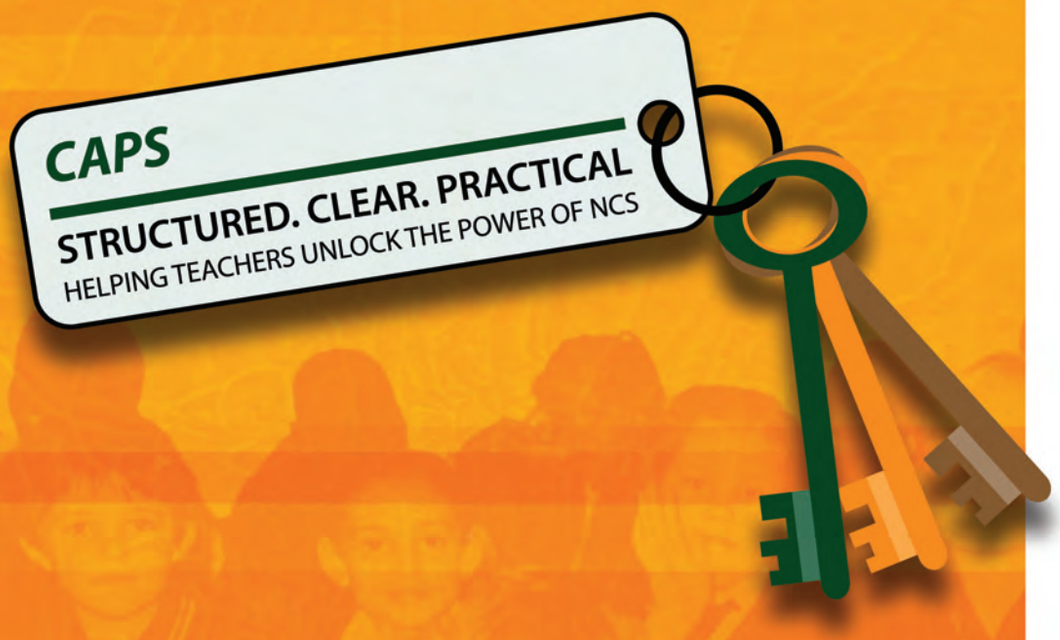
SETSWANA MATHEMATICS

National Curriculum Statement (NCS)

Curriculum and Assessment Policy Statement



Foundation Phase
Grade 1-3

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

PEGELO YA PHOLISI YA KHARIKHULAMO KA TLHATLHOBO MEPHATO 1–3

DIPALO

DISCLAIMER

In view of the stringent time requirements encountered by the Department of Basic Education to effect the necessary editorial changes and layout to the Curriculum and Assessment Policy Statements and the supplementary policy documents, possible errors may occur in the said documents placed on the official departmental websites.

There may also be vernacular inconsistencies in the language documents at Home-, First and Second Additional Language levels which have been translated in the various African Languages. Please note that the content of the documents translated and versioned in the African Languages are correct as they are based on the English generic language documents at all three language levels to be implemented in all four school phases.

If any editorial, layout or vernacular inconsistencies are detected, the user is kindly requested to bring this to the attention of the Department of Basic Education.

E-mail: capslangcomments@dbe.gov.za or fax (012) 328 9828

Department of Basic Education

222 Struben Street
Private Bag X895
Pretoria 0001
South Africa
Tel: +27 12 357 3000
Fax: +27 12 323 0601

120 Plein Street Private Bag X9023
Cape Town 8000
South Africa
Tel: +27 21 465 1701
Fax: +27 21 461 8110
Website: http://www.education.gov.za

© 2011 Department of Basic Education

ISBN: 978-1-4315-0446-6

Design and Layout by: Ndabase Printing Solution

Printed by: Government Printing Works

FOREWORD BY THE MINISTER

Our national curriculum is the culmination of our efforts over a period of seventeen years to transform the curriculum bequeathed to us by apartheid. From the start of democracy we have built our curriculum on the values that inspired our Constitution (Act 108 of 1996). The Preamble to the Constitution states that the aims of the Constitution are to:

- heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
- improve the quality of life of all citizens and free the potential of each person;
- lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law; and
- build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations.

Education and the curriculum have an important role to play in realising these aims.

In 1997 we introduced outcomes-based education to overcome the curricular divisions of the past, but the experience of implementation prompted a review in 2000. This led to the first curriculum revision: the *Revised National Curriculum Statement Grades R-9* and the *National Curriculum Statement Grades 10-12* (2002).

Ongoing implementation challenges resulted in another review in 2009 and we revised the *Revised National Curriculum Statement* (2002) and the *National Curriculum Statement Grades 10-12* to produce this document.

From 2012 the two National Curriculum Statements, for *Grades R-9* and *Grades 10-12* respectively, are combined in a single document and will simply be known as the *National Curriculum Statement Grades R-12.* The *National Curriculum Statement for Grades R-12* builds on the previous curriculum but also updates it and aims to provide clearer specification of what is to be taught and learnt on a term-by-term basis.

The *National Curriculum Statement Grades R-12* represents a policy statement for learning and teaching in South African schools and comprises of the following:

(a) Curriculum and Assessment Policy Statements (CAPS) for all approved subjects listed in this document;

(b) *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*; and

(c) *National Protocol for Assessment Grades R-12.*

MRS ANGIE MOTSHEKGA, MP
MINISTER OF BASIC EDUCATION

DITENG

KGAOLO 1: MATSENO LE LEMORAGO 3

1.1 Lemorago 3

1.2 Thadiso 3

1.3 Maitlhomo a kakaretso a Kharikhulamo ya Aforika Borwa 4

1.4 Kabo ya Nako 6

1.4.1 Kgato ya Motheo 6

1.4.2 Kgato ya Magareng 6

1.4.3 Kgato e Kgolwane 7

1.4.4 Mephato 10-12 7

KGAOLO 2: DITLHALOSO, MAIKAELELO, DIKGONO LE DITENG 8

2.1 MATSENO 8

2.2 DIPALO KE ENG? 8

2.3 MAIKAELELO A A TOTOBETSENG 8

2.4 DIKGONO TSE DI TOTOBETSENG 8

2.5 TSEPAMO MO DITENG TSA SERUTWA 9

2.6 BOLENG JWA DITENG TSA SERUTWA 11

2.7 DIPALO MO THUTONG YA KGATO MOTHEO 11

2.7.1 Ditaelokaedi tse di tshitshintsweng tsa taolo ya phaposi 11

2.7.2 Barutwana ba ba itemogelang dikgoreletsi mo go ithuteng 13

2.7.313 Dipalo tsa tlhogo 13

2.8 MOPHATO WA R 14

2.9 DIDIRISWA TSE DI ATLENEGISEDITSWENG PHAPOSI YA DIPALO YA KGATO MOTHEO 16

KGAOLO 3: TLHALOSO YA DITENG TSE DI TOTOBETSENG 17

3.1 MATSENO 17

3.2 TOTOBATSO YA DITENG GO BONTSHA TSWELETSO PELE 17

- **DIPALO, MATSHWAO LE DIKGOLAGANO 18**
- **DIPATERONE, DITIRO LE ALEJEBERA 26**
- **BOALO LE POPEGO (THUTATEKANYO) 27**
- **TEKANYO 30**
- **TSHWARO YA TSHEDIMOSETSO 35**

3.3 TLHALOSO YA DITENG 38

3.4. TATEDISO LE KGATO YA DITENG 39

3.4.1 Mophato 1 thadiso ya kgweditharo..... 41

3.4.2 Mophato 2 thadiso ya kgweditharo..... 60

3.4.3 Mophato 3 thadiso ya kgweditharo..... 83

3.5 DINTLHA TSA TSHEDIMOSETSO LE DIKAELO TSA GO RUTA 106

3.5.1 Tlhaloso ya diteng tsa tsa mophato1 107

3.5.2 Tlhaloso ya diteng tsa tsa mophato 2 235

3.5.3 Tlhaloso ya diteng tsa tsa mophato 3 369

KAROLO 4: TLHATLHOBO 528

4.1 MATSENO..... 528

4.2 TLHATLHOBO YA LETSATSI KGOTSA E SA TLWAELEGANG..... 528

4.3 TLHATLHOBO E TLWAELEGILENG..... 529

4.4 LENANE LA TLHATLHOBO E TLWAELEGILENG 529

4.5 GO REKOTA LE PEGELO 530

4.6 TEKANYETSO LE TLHATLHOBO..... 531

4.7 KAKARETSO..... 531

4.8 SEKAO SA TIRWANA YA TLHATLHOBO TSA MOPHATO 1 GO 3 532

KGAOLO 1: MATSENO LE LEMORAGO

1.1 LEMORAGO

Pegelo ya Kharikhulamo ya Bosetšhaba Mephato R-12 (NCS) e tlhalosa pholisi ya kharikhulamo le tlhatlhobo mo dikolong ka tlhomamo.

Go tokafatsa tiragatso e, Pegelo ya Kharikhulamo ya Bosetšhaba e ne ya mametlelelwa ka dimametlelelo tse di tla diragadiwang ka Ferikgong 2012. Tokomana e le nngwe e e sobokantsweng ya Pholisi ya Kharikhulamo le Tlhatlhobo ya serutwa se sengwe le se sengwe, e ne ya kwalwa go emisetsa Dipegelo tsa Dirutwa, Dikaedi tsa Lenaneothuto le Dikaedi tsa Tlhatlhobo ya Dirutwa Mephato ya R-12 tsa bogologolo.

Pegelo ya Kharikhulamo ya Bosetšhaba ya Mephato R-12 e e tlhabolotsweng: Pholisi ya Kharikhulamo le Tlhatlhobo (Ferikgong 2012) e emisetsa Pegelo ya Kharikhulamo ya Bosetšhaba Mephato ya R - 9 (2002) le Pegelo ya Kharikhulamo ya Bosetšhaba Mephato ya 10-12 (2004).

1.2 THADISO

(a) *National Curriculum Statement Grades R-12 (Ferikgong 2012)* e emela pegelo ya pholisi ya go ithuta le go ruta mo dikolong tsa Aforika Borwa mme e na le tse di latelang:

(i) Pegelo ya Pholisi ya Kharikhulamo le Tlhatlhobo ya serutwa sengwe le sengwe sa sekolo se se amogetsweng*;*

(ii) Pegelo ya Pholisi ya, *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12; le*

(iii) Pegelo ya Pholisi ya, *National Protocol for Assessment Grades R-12 (Ferikgong 2012).*

(b) The *National Curriculum Statement Grades R-12 (Ferikgong 2012)* e emela dipegelo tse pedi tsa kharikhulamo ya bosetšhaba tsa ga jaana, tsona ke:

(i) *Revised National Curriculum Statement Grades R - 9, Government Gazette No. 23406* of 31 May 2002*,* le

(ii) *National Curriculum Statement Grades 10-12 Government Gazettes, No. 25545 of 6 October 2003* and *No. 27594* of 17 May 2005.

(c) Dipegelo tsa kharikhulamo tsa bosetšhaba tse di akanngwang go ka dirisiwa mo ditemanapotlana tsa (a) le (b) di na le dipegelo tsa pholisi tse di latelang tse di tla khutlisiwang ka tatelano ke *National Curriculum Statement Grades R-12 (Ferikgong 2012) mo pakeng ya go tloga ka* 2012-2014:

(i) Lekala la Thuto/Lenaneo la Serutwa, Dikaedi tsa Lenaneothuto, Dikaedi tsa Tlhatlhobo ya Dirutwa tsa Mephato R - 9 le Mephato 10-12;

(ii) Pegelo ya Pholisi ya *National Policy on assessment and qualifications for schools in the General Education and Training Band d*, e e tlhamilweng sešwa mo *Government Notice No. 124* in *Government Gazette No. 29626* of 12 February 2007;

(iii) Pegelo ya Pholisi ya the *National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF)*, e e tlhamilweng sešwa mo *Government Gazette No.27819* of 20 July 2005;

(iv) Pegelo ya Pholisi ya *An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), e e mabapi le barutwana ba ba nang le ditlhokego tse di kgethegileng,* e e phasaladitsweng mo *Government Gazette, No.29466* of 11 December 2006, e akareditswe mo pegelong ya pholisi ya National *policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12; le*

(v) Pegelo ya Pholisi ya *An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), e e mabapi le the National Protocol for Assessment (Grades R-12)*, e e tlhamilweng sešwa mo*Government Notice No.1267*in *Government Gazette No. 29467* of 11 December 2006.

(c) Pegelo ya Pholisi ya *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*, le dikarolo tse di mo Pholising ya Khaikhulamo le Tlhatlhobo jaaka e akanngwang mo Dikgaolong 2, 3 le 4 tsa pegelo e, tse di agang melao le boleng jwa *National Curriculum Statement Grades R-12.* Ka jalo go ya ka karolo *6A ya South African Schools Act, 1996 (Act No. 84 of 1996,)* e aga motheo o Tona ya Thuto ya Motheo e ka tlhomamisang dipoelo tse di lekaneng tsa boleng, gammogo le thulaganyo le tsamaiso ya tlhatlhobo ya diphitlhelelo tsa barutwana e e ka dirisiwang mo dikolong tsa botlhe le mo dikolong tse di ikemetseng ka nosi.

1.3 MAITLHOMO A KAKARETSO A KHARIKHULAMO YA AFORIKA BORWA

(a) *Pegelo ya Kharikhulamo ya Bosetšhaba Mephato R-12* e tlhagisa kitso, dikgono le meetlo e e tshwanelwang ke go ithutiwa mo dikolong tsa Aforika Borwa. Kharikhulamo e ikaelela go netefatsa gore barutwana ba bona le go diragatsa kitso le dikgono ka ditsela tse di nang le bokao mo matshelong a bona. Mo ntlheng e, kharikhulamo e godisa kakanyo ya go tsepamisa kitso ka bokao jwa tikologo, e ntse e sisimoga (tsibogela) botlhokwa jwa lefatshe ka bophara.

(b) Pegelo ya Kharikhulamo ya Bosetšhaba Mephato R-12, e arabela maikaelelo a:

- go tlamela barutwana, go sa kgathalesege lemorago la ikonomi ya loago, lotso, bong, bokgoni jwa mmele kgotsa bokgoni jwa botlhale, le kitso, dikgono le meetlo tse di tlhokegang go ikgotsofatsa le botsayakarolo jo bo nang le bokao mo loagong jaaka baagi ba naga e e gololosegileng;
- e tlamela phitlhelelo ya thuto e e kwa godimo;
- go kaela phetogelo ya barutwana go tswa go thuto ya ditheo go ya go lefelo la tiro; le
- go tlamela bathati ka tshedimosetso e e lekaneng ya dikgono tsa morutwana.

(c) Pegelo ya Kharikhulamo ya Bosetšhaba Mephato R-12 e ikaegile ka metheo e e latelang:

- *Phetogo ya loago;* e netefatsa gore go sa lekalekaneng mo go tsa thuto go go fetileng go a siamisiwa, le gore ditšhono tse di lekalekanang tsa thuto di neelwa baagi botlhe:
- *Go ithuta go go tlhaga gape go tseneletse*, go rotloetsa molebo o o tlhaga e le o o tseneletseng mo thutong, boemong jwa go rutiwa ga go neelwa dinnete go se tlhaga e bile go sa tsenelela;
- *Kitso e e kwa godimo le dikgono tse di kwa godimo;* bonnye jwa maemo a kitso le dikgono tse di tshwanetseng go fitlhelelwa mo mophatong o mongwe le o mongwe di totobaditswe le go beelwa seemo se se kwa godimo, seemo se se fitlhelegang mo dirutweng tsotlhe;

- *Tsweletso;* diteng le bokao jwa mophato o mongwe le o mongwe di supa tsweletso go tloga go e e bonolo go fitlha go e e gwetlhang tlhaloganyo;

- *Ditshwanelo tsa botho, boakaretsi, bosiaimisi jwa tikologo le loago;* go tsenyeletsa melawana le ditlwaelo tsa bosiamisi jwa tikologo le loago le ditshwanelo tsa botho jaaka di tlhalosiwa mo Molaotheong wa Aforika Borwa. Pegelo ya Kharikhulamo ya Bosetšhaba Mephato R-12. (Ka kakaretso) e bosisi mo dintlheng tsa dipharologano di tshwana le lehuma, go tlhoka tekatekano, lotso, bong, puo, kgolo, bogole le dintlha tse dingwe.

- *Go totobatsa botlhokwa jwa tsamaiso ya kitso ditso;* go lemoga ditiragalo (hisetori) le boswa jo bo humileng jwa naga e jaaka dintlha tse di botlhokwa tse di nonotshang meetlo e e leng teng mo Molaotheong; le

- *Go ikanyega, boleng le nonofo;* go tlamela thuto e e ka bapisiwang le ya dinaga tse dingwe ka boleng, go anama le boteng

(d) Pegelo ya Kharikhulamo ya Bosetšhaba Mephato R-12 e ikaelela go tlhagisa barutwana ba ba kgonang go:

- lemoga le go rarabolola mathata gape ba tsaya ditshwetso ba akanya ka tsenelelo e bile ba na le boitlhamedi.

- dira ka katlego ba le bosi, kana ba na le ba bangwe e le karolo ya setlhopha;

- ithulaganya, go itsamaisa le go tsamaisa ditiro tsa bona ka boikarabelo le ka nonofo.

- kgobokanya, sekaseka, rulaganya le go tlhatlhoba tshedimosetso ka tsenelelo;

- tlhaeletsana ka nonofo ba dirisa dikgono tsa pono, matshwao kgotsa dikgono tsa puo mo mekgweng e e farologaneng;

- dirisa saense le thekenoloji ka nonofo le ka tsenelelo ba supa boikarabelo mo tikologong le mo boitekanelong jwa ba bangwe; le

- bontsha go tlhaloganya lefatshe jaaka thulaganyo ya ditsamaiso tse di amanang ka go lemoga gore dikaelo tsa tharabololo ya mathata ga di tlhagelele di le tsosi.

(e) Boakaretsi bo tshwanetse go nna karolokônôkônô ya thulaganyo, ipaakanyo le go ruta mo sekolong se sengwe le se sengwe. Se, se ka diragala fa fela barutabana botlhe ba na le tlhaloganyo e e edileng ya go lemoga le go arabela dikgoreletsi tsa go ithuta le go rulaganyetsa dipharologano.

Ntlhakgolo mo go tsamaiseng boakaretsi ke go netefatsa gore dikgoreletsi di a lemogiwa le go arabelwa ke ditlhopha tsotlhe tsa tshegetso mo loagong lwa sekolo, go akaretsa barutabana, ditlhopha tsa tshegetso tsa dikgaolothuto, ditlhopha tsa tshegetso tse di mo ditheong, batsadi le dikolo tse di kgethegileng jaaka ditikatikwe tse di tswelang morafe mosola ka kakaretso. Go arabela dikgoreletsi mo phaposiborutelong, barutabana ba tshwanetse go dirisa ditogamaano tse di farologaneng tsa dipharologano tsa kharikhulamo jaaka tse di akareditsweng mo Dikaeding tsa Go Ruta le Go Ithuta ga Boakaretsi tsa Lefapha la Thuto ya Motheo (2010). (*Department of Basic Education's Guidelines for inclusive teaching and learning (2010)*).

1.4 KABO YA NAKO

1.4.1 Kgato ya Motheo

(a) Nako ya go ruta ya dirutwa tsa Kgato ya Motheo tse di kailweng mo lenaneong le le fa tlase:

SERUTWA	MOPHATO R (DIURA)	MEPHATO 1-2 (DIURA)	MEPHATO 3 (DIURA)
Puo ya Gae	10	7/8	7/8
Puo Tlaleletso ya Ntlha		2/3	3/4
Dipalo	7	7	7
Dikgono tsa Botshelo Kitso ya Tshimologo Boitlhamedi mo go tsa Botsweretshi Thuto ya Ikatiso ya Mmele Thuto ya boitekanelo jwa motho le loago	6 (1) (2) (2) (1)	6 (1) (2) (2) (1)	7 (2) (2) (2) (1)
GOTLHE	**23**	**23**	**25**

(b) Nako ya go ruta ya Mephato R, 1 le 2 ke diura di le 23 mme ya Mophato 3 ke diura di le 25.

(c) Diura di le 10 mo dipuong di abetswe Mephato R-2 mme diura di le 11 ke tsa Mophato 2. Bogolo jwa diura di le 8 le bonnye jwa diura di le 7 di abetswe Puo ya Gae, bonnye jwa diura di le 2 le bogolo jwa diura di le 3 di abetswe Puotlaleletso mo mephatong R-2. Mo mophatong wa 3 bogolo jwa diura di le 8 le bonnye jwa diura di le 7 di abetswe Puo ya Gae fa bonnye jwa diura di le 3 le bogolo jwa diura di le 4 di abetswe Puotlaleletso ya Ntlha.

(d) Mo serutweng sa Dikgono tsa Botshelo, Kitso ya Tshimologo e abetswe ura e le 1 mo mephatong ya R-2 le diura di le 2 jaaka go kailwe ka diura tse di mo masakaneng mo mophatong wa 3.

1.4.2 Kgato ya Magareng

(a) Nako ya go ruta ya dirutwa tsa Kgato ya Magareng tse di kailweng mo lenaneong le le fa tlase:

SERUTWA	DIURA
Puo ya Gae	6
Puo Tlaleletso ya Ntlha	5
Dipalo	6
Disaense tsa Tlhago le Thekenoloji	3,5
Disaense tsa Loago	3
Dikgono tsa Botshelo Boitlhamedi mo go tsa Botsweretshi Thuto ya Ikatiso ya Mmele Thuto ya boitekanelo jwa motho le loago	4 (1,5) (1) (1,5)
GOTLHE	**27,5**

1.4.3 Kgato e Kgolwane

Nako ya go ruta ya dirutwa tsa Kgato e Kgolwane tse di kailweng mo lenaneong le le fa tlase:

SERUTWA	DIURA
Puo ya Gae	5
Puo Tlaleletso ya Ntlha	4
Dipalo	4,5
Disaense tsa Tlhago	3
Disaense tsa Loago	3
Thekenoloji	2
Disaense tsa Botsamaisi le Ikonomi	2
Tebanyo le Botshelo	2
Botsweretshi le Setso	2
GOTLHE	**27,5**

1.4.4 Mephato 10-12

(a) Nako ya go ruta ya dirutwa tsa Mephato 10-12 tse di kailweng mo lenaneong le le fa tlase:

SERUTWA	KABO YA NAKO MO BEKENG (DIURA)
Puo ya Gae	4.5
Puo Tlaleletso ya Ntlha	4.5
Dipalo	4.5
Tebanyo le Botshelo	2
Bonye jwa dirutwa dingwe le dingwe fela tse tharo di tlhophiwa go tswa mo Setlhopheng sa B Mametlelelo B, Mananeo B1-B8 a pegelo ya pholisi ya *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12,* e le mabapi le go ya ka mabaka a a botswang pele go dumelanwa ka ona mo ditemaneng tsa 28 tsa pegelo ya pholisi e e bolelwang.	12 (3x4h)

Nako e e abilweng ya beke e ka dirisediwa bonnye dirutwa tsa NCS tse di tlhokegang jaaka go kailwe fa go-dimo, e bile e se ke ya dirisediwa dirutwa dipe tsa tlaleletso tse di okeditsweng mo lenaneong la dirutwa. Fa morutwana a ka eletsa go oketsa dirutwa, nako e e okeditsweng e abelwe go rutiwa ga dirutwa tse.

KGAOLO 2: DITLHALOSO, MAIKAELELO, DIKGONO LE DITENG

2.1 MATSENO

Kgaolo 2 ya Thuto ya Dipalo tsa Kgato Motheo mo Pegelong ya Polisi ya Bosetšhaba ya Kharikhulamo le Tlhatlhobo e neela barutabana ka tlhaloso ya dipalo, maikaelelo a a tsepameng, dikgono tse di tsepameng, tsepamiso mo diteng tsa serutwa, bokete jwa diteng tsa serutwa, didiriswa tsa tsa dithutiso tsa dipalo tse di atlegenesitsweng thuto ya kgato ya motheo, dikaelothuto tse di tshitshintsweng go thusa barutwana ba nang le mathata a go ithuta dipalo, dipalo-tlhogo le go godisa thuto ya bokgoni jwa go ithuta dipalo mo Mophatong wa R.

2.2 DIPALO KE ENG?

Dipalo ke puo e e dirisang matšhwao le mokwalopalo o o tlhalosang botsalano jwa ditlhakapalo, thuto tekatekanyo le dikerafo. Ke tirwana ya botho e e akaretsang go lebelela, go bapisa le go batlisisa dipaterone le boleng botsalano jwa dilo tse di bonagalang le tsa loago le fa gare ga didiriswa tsa dipalo ka botsona. E thusa go aga mekgwa ya go akanya e e latelanang le go nagana ka tshekatsheko, nepagalo le tharabololo ya dipalo tse di abelanang le go tsaya ditshwetso.

2.3 MAIKAELELO A A TOTOBETSENG

Maikaelo a go rutiwa le go ithuta dipalo a tsepamedisitswe mo go ageng tse di latelang mo morutwaneng:

- Tshekatsheko temoso ya botsalano jwa dipalo e dirisitsweng jang mo loagong, tikologong, tsa setso le mo botsalanong jwa tsa ikonomi.
- Go itshepa le bokgoni go lebagana le maemo a dipalo kwa ntle ga go kgorelediwa ke letshogo la dipalo
- Moya wa gonna le lerato la dipalo
- Kanaanelo le bontle jwa dipalo
- Temogo ya gore dipalo ke karolo ya botsweretshi ya botho
- Kgopolo tlhaloganyo e e tseneletseng e e tla dirang gore dipalo di nne le bokao
- Kamogelo ya kitso e e totobetseng le dikgono tse di tlhokagalang go
  - dirisa dipalo ka tsela e e bonagalang, mo loagong le mo mathateng a dipalo
  - ithuta diteng tsa serutwa se se maleba
  - Go ithutela pele mo dipalong

2.4 DIKGONO TSE DI TOTOBETSENG

Go godisa dikgono tsa botlhokwa tsa dipalo morutwana o tshwanetse go

- godisa tiriso ya puo ya dipalo
- godisa tlotlofoko ya dipalo, kgopolopalo le go tlhakanya le dikgono tsa go dira dipalo
- ithuta go reetsa, go buisana, go nagana ka tatelano le go dirisa kitso ya dipalo e e ithutilweng
- ithuta go batlisisa, go lokolola, go Bapisa le go ranola tshedimosetso
- ithuta go botsa le go rarabolola dipalo

- Aga boitemogelo mo karolong e e botlhokwa e dipalo di e tshamekang mo maemong bonnete a matshelo a rona, go akaretsa kgolo ya morutwana ka boene

2.5 TSEPAMO MO DITENG TSA SERUTWA

Dipalo mo kgatong ya motheo o di akaretsa diteng tsa dirutwa di le tlhano. Diteng tsa serutwa sengwe le sengwe di abelana ka kamogelo ya dikgono tse di totobetseng. Lenaneo le le fa tlase le supetsa tsepamo mo diteng tsa serutwa ga mmogo le tsepamo e e totobetseng mo diteng tsa dirutwa tsa thuto ya kgato motheo

Lenaneo 2.1 Tsepamo mo diteng tsa dipalo tsa thuto kgato motheo

KITSO YA DITENG TSA DIPALO		
Diteng tsa serutwa	**Tsepamo mo diteng ka kakaretso**	**Tsepamo e e totobetseng mo diteng tsa kgato ya thuto motheo**
Dipalo, diopereishene le botsalano	Kgodiso mo bokaong jwa dipalo e akaretsa • bokao jwa dipalo tse di farologaneng • Botsalano mo dipalong tse di farologaneng • Kamano bogolo ya dipalo tse di farologaneng • ditsela tse di farologaneng tsa tshwantshiso ya dipalo • Kgono ya go dira ka dipalo	Palo tekanyo e e godisiwang go ya kwa bokhutlong jwa mophato wa 3 e akaretsa palotlalo ya bonnye jo bo ka nang ka 1000 le dipalophatlho tse di tshwanang. Mo kgatonge,palokgopolo ya barutwana e godisiwa ka go dira ka go bala didiriswa tse di kgobokantsweng, kgaogano le go kopanya bogotlhe ba tsona, o bala o tlodisa ka tsela tse di farologaneng, rarabolola dipalo tsa mafoko le go aga le go tlhatlhamolola dipalo • Go bala go godisa bokgoni jwa barutwana jwa go itse kgoplopalo, dipalo tsa tlhogo, phopholetso, go tlhakanya le temogo ya dipaterone • Kgodiso ya kgopolopalo e thusa barutwana go ithuta ka ga dipharologantsho tsa dipalo le kgodiso ya ditogamaano tsa go dira tlhakanyo bonolo • Go rarabolola dipalo go ya ka maemo go naya barutwana bokgoni jwa go buisana ka dikakanyo tsa bona ka molomo le go di kwala ba dirisa ditshwantsho le matšhwao • Barutwana ba aga kutlwisiso mo diopereisheneng tsa go tlhakanya, go tlosa, go atisa le go arola • Barutwana ba godisa kgopolo ya dipalophatlho ka go ranolola dipalo tse di akaretsang go aroganya didiriswa le go dirisa ditshwantsho. Dipalo di tshwanetse go akaretsa di tharabololo tse di neelang ka disala tsa palotlalo kgotsa dipaophatlho. Go aroganya go seka ga akaretsa fela go bona dikarolo mo selong se se feletseng mme gape le go bona dikarolo mo didirisweng tse di kgobokantsweng. Mo kgatong e, ga go a solofelwa gore ba itse go bala le go kwala matshwao a dipalophatlo.

KITSO YA DITENG TSA DIPALO		
Diteng tsa serutwa	**Tsepamo mo diteng ka kakaretso**	**Tsepamo e e totobetseng mo diteng tsa kgato ya thuto motheo**
Dipaterone, tiriso le Alejebera	Alejebera ke puo ya go batlisisa le go tlhaeletsa dipalo ka bontsi, e kgona le go atlosediwa mo thutong ya ditiriso le dikamano tse dingwe tse di fa gare ga dilo tse di fetofetogang. Mo karolong bogare jwa diteng tsa serutwa, morutwana a ka fitlhelela dikgono tse mo tirisong ya Alejebera. E tsepamedisitswe gape mo: • tlhalosong ya dipaterone le kamano ka tiriso ya matshwao, kerafo le lenaneo, le • Tshupetso le go lokolola dilo tsa tlwaelo le phetogo mo dipateroneng, le kamano e e kgotlosang morutwana go dira ponelopele le go rarabolola dipalo	Mo kgatong e, barutwana ba dira • popego palo ga mmogo (sekao go bala o tlodisa) • Dipaterone tsa thutatekano (sekao ditshwantsho) Barutwana ba tshwanetse go dirisa didiriswa tse di bonalagalng, ditshwantsho le dipopego tsa matshwao go kopolola, go atolosa, tlhaosa le go bopa dipaterone, Go kopolola dipaterone go thusa barutwana go bona tatelano gore paterone e dirilwe jang. Go atolosa paterone go thusa morutwana go lekola gore a ba tlhalogantse tatelano ya paterone Go tlhalosa paterone go thusa morutwana go godisa dikgono tsa bona tsa puo. Tsepamiso mo tatelanong ya dipaterone e ala motheo mokgodisong ya dikgono tsa go nagana tsa Alejebera. Popegopalo e tshegetsa kgodiso ya kgopolopalo le bokao jo bo agilweng mo dipalong, diopereishene le botsalano Dipaterone tsa thutatekano di akaretsa tatelano ya mela, dipopego le didiriswa mme gape le dipaterone tsa mo lefatsheng. Mo dipateroneng tsa thutatekano barutwana ba dirisa kitso ya bone ya boalo le popego.
Boalo le popego	Thuto ka ga boalo le popego e tsweletsa go tlhaloganya le go ananeela dipaterone, nepagalo ya tsona, phitlhelelo le bontle jwa dipopego tsa tlholego le tsa setso. E tsepamedisitswe mo • pharologantsho, botsalano • Kitsiso, maemo le • Diphetogo mo tekatekanyong ya dipopego pedi le didiriswa tekatekanyo tharo	Mo kgatong e, barutwana ba tsepamedisiwa mo didirisweng tsa tekatekanyong tharo (3-D), dipopego tekatekanyo tlhakore pedi (2-D), maemo le dikaelo. • Barutwana ba utolola dipharologantsho tsa didiriswa tsa tekatekanyo tharo (3-D) le dipopego tekatekanyo tlhakore pedi (2-D) ka go di tlhpa, ba di rulaganya, tlhalosa le go naya maina a tsone • Barutwana ba Bapisa dipopego lego aga ka didiriswa • Barutwana ba lemoga le go tlhalosa dipopego le didiriswa tse di tshwanang le dipopego tsa dipalo mo tikologong. • Barutwana ba tlhlosa maemo a didiriswa, a bone le a ba bangwe ba dirisa tlotlofoko e e maleba • Barutwana ba la tela le neela ka dikaelo
Go lekanya	Go lekanya go tsepamedisitswe mo tlhpong le tirisong ya diyuniti tse di maleba le difomula go lekanyetsa pharologantsho ya ditirafalo, dipopego, didiriswa mo tikologong. E nyalana ka tlhamalalo le lefatshe la morutwana la bonetetshi, bothekeniki le ekonomi, di kgonisa morutwana go • dira phopholetso e e nang le bokao • Tsitsiboga mo go neeleng mabaka a go lekanya le dipholo	• Mo kgatong e, kgopolo ya barutwana ya go lekanya e godisiwa ka go dira ka ponagalo ka didiriswa tse di farologaneng le dipoego, go ithuta dipharologantsho tsa boleele, mothamo, bokete, boalo le nako • Barutwana ba lekanya dipharologantsho tsa dipopego le didiriswa ba dirisa ditsela tse di sa tlhomamang tse di malaba jaaka diatla, dikgato le ditshelo jalo jalo • Barutwana ba Bapisa dilekanyo tse di farologaneng ka go dirisa mafoko a tshwantshiso jaaka moleele go/ mokhutswana go, e boima thata/ e bofefo thata jalo jalo • Barutwana ba itsesiwe go diyuniti tse di tlhomameng jaaka digerama, dikilogerama, dimilimetara, diletara, disentimetara, dimetara. Ditirwana tse di amanang le nako di tshwanetse go rulaganngwa go lemosa barutwana go tlhaloganya tsamao ya nako pele ga a bala letsatsi ka nako.

KITSO YA DITENG TSA DIPALO		
Diteng tsa serutwa	**Tsepamo mo diteng ka kakaretso**	**Tsepamo e e totobetseng mo diteng tsa kgato ya thuto motheo**
Go dira ka dipalo tsa tshedimosetso	Ka go ithuta dipalo tse di dirang ka tshedimosetso, morutwana o godisa dikgono tsa go • Kgobokanya, • Rulaganya, • le go supetsa, • Lokolola le go ranolola tshedimosetso e e neetsweng	Go rutiwa le go ithuta dipalo tsa tshedimosetso mo kgatong ya motheo go tsepamedisitswe mo go tlhopheng didiriswa le tshedimosetso ka ditsela tse di farologaneng, go ikaegile ka ditebego tse di farologaneng tsa didiriswa kgotsa tshedimosetso • Go solofelwa gore barutwana ba ranole le go aga dikerafa tse di dirisediwang ditshwantsho le kerafonoko e e supetsang nyalano ka bongwe-ka-bongwe mo tshedimosetsong e e neetsweng.

2.6 BOLENG JWA DITENG TSA SERUTWA

Boleng jwa diteng tsa serutwa sa dipalo e neela ka tshimologo ya mesola e mebedi: ga ntlha boleng bo neela ka kaelo ya nako e e tlhokagalang go ruta ka botlalo diteng tse di mo serutweng se sengwe le sengwe;sa bobedi boleng bo neela ka kaelo mo go kgaoganyeng diteng tsa serutwa mo tlhatlhobong.Boleng jwa diteng tsa serutwa ga bo tshwane mo mophatong mongwe le mongwe wa kgato ya motheo.

Lenaneo 2.2 Boleng jwa diteng tsa serutwa mo thutong ya kgato motheo

BOLENG JWA DITENG TSA SERUTWA			
Diteng tsa serutwa	**Mophato 1**	**Mophato 2**	**Mophato 3**
Dipalo, diopereishene le dikgolagano*	65%	60%	58%
Dipaterone, tioriso le Alejebera	10%	10%	10%
Popego le boalo (Jeometeri)	11%	13%	13%
Go lekanya	9%	12%	14%
Go dira ka dipalo tsa tshedimosetso	5%	5%	5%
	100%	**100%**	**100%**

*Go botlhokwa gore tsepamo e nne mo dipalong, diopereishene le botsalano mo mophatong wa R. Letlelela barutwana go fetsa mo kgatong ya motheo ba tshwanetse gore ba bo ba tlhomame go tlhaloganya bokao jwa dipalo le go Motlotlo ka diopereishene. Maikaelelo ka gore barutwana ban ne le bokgoni le go itshepa fa ba dira dipalo le go tlhakanya. Ka lebaka le, nako e e abetsweng dipalo, diopereishene le botsalano e okeditswe. Tiro ka bontsi e tshwanetse go tsepamedisiwa mo dopateroneng tsa dipalo go tiisa bokgoni jwa barutwana go dirisa dipalo

2.7 DIPALO MO THUTONG YA KGATO MOTHEO

Thuto ya kgato motheo e golaganya botshelo jwa ngwana jwa tshimologo ya sekolo le botshelo kwa ntle ga sekolo, mo letlhakoreng le lengwe dipalo kgopolo tse di rutiwang mo mephatong e e latelang di a golaganngwa. Mo mephatong ya ntlha bana ba tshwanetse go tlhagisediwa maitemogelo a dipalo a a ba nayang ditshono tse dintsi tsa go dira, go Motlotlo le go rekota dikakanyo tsa bone tsa dipalo.

Kgoboko ya nako e e dirisediwang dipalo e na le tsenelelo mo kgodisong ya barutwana ya dikgopolo tsa dipalo le dikgono tsa bone. Ditirwana tse barutwana ba tshwanetseng go di dira gareng ga tse dingwe, ga e se go ba dira e ka re ba a dira mme fela ke gore ditirwana tse, di tsepamedisiwe mo dipalong jaaka go kailwe mo kharikhulamong.

2.7.1 Ditaelokaedi tse di tshitshintsweng tsa taolo ya phaposi

Nako yotlhe e e beetsweng go ruta dipalo mo letsatsing le le nosi, e tshwanetse go lebelelwa jaaka pakathuto e le nngwe. Ka nako ya pakathuto ya dipalo, tse di latelang di tshwanetse go diragala:

- **Tirwana ya phaposi yotlhe**
  - Dipalo tsa tlhogo
  - Tiiso ya dikgopolo
  - Taolo ya phaposi (kabelano ya ditirwana tsa barutwana ka nosi)
- **Go ruta ditlhopha tse dinnye**
  - Go bala
  - Kgodiso ya kgopolopalo (ka ditirwana tsa motlotlo le tiragatso)
  - Go rarabolola dipalo (ka ditirwana tsa motlotlo le tiragatso)
  - Rekota ka go kwala
  - Godisa ditogamaano tsa go tlhakanya (ka ditirwana tsa motlotlo le tiragatso)
  - Dipaterone
  - Boalo le popego
  - Go lekanya
  - Go dira ka dipalo tsa tshedimosetso

- **Tiro e e itirelwang ke barutwana**

Barutwana ba ikatisa le go tiisa kgodiso ya dikgopolo mo thutong ya phaposi le mo ditlhopheng tse dinnye.

Ditirwana tsa phaposi yotlhe: Tsepamo e tla dirwa bogolo segolo mo dipalong tsa tlhogo, tiiso ya dikgopolo le kabelano ya ditirwana tse barutwana ba di dirang ba le nosi mo metsotsong e le 20 ka letsatsi mo tshimologong ya thuto ya dipalo. Ka nako e,gape morutabana o dira le barutwana botlhe mo phaposing go tlhomamisa le go rekota leina la letsatsi, letlha, barutwana ba leng teng le be ba lofileng, le maemo a bosa. Dipalo tsa tlhogo di akaretsa tshimologo ya dipalo tsa tlhogo jaaka" palo morago ga/pele ga 8 ke, 2 gantsi/gannye go feta 8 ke,4+2;5+2;6+2 jalo jalo. Ka nako e, moratabana o kgona go dira dikgopolo tse di boimanyana. Se se leng botlhokwa gape ke gore morutabana a neele barutwana tirwana e e ba akaretsang botlhe ga mmogo le ditirwana tse di dirwang ke barutwana ka bongwe ka bongwe, a ntse a tsweletse ka tiro e e tsepamedisitsweng setlhopha se se nnye kwa sekhutlwaneng sa go ruta.

Setlhopha se sennye se se tsepamedisitsweng dithutiso: di nna mosola fa morutabana a ruta setlhopha se sennye sa barutwana (8-12), ba ba nang le bokgoni jo bo tshwanang mo dipalong/metsheng kgotsa fa lenaneo la dipalo, fa barutwana ba bangwe ba dira ditirwana tse ba dirang ba ikemetse. Morutabana o dira tiro ka go Motlotlo le tiro e e diragatswang(practical) le barutwana, go dira ditirwana tse di tshwanang le go bala, go fopholetsa, kgodiso ya kgopolopalo le ditirwana tsa tharabololo ya dipalo ga mmogo le ditirwana tse di malebana le dipaterone, boalo le popego, go lekanya le dipalo tsa go dira ka tshedimosetso go tshwanetse go rulaganyetswe.

Gore o kgone go tiisa go ithuta, tiro e e kwalwang (buka ya go dira, dikai papetlana ya tirwana, dikarata tsekedimo tsa tiro) o tshwanetse go tsaya karolo mo ditirong tsa ditlhopha mo go kgonagalang teng. Barutwana ba tshwanetse go nna le didiriswa tsa go kwala (dibuka tsa dithutiso tsa phaposi jalo jalo) ditirwana tsa go ranola dipalo. Nako ya ditiro tsa ditlhopha di tshwanetse go neela barutwana tšhono ya go buisana le morutabana le barutwana ba tshwanetse go rotloediwa go tlotla, go diragatssa le go rekota dikakanyo tsa bone tsa dipalo.

Barutabana ba tshwanetse go tlhokomela gore ba seka ba nyatsa barutwana ba bonya, ba tshwanetse go newa tšhono ya go dira tiro ya nako telele. Go bonolo go nyalanya maemo o tiro e e boima go barutwana ba setlhopha sa bokgoni jo bo tshwanang. Le fa go ntse jalo, ditlhopha tsa bokgoni jo bo tlhakaneng di ka dira

sentle mo tirong ya go aga, fo lekanya le dira dipaterone kgotsa go dira ditirwana tsa go tlhopa kgotsa go tshameka metshameko

Ditirwana tse barutwana ba di itirelang: fa morutabana a ntse a tsweletse le setlhopha se se tsepamedisitsweng mo dithutong tsa kwa sekhutlwaneng, barutwana ba bangwe ba tshwanetse gore ba dire ditiro tse di farologaneng tsa dipalo tse tsepamedisitsweng mo go tiiseng dikgopolo le dikgono tse di setseng di rutilwe ka nako ya dithuto tse di tsepameditsweng ditlhopha tse dinnye. Ditirwana tse barutwana ba di itirelang di tshwanetse go farologanngwa go neelana ka bokgoni jwa maemo a a farologaneng. Ditirwana tse, di ka nna tsa akaretsa

- ditirwana tse di kwalelwang mo bukeng ya tiro
- papetlana ya tirwana/dikarata tsekedimo tsa tiro ya go bala, tiriso ya dipalo, dipalo tse di botlhofo (dipalo tsa mafoko)
- metshameko ya dipalo jaaka ludo, ditomino, diphasele tsa jiki saw
- Ditiro tse di akaretsang go aga, go tlhola, go dira dipaterone kgotsa go lekanya

Pakathuto ya dipalo e tshwanetse go neelana ka tshegetso ya barutwana ba itemogelang dikgoreletsi /mathata.

Ditirwana tse barutwana ba itirelang tsone ga mmogo le tsa dithuto tse di tsepamedisitsweng ditlhopha tse dinnye kwa sekhutlwaneng, di tshwanetse go lebelelwa (tse di diragatswang, le tsa motlotlo), di tshwaiwe le go tlhokemelwa (tse di kwadilweng) ke morutabana jaaka karolo ya tlhatlhobo e e sa tlhomamang le e e tlhomameng.

Go latedisiwa ga dikarabo tsa barutwana (tsa puisano, motlotlo, tse di dirisegang, tse di kwalwang) mo maemomg a ba ithutang le go rutiwa mo go ona, di bontsha morutabana go tlhatlhoba ka tsela e e tswelang, go lekola tswelopele ya barutwana le go rulaganya tshegetso go ya ka dikgoreletsi tse ba itemogelang mo go ithuteng

2.7.2 Barutwana ba ba itemogelang dikgoreletsi mo go ithuteng

Go botlhokwa go akaretsa barutwana ba itemogelang mathata mo thutong e e tletseng ditiro tsa phaposi.Dikao tse di dirisang dithusa-thuto tse di bonagalang di tshwanetse go dirisiwa sebaka se se leele gonne fa di tla tlogelwa ka bonko di ka baka tsielego le poelomorago mo thutong ya barutwana. Barutwana batshwanetse go neelwa nako e telele go:

- Feleletsa ditirwana tlhatlhobo le ditiro tsa phaposi
- Iponela bokgoni jwa go akanya (ditogamaano tsa bona).

Ditirwana tse di feditsweng, palo ya tsona e lekanyetswe go barutwana kwa ntle ga go sa eletlhoko se barutwana ba se itseng le bokgoni jwa bona bo sa lebelelwa .

2.7.3 Dipalo tsa tlhogo

Dipalo tsa tlhogo di tsaya karolo e kgolo mo kharikhulamong ya thuto ya motheo.Dintlha tsa Kgokagano ya dipalo le lenaane la katiso la dipalo tsa mophato mongwe le mongwe, tse barutwana ba solofetsweng go di itse kgotsa go di gakologelwa ka bonako di neetswe mo lenaaneng.Mo tlaleletsong,dipalo tsa tlhogo di ka dirisiwa ka phethelelo go thusa thata kgodisa kitso ya dipalo tse di kgolwane ka go dirisa mokgwa wa go bala o tlola le go bala o ya kwa godimo le kwa tlase mo palo sepagamo(number ladder)Sekao 796.Oketsa ka 7.Ke 803.Fokotsa ka 5 Ee ke 798. Oketsa ka 10... oketsa gape ka 2.....oketsa ka 90.....fokotsa ka 5 jalo jalo.Se, se ka thusa barutwana go dira molapalo wa dipalo tsa tlhogo.

Dipalo tsa tlhogo ka jalo di tlhagelela thata mmogo mo go baleng le mo dikarolong tsa kgodiso ya kgopolo palo tse di amanang le ditlhogo tsa dipalo le dipaterone.Se, se kgona go diragala gape fa o ruta ditirwana tsa go lekanya le dipalo tse di dirang ka tshedimosetso, fa go dirwa dipalo tsa tlhogo, morutabana ga a tshwanela go pateletsa barutwana go dira dipalo tsa tlhogo tsa go tlhakanya tse ba ka se di kgoneng. Didiriswa tsa go kwalela le dipadisa di tshwanetse go nna teng ka dinako tsotlhe mo barutwaneng ba ba di tlhokang.

2.8 MOPHATO WA R

Thuto ya go ithuta dipalo e tshwanetse go ikaega ka melawana ya tsenyaletso le motshameko yo o ikaegileng ka go ithuta.nna e e gokaganeng le go ithuta o tshameka.Morutabana o tshwanetse go nna matlhagatlhaga ka go nna mogokaganyi boemong jwa go nna motsamaisi wa thuto mo phaposing. Mogokaganyi o neela ka ditšhono tse di itiragalelang fela ka nako ya ditirwana tse di ikaegileng ka ngwana jaaka metshameko o o lokolosegileng mo sekhutlwaneng sa motshameko wa megopolo kgotsa lefelo la go aga diboloko,sekhutlwana sa go tshameka ka mmu le metsi ga mmogo le ditirwana tse di eteletsweng pele ke morutwana, tse di tsepamedisitsweng mo dikgopolong tsa dipalo jaaka go ithuta go bala,go nna le kgolo le kitso ya dipalo, boalo le dipopego,dipaterone,nako le temogo e e totobetseng ya dipalo.Mmala ka nosi ga se karolo ya dipalo mme e ka thusa go godisa ditirwana tsa kgopolo palo jaaka go tlhaola,kgobokanyo ka ditlhopha le pharologantsho

Dikarolo tsotlhe tsa mophato wa R, o akaretsa maemo a tikologo ya phaposi, tiragatso ya go ruta le ithuta, di tshwanetse go godisa kgolo ya ngwana ka bogotlhe.Kgolo e,e e tshamekang karolo e e botlhokwa mo dipalong tsa pele e akaretsa kgolo godisiwa ka go dirisa dikgang khutswe, dipina, diraeme,metshame ya menwana le metshameko ya metsi, ditshamekisi tsa go ithuta tse di akaretsang metshameko e e tshamekelwang mo lepolankeng, go aga le metshameko ya go utpolola (boima, nako, mothamo, go lekanya jalo jalo), metshameko ya megopolo, metshameko ya kwa ntle, le ya mo patlelong.Mefuta e mentsi ya metshameko e ka akaretsa dintlha ka kitso e ntsi ya dipalo sekao go meta fa o apaya,go bala fa reka dilwana kwa lebenkeleng.

Ka mafoko a mangwe, thutego mo dipalong tsa tshimologo le dikgopolo tse nyalanang le dipalo, di tshwanetse gore jaaka di siametse thuto, di ikamanye go melawana ya go ithuta e e latelang e ngwana e golang mo kgatong tse tharo tsa go ithuta, maina a dikgato tse ke a:jalo go anya kitso ya dipalo le megopolo yotlhe e e tsenyeletsang dipalo di tshwanetse tsa ikaege ka theo (motheo) ya thuto e e reng fa bana ba ithuta ba tsamae ka dikgato tse tharo tse di latelang tse:

- Kgato ya maitemogelo ka tsamaiso ya mmele (maitemogelo ka dikgopolo tsa mmele le dirwe tsa kutlo
- Kgato ya go dira ka dikgonngwa/dipopego (Tekatekanyo ya popego tharo,dirisa diboloko tse di farologaneng, matlhare le didiriswa tse dingwe mo tikologong)le
- Tshwantshiso boemedi jwa pene le pampiri (tshwantshiso ya dikgonngwa tse di sa felelang o dirisa ditshwantsho, nyalano ya dikarata tsekedimo)

Mo ngwageng wa mophato wa R ,lenaanethuto le bidiwa lenaneo la letsatsi le letsatsi **(Lebelela Tlhakapalo 1)** mme e dirilwe ka dikarolo tse tharo:

- Ditiro tse di kaelwang ke morutabana
- Ditiro tsa tlwaelo le
- Ditiro tsa boitshimololedi tsa bana le metshameko e e golololesegileng

Kgatelelo mo tsamaong ya ngwaga,e tshwanetse go nna mo tatelong ya lenaneo la letsatsi le letsatsi go tsweletsa go ithuta tshimologo ya kitso ya dipalo ka mokgwa wa go ithuta o tshameka.Sekao ditiro tse di kaelwang ke morutabana thutotong ya dipalo, di neelana ka ditšhono ka nako ya go dula le barutwana mo sedikong. Bontsi jwa ditiro ka nako

ya go dula le barutwana mo sekeleng, di tshwanetse go tsepamedisiwa mo go ithuteng dipalo. Nako ya mo mosong fa bana ba dumedisiwa le fa lenaneo le tshwaiwa go bona ba bas a tlang sekolong, ke nako e neelanang ka tshono ya go tshameka ka dipalo, sekao go bala. Nako tse dingwe tsa go dula le bana mo sekeleng jaaka nako ya dipalo, perceptual motor mosakos, nako ya go itshikinya, nako ya mmino le nako ya bonetetshi di neelana gape ka nako go itsepamisa mo dipalong.

Kgatelelo ya dipalo e ka dirwa ka nako ya ditirwana tsa botsweretshi jwa boitlhamedi, sekao o ka dirisa dipopego tsa thutatekano jaaka disekele le dikhutlo-nne go dira kholaje kgotsa o bapisa paterone ya go foreima setshwantsho. Karata tsekedimo ya maemo a bosa, khalentara le nako ya malatsi a botsalo di ka neela ka ditshono tsa go utolola dikgopolo tsa dipalo. Ke kitso ya morutabana le boithaopi tse di ka godisang bokgoni jwa go ithuta .

- Ditiro tsa tlwaelo, ke dinako tse bana ba tsayang karolo ka matlhagatlhaga jaaka nako ya ja, nako ya go fitlha, nako ya go ya gae le nako ya go ya kwa ntlwaneng boithomelo, di ka nna tsa tsepamedisiwa mo dipalong.Bana ba ba apereng diaparo tse dikhibidu, sekao ba ye ntlwaneng boithomelo pele (mmala le palokemotatelano) ngwana mongwe le mongwe o newa dijo le sementshisi (bongwe ka bongwe nyalelano), Pinky o tla rata sementshisi ya bobedi, Pule ga a sa tlhole a batla gape. Se se se re isa mo go supeng le go diriseng nako ya go rut, ka mantswe a mangwe go nna mogokaganyi mo go ithuteng
- Ka nako ya motshameko o o gololosegileng morutabana a ka tsweletsa thuto ya dipalo tsa tshimologo ka go rulaganya lefelo la go tshameka motshameko o o gololosegile ka tsela e e maleba. Metshameko ya kwa ntle jaaka go palama mo polankeng kgotsa go palama baesekele go ka tsweletsa go ithuta dintlha kgolo tsa tlotlofoko ya dipalo jaaka godimo/tlase kwa tlase/kwa godimo, bonako/bonya, godimo/ fa fatshe jalo jalo. Go yshameka ka mmu le metsi go ka godisa go tlhaloganya dikgopolo jaaka boima, bolumu le mothamo. Ditirwana tse tsotlhe tse, di ka tsweletsa dkgono tse di botlhokwa, tse di ka nnang le karolo e e botlhokwa mo katlegong ya go ithuta kwa dikolong tsa dithuto tse di tlhomameng tsa serutwa sa letheresi le numeresi. Dikai tsa dikgono tse ke:
    - Kgodiso mo go tlhaloganyeng maemo a gago mo boalong sekao kwa morago, mo pele ga, ka fa tlase ga, go bapa le sediriswa (sekao se, se ka golaganngwa le boemo jwa bolengpalo mo dipalong) le
    - Tshupokaelo le tshupo kwalo (di ka golaganngwa go dipalo le popego ya ditlhaka le go bala go tswa kwa molemeng go ya kwa mojeng)

Tiragatso e neetsweng fa godimo, e kaetsa mokgwa wa dithuto tsa mophato wa R tse di tsweletsang tharabololo ya dipalo, kakanyo ka tatelano le neelano ya mabaka, ga mmogo le thuto ka ga boagi ka gonne di tsepamedisitswe mo go ithuteng le ba bangwe le dipuisano. Ka go dirisa dinako tsa go ruta barutabana ba ka rotloetsa bana go nagana ka ditshwetso tsa bona le go nna le ponelopele mo di kgonagalong sekao a fopholetse gore a setshelo se se diriseditsweng go tshela metsi se ka dirisediwa go tshela metsi a mantsi go feta a setshelo se sengwe.

Ka go dirisa ditshitshinyo tse di thusang le go laletsa ngwana go nagana ka ga thefosano ya maemo a a le ditsela tsa go rarabolola dipalo, morutabana a ka rotloetsa bana go nagana kwa teng thata ka ga mabaka le go bona mabaka a a siameng ka boikgethelo jo ba bo dirang. Ka tsela e, kgodiso ga e dirwe mo dipalong fela mme gape le mo ngwaneng ka bogotlhe le mosola wa pegelo ya polisi ya kharikhulamo ya tlhatlhobo o tlisiwa mo tirisong.

Tiragatso ya mekgwa ya tlhatlhobo mo mophatong wa R, e tshwanetse go dirwa ka tsela e e sa tlhomamang ebile bana ba seka ba patelediwa go kwala “teko”.Ke ka lebaka le o, tlhatlhobo e sa akarediwang mo mophatong wa R pegelo ya pholisi ya kharikulamo ya tlhatlhobo. Tirwana nngwe le nngwe ya e e dirisediwang tlhatlhobo e tshwanetse go rulaganngwa ka matsetseleko gore o kgone go akaretsa dikgono tse di farologaneng

Gantsi mo mophaong wa R, tlhatlhobo e dirwa ka go lebelela bana, morutabana a rekota dipholo tsa tlhatlhobo a dirisa lenaneo la go lekola. Ka ga moo, fa ngwaga o tsweletse morutabana o kgona go bona setshwano se se

feletseng sa ngwana, se feletse ka dikgwetlho le maatla a a godileng mo nakong e e telele. Se se go naya tšhono ya go thusa ngwana yo o itemogelang dikgwetlho tse le gore o oketse maatla a gagwe.

O seka wa letlelela porogerama e rulagantsweng ka tsela e e tiileng, e e tlhomamisitsweng mo melaong ya kgale ya go ithuta, ka gonne ga e oketse ditšhono tsa go ithuta dipalo mo ngwaneng wa mophato wa R. Mophato wa R o seka wa rutiwa ka tsela ya mophato wa 1. Phaposi e, e na le dipharologantsho tse di ikaegileng ka gore ngwana o o dira jang gore a nne le bokao go ya ka dingwaga tse a leng mo go tsona le gore o bona jang kitso, dikgono, boleng le maitsholo a a mo letlelelang go oketsa ditshono tse a di newang mo dingwageng tsa thuto ya gagwe e e tlhomameng.

2.9 DIDIRISWA TSE DI ATLENEGISITSWENG TSA DIPALO TSA PHAPOSI YA KGATO MOTHEO

- Dipadisa
- Taese e tonna
- Letlhomeso le legolo(foraime)la go bala
- Karata tsekedimo ya boleele
- Pousetara ya 1-100 le 101-200 ya gerete ya dipalo tsa go bala
- Melapalo e e farologaneng(Tse di tsepameng le tse di rapeletseng)
- Sete ya dikarata tsa dipalo
- Tšhelete a go tshameka disente le tšhelete dipampiri a motshameko
- Khalentara ya ngwaga eo
- Tshupanako e tonna
- Sekale sa boima
- Diboloko tsa go aga
- Seloko sa go bopa
- Mabokose a a farologaneng a dipopego tse di fapaneng le bogolo di tlisiwa go tswa kwa gae.
- Mabotlole a dipolasitiki a a farologaneng le ditshelo tsa go tlhalosa le go bapisa methamo/dibolumu.
- Dikai tse di siameng tsa kgolokwe (bolo) lebokose la khutlonnetsepa (lebokose), kubiki (cube), setopo (cone), piramiti (pyramid) le selennere (cylinder) tse, morutabana o di bopa ka boene.
- Palo ya dikhutlonne tsa dipolasitiki le mabokose, dikhutlonnetsepa tse di farologaneng, didiko, dikhutlotharo tsa bogolo jo bo farologaneng.
- Metshameko ya dipalo, sekao, luto (ludo), morabaraba wa dinoga le llere (snake and ladder), malepatshwantsho (jigsaw puzzle), ditomino (dominoes), metshameko wa malepa ka tlhale (tangrams)
- Di botlhokwa go mophato wa R le 1.
- Boalo jwa motlhaba le motshameko wa metsi.
- Didiriswa tsa go palama, lekanetsa, go akgwa le kgati.
- Lebenkele la motshameko ka dilwana tse di rekwang ka tshelete ya motshameko.
- Metshameko e farologaneng e e maleba, jaaka “Khutlonne ke eng?”
- Diboloko

KGAOLO 3: TLHALOSO YA DITENG TSE DI TOTOBETSENG

3.1 MATSENO

Mo Sekgamung sa Thuto-Kakaretso le Katiso sa mephato ya R-9, go na le dikarolo tsa diteng tsa serutwa sa Dipalo di le tlhano:

- Dipalo, Matshwao le Dikgolagano
- Dipaterone, Diopereishene le Alejebera
- Boalo le Popego
- Tekanyo
- Go dira ka dipalo tsa tshedimosetso

Diteng tsa serutwa sengwe le sengwe di kgaogantswe ka ditlhogo tsa dipalo, sekao, nngwe ya ditlhogo mo karolong ya Boalo le jeometeri) mo Kgatong ya Motheo, ke ka ga tekatekanyopedi/matlhakorepedi (2-D). Dikgopolo le dikgono di totobaditswe mo setlhogong sengwe le sengwe. Kgaolo ya 3 ya Dipalo tsa Kgato ya Motheo ya Pegelo ya Pholisi ya Kharikhulamo le Tlhatlhabo e totobatsa le go tlhalosa diteng tse di tlhokegang tsa dipalo.

3.2 TOTOBATSO YA DITENG GO BONTSHA TSWELELOPELE

Manaane a thadiso ya kgato a bontsha dikgopolo le dikgono tse di totobetseng le tsweletso go tswa mo mophatong wa R go ya go wa 3. Manaane a thadiso ya kgato a bontsha tsweletso ya dikgopolo le dikgono go ralala dikgweditharo di le nne mo ngwageng.

Le gale, mo ditlhogong tse di rileng dikgopolo le dikgono di a tshwana mo mephatong e mebedi kgotsa e meraro e e latelanang. Tlhaloso ya diteng e tla neela dikaelo tse di bontshang gore tswelelopele e tshwanetse e dirwe jang mo mabakeng a a tshwanang le a. Ka moo, totobatso ya diteng e tshwanetse go buisiwa mmogo le tlhaloso ya diteng

Thadiso ya Kgato ya Motheo e bontsha tsweletso ya dikarolo tsa diteng; Dipalo, Matshwao le Dikgolagano, Dipaterone, Ditiriso le Alejebera, Boalo le Popego, Tekanyo le Go dira ka Dipalo tsa Tshedimosetso go tswa go mophatong wa R-3 jaaka e tlhagisitswe mo manaaneng a a fa tlase:

THADISO YA KGATO YA MOTHEO

1. DIPALO, DIOPEREISHENE LE DIKGOLAGANO

Kgatelopele mo Dipalong, Diopereishene le Dikgolagano

- Kgatelopele e kgolo ya Dipalo, Diopereishene le Dikgolagano e diragala ka ditsela di le tharo:
  - Tlhatlhamano ya dipalo e a oketsega
  - Mefuta e e farologaneng ya dipalo e a itsisiwe
  - Ditogamaano tsa palelo di a fetoga
- Fa tlhatlhamano ya dipalo ya dipalelo e oketsega go fitlha mo mophatong wa 3, barutwana ba tshwanetse go bontsha bokgoni jo bo lekaneng mo ditogamaanong tsa dipalelo.
- Mathata a a mo tirisong a tshwanetse go tsaya tsia tlhatlhamano ya dipalo tsa mophato mmogo le bokgoni jwa barutwana jwa go balela.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
KGODISO YA PALOKGOPOLO: Bala o dirisa dipalotlalo				
1.1 **Bala didiriswa**	**Bala didiriswa tse di kgonngwang** Fopholetsa le go bala ka botshepegi, ka bonnye didiriswa go fitlha ka10 letsatsi le letsatsi.	**Bala didiriswa tse di kgonngwang** Fopholetsa le go bala ka botshepegi, ka bonnye didiriswa go fitlha ka 50 letsatsi le letsatsi.Go bala ka ditlhopha go rotloediwe.	**Bala didiriswa tse di kgonngwang** Fopholetsa le go bala ka botshepegi, ka bonnye go fitlha ka 200 letsatsi le letsatsi. Go bala ka ditlhopha go rotloediwe.	**Bala didiriswa tse di kgonngwang** Fopholetsa le go bala ka botshepegi, ka bonnye go fitlha ka 1000 letsatsi le letsatsi.Go bala ka ditlhopha go rotloediwe.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
1.2 **Bala go ya pele le kwa morago**	Go balela-pele le go balela morago ka bongwe go tloga ka 1 go fitlha ka 10. Dirisa dipalo tsa dipina le diraeme.	Go balela-pele le go balela morago ka bongwe go tloga ka palo nngwe le nngwe e e mo magareng ga 0 go fitlha ka 100 **Go balela-pele ka**: • bolesome (10s) go tloga ka katiso nngwe le nngwe ya bolesome e e mo magareng ga 0 le 100 • botlhano (5s) go tloga ka katiso nngwe le nngwe ya botlhano e e mo magareng ga 0 le 100 • bobedi (2s) go tloga ka katiso nngwe le nngwe ya bopedi magareng ga 0 le 100	Go balela-pele le go balela morago ka: • bongwe (1s) go tloga ka palo nngwe le nngwe e e mo magareng ga 0 le 200 • bolesome (10s) go tloga katiso nngwe le nngwe ya bo10 e e mo magareng ga 0 le 200 • botlhano (5s) go tloga ka palo nngwe le nngwe ya katiso ya 5 e e mo magareng ga 0 le 200 • bobedi (2s) go tloga ka palo nngwe le nngwe ya katiso ya 2 e e mo magareng ga 0 le 200 • boraro (3s) go tloga ka palo nngwe le nngwe ya katiso ya 3 e e mo magareng ga 0 le 200 • bone (4s) go tloga ka palo nngwe le nngwe ya katiso ya 4 e e mo magareng ga 0 le 200	Go balela-pele le go balela morago ka: • bongwe (1s) go tloga ka palo nngwe le nngwe e e mo magareng ga 0 le 1000 • bolesome (10s) go tloga ka palo nngwe le nngwe ya katiso ya 10 e e mo magareng ga 0 le 1000 • botlhano (5s) go tloga ka palo nngwe le nngwe ya katiso ya 5 e e mo magareng ga 0 le 1000 • bopedi (2s) go tloga ka palo nngwe le nngwe ya katiso ya 2 e e mo magareng ga 0 le 1000 • botharo (3s) go tloga ka palo nngwe le nngwe ya katiso ya 3 e e mo magareng ga 0 le 1000 • bonne (4s) go tloga ka palo nngwe le nngwe ya katiso ya 4 e e mo magareng ga 0 le 1000 • bo 20,bo 25, bo 50, b0 100 go fitlha bonnye ka 1000.
KGODISO YA PALOKGOPOLO: Kemedi ya palotlalo				
	Bua le go dirisa mainapalo mo tirisong e e tlwaelegileng.			
1.3 **Matshwaopalo le mainapalo**	**Lemoga, tlhaola le go buisa dipalo** • Lemoga,tlhaola le go buisa matshwapalo go tloga ka 1 go fitlha 10 • Lemoga,tlhaola le go buisa mainapalo go tloga ka 1 go fitlha 10	**Lemoga,tlhaola le go buisa matshwaopalo** • Lemoga,tlhaola le go buisa letshwaopalo go tloga ka 1 go fitlha 100 • Kwala letshwaopalo go tloga ka 1 le go fitlha 20 • Lemoga,tlhaola le go buisa mainapalo go tloga ka 1 go fitlha 10 • Kwala leinapalo go tloga ka 1 go fitlha 10	**Lemoga,tlhaola le go buisa matshwaopalo** • Lemoga,tlhaola le go buisa matshwaopalo go tloga ka 0 go fitlha ka 200 • Kwala matshwaopalo go tloga ka 0 go fitlha ka 100 • Lemoga,tlhaola le go buisa leinapalo go tloga ka 0 go fitlha ka 100 • Kwala leinapalo go tloga ka 0 go fitlha 100.	**Lemoga,tlhaola le go buisa dipalo** • Lemoga,tlhaola le go buisa matshwaopalo go tloga ka 0 go fitlha ka 1000 • Kwala matshwaopalo go tloga ka 0 go fitlha ka 1000 • Lemoga,tlhaola le go buisa mainapalo go tloga ka 0 go fitlha ka 1000 • Kwala leinapalo go tloga ka 0 go fitlha 1000.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
KGODISO YA KGOPOLOPALO:Tlhalosa,bapisa le go rulaganya dipalotlalo				
1.4 **Tlhalosa, bapisa le go rulaganya dipalo**	**Tlhalosa,bapisa le go rulaganya kgobokanyo ya didiriswa go fitlha ka 10** • Tlhalosa palotlalo go fitlha ka 10 • Bapisa dilo tse pedi tse o di neilweng o bolele gore ke efe e e leng kgolo,nnye go,e kgolo go, e e lekanang le,e ntsi, tse mmalwa go fitlha ka 10 • Rulaganya didiriswa tse di kgobokantsweng tse di fetang tse pedi go tloga go e nnye go ya go e kgolo go fitlhela 10.	**Tlhalosa,bapisa le go rulaganya didiriswa go fitlha ka 20** • Tlhalosa le go bapisa didiriswa tse di kgobokantsweng go ya ka bontsi, bonnye le tse di tshwanang • Tlhalosa le go rulaganya didiriswa tse di kgobokantsweng go tloga ka tse dintsi go ya go tse di mmalwa le go tloga go tse mmalwa go ya go go tse dintsi.		
1.4 **Tlhalosa, bapisa le go rulaganya dipalo**	**Dirisa lebaditatelano go bontsha tatelano,lefelo kgotsa maemo**: Godisa temoso ka ga lebadi tatelano sekao:ya ntlha, ya bobedi, ya boraro go fitlha go ya borataro le ya bofelo.	**Tlhalosa, bapisa le go rulaganya dipalo go fitlha ka 20** • Tlhalosa le go bapisa palotlalo go ya ka e nnye go,e kgolo go le e ntsi go, le e e lekanang le. • Tlhalosa le go rulaganya dipalo go ya ka bonnye go fitlha ka bogolo le bogolo go fitlha ka bonnye. **Dirisa lebaditatelano go bontsha thulaganyo,lefelo le maemo**: Baya didiriswa mo moleng go tloga ka ya ntlha go ya go ya lesome kgotsa ya ntlha go fitlha ka ya bofelo sekao: ya ntlha, ya bobedi, ya boraro……. Bo lesome.	**Tlhalosa,bapisa le go rulaganya dipalo go fitlha 99** • Tlhalosa le go bapisa palotlalo go fitlha 99 ka go dirisa bonnye go,kgolo go, ntsi go le e e lekanang le. • Tlhalosa le go rulaganya dipalo go fitlha ka 99 go tloga go e nnye go fitlha kwa go e kgolo le e e kgolo go fitlha go e e nnye **Dirisa lebaditatelano go bontsha thulaganyo,lefelo kgotsa maemo** Baya didiriswa ka ya ntlha go fitlha ka ya bosome-a-mabedi kgotsa ya ntlha go fitlha ka ya bofelo sekao: ya ntlha, ya bobedi, ya boraro…..ya bosomeamabedi.	**Tlhalosa,bapisa le go rulaganya dipalo go fitlha 999** • Tlhalosa le go bapisa palotlalo go fitlha 999 ka go dirisa nnye go ,kgolo go le e lekana le. • Tlhalosa le go rulaganya palotlalo go fitlha ka 999 go tloga ka e e nnye go fitlha ka e kgolo le e kgolo go fitlha go e nnye. **Dirisa lebaditatelano go bontsha thulanyo,lefelo kgotsa maemo** Dirisa,buisa le go kwala lebaditatelano o akaretsa khutshwafatso (ya ntlha, ya bobedi, ya boraro go fitlha ka ya bosomeamararo-nngwe)

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
KGODISO YA KGOPOLOPALO:Bolengkemedi				
1.5 **Bolengkemedi**		**Simolola go lemoga bolengkemedi ba bonnye ba palopedi go fitlha ka 20** • Tlhatlhamolola palomonopedi mo dikatisong tsa 10 le bongwe.	**Lemoga bolengkemedi ba bonnye ba palopedi go fitlha 99** • Tlhatlhamolola palomonopedi go fitlha ka 99 mo dikatisong tsa 10 le bongwe. • Tlhaola le go bolela bolengpalo jwa palo nngwe le nngwe.	**Lemoga bolengpalo jwa palotharogo fitlha ka 999** • Tlhatlhamolola palomonotharo go fitlha ka 999 mo dikatisong tsa 100,dikatiso tsa 10 le bongwe/ diyuniti • Tlhaola le go neela boleng jwa palo nngwe le nngwe.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
GO RARABOLOLOLA MATHATA A A MO TIRISONG				
1.6 **Ditogamaano tsa go rarabolola dipalo**	Dirisa ditogamaano tse di latelang go fitlha ka 10: • Didiriswa tse di kgonngwang sekao dibadisi • Llere ya dipalo e e bonagalang	Dirisa ditogamaano tse di latelang fa o rarabolola dipalo le go tlhalosa ditharabololo tsa dipalo: • Didiriswa tse di kgonngwang sekao:dibadisi • Ditshwantsho go thala kgang ya dipalo. • Go aga le go kgaoganya dipalo. • Go oketsa gabedi le go kgaoganya ka bogare. • Melapalo e e tshegetswang ka didiriswa tse di kgonngwang	Dirisa ditogamaano tse di latelang fa o rarabolola dipalo le go tlhalosa ditharabololo tsa dipalo: • Dithalo kgotsa didiriswa tse di kgonngwang sekao:dibadisi • Go aga le go kgaoganya dipalo • Go oketsa gabedi le go kgaoganya ka bogare • melapalo	Dirisa ditogamaano tse di latelang fa o rarabolola dipalo le go tlhalosa tharabololo tsa dipalo: • Go aga le go kgaoganya dipalo • Go oketsa gabedi le go kgaoganya ka bogare. • melapalo • atametsa go bolesome
1.7 **Go tlhakanya le go ntsha**	Rarabolola didipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo tse di akaretsang go tlhakanya le go ntsha ka dikarabo tse di fitlhang go 10	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo tse di akaretsang go tlhakanya le go ntsha ka dikarabo tse di fitlhang ka 20	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo tse di akaretsang go tlhakanya le go ntsha ka dikarabo tse di fitlhang ka 99.	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo tse di akaretsang go tlhakanya le go ntsha tsa dikarabo tse di fitlhang go 999
1.8 **Tlhakanyo poeletso e e isang kwa go atiseng**		Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo tse di akaretsang go tlhakanya ka poeletso ka dikarabo tse di fitlhang go 20.	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo o dirisa poeletso ya go tlhakanya le go atisa ka dikarabo tse di fitlhang go 50.	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago ya dipalo o dirisa katiso ka dikarabo tse di fitlhang go 100.
1.9 **Go kgobokanya le go kgaoganya go go lebiseditseng kwa go aroleng**	Rarabolola le go tlhalosa dipalofoko mo tirisong e e akaretsang go kgaoganya ka go lekana,go kgobokanya ka dipalotlalo go fitlha ka 10 le dikarabo tse di ka akaretsang sesala	Rarabolola le go tlhalosa tharabololo ya dipalo di le mo tirisong tse di akaretsang go kgaoganya ka go lekana le go kgobokanya ka dipalotlalo tsa go fitlha ka 20 le dikarabo tse di ka akaretsang sesala.	Rarabolola le go tlhalosa tharabololo ya dipalo tse di mo tirisong tse di akaretsang go kgaoganya ka go lekana le go kgobokanya go fitlha ka 50 le dikarabo tse di ka akaretsang sesala.	Rarabolola le go tlhalosa tharabololo ya dipalo tse di mo tirisong tse di akaretsang go kgaoganya ka go lekana le go kgobokanya go fitlha ka 100 dikarabo tse di ka akaretsang sesala.
1.10 **Kgaoganyo e telele ya palophatlo**			Rarabolola le go tlhalosa tharabololo ya dipalo tse di mo tirisong tse di akaretsang kgaoganyo ka go lekalekana e e lebisitseng kwa thararabololong e e akaretsang dipalophatlo tse di tsamaelanang	Rarabolola le go tlhalosa tharabololo ya dipalo tse di mo tirisong tse di akaretsang kgaoganyo ka go lekalekana e lebisitse kwa tharabololong e e akaretsang dipalophatlo tse di tsamaelanang le tse di sa tsamaelaneng.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
1.11 **Tšhelete ya papetlana**	Godisa temogo ya tšhelete a papetlana le tšhelete a dipampiri a Aforika Borwa	• Lemoga le go tlhaola tšhelete a papetlana a Aforika Borwa (5c, 10c, 20c, 50c, R1, R2, R5) tšhelete a dipampiri R10, R20 • Rarabolola dipalo tsa tšhelete a a akaretsang palogotlhe le tšhelete a a salang fa o reka le go fetolela R20 go tšhelete a ditshipi ka bo 20c	• Lemoga le go tlhaola tšhelete a papetlana a Aforika Borwa (le tšhelete a dipampiri) • Rarabolola dipalo tsa tšhelete a a akaretsang palogotlhe le tšhelete a a salang fa o reka le go fetolela R99 go tšhelete a ditshipi ka bo 90c	• Lemoga le go tlhaola tšhelete otlhe a Aforika Borwa a tshipi/papetlana le a dipampiri • Rarabolola dipalo tsa tšhelete a a akaretsang palogotlhe le go fetolela diranta mo disenteng. • Fetolela magareng ga diranta le disente
Palelo e e seng mo tirisong				
1.12 **Dithekeniki/** **Malepa** (mekgwa kgotsa ditogamaano)		**Dirisa ditogamaano tse di latelang go diragatsa palelo.** • Go thala kgotsa go dirisa didiriswa tse di kgonngwang sekao: dibadisi • Go aga le go kgaoganya dipalo • Go oketsa gabedi le go aroganya ka bogare • Molapalo	**Dirisa ditogamaano tse di latelang go diragatsa palelo.** • Go thala kgotsa go dirisa didiriswa tse di kgonngwang, sekao dibadisi • Go aga le go kgaoganya dipalo • Go oketsa gabedi le go aroganya ka bogare • Molapalo	**Dirisa ditogamaano tse di latelang go diragatsa palelo.** • Go aga le go kgaoganya dipalo • Go oketsa gabedi le go aroganya ka bogare • Molapalo • Katametso go lesome
1.13 **Go tlhakanya le go ntsha/tlosa**	Rarabolola dipalo tse di boletsweng ka go tlhakanya le go ntsha mme o neele ditharabololo go fitlha ka 10	• Tlhakanya go fitlha ka • Ntsha go tswa go fitlha ka • Dirisa matshwao a a maleba (+, –, =, □) • Ikatiso kgolagano ya dipalo tse di fitlhang go	• Tlhakanya go • Ntsha go tswa go • Dirisa matshwao a maleba (+, –, =, □) • Ikatiso kgolagano ya dipalo tse di fitlhang go	• Tlhakanya go • Ntsha go tswa go • Dirisa matshwao a maleba (+, –, =, □) • Ikatiso kgolagano ya dipalo tse di fitlhang go
1.14 **Tlhakanyo-poeletso e e lebisang kwa go atiseng**		• Tlhakanya dipalo tse di tshwanang o di boeletsa go fitlha ka 20 • Dirisa matshwao a a maleba (+, =, □)	• Atisa dipalo go fitlha go kale go palogotlhe ya • Dirisa matshwao a a maleba (+, x, =, □)	• Atisa palo nngwe le nngwe go 2,3,4,5,10 go palogotlhe ya 100 • Dirisa matshwao a a maleba (x, □)
1.15 **Go arola**				• Arola dipalo tse di fitlhang go 100 ka 2,3,4,5,10 • Dirisa matshwao a maleba (÷, =, □)

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
1.16 **Dipalo tsa tlhogo**	Dipalokgopolo: tlhatlhamano ya 10 Tirwana nngwe le nngwe e simolola ka dipalo tsa tlhogo • Go bala didiriswa letsatsi le letsatsi • Go balela kwa pele le morago • Go bala dipalo ka tatelano • Opa diatla ga ntsi/gole gonnye ka nako • Ke kopo efe ya diatla e e leng ntsi thatathata,nnye thatathata, ntsi go feta, nnye go feta. • Ke palo efe e e latelang pele, morago, fa gare.	**Dipalokgopolo: Tlhatlhamano ya 20** • Naya dipalo tse di mo pele le mo morago ga palo e o e neetsweng. • Rulaganya sete ya dipalo e e neetsweng e e tlhophilweng. • Bapisa dipalo go fitlha go 20 mme o neele gore ke efe e e leng 1 le e e leng 2 go feta kgotsa e le nnye.	**Dipalokgopolo:Tlhatlhamano ya 99** • Rulaganya sete ya dipalo e e neetsweng e e tlhophilweng. • Bapisa dipalo go fitlha go 99 mme o neele gore ke efe e e leng 1, 2, 3, 4, 5 le 10 le e e fetang kgotsa e le nnye.	**Dipalokgopolo:Tlhatlhamano ya 1000** • Rulaganya sete ya dipalo e e neetsweng e e tlhophilweng. • Bapisa dipalo go fitlha go 1000 mme o neele gore ke efe e e leng 1, 2, 3, 4, 5 le 10 le e e fetang kgotsa e le nnye.
		Gopola ka bonako: • Dintlha ka go tlhakanya le go ntsha go fitlha ka 10 **Ditogamaano tsa palelo** Dirisa ditogamaano tsa palelo go tlhakanya le go ntsha sentle: • Baya palo e kgolo pele gore o kgone go balela-pele kgotsa kwa morago. • Molapalo • Go oketsa gabedi le go aroganya ka bogare • Go aga le go kgaoganya dipalo	**Gopola ka bonako:** • Dintlha ka go tlhakanya le go ntsha go fitlha ka 20 • Go tlhakanya kgotsa go ntsha dikatisanetso tsa ga 10 go tloga ka 0 go fitlha ka 100 **Ditogamaano tsa palelo** Dirisa ditogamaano tsa palelo go tlhakanya le go ntsha sentle: • Baya palo e kgolo pele gore o kgone go balela-pele kgotsa kwa morago. • Molapalo • Go oketsa gabedi le go aroganya ka bogare • Go aga le go kgaoganya dipalo • Dirisa dikgolagano magareng ga go tlhakanya le go ntsha.	**Gopola ka bonako:** • Gakologelwa dintlha ka go tlhakanya le go ntsha go fitlha ka 20 • Tlhakanya kgotsa ntsha dikatisanetso tsa 10 go tloga ka 0 go fitlha 100 • Dintlha ka ga dikatiso tsa: - Mananeo a katiso ya bo 2 e e nang le dikarabo go fitlha go 20 - Mananeo a katiso ya bo10 e e nang le dikarabo go fitlha go 100 • Dintlha ka ga go arola dipalo: - Dipalo tse di fitlhang ka 20 di kgona go aroganngwa ka 2. - Dipalo tse di fitlhang ka 100 di kgona go aroganngwa ka 10. **Ditogamaano tsa palelo** Dirisa ditogamaano tsa palelo go tlhakanya le go ntsha sentle: • Baya palo e kgolo pele gore o kgone go balela-pele kgotsa kwa morago. • Molapalo • Go oketsa gabedi le go aroganya ka bogare • Go aga le go kgaoganya dipalo • Dirisa dikgolagano magareng ga go tlhakanya le go ntsha. • Dirisa dikgolagano magareng ga go atisa le go arola.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
1.17 **Dipalophatlo**			• Dirisa le go neela dipalophatlo tse di tsamaelanang le tse di sa tsamaelaneng mo tirisong e e tlwaelegileng e e akaretsang dihalofo, nnagwe-nneng, nngwe tharong, nngwe thatarong le nngwe tlhanong. • Lemoga dipalophatlo mo popegong ya setshwantsho • Kwala dipalophatlo jaaka halofo.	• Dirisa le go neela dipalophatlo tse di tsamaelanang le tse di sa tsamaelaneng mo tirisong e e tlwaelegileng e e akaretsang dihalofo, nnagwe-nneng, nngwe tharong, nngwe robeding, nngwe thatarong le nngwe tlhanong. • Lemoga dipalophatlo mo popegong ya setshwantsho. • Simolola go lemoga dihalofo tse pedi kgotsa nngwe tharong tse pedi di bopa palotlalo e le nngwe le gore pedi-nneng e a lekalekana. • Kwala dipalophatlo jaaka halofo e le 1, pedi-tharong.

THADISO YA KGATO YA MOTHEO

2. DIPATERONE, DITIRISO LE ALEJEBERA

Tsweletso mo Dipateroneng, Ditiriso le Alejebera

- Mo Dipateroneng, Ditiriso le Alejebera, barutwana ba bona ditšhono tsa go:
  - Feleletsa le go atolosa dipaterone tse di tshwantshitsweng ka dipopego tse di farologaneng, le
  - Go tlhaola le go tlhalosa dipaterone.
- Go tlhalosa dipaterone go thaya motheo mo barutwaneng ba Kgato ya Bogare go tlhalosa melao ya dipaterone. Se, se tlhomamisiwa mo Kgatong e Kgolwane mo tirong ya Alejebera

DITENG	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
2.1 **Dipaterone tsa Jeometeri**	**Kopolola le go atolosa** Kopolola le go atolosa dipaterone tse di bonolo o dirisa didiriswa tse di kgonngwang le ditshwantsho (sekao, dirisa mmala le dipopego)	**Kopolola, atolosa le go tlhalosa** Kopolola , atolosa le go tlhalosa ka mafoko • dipaterone tse di bonolo tse di dirilweng ka didiriswa tse di kgonngwang • dipaterone tse di bonolo tse di tshwantshitsweng ka mela, dipopego kgotsa didiriswa **Bopa dipaterone tsa gago** Bopa dipaterone tsa gago tsa Jeometeri • Ka didiriswa tse di kgonngwang • ka go thala mela, dipopego kgotsa didiriswa **Dipaterone tse di re potapotileng** Tlhaola, tlhalosa ka mafoko le go kopolola dipaterone tsa Jeometeri • mo tlholegong • go tswa mo botshelong jwa matsatsi a gompieno • go tswa mo go tsa setso	**Kopolola, atolosa le go tlhalosa** Kopolola , atolosa le go tlhalosa ka mafoko • dipaterone tse di bonolo tse di dirilweng ka didiriswa tse di kgonngwang • dipaterone tse di boima tse di ditshwantshitsweng ka mela, dipopego kgotsa didiriswa **Bopa le go tlhalosa dipaterone tsa gago** • Ka didiriswa tse di kgonngwang • ka go thala mela, dipopego kgotsa didiriswa **Dipaterone tse di re potapotileng** Tlhopha, tlhalosa ka mafoko le go kopolola dipaterone tsa Jeometeri • mo tlholegong • go tswa mo botshelong jwa matsatsi a gompieno • go tswa mo go tsa setso	**Kopolola, atolosa le go tlhalosa** Kopolola , atolosa le go tlhalosa ka mafoko • dipaterone tse di bonolo tse di dirilweng ka didirisegi • dipaterone tse di boima tse ditshwantshitsweng ka mela, dipopego kgotsa didiriswa **Bopa le go tlhalosa dipateron tsa gago** • Ka didiriswa tse di kgonngwang • ka go thala mela, dipopego kgotsa didiriswa **Dipaterone tse di re potapotileng** Supa, tlhalosa ka mafoko le go kopolola dipaterone tsa thutotekatekanyo • mo tlholegong • go tswa mo botshelong jwa matsatsi a gompieno • go tswa mo go tsa setso
2.2 **Dipaterone tsa Dipalo**		**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa tatelano e e bonolo ya dipalo go fitlha go 100 **Bopa le go tlhalosa dipaterone tsa gago**	**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa tatelano e e bonolo ya dipalo go fitlha go 200 **Bopa le go tlhalosa dipaterone tsa gago**	**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa tatelano e e bonolo ya dipalo go fitlha go 999 **Bopa le go tlhalosa dipaterone tsa gago**

THADISO YA KGATO YA MOTHEO

3. BOALO LE POPEGO (JEOMETERI)

Tsweletso/kgatelopele ya Boalo le Popego (Jeometeri)

Tsweletsokgolo ya Boalo le Popego e fitlhelelwa ka :

- go tsepama mo dipharologantshong le dipopego tse dintšhwa le didiriswa mo mophatong mongwe le mongwe, le
- go tswa mo go ithuteng puo ya maemo le go tshwantsha dikakanyo tse di farologaneng tsa didiriswa tse di tshwanang, go ya mo puisong le go sala di bala le go latela dikaelo morago mo dimmapeng tse di sa tlhomamang

DITENG	MOPHATO WA R	MOPHATO 1	MOPHATO 2	MOPHATO 3
3.1 **Maemo, kitsiso le dipono**	**Puo ka ga maemo a didiriswa** Tlhalosa maemo a sediriswa se le sengwe mabapi le sediriswa se sengwe, sekao fa godimo ga, fa pele ga, fa morago, fa molemeng, fa mojeng, kwa godimo, kwa tlase, go bapa le.	**Puo ka ga maemo a didiriswa** Tlhalosa maemo a sediriswa se le sengwe mabapi le sediriswa se sengwe, sekao fa godimo ga, fa pele ga, fa morago, fa molemeng, fa mojeng, kwa godimo, kwa tlase, go bapa le.	**Puo ka ga maemo a didiriswa** Tlhalosa maemo a sediriswa se le sengwe mabapi le sediriswa se sengwe sekao fa godimo ga, fa pele ga, fa morago, fa molemeng, fa mojeng, kwa godimo, kwa tlase, go bapa le.	
		Maemo le dipono • Lemoga le go bapisa dipono tse di farologaneng ka ga didiriswa tse di tshwanang tsa letsatsi le letsatsi	**Maemo le dipono** • Lemoga le go bapisa dipono tse di farologaneng ka ga didiriswa tse di tshwanang tsa letsatsi le letsatsi	**Maemo le dipono** • Lemoga le go bapisa dipono tse di farologaneng ka ga didiriswa tse di tshwanang tsa letsatsi le letsatsi • Neela leina la sediriswa sa letsatsi le letsatsi fa o bontshiwa sengwe se se sa tlwaelegang ka ga sona. • Buisa, ranola le go thala dimmapa tse di sa tlhomamang, kgotsa kakanyokgolo ka ga didiriswa tse di kgobokantsweng. • Batla didiriswa mo dimmapeng.
	Maemo le dikaelo • Latela dikaelo tsa go tsamaya mo phaphosing.	**Maemo le dikaelo** • Latela dikaelo tsa go tsamaya mo phaphosing. • Latela ditaelo tsa go baya sediriswa se le sengwe go ya ka nyalano ya sona, sekao baya phensele ka fa morago ga lebokoso.	**Maemo le dikaelo** • Latela dikaelo tsa go tsamaya mo phaphosing.	**Maemo le dikaelo** • Latela dikaelo tsa go tsamaya mo phaphosing. • Neela dikaelo tsa go tsamaya mo phaphosing le mo sekolong. • Latela dikaelo go tloga mo lefelong le rileng go ya go le lengwe mo mmapeng o o sa tlhomamang.

DITENG	MOPHATO WA R	MOPHATO 1	MOPHATO 2	MOPHATO 3
3.2 **Didiriswa tsa tekanotlhakoretharo/ matlhakoretharo** **(3-D)**	**Tlhatlhamano ya didiriswa** Lemoga le go neela leina la didiriswa tsa tekanotlhakoretharo (3-D) mo phaphosing • Dipopego tsa bolo • Dipopego tsa mabokose **Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa didiriswa tsa tekatekanotlhakoretharo go ya ka: • bogolo • mmala • didiriswa tse di kgokologang • didiriswa tse di relelang **Ditirwana tse di lebelelwang** • Dirisa didiriswa tsa tekanotlhakoretharo (3-D) jaaka diboloko tse di agang, didiriswa tse di latlhilweng mme di ka dirisiwa gape, jalo jalo go bopa didiriswa tse di kopaneng sekao dithawa, ,marogo jalo jalo	**Tlhatlhamano ya didiriswa** Lemoga le go neela leina la didiriswa tsa tekanotlhakoretharo (3-D) mo phaphosing • Dipopego tsa bolo • Dipopego tsa mabokose **Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa didiriswa tsa tekatekanotlhakoretharo go ya ka: • bogolo • mmala • didiriswa tse di kgokologang • didiriswa tse di relelang **Ditirwana tse di lebelelwang** • Tlhokomela le go aga didiriswa tsa tekanotlhakoretharo (3-D) a dirisa didiriswa tse di kgonngwang jaaka diboloko tse di agang, didiriswa tse di latlhilweng mme di ka dirisiwa gape, didiriswa tsa kago.	**Tlhatlhamano ya didiriswa** Lemoga le go neela leina la didiriswa tsa tekatekanotlhakoretharo (3-D) mo phaphosing • Dipopego tsa bolo • Dipopego tsa mabokose • Diselennere **Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa didiriswa tsa tekatekanotlhakoretharo go ya ka: • bogolo • mmala • didiriswa tse di kgokologang • didiriswa tse di relelang **Ditirwana tse di lebelelwang** • Lebelela le go aga didiriswa tsa tekanotlhakoretharo (3-D) a dirisa didiriswa tse di kgonngwang jaaka dipopego tsa tekanyotlhakorepedi (2-D) tse di segolotsweng, diboloko tse di agang, didiriswa tse di latlhilweng mme di ka dirisiwa gape , didiriswa tsa kago, didiriswa tsa tekanotlhakoretharo (3-D) tsa Jeometeri.	**Tlhatlhamano ya didiriswa** Lemoga le go neela ka leina la didiriswa tsa tekanotlhakoretharo (3-D) mo phaphosing le mo ditshwantshong • Dipopego tsa bolo (spheres) • Dipopego tsa mabokose (porisimo) • selenere • phiramiti • dikhounu **Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa didiriswa tsa tekatekanotlhakoretharo go ya ka: • dipopego tlhakorepedi tse di bopang difatlhego tsa didiriswa tsa tekanotlhakoretharo (3-D) • Boalo jo bo rapaletseng kgotsa jo bo obegileng/legaba kgotsa **Ditirwana tse di lebelelwang** • Lebelela le go aga didiriswa tsa tekanotlhakoretharo (3-D) a dirisa didiriswa tse di kgonngwang jaaka dipopego tsa tekanotlhakorepedi (2-D) tse di segolotsweng, mmu wa seloko, matlhokwa a a ntshang dijo mo menong, didiriswa tsa tekanotlhakoretharo (3-D) tsa Jeometeri.

DITENG	MOPHATO WA R	MOPHATO 1	MOPHATO 2	MOPHATO 3
3.3 **Dipopego tsa tekanyopedi** **(2-D)**		**Tatelano ya dipopego** Lemoga le go neelana ka leina la popego tekanyopedi (2-D) • didiko • dikhutlotharo • dikhutlonne **Diponagalo tsa dipopego** Tlhalosa, tlhaola le go bapisa dipopego tsa tekanotlhakorepedi (2-D) go ya ka: • bogolo • mmala • matlhakore a a tlhamaletseng • matlhakore a a potokwe	**Tatelano ya dipopego** Lemoga le go neelana ka leina la popego tekanyopedi (2-D) • didiko • dikhutlotharo • dikhutlonne • dikhutlonnetsepa **Diponagalo tsa dipopego** Tlhalosa, tlhaola le go bapisa dipopego tsa tekanytlhakoreopedi (2-D) go ya ka: • bogolo • mmala • matlhakore a a tlhamaletseng • matlhakore a a potokwe	**Tatelano ya dipopego** Lemoga le go neelana ka leina la popego tekanyopedi (2-D) • didiko • dikhutlo-tharo • dikhutlo-nne • dikhutlonne-tsepa **Diponagalo tsa dipopego** Tlhalosa, tlhaola le go bapisa dipopego tsa tekanotlhakorepedi (2-D) go ya ka: • bogolo • mmala • matlhakore a a tlhamaletseng • matlhakore a potokwe **Thala dipopego** • didiko • dikhutlo-tharo • dikhutlo-nne • dikhutlonne-tsepa
3.4 **Tekano**	**Tekano** • Lemoga kgaogano gabedi mo mmeleng wa gago.	**Tekano** • Lemoga kgaogano gabedi mo mmeleng wa gago. • Lemoga le go thala mola wa bogare mo dipopegong tsa tekanotlhakorepedi (2-D) le dipopego tse e seng tsa Jeometeri	**Tekano** • Lemoga le go thala mola wa bogare mo dipopegong tsa tekanotlhakorepedi (2-D) le dipopego tse e seng tsa Jeometeri	**Tekano** • Lemoga le go thala mola wa bogare mo dipopegong tsa tekanotlhakorepedi (2-D) le dipopego tse e seng tsa Jeometeri • Lemoga mola wa bogare wa tekano mo pampiring e e menilweng e e bonagalang

THADISO YA KGATO YA MOTHEO

4. TEKANYO

Kgatelopele mo tekanyong

- Kgatelopele e kgolo mo go lekanyetseng go kgabaganya mephato e fitlhelelwa ka kitsiso ya:
  - Mekgwa e mešwa ya tekanyo
  - Didiriswa tse dintšhwa tsa tekanyo, o simolola ka didiriswa tse di sa tlhomamang o ya kwa go tse di tlhomameng mo mophatong wa 2 le 3;
  - Diyuniti tse dintšhwa tsa tekanyo, bogolo jang mo mephatong ya 2 le 3
- Go balela le go rarabolola dipalo ka go tekanyetsa di tshwanetse go tsaya tiro e e setseng e dirilwe tsia.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
4.1 **Nako**	**Tsamao ya nako** Tlotla ka go tsamaya ga nako • Bua ka ga dilo tse di diragalang motshegare le bosigo. • Barutwana ba rulaganya ka ditiragalo tse di diragalang motshegare tatelano • Ba rulaganya ditiragalo tsa ka gale tse di diragalang mo matshelong a bona.	**Tsamao ya nako** Tlotla ka ga go tsamaya ga nako • Ba rulaganya ditiragalo tsa ka gale tse di diragalang mo matshelong a bona. • Bapisa boleele jwa nako o dirisa puo, sekao, leele, khutshwane, bonako, bonya. • Rulaganya ditiragalo o dirisa puo, jaaka'maabane','gompieno' le 'ka moso'.		

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
4.1 **Nako**		**Bua ka ga nako** • Dirisa puo go tlhalosa fa sengwe se diragala, sekao, mosong, thapama, bosigo, phakela, lotlatlana • Neela matsatsi a beke le dikgwedi tsa ngwaga ka tatelano. • Kwala matsatsi a botsala mo khalentareng.	**Bua ka ga nako** • Neela matsatsi a beke le dikgwedi tsa ngwaga ka tatelano. • Kwala matsatsi a botsalo, meletlo ya tsa sedumedi, matsatsi a boikhutso, ditiragalo tsa hisitori, le ditiragalo tsa thuto mo khalentareng. • Dirisa diura go bua ka nako ya diura di le12, halofo ya diura le kgweditharo ya diura. **Balela boleele jwa nako le go tsamaya ga nako** • Dirisa khalentara go balela le go tlhalosa boleele jwa nako go ya ka: - Matsatsi - Dibeke • Dirisa tshupanako go balela boleele jwa nako go ya ka: - Diura - Halofo ya ura	**Bua ka ga nako** • Buisa letlha mo alemanakeng. • Kwala matsatsi a botsalo , meletlo ya sedumedi,matsatsi a boikhutso, matsatsi a di tiragalo tsa histori le ditiragalo tsa thuto mo khalentareng • Bua nako ya diura di le 12 ka: • Diura • Halofo ya diura • Kgweditharo ya ura • Metsotso • Mo tshupanako ya manaka le mo go ya panya-panya le selefouno. **Balela boleele jwa le go tsamaya ga nako** • Dirisa khalentara go balela le go tlhalosa boleele jwa nako mo: - Matsatsi - Dibeke - Dikgwedi • Fetolela magareng ga matsatsi le dibeke • Fetolela magareng ga dibeke le dikgwedi. • Dirisa tshupanako go bua ka boleele jwa nako ka: - Diura - Halofo ya diura - Kgweditharo ya diura

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
4.2 **Boleele**	**Go lekanyetsa go go sa tlhomamang** • Bapisa le go rulaganya boleele, bogodimo,kgotsa bophara,jwa dilo tse pedi kgotsa go feta ka go di bapisa.Dirisa puo go bua ka ga papiso sekao: telele, khutshwane, telele thata, sephara thata	**Go lekanyetsa go go sa tlhomamang** • Bapisa le gorulaganya boleele, bogodimo,kgotsa bophara,jwa dilo tse pedi kgotsa go feta ka go di bapisa.Dirisa puo go bua ka ga papiiso sekao: telele, khutshwane, telele thata, sephara thata • Phopholetsa, lekanya, bapisa, rulaganya le go kwala boleele o dirisa selekanyo se se sa tlhomamang sekao: boalo jwa letsogo,boleele jwa phensele le dibadisi. • Tlhalosa boleele jwa didiriswa ka go bala le go kwala boleele o dirisa ditekanyo tse di sa tlhomamang.	**Go lekanyetsa go go sa tlhomamang** • Phopholetsa, lekanya, bapisa, rulaganya le go kwala boleele o dirisa selekanyo se se sa tlhomamang sekao: boalo jwa lebogo,boleele jwa phensele le dibadisi. • Tlhalosa boleele jwa didiriswa ka go bala le go kwala boleele o dirisa ditekanyo tse di sa tlhomamang **Itsise ka ga tekanyo e e tlhomameng** • Phopholetsa, lekanya, bapisa, rulaganya le go kwala boleele o dirisa selekanyo sa mitara (gongwe o ka dirisa dithupana tse di arogantsweng ka dimetara kgotsa mogala wa boleele jwa dimetara) jaaka selekanyetsi se se tlhomameng sa boleele.	**Go lekanyetsa go go sa tlhomamang** • Phopholetsa, lekanya, bapisa, rulaganya le go kwala boleele o dirisa selekanyo se se sa tlhomamang sekao: boalo jwa lebogo,boleele jwa phensele le di badisi. • Tlhalosa boleele jwa didiriswa ka go bala le go kwala boleele o tlhalosa gore boleele jwa tsona ke bokae fa o dirisa ditsela tse di sa tlhomamang **Itsise ka ga tekanyo e e tlhomameng** • Phopholetsa, lekanya, bapisa, rulaganya le go kwala boleele o dirisa dimetara (kgotsa dithupana tse di arogantsweng ka dimetara kgotsa mogala wa boleele jwa dimetara) jaaka selekanyetsi se se tlhomameng sa boleele. • Fopholetsa le go lekanya boleele o dirisa sediriswa se se thalang mola se se nang le disentimetara (Ga go tlhokagale gore dimetara di fetolelwe mo disentimetareng)
4.3 **Boima / Bokete**	**Go lekanyetsa go go sa tlhomamang** • Lekanya le go rulaganya bokete jwa didiriswa tse pedi kgotsa go feta ka go di tshwara kgotsa go dirisa sekale.	**Go lekanyetsa go go sa tlhomamang** • Fopholetsa, lekanya, bapisa le go rulaganya o kwala bokete o dirisa sekale le dikale tse e seng tsa nnete jaaka ditene le diboloko.	**Go lekanyetsa go go sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa le go rulaganya o kwala bokete o dirisa sekale le dikale tse e seng tsa nnete jaaka ditene le diboloko.	**Go lekanyetsa go go sa tlhomamang** • Fopholetsa, lekanya, bapisa le go rulaganya o kwala bokete o dirisa sekale le dikale tse eseng tsa nnete jaaka ditene le diboloko.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
4.3 **Boima / Bokete**	• Dirisa puo go bua ka ga papiso sekao bofefo, boima,bofefo thata, boima thata	• Tlhalosa bokete jwa didiriswa ka go bala le go kwala bokete o dirisa ditsela tse di sa tlhomamang • Dirisa puo go bua ka papiso ya boima, boima thata,bofefo, boima thata	• Tlhalosa bokete jwa didiriswa ka go simolola ka go bala o kwala bokete/ boima o dirisa diyuniti tse di sa tlhomamang. • Dirisa puo go bua ka ga papiso, sekao, bofefo, boima, bofefo thata, boima thata. **Itsise ka ga go lekanyetsa go go tlhomameng** • Bapisa, rulaganaya le go kwala bokete jwa dilo tse di rekisiwang tse di nang le bokete/boima jo bo kwadilweng ka dikilogerama, sekao, dikilogerama tse 2 tsa raese le kilogerama e 1 ya folouru. • Lekanyetsa bokete jwa gago ka go dirisa sekale sa ntlwana ya go tlhapela se se nang le dikilogerama	• Tlhalosa bokete jwa didiriswa ka go bala o kwala bokete ka diyuniti tse di sa tlhomamang. • Dirisa puo go bua ka papiso ya sekao bofefo,boima, bofefothata le boimathata **Itsise ka ga go lekanyetsa go go tlhomameng** • Bapisa, rulaganya le go kwala bokete jwa dilo tse di rekisiwang jo bokete jwa tsona bo leng ka diyuniti tsa bokete jaaka kilogerama sekao: Dikilogorama di le 2 tsa mmopo le kilogerama e le 1 ya reisi. Dikerama sekao dikerama tse 500 tsa letswai • Lekanya bokete jwa gago ka dikilogorama, dirisa sekale sa phaposi ya go tlhapela. • (Ga go fetolelwe magareng ga dikilogerama le dikerama tse di tlhokagalang)
4.4 **Mothamo / Bolumu**	**Go lekanya go go sa tlhomamang** • Bapisa le go rulaganya selekanyo (mothamo) sa metsi mo teng ga dikgamelo tse pedi di bapisitswe. Barutwana ba netefatsa ka go tshela metsi mo setshelong sa boraro fa go tlhokagala. • Bapisa le go rulaganya selekanyo (bolumu)sa metsi se dikgamelo tse pedi di ka tladiwang ka sona. • Dirisa puo go bua ka ga papiso sekao: e ntsi go, e nnye go, e tletse, e lolea.	**Go lekanya go go sa tlhomamang** • Bapisa le go rulaganya selekanyo (mothamo) sa metsi mo teng ga dikgamelo tse pedi di bapisitswe. Barutwana ba netefatsa ka go tshela metsi mo kgamelong ya boraro fa go tlhokagala. • Bapisa le go rulaganya selekanyo (bolumu) sa metsi se dikgamelo tse pedi di ka tladiwang ka sona. • Dirisa puo go bapisa jaaka: ntsi thata, nnye go, tletse le lolea. • Fopholetsa, lekanya, bapisa, rulaganya le go kwala mothamo wa dikgamelo o dirisa diyuniti tse di sa tlhomamang, sekao dikopi le maswana.	**Go lekanya go go sa tlhomamang** • Fopholetsa, lekanya, bapisa le go kwala selekanyo sa mothamo wa dikgamelo (go raya gore selekanyo se kgamelo e ka se tsayang fa e tladitswe) o dirisa dilekanyetso tse di sa tlhomamang sekao maswana le dikopi.	**Go lekanya go go sa tlhomamang** • Fopholetsa, lekanya, bapisa le go kwala selekanyo sa mothamo wa dikgamelo (go raya gore selekanyo se kgamelo e ka se tsayang fa e tladitswe)o dirisa dilekanyetso tse di sa tlhomamang sekao maswana le dikopi.

SETLHOGO	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
4.4 **Mothamo / Bolumu**		• Tlhalosa mothamo wa dikgamelo ka go bala le go kwala gore go tlatsa kgamelo go tsaya diyuniti di le kae tse di sa tlhomamang tsa dikopi tse nne.	• Tlhalosa mothamo wa dikgamelo ka go bala le go kwala gore ke diyuniti tse di sa tlhomamang tse kae tse o ka tlatsang kgamelo ka tsone sekao botlolo e na le mothamo wa dikopi tse nne. **O itsese ka ga ditsela tse di tlhomameng** • Fopholetsa, lekanya, bapisa, rulaganya le go kwala mothamo wa dikgamelo tse di lekanyediwang ka diletara. • Bapisa, rulaganya le go kwala mothamo wa didiriswa tse di phuthetsweng go kwadilwe diletara mo go tsone sekao diletara tse 2 tsa mashi, le litara e le 1 ya senotsididi, diletara tse 5 tsa pente	• Tlhalosa mothamo wa dikgamelo ka go bala le go kwala gore ke diyuniti tse di sa tlhomamang tse kae tse o ka tlatsang kgamelo ka tsona sekao botlolo e na le mothamo wa dikopi tse nne. **O itsese barutwana ka go dirisa ditsela tse di tlhomameng** • Fopholetsa, lekanya, bapisa, rulaganya le go kwala mothamo wa didiriswa ka go dirisa ditekanyo tsa diletara, halofo ya litara le kwatara ya letara. • Bapisa, rulaganya le go kwala mothamo wa didiriswa tse di phuthetsweng go kwadilwe diletara mo go tsone sekao diletara tse 2 tsa maši, le letara e le 1 ya senotsididi, diletara di le 5 tsa pente kgotsa di kwadilwe ka dimililetara sekao dimililetara di le 500 tsa maši, dimililetara di le 340 tsa senotsididi, dimililetara di le 750 tsa oli. • Itse gore kopi e e tlwaelegileng e e tlhomameng ke dimililetara di le 250. • Itse gore leswana le le nnye le le tlwaelegileng le le tlhomameng ke dimililetara di le 5 (Ga go tlhokege phetolelo ya dimililetara le diletara)
4.5 **Boleele jwa molelwane wa selo(perimeta) le boatlhamo(Area)**				**Boleele jwa molelwane wa selo (*Perimeta*)** Batlisisa sekgala se go dikologa tekanyotlhakorepopegopedi (2-D) le didiriswa tsa tekanyotlhakore tharo (3-D) ka go dirisa papiso e e lebaganeng kgotsa diyuniti tse di sa tlhomamang. **Boatlhamo (*Area*)** Batlisisa boatlhamo o dirisa dithaele.

THADISO YA KGATO YA MOTHEO 5. GO DIRA KA TSHEDIMOSETSO YA DIPALO
Kgatelopele mo go direng ka dipalo tsa tshedimosetso • Kgatelopele e kgolo mo go lekanyetseng tsamaiso ya tshedimosetso go kgabaganya mephato e fitlhelelwa ka kitsiso ya: - tswelela mo go direng ka didiriswa go ya go dira ka tshedimosetso le - dira ka dipopego tse dintšhwa tse di dirang ka tshwantshiso ya tshedimosetso • Barutwana ba tshwanetse go go dira ka tshedimosetso e e feleletseng bonnye ngwaga otlhe-se se akaretsa go kgobokanya le go rulaganya tshedimosetso, go tshwantsha tshedimosetso, go utolola, ranola le go bega tshedimosetso • Dingwe tsa dintlha tse di fa godimo tsa go dira ka dipalo tsa tshedimosetso di ka dirwa jaaka ditirwana tse di kgethegileng

DITENG	MOPHATO R	MOPHATO 1	MOPHATO 2	MOPHATO 3
5.1 **Kgobokanya le go tlhaola didiriswa**	**Kgobokanya le go rulaganya didiriswa** kgobokanya le go tlhaola didiriswa tse di kgonngwang letsatsi le letsatsi	**Kgobokanya le go rulaganya didiriswa tse di kgonngwang.** Kgobokanya le go tlhaola didiriswa tse di kgonngwang letsatsi le letsatsi		
5.2 **Bapisa Tshwantshisa didiriswa tse di tlhaotsweng di bo di kgobokanngwa**	**Tshwantshisa didiriswa tse di tlhaotsweng di bo di kgobokanngwa** Tlhaola setshwantsho sa didiriswa tse di kgobokantsweng	**Tshwantshisa didiriswa tse di tlhaotsweng di bo di kgobokanngwa** Tlhaola setshwantsho sa didiriswa tse di kgobokantsweng		
5.3 **Buisana le go bega ka ga didiriswa tse di tlhaotsweng di kgobokantswe**	**Buisana le go bega ka ga didiriswa tse di tlhaotsweng di kgobokantswe** • Araba dipotso ka: - Gore kgobokanyo e tlhaotswe jang - Mothalo o o bontshang kgobokanyo	**Buisana le go bega ka ga didiriswa tse di tlhaotsweng di kgobokantswe** • Neela mabaka a gore kgobokanyo e tlhaotswe jang • Araba dipotso ka ga: - Tlhaolo e dirilwe jang (dikgato/ thulaganyo) - Didiriswa tse di tlhaotsweng di lebega jang(kungo) • Tlhaloso ya kgobokanyo /mothalo • Tlhalosa ya gore kgobokanyo e tlhaotswe jang		

5.4 **Kgobokanya le go rulaganya dipalo tsa tshedimosetso**		Kgobokanya le go rulaganya dipalo tsa tshedimosetso. .Kgobokanya dipalo tshedimosetso ka phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana	Kgobokanya le go rulaganya dipalo tsa tshedimosetso Kgobokanya dipalo tshedimosetso ka phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana	Kgobokanya le go rulaganya dipalo tsa tshedimosetso Kgobokanya dipalo tshedimosetso ka phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana Rulaganya dipalo tshedimosetso tse di neetsweng ke morutabana kgotsa di le mo bukeng ya tirokwakelelo Rulaganya dipalo tshedimosetso go ya ka Mananeo Maduo a lekalekanang Lenaaneng
5.5 **Emela tshedimosetso ya dipalo**		**Emela tshedimosetso ya dipalo.** • Emela tshedimosetso mo kerafong ya setshwantsho. • Kerafo e e lekanyeditsweng go nyalana ka bongwe- ka -bongwe (1 to 1)	**Emela tshedimosetso ya dipalo.** • Emela tshedimosetso mo kerafong ya setshwantsho. • Kerafo e e lekanyeditsweng go nyalana ka bongwe- ka -bongwe	**Emela tshedimosetso ya dipalo.** • Rulaganya tshedimosetso mo: - Tshwantshisa tshedimosetso mo - Kerafong e e lekanyeditsweng go nyalana ka bongwe- ka- bongweU - Molanoko
5.6 **Utolola le go ranola dipalo tsa tshedimosetso**		**Utolola le go ranola dipalo tsa tshedimosetso** Araba dipotso ka dipalo tshedimosetso mo kerafong ya setshwantsho • se se lekanyeditsweng go nyalana ka bongwe- ka -bongwe	**Utolola le go ranola dipalo tsa tshedimosetso** Araba dipotso ka tshedimosetso ya dipalo mo setshwantshong • se se lekanyeditsweng go nyalana ka bongwe- ka –bongwe.	**Utolola le go ranola dipalo tsa tshedimosetso** Araba dipotso ka tshedimosetso ya dipalo • setshwantsho se se lekanyeditsweng go nyalana ka bongwe- ka- bongwe • Molanoko

3.3 TLHALOSO YA DITENG

Mo karolong e ya tlhaloso ya diteng, barutabana ba neetswe:

- thadiso ya kgweditharo ya Mophato R-3
- tatelano ya ditlhogo e e tsitshintsweng go ya ka dikgweditharo: ga se dintlha tsotlhe tsa ditlhogo tse di rutiwang mo kgweditharong, dingwe tsa dintlha tsa ditlhogo tse di rileng, di tlhoka go rutiwa pele ga dintlha tsa ditlhogo tseo;
- Nako e e tshitshintsweng ya ditlhogo mo tsamaong ya ngwaga. Diteng le ditlhogo dingwe tsa dirutwa di tlhoka nako e ntsi go feta tse dingwe,ditlhogo tse dingwe, le
- Tlhaloso ya diteng le dikaelo tsa go ruta mmgogo le dikao, di neetswe mo go maleba.

Diteng tsa serutwa sengwe le sengwe di kgaogantswe go ya ka ditlhogo. Diteng tsa dirutwa tsotlhe di tshwanetse go rutiwa kgweditharo nngwe le nngwe. Tatelano ya ditlhogo go ya ka dikgweditharo di naya kakanyo ya kgaoganyo ya ditlhogo tse di tlhokang go rutwa mo ngwageng le tse di tlhokang go boelediwa mo ngwageng. Ga go botlhokwa go ruta ditlhogo tsotlhe fa o ruta Boalo le Popego (Jeometeri), Tekanyo le go dira ka tshedimosetso ya Dipaloalo mo kgweditharong nngwe le nngwe. Le gale, ditlhogo tsotlhe di tshwanetse go rutiwa mo tsamaong ya ngwaga

Mo kgaolong ya bobedi (temana 2.6) boleng jwa diteng tsa serutwa bo neetswe. Fa se, se kopanngwa le diura tse di rebotsweng mo ngwageng o kgona go tlhakanya diura tsa diteng tsa serutwa sengwe le sengwe.

Barutabana ba ka nna ba itlhophela go rulaganya le gobaya nako e morutabana a tshwanetseng go e dirisetsa go ruta serutwa ka mokgwa o o farologaneng le o o atlenegisitsweng mo kgaolong e. Barutabana ba ka nna ba fetola nako e e thitshintsweng ya ditlhogo tse di neetsweng go le gonnye. Le gale, ba tshwanetse go tlhokomela boleng le diura tse di abetsweng diteng tsa serutwa mo Kgatong ya Motheo wa serutwa sa Dipalo

- **Mophato R-** Dipalo di mo sebopegong sa tshimologo ya dipalo, ka jalo ga di a kgaoganngwa ka dinako tsa dithuto. Morutabana wa mophato R o tshwanetse go tsenyeletsa dipalo mo ditirwaneng tsa letsatsi le letsatsi tsa morutwana le fa nako e tshwanetse go bewa kwa thoko mo tsamaong ya letsatsi mo morutabana a tsepamang fela mo tirwaneng ya dipalo, e seng jalo, barutwana ga ba kitla ba nna le temogo le kgodiso ya dikgopolo le dikgono tsa dipalo tse di lebeletsweng.
- Nako ya Mephato ya 1-3 e abilwe ka tsela e e latelang:
  - Diura di le supa di tshwanetse go dirisediwa go ruta Dipalo mo bekeng (dibeke tse 10 x dikgweditharo tse 4 x diura di le 7=Diura di le 280 ka ngwaga)
  - Thuto nngwe le nngwe ya Dipalo ya mophato 1 go fitlha 3 e tshwanetse go rutwa mo ureng e le nngwe le metsotso e le 24 ka letsatsi.
  - Se se raya gore go na le dikgweditharo di le nne tsa dibeke di le 10 ka matsatsi a le matlhano letsatsi le letsatsi (go simologa ka Mosupologo go fitlha ka labotlhano) mo dithutong tsa beke.
  - Mo tshimologong ya kgweditharo nngwe le nngwe, go tshwanetse ga nna le beke eo mo go yona go kaelwang le go tiisiwa tiro e e fetileng, ka gore bana ba na le go lebale ditengtse dintsii ka nako ya matsatsi a boikhutso le go tswa mo tlwaelong ya go ya kwa sekolong. Letlelela beke e le nngwe mo bokhutlong jwa kgweditharo go tiisa kitso ka ga dikgopolo. Se se go naya 8 x 4 x 5 = dithuto tse 160

3.4 TATELANO LE NAKO E E TLHAOLETSWENG DITENG

Mophato wa R-3 o neetswe manaane a a latelang a kgweditharo nngwe le nngwe:

- Nako e e tlhaoletsweng ditlhogo tsa ngwaga otlhe (e bontsha kgaoganyo ya ditlhogo mo kgabaganyong ya dikgweditharo le go atlenegisa nako e e tshwanetseng go dirisiwa mo setlhogong sengwe le sengwe sa diteng tsa serutwa)
- Tatelano ya ditlhogo mo ngwageng (e bontsha gore ditlhogo di abilwe jang mo kgweditharong le tsweletso ya dikgopolo le dikgono mo kgabaganyong ya dikgweditharo)
- Dintlha tse di tlhalosang di neetswe go ya ka setlhogo sengwe le sengwe- manaane a, neela tlhaloso ya diteng le dikaelo tsa setlhogo sengwe le sengwe jaaka se latedisitswe mo kgabaganyong ya dikgweditharo

Thulaganyetsothuto – kabo ya nako mo kgweditharong go ya ka setlhogo

Thuto ya dipalo ke setlhogo se se botlhokwa thata mo Kgatong ya thuto ya Motheo ya serutwa sa Dipalo. Mo nakong e ntsi, beke nngwe le nngwe, kgweditharo le mo ngwageng, e tsepamedisitswe mo thutong ya Dipalo, Matshwao le Dikgolagano. Mo selekanong, dithuto tse tharo kgotsa go feta mo bekeng e le nngwe di tshwanetse go tsepamisiwa mo Dipalong, Matshwao le Dikgolagano. Nako e nngwe, e e salang e kgaoganngwe magareng ga dirutwa tse dingwe.

Boalo le Popego le Tekanyo di tlhoka nako e ntsi le kelotlhoko go feta dipalo tsa go dira ka Tshedimosetso le Dipaterone, ditiro le Alejebera. Manaane a a fa tlase a supa gore ke dithuto di le kae tse di ka abelwang diteng tsa serutwa sengwe le sengwe le setlhogo sa mophato mogwe le mongwe mo Dipateroneng,Ditirisong le Alejebera, Boalo le Popego, Tekanyo le dipalo tse di dirang ka tshedimosetso.

Kabelano **ya diteng tsa serutwa le ditlhogo mo dithutong mo mophatong wa R**

Popego ya dipalo mo mophatong wa R, ke ya dipalo tsa tshimologo ka ga moo nako e e latelang e e abilweng e tshitsinyeditswe tsepamiso mo thutong ya dipalo ga mmogo le ditirwana tse di sa tlhomamang. Se,se netefatsa kakaretso e e feletseng mo diteng tsa serutwa tse di neetsweng. Ditirwana tsa dipalo tsa tshimologo e ka nna go bala palo ya di dijelo le dibikiri tse o ba nayang tsone fa ba ja, go bala metshameko e e tshamikiwang kwa ntle, metshameko e e tshamekiwang mo teng ga phaposi jaaka ditomino le dijikiso phasele jalo jalo. Morutabana o tshwanetse go rulaganya ditirwana tsotlhe go ya ka ditlhokego tsa barutwana le didirswa tse di leng teng mo phaposing.

Boalo le popego ke karolo e e botlhokwa ya kgolo ya morutwana yo monnye mo dipalong, e tshwanetse go anamisiwa mo bekeng, ka ditiragalo tse dingwe tse di tsepamisitsweng ka fa tlase ga kaelo ya morutabana le ditšhono tsa go aga, mmu le motshameko wa metsi le barutwana

Tekanyo e tshwanetse ga akarediwa mo ditirwaneng tsa go bala, sekao go fopholetsa le go bala o lekanya sekgala ka diatla, maoto le dikgato

Go tshwaya rejisitara le tšhate ya maemo a bosa go naya morutabana tšhono ya **Go dira ka Dipalo tsa tshedimosetso**

Lenaane 3.1: Kabo ya nako go ya ka diteng tsa beke

Diteng tsa serutwa	Ditlhogo	Nako e e tsitshintsweng
Dipalo, Matshwao le Dikgolagano	Go bala Temogo ya dipalo Supa le go tlhalosa dipalotlalo Kgopolopalo Go rarabolola dipalo	**Metsotso e le 120**
Dipaterone, Ditiriso le Alejebera	Kopolola, atolosa le go aga dipaterone tsa bone	**Metsotso e le 80**
Boalo le Popego (Jeometeri)	Lemoga, tlhopha le go neela maina a tekanyo ya popegopedi (2-D) le ditshwantsho Tekanyo ya popego Aga dipopego tekanyo ya tlhakoretharo (3-D) o dirisa didiriswa tse di kgonngwang. Dikamano tsa boalo Dikaelo	**Metsotso e le 80**
Tekanyo	Nako Boleele Boima Mothamo	**Metsotso e le 80**
Go dira ka dipalo tsa tshedimosetso	Kgobokanya, tlhaola, tshwantsha, bala le go emela tshedimosetso	**Metsotso e le 60**
Palogotlhe		**Metsotso e le 420 Diura di le 7 ka beke**

- **Kabo ya diteng tsa serutwa le ditlhogo tsa dithuto tsa Mephato 1 go ya go 3**

Palogare ya dithuto di le tharo mo bekeng (magareng ga diura di le 4 le $4\frac{1}{2}$) e dirisetswa go ruta Dipalo, Matshwao le Dikgolagano mo Mephatong 1, 2 le 3. Dithuto tse pedi tse di salang (ke gore tse di mo magareng ga diura di le $2\frac{1}{2}$ le 3) di kgaoganngwe fa gare ga ditlhogo tse dingwe tsa diteng tsa dirutwa go ya ka mokgwa o o tsitshintsweng fa tlase.

Lenaneo 3.2: Palo ya dithuto tse di tsitshintsweng tsa diteng tsa serutwa tsa kgweditharo tsa Mophato 1

DITENG TSA SERUTWA	SETLHOGO	NOMERE YA DITHUTO				
		Kgwed-itharo 1	Kgwed-itharo 2	Kgwed-itharo 3	Kgwed-itharo 4	Gotlhe
Dipalo, matshwao le dikgolagano	Ditlhogo tsotlhe tsa Dipalo, matshwao le dikgolagano	22	30	28	25	**105**
Dipaterone mediro le Alejebera	Dipaterone tsa Dipalo	3	3	3	3	**12**
	Dipaterone tsa tekano	1	1	1	1	**4**
Boalo le popego (Tekano)	Tekatekanyo ya dipopegotlhakorepedi (2-D)		3		3	**6**
	Tekanyo ya popegotlhakoretharo (3-D)	3		2	1	**6**
	Maemo, kitsiso, le dikakanyo	2			1	**3**
	Tekatno			1	1	**2**
Tekano	Nako	2				**2**
	Boleele	2		2		**4**
	Boima	2			2	**4**
	Mothamo/bolumu	1	2		1	**4**
Go dira ka Dipalo tsa tshedimosetso	Kgobokanya, rulaganya le go lokolola didiriswa	2	1			**3**
	Sediko sotlhe sa tshedimosetso			3		**3**
	Dikarolo tsa sediko sa tshedimosetso				2	**2**
Palo yotlhe ya dithuto		**40**	**40**	**40**	**40**	**160**

Lenaneo 3.3: Palo ya dithuto tse di tsitshintsweng tsa diteng tsa serutwa tsa kgweditharo tsa Mophato 2

3.4.1. THADISO YA MOPHATO 1

THADISO YA MOPHATO 1 1. DIPALO, MATSHWAO LE DIKGOLAGANO/BOTSALANO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
TLHABOLOLO YA KGOPOLO YA DIPALO: Bala ba dirisa palotlalo				
1.1 **Bala didirisiwa**	**Bala didirisiwa tse di angwang go fitlha kwa go 10** **Neela phopholetso e e dumelesegang ya palo ya didirisiwa tse di ka tlhotlhomisiwang ka go balwa.**	**Bala didirisiwa ka nepagalo go fitlha ka 20** **Neela phopholetso e e dumelesegang ya palo ya didirisiwa tse di ka tlhotlhomisiwang ka go di bala.** **Go bala ka go kgobokanya go a tlhotlhelediwa**	**Bala didirisiwa ka nepagalo go fitlha ka 40** **Neela phopholetso e e dumelesegang ya palo ya didirisiwa tse di ka tlhotlhomisiwang ka go di bala.** **Go bala ka go kgobokanya go a tlhotlhelediwa**	**Bala didirisiwa ka nepagalo go fitlha ka 50** **Neela phopholetso e e dumelesegang ya palo ya didirisiwa tse di ka tlhotlhomisiwang ka go di bala.** **Go bala ka go kgobokanya go a tlhotlhelediwa**
1.2 **Bala go ya kwa pele le kwa morago**	**Bala go ya kwa pele le kwa morago mo:** • Ka bongwe go tswa mo palong nngwe le nngwe fa gare ga 1 le 20	**Bala go ya kwa pele le kwa morago mo:** • Ka bongwe go tswa mo palong nngwe le nngwe fa gare ga 0 le 50 **Bala go ya kwa pele mo:** • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 mo gare ga 0 le 50 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 mo gare ga 0 le 50 • Bobedi go tswa mo katisanetswa nngwe le nngwe ya 2 mo gare ga 0 le 20	**Bala go ya kwa pele le kwa morago mo:** • Ka bongwe go tswa mo palong nngwe le nngwe fa gare ga 0 le 80 **Bala go ya kwa pele mo:** • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 mo gare ga 0 le 80 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 mo gare ga 0 le 80 • Bobedi go tswa mo katisanetswa nngwe le nngwe ya 2 mo gare ga 0 le 80	**Bala go ya kwa pele le kwa morago mo:** • Ka bongwe go tswa mo palong nngwe le nngwe fa gare ga 0 le 100 **Bala go ya kwa pele mo:** • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 mo gare ga 0 le 100 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 mo gare ga 0 le 100 • Bobedi go tswa mo katisanetswa nngwe le nngwe ya 2 mo gare ga 0 le 100

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
TLHABOLOLO YA KGOPOLO YA DIPALO : E emela dipalotlalo				
1.3 **Matshwaopalo le mainapalo**	**Lemoga, supa le go buisa dipalo** • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 20 • Kwala matshwaopalo go simolola ka 1 go fitlha go 5 • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 5 • Kwala mainapalo go simolola ka 1 go fitlha go 5	**Lemoga, supa le go buisa dipalo** • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 50 • Kwala matshwaopalo go simolola ka 1 go fitlha go 10 • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 10 • Kwala mainapalo go simolola ka 1 go fitlha go 10	**Lemoga, supa le go buisa dipalo** • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 80 • Kwala matshwaopalo go simolola ka 1 go fitlha go 20 • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 10 • Kwala mainapalo go simolola ka 1 go fitlha go 10	**Lemoga, supa le go buisa dipalo** • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 100 • Kwala matshwaopalo go simolola ka 1 go fitlha go 20 • Lemoga, supa le go buisa matshwaopalo go simolola ka 1 go fitlha go 10 • Kwala maina a dipalo go simolola ka 1 go fitlha go 10
TLHABOLOLO YA KGOPOLO YA DIPALO : Tlhalosa, bapisa le go rulaganya dipalotlalo				
1.4 **Tlhalosa, bapisa le go rulaganya dipalotlalo**	**Tlhalosa, bapisa le go rulaganya didirisiwa go fitlha go di le 5** • Bapisa didirisiwa tse di kgobokantsweng go ya ka bontsi,mmalwa;go ntsi go feta,bonnye go feta; tshwana le,fela jaaka go le gontsi,pharologano jaaka. • Rulaganya kgobokanyo ya didirisiwa go tswa go tse dintsi go fitlha go tse dinnye le go tswa go tse dinnye go fitlha go tse dintsi.	**Tlhalosa , bapisa le go rulaganya didirisiwa go fitlha go di le 10** • Bapisa didirisiwa tse di kgobokantsweng go ya ka bontsi,mmalwa, go ntsi go feta,bonnye go feta; tshwana le,fela jaaka go le gontsi,pharologano jaaka. • Rulaganya kgobokanyo ya didirisiwa go tswa go tse dintsi go fitlha go tse dinnye le go tswa go tse dinnye go fitlha go tse dintsi.	**Tlhalosa , bapisa le go rulaganya didirisiwa go fitlha go di le 15** • Bapisa didirisiwa tse di kgobokantsweng go ya ka bontsi,mmalwa, go ntsi go feta,bonnye go feta; tshwana le,fela jaaka go le gontsi,pharologano jaaka. • Rulaganya kgobokanyo ya didirisiwa go tswa go tse dintsi go fitlha go tse dinnye le go tswa go tse dinnye go fitlha go tse dintsi.	**Tlhalosa , bapisa le go rulaganya didirisiwa go fitlha go di le 20** • Bapisa didirisiwa tse di kgobokantsweng go ya ka bontsi,mmalwa, go ntsi go feta,bonnye go feta; tshwana le,fela jaaka go le gontsi,pharologano jaaka. • Rulaganya kgobokanyo ya didirisiwa go tswa go tse dintsi go fitlha go tse dinnye le go tswa go tse dinnye go fitlha go tse dintsi.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.4 **Tlhalosa, bapisa le go rulaganya dipalotlalo**	**Tlhalosa, bapisa le go rulaganya dipalo go fitlha go 5** • Tlhalosa le go bapisa dipalotlalo go ya ka bonnye go, tonna go, go lekana le. • Tlhalosa le go rulaganya dipalo: - Go tswa go tse dinnye go fitlha go tse ditonna le go tswa go tse ditonna go fitlha go tse dinnye - Tiriso ya molapalo wa 1-5	**Tlhalosa, bapisa le go rulaganya dipalo go fitlha go 10** • Tlhalosa le go bapisa dipalotlalo go ya ka bonnye go, tonna go, go lekana le. • Tlhalosa le go rulaganya dipalo: - Go tswa go tse dinnye go fitlha go tse ditonna le go tswa go tse ditonna go fitlha go tse dinnye - Pele , morago,mo gare,fa gare - Tiriso ya molapalo wa 0-10	**Tlhalosa, bapisa le go rulaganya dipalo go fitlha go 15** • Tlhalosa le go bapisa dipalotlalo go ya ka bonnye go, tonna go, go lekana le. • Tlhalosa le go rulaganya dipalo: - Go tswa go tse dinnye go fitlha go tse ditonna le go tswa go tse ditonna go fitlha go tse dinnye - Pele , morago,mo gare,fa gare - Tiriso ya molapalo wa 0-15	**Tlhalosa, bapisa le go rulaganya dipalo go fitlha go 20** • Tlhalosa le go bapisa dipalotlalo go ya ka bonnye go, tonna go, go lekana le. • Tlhalosa le go rulaganya dipalo: - Go tswa go tse dinnye go fitlha go tse ditonna le go tswa go tse ditonna go fitlha go tse dinnye - Pele , morago,mo gare,fa gare - Tiriso ya molapalo wa 0-20 **Dirisa mabaditatelano go bontsha thulaganyo, lefelo le maemo** • Baya didirisiwa ka maemo a tsona mo moleng go simolola ka ya ntlha go fitlha go lesome kgotsa go simolola ka ya ntlha go fitlha ka ya bofelo, sekao, ya ntlha, ya bobedi, ya boraro….ya lesome, ya bofelo • Mabaditatelano go ya ka thulaganyo ya ntlha go fitlha go ya lesome.
TLHABOLOLO YA KGOPOLO YA DIPALO : Bolengkemedi				
1.5 **Bolengkemedi**			Lemoga bolengkemedi jwa dipalo tsa 11 -15 • Kgaoganya dipalopedi ka lesome le nngwe , sekao, 12 ke 10 le 2	Lemoga bolengkemedi jwa dipalo tsa 11 -19 • Kgaoganya dipalopedi ka lesome le nngwe , sekao, 18 ke 10 le 8

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
THARABOLOLO YA DIPALO DI LE MO TIRISONG				
1.6 **Maano a go rarabolola dipalo**	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di ang-wang, sekao, dibadisi • Ditshwantsho go thala palogotlhe ya kgang • Melapalo e e tsheget-swang ka dithusathuto tse di angwang, sekao, bala dibaga	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Ditshwantsho go thala palogotlhe ya kgang • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegetswang ka dithusathuto tse di angwang, sekao, dibaga tsa go bala	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Ditshwantsho go thala palogotlhe ya kgang • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegetswang ka dithusathuto tse di angwang, sekao, dibaga tsa go bala	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Ditshwantsho go thala palogotlhe ya kgang • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegetswang ka dithusathuto tse di angwang, sekao, dibaga tsa go bala
1.7 **Tlhakanyo le go ntsha**	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go ntsha, mme dikarabodi fitlhe mo go 5.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go ntsha, mme dikarabo di fitlhe mo go 10. .	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go ntsha, mme dikarabo di fitlhe mo go 15. .	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go ntsha, mme dikarabo di fitlhe mo go 20.
1.8 **Poeletso ya tlhakanyo e e isang kwa katisong**		Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang poeletso ya tlhakanyo mme dikarabo di fitlhe mo go 10.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang poeletso ya tlhakanyo mme dikarabo di fitlhe mo go 15.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang poeletso ya tlhakanyo mme dikarabo di fitlhe mo go 20.
1.9 **Kgobokanyo le karoganyo e e isang kwa karologantshong**	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo tsa go fitlha ka 5 ka dikarabo tse di ka akaretsang sesala.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo tsa go fitlha ka 10 ka dikarabo tse di ka akaretsang sesala.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo tsa go fitlha ka 15 ka dikarabo tse di ka akaretsang sesala.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo dipalotlalo tsa go fitlha ka 20 ka dikarabo tse di ka akaretsang sesala.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.11 **T**šhelete		• Lemoga le go supa /tlhaola tšhelete ya Aforika Borwa 5c, 10c, 20, 50c, R1, R2; R5 • Rarabolola dipalo tsa tšhelete go akaretsa dipalogotlhe le tšhentšhi ya R10 le ya disente tsa go fitlha go 20c	• Lemoga le go supa /tlhaola tšhelete ya Aforika Borwa 5c, 10c, 20, 50c, R1, R2; R5 • Rarabolola dipalo tsa tšhelete go aka-retsa dipalogotlhe le tšhentšhi ya R20 le ya disente tsa go fitlha go 20c	• Lemoga le go supa /tlhaola tšhelete ya Aforika Borwa • Tšhelete ya dipapetlana :5c, 10c, 20, 50c, R1, R2; R5 • Madi a pampiri: R10 le R20 • Rarabolola dipalo tsa tšhelete go akaretsa dipalogotlhe le tšhentšhi ya R20 le ya disente tsa go fitlha go 20c
DIPALO DI SE MO TIRISONG				
1.12 **Maano (mekgwa le ditogamaano)**	Dirisa maano a a latelang fa ba dira dipalo: • Dithusathuto tse di ang-wang, sekao, dibadisi • Thala ditshwantsho • Molapalo o o tshegedits-weng ke dithusathuto tse di angwang, sekao, dibaga tsa go bala	Dirisa maano a a latelang fa ba dira dipalo: • Dithusathuto tse di angwang, sekao, dibadisi • Thala ditshwantsho • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegeditsweng ka dithusathuto tse di angwang, sekao, dibaga tsa go bala	Dirisa maano a a latelang fa ba dira dipalo: • Dithusathuto tse di angwang, sekao, dibadisi • Thala ditshwantsho • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegeditsweng ka dithusathuto tse di angwang, sekao, dibaga tsa go bala	Dirisa maano a a latelang fa ba dira dipalo: • Dithusathuto tse di angwang, sekao, dibadisi • Thala ditshwantsho • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegeditsweng ka dithusathuto tse di angwang, sekao, dibaga tsa go bala
1.13 **Tlhakanyo le tloso**	**Tlhatlhamano ya dipalo: 1 - 5** • Tlhakanyo go fitlha go 5 • Tloso go tloga mo go 5 • Ikatise ka kgolagano ya dipalo tsa 5	**Tlhatlhamano ya dipalo: 1 - 10** • Tlhakanyo go fitlha go 10 • Tloso go tloga mo go 10 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo tsa 7	**Tlhatlhamano ya dipalo: 1 - 15** • Tlhakanyo go fitlha go 15 • tloso go tloga mo go 15 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo tsa 9	**Tlhatlhamano ya dipalo: 1 - 20** • Tlhakanyo go fitlha go 20 • tloso go tloga mo go 20 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo tsa 10
1.14 **Poeletso ya tlhakanyo e e isang kwa katisong**		• Poeletso ya tlhakanyo(ke gore palo e e tshwanang) go fitlha go 10 • Dirisa matshwao a a maleba (+, =, □)	• Poeletso ya tlhakanyo(ke gore palo e e tshwanang) go fitlha go 15 • Dirisa matshwao a a maleba (+, =, □)	• Poeletso ya tlhakanyo(ke gore palo e e tshwanang) go fitlha go 20 • Dirisa matshwao a a maleba (+, =, □)

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.16 **Dipalo tsa tlhogo**	**Kgopolo ya dipalo: Tlhatlhamano 5** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo tsa go fitlha go 5 mme o bue gore fa e le 1 le 2 ke efe e tonna kgotsa e nnye.	**Kgopolo ya dipalo: Tlhatlhamano 10** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo tsa go fitlha go 10 mme o bue gore fa e le 1 le 2 ke efe e tonna kgotsa e nnye.	**Kgopolo ya dipalo: Tlhatlhamano 15** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo tsa go fitlha go 15 mme o bue gore fa e le 1 le 2 ke efe e tonna kgotsa e nnye. **Gakologelwa ka bonako:** • Kgolagano ya dipalo tsa 5 • Gakologelwa dintlha tsa tlhakanyo le tloso tsa 5 **Ditogamaano tsa Palelo** Dirisa ditogamaano tsa go balela go tlhakanya le go ntsha sentle : • Baya palo e tona pele go go kgontsha go balela pele le go balela morago • Molapalo • Koketsopedi le karoganyo ka bogare • Go aga le go thuba	**Kgopolo ya dipalo: Tlhatlhamano 20** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo tsa go fitlha go 20 mme o bue gore fa e le 1 le 2 ke efe e tonna kgotsa e nnye. **Gakologelwa ka bonako:** • Kgolagano ya dipalo tsa 10 • Gakologelwa dintlha tsa tlhakanyo le tsa go ntsha tsa go fitlha go 10 **Ditogamaano tsa Palelo** Dirisa ditogamaano tsa go balela go tlhakanya le go ntsha sentle : • Baya palo e tona pele go go kgont-sha go balela pele le go balela morago • Molapalo • Koketsopedi le karoganyo ka bogare • Go aga le go thuba

Mefuta ya Dipalo ya Mophato 1

Tse ke dikao tsa mefuta e e botlhokwa ya dipalo tse morutabana a tshwanetseng go di naya barutwana ba gagwe gangwe le gape mo phaposing. Fa morutabana a dira ka setlhopha se sennye, o tshwanetse go ba naya palo ka molomo. Fa barutwana ba kgona go buisa, a ka ba naya dipalo gape ka go di kwala, mme o tshwanetse go ba naya tsona gape ka molomo. Dipalo tse di mo tirisong di ka akarediwa mo dipapetlaneng tsa tiro, mme di tshwanetse go nna dikhutshwane, di tlhamaletse le go tlwaelega, mme morutabana o tshwanetse go netefatsa gore barutwana botlhe ba a di tlhaloganya.

Kgaoganyo

Kgaoganyo**,** *tlogelo ya sesala*

Thabo o rekisa diapole mo dikgetsaneng di le tharo tse di nang le diapole di le tharo nngwe le nngwe. O na le diapole di le 14. A ka nna le dikgetsana di le kae tsa diapole fa a tsentse diapole di le tharo mo kgetsaneng nngwe le nngwe?

Kgaoganyo go akaretsa sesala mo karabong

Tebogo o batla go isa mae a le 15 kwa go nkoko wa gagwe. O ya go nna le mabokoso a mae a le makae fa a paka mae a le marataro mo bokosong nngwe le nngwe?

Karoganyo

Karoganyo, tlogelo ya sesala

Aroganya dimonamone di le 14 mo gare ga ditsala di le tharo gore botlhe ba bone tse di lekanang.

Poeletso ya tlhakanyo

Dibaesekele di le nne di na le maotwana a le makae?

Tlhakanyo le go tlosa

Go na le bonnye mefuta e le meraro ya motheo ya dipalo tsa tlhakanyo le go ntsha mme mofuta mongwe le mongwe o ka bodiwa ka mekgwa e e farologaneng. Mefuta e ya motheo ke:

Tšhentšhi

Mapule o ne a na la diapole di le tlhano. Tebogo a mo naya diapole di le robedi. O na le diapole di le kae jaanong? Mapule o ne a na le diapole di le 13. A naya Tebogo diapole di le tlhano. O na diapole di le kae jaanong?

Kopanya

Mapule o na le dimabole di le tlhano tse di tala le di le robedi tsa botala jwa legodimo. O na le dimabole di le kae? Mapule o na le dimabole di le 13. Tse tlhano di botala jwa tlhaga fa tse di setseng di le botala jwa legodimo. Mapule o na le dimabole di le kae tsa botala jwa legodimo?

Bapisa

Tebogo o na le dipanana di le 13. Mapule o na le dipanana di le 5. Tebogo o na le dipanana di le kae go feta tsa go Mapule?

Mekgwa e e farologaneng ya go botsa dipalo

Dipalo di tshwanetse go bodiwa ka mekgwa e e farologaneng. Sekao, bobedi jwa tsona ke dipalo tsa tšhentšhi, mme “di sa itsiweng” di fitlhelwa mo mafelong a a farologaneng a dipalo.

Tebogo o ne a na le diapole. Mapule o mo naya diapole tse dingwe di le robedi. O na le diapole di le13 jaanong. Tebogo o ne a na le diapole di le kae kwa tshimologong?

Tebogo o ne a na le diapole di le tlhano. Mapule o mo naya diapole dingwe. O na le diapole di le 13 jaanong. Mapule o mo neile diapole di le kae?

Mefuta ya dipalo ka tiriso e e farologaneng ya botsalano

Boitumelo o rekisa senotsididi ka diranta di le 4 sengwe le sengwe. Dira lenaneo go mo thusa go bona ditlhotlhwa tsa ditheko tse di tona.

Dinomoro tsa dinotsididi	1	2	3	4	5	6	7
Tlhotlhwa ka Diranta	4	8					

Dirisa lenaneo go bona tlhotlhwa ya dinotsididi di le supa.

Mefuta ya dipalo e neilwe go kaela morutabana. Barutwana ga ba tshwanela go tshwarisiwa bothata ka maina a mefuta. Tlhokomela ka gore, barutwana ba a tle ba dirise ditsela tse di farologaneng tsa go rarabolola dipalo ka mokgwa o morutabana a neng a sa o emela.

THADISO YA MOPHATO 1 2. DIPATERONE,MEDIRISO, LE ALIJEBERA				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
2.1 **Dipaterone tsa Jeometeri**	**Kopolola le go ataloso** Kopolola le go atolosa dipaterone tse di bonolo o dirisa: • Didirisiwa tse di bonwang; • Dithalo, sekao, tiriso ya mebala le dipopego **Thulaganyo e e tshitsinngwang ya tiro** Simolola go kopolola le go atolosa dipaterone ka go dirisa didirisiwa tse di bonwang, mme fa barutwana ba setse ba itse go dirisa kherayone kgotsa pensele, ba simolola ka go kopolola le go atolosa dipaterone ka go di thala.	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka didirisiwa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didirisiwa **Tlhama le go tlhalosa dipaterone tsa gagwe** • Tlhama Dipaterone tsa Jeometeri - Ka didirisiwa tse di bonwang - Ka go thala mela, dipopego kgotsa didirisiwa • Tlhalosa dipaterone tsa gago	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka didirisiwa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didirisiwa **Tlhama le go tlhalosa dipaterone tsa gagwe** • Tlhama Dipaterone tsa Jeometeri - Ka didirisiwa tse di bonwang - Ka go thala mela, dipopego kgotsa didirisiwa • Tlhalosa dipaterone tsa gago	**Dipaterone tse di re dikaganyeditseng** Supa, tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Tsa tlhago • Go tswa mo botshelong jwa ka metlha jwa gompieno • Go tswa mo ngwaong-bosweng jwa rona **Tlhama le go tlhalosa dipaterone tsa gagwe** • Tlhama Dipaterone tsa Jeometeri - Ka didirisiwa tse di bonwang - Ka go thala mela, dipopego kgotsa didirisiwa • Tlhalosa dipaterone tsa gago

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
2.2 **Dipaterone tsa dipalo**	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 20 Thulaganyo e tshwanetse e bontshe go bala go ya kwa pele le go ya kwa morago mo: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 20	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 50 Thulaganyo e tshwanetse go bontsha go bala go ya kwa pele le go ya kwa morago mo: Balela kwa pele ka: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 50 • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 e e mo gare ga 50 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 e e mo gare ga 50 • Bopedi go tswa mo katisanetswa nng 0 le 50 **Tlhama le go tlhalosa dipaterone tsa gago** • Tlhama le go tlhalosa dipaterone tsa gago tsa dipalo	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 80 Thulaganyo e tshwanetse go bontsha go bala go ya kwa pele le go ya kwa morago mo: Balela kwa pele ka: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 80 • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 e e mo gare ga 80 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 e e mo gare ga 80 • Bopedi go tswa mo katisanetswa nng 0 le 80 **Tlhama le go tlhalosa dipaterone tsa gago** • Tlhama le go tlhalosa dipaterone tsa gago tsa dipalo	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 100 Thulaganyo e tshwanetse go bontsha go bala go ya kwa pele le go ya kwa morago mo: Balela kwa pele ka: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 100 • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 e e mo gare ga 100 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 e e mo gare ga 100 • Bopedi go tswa mo katisanetswa nng 0 le 100 **Tlhama le go tlhalosa dipaterone tsa gago** • Tlhama le go tlhalosa dipaterone tsa gago tsa dipalo

THADISO YA MOPHATO 1 3. POPEGO LE BOALO (THUTATEKANO)				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
3.1 **Kemo ,Kitsiso le dikakanyo**	**Kemo a puo** Tlhalosa kemo ya selo sengwe le kamano ya sona le se sengwe. Sekao, kwa godimo ga, fa pele ga, fa morago ga, moja, molema, kwa godimo ga, fa thoko ga. **Kemo le dikaelo** • Sala dikaelo tsa go tsamaya mo phaposiborutelong morago • Sala ditaelo morago tsa go baya selo se le sengwe go amana le se sengwe, sekao, baya pensele mo gare ga bokoso. **Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgwed-itharo 1** • Puo ya kemo e tshwanetse go rutiwa ka ditirwana tse di mo tirisong tse di pateletsang barutwana go tsaya karolo mo ditirwaneng tsa mmele. • Tseno di ka kopanngwa ka go rekota, jaaka: go thala, tshasa mebala, bapisa dithalo ka mafoko. • Dirisa puo ya kemo e e ithutilweng fa ba sala dikaelo morago • Dikaelo di tshwanetse go ithutiwa ka ditirwana tse ba ikatisang ka tsona , moo barutwana ba sutang kgotsa ba sutisang didirisiwa go ya ka ditaelo.			**Kemo a puo** Tlhalosa kemo ya selo sengwe le kamano ya sona le se sengwe. Sekao, kwa godimo ga, fa pele ga, fa morago ga, moja, molema, kwa godimo ga, fa thoko ga. **Kemo le dikaelo** • Sala dikaelo tsa go tsamaya mo phaposiborutelong morago • Sala ditaelo morago tsa go baya selo se le sengwe go amana le se sengwe, sekao, baya pensele mo gare ga bokoso. **Tshitshinyo ya ditirwana tse di tse-pamiseditsweng Kgweditharo 1** • Puo ya kemo e tshwanetse go rutiwa ka ditirwana tse di mo ti-risong tse di pateletsang barutwana go tsaya karolo mo ditirwaneng tsa mmele. • Tseno di ka kopanngwa ka go reko-ta, jaaka: go thala, tshasa mebala, bapisa dithalo ka mafoko. • Dirisa puo ya kemo e e ithutilweng fa ba sala dikaelo morago Dikaelo di tshwanetse go ithutiwa ka ditirwana tse ba ikatisang ka tsona , moo barutwana ba sutang kgotsa ba sutisang didirisiwa go ya ka ditaelo. **Kemo le dikakanyo** • Bapisa dikakanyo tse di farolo-ganeng tsa didirisiwa tsa letsatsi le letsatsi.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.2 **Didirisiwa tsa tlhakoretharo**	**Tlhatlhamano ya didirisiwa** Lemoga le go naya didirisiwa tse di tlhakoretharo maina mo phaposiborutelong le ditshwantshong. • Dipopego tsa bolo (dikgolokwe) • Dipopego tsa dibokoso (matlhakoremabapitekano) **Diponagalo tsa didirisiwa** Tlhalosa, aroganya le go bapisa didirisiwa tse di tlhakoretharo go ya ka: • bogolo • Mmala **Ditirwana tse di tsepilweng** Lemoga le go aga didirisiwa tsa tlhakoretharo tse di neilweng ba dirisa dithusathuto tse di angwang jaaka: diboloko tsa go aga, matlakala a a dirisiwang gape, didirisiwa tsa go aga		**Tlhatlhamano ya didirisiwa** Lemoga le go naya didirisiwa tse di tlhakoretharo maina mo phaposiborutelong le ditshwantshong. • Dipopego tsa bolo (dikgolokwe) • Dipopego tsa dibokoso (matlhakoremabapitekano) **Diponagalo tsa didirisiwa** Tlhalosa, aroganya le go bapisa didirisiwa tse di tlhakoretharo go ya ka: • bogolo • Mmala • Didirisiwa tse di kgokologang/pitikologang • Didirisiwa tse di relelang	**Tlhatlhamano ya didirisiwa** Lemoga le go naya didirisiwa tse di tlhakoretharo maina mo phaposiborutelong le ditshwantshong. • Dipopego tsa bolo (dikgolokwe) • Dipopego tsa dibokoso (matlhakoremabapitekano) **Diponagalo tsa didirisiwa** Tlhalosa, aroganya le go bapisa didirisiwa tse di tlhakoretharo go ya ka: • Bogolo • Mmala • Didirisiwa tse di • kgokologang/pitikologang • Didirisiwa tse di relelang

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.2 **Didirisiwa tsa tlhakoretharo (3-D)**	**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgwedtharo 1** • Motshameko o o lokologileng ka didirisiwa tse di tlhakoretharo go aga didirisiwa tse ba di itlhophetseng ba dirisa diboloko tsa go aga, matlakala a a dirisiwang gape kgotsa didirisiwa tsa go aga . seno ba ka se dira ba le bosi ka nako ya bona. • Kopolola sekao sa sengwe se morutabana ba neileng sona. Seno se ka dirwa ka nako ya bona. • Bapisa bogolo jwa didirisiwa tse di lekanang, sekao, bua gore ke bolo efe e e tona. • Bua ka mebala ya didirisiwa o be o aroganye didirisiwa go ya ka mebala. • Supa o be o tlhalose didirisiwa tsa jeometeri/jiometeri le didirisiwa tsa letsatsi letsatsi ka go bua gore a di bopegile jaaka bolo kgotsa jaaka bokoso. • Tiro e tiisiwang ka tiro e e kwalwang.		**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgwedtharo 3** • Dira ka dibolo le ka didirisiwa tse di bopilweng jaaka dibolo, le dibokoso tse di farologaneng le didirisiwa tse dingwe tse di bopilweng jaaka khutlonnetsepa ya matlhakoremabapitekano kgotsa dikhubi (cubes). Tlhotlhomisa gore ke selo sefe se se ka pitikologang, relelang le se se ka pakiwang. • Supa o be o tlhalose didirisiwa tsa jeometeri/jiometeri le didirisiwa tsa letsatsi letsatsi ka go bua gore a di bopegile jaaka bolo kgotsa jaaka bokoso. • Tiro e tiisiwang ka tiro e e kwalwang.	**Tshitshinyo ya tsepamo mo kgwedtharong 4:** Tiro e tiisiwang ka tiro e e kwalwang.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.3 **Tekatekanyo ya dipopegopedi 2-D**		**Tlhatlhamano ya dipopego** Lemoga le go naya tekatekanyo ya dipopegopedi maina • Didiko • Dikhutlotharo • Dikhutlonnetsepa **Diponagalo tsa dipopego** Tlhalosa, aroganya le go bapisa tekatekanyo ya dipopegopedi go ya ka: • Bogolo • Mmala • Mola o o tlhamaletseng • Melakgolokwe		**Tlhatlhamano ya dipopego** Lemoga le go naya tekatekanyo ya dipopegopedi maina • Didiko • Dikhutlotharo • Dikhutlonnetsepa **Diponagalo tsa dipopego** Tlhalosa, aroganya le go bapisa tekatekanyo ya dipopegopedi go ya ka: • Bogolo • Mmala • Mola o o tlhamaletseng • Melakgolokwe

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.3 **Tekatekanyo ya dipopegopedi 2-D**		**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 2** • Simolola ka motshameko o o lokologileng ka dipopego tse di farologaneng tse di akaretsang tsa di go dira ditshwantsho ka dipopego tsa Jiometeri/thutatekanyetso tse di kgaotsweng. Seno se ka dirwa ka nako ya bona. Seno se ka dirwa ka nako ya thuto ya Dikgono tsa Botshelo • Kopolola setshwantsho se se dirilweng ka dipopego tsa Jiometeri/jeometeri. Seno se ka dirwa ka nako ya bona. • Bapisa bogolo jwa didirisiwa tse di tshwanang, sekao, rulaganya dikhutlonne go tswa go e nnye go fitlha go e tona mme o dirise puo ya bogolo go tlhalosa dipopego. • Bua ka mebala ya dipopego mme morago o tlhaole dipopego go ya ka mebala. • Dira ka didikwe le ka dikhutlonne tsa bogolo jo bo farologaneng, le dikhutlonnetsepa tsa dipopego tse di farologaneng. Di aroganye go ya ka gore a di na le matlhakore a a tlhamaletseng kgotsa a a kgolokwe. • Tlhaola o be o kgobokanye dipopego go ya ka gore a ke dikhutlonnetsepa, dikhutlonne kgotsa didiko. • Tiro e tiisiwang ka tiro e e kwalwang.		**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 4** • Dira ka didiko le ka dikhutlonne tse di farologaneng le dikhutlonnetsepa tse di farologaneng. Rulaganya dipopego go ya ka gore a di na le melatlhamalalo kgotsa matlhakore a a sediko. • Tlhaola dipopego go ya ka gore a ke dikhutlotharo, khutlonne, khutlonnetsepa kgotsa sediko. • Tiro e tiisiwang ka tiro e e kwalwang.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.4 **Tekano**			**Tekano** • Lemoga tekano mo mmeleng wa gagwe. • Lemoga le go thala mola wa tekano mo dipopegong tsa jiometeri/thutatekano tsa tekano ya tlhakorepedi 2D kgotsa tse e seng thutatekano tsa tekano ya tlhakoreped 2-Di. **Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 3** • Lebelela mela ya tekano mo didirisiwang tse di angwang le mo ditshwantshong. • Ditiro tse di kwalwang ga di a tshwanela go tswa fela mo letlhakoreng le le lengwe mme e tshwanetse go akaretsa dikao tse barutwana ba ntshang mo moleng wa tekano.	**Tekano** • Lemoga le go thala mola wa tekano mo dipopegong tsa thutatekano tsa tekano ya tlhakorepedi 2-D kgotsa tse e seng jiometeri tsa tekano ya tlhakorepedi. **Tshitshinyo ya ditirwana tse di tse-pamiseditsweng Kgweditharo 4** Ditiro tse di kwalwang di tshwanetse go akaretsa dikao tseo mola wa tekano e seng mola wa tsepamo fela.

THADISO YA MOPHATO 1 4. TEKANYO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
4.1 **Nako**	**Go tsamaisa nako** Bua ka go tsamaisa nako • Rulaganya ditiragalo tsa tlwaelo tsa matshelo a bona. • Bapisa boleele jwa nako o dirisa puo, sekao, lelele, khutshwane, bonako, bonya. • Rulaganya ditiragalo ka go dirisa puo jaaka maabane, gompieno, kamoso. **Bua/bolela nako** • Tlhalosa fa sengwe se diragala ka go dirisa puo, sekao, mesong, thapama; maitsiboa, phakela, thari. • Naya maina a malatsi a beke le dikgwedi tsa ngwagao be o di rulaganye • Kwala malatsi a matsalo mo alemanakeng	Nako e tswelele go rutiwa ka nako ya go ruta barutwana botlhe mo phaposiborutelong.	Nako e tswelele go rutiwa ka nako ya go ruta barutwana botlhe mo phaposiborutelong.	Nako e tswelele go rutiwa ka nako ya go ruta barutwana botlhe mo phaposiborutelong.
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Bapisa le go rulaganya boleele kgotsa bophara jwa didirisiwa di le pedi kgotsa go feta ka go di bapisa/tshwantshanya. • Dirisa puo go bua ka papiso, sekao, leele, khutshwane, bophara • Fopholetsa, lekanyetsa, bapisa/tshwantshanya, rulaganya le go rekota boleele ba dirisa didirisiwa tsa go lekanyetsa tse di sa tlhomamang, sekao, tekanyetso ya diatla, boalo, boleele jwa pensele, dibadisi, jalo jalo.		**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa/tshwantshanya, rulaganya le go rekota boleele ba dirisa didirisiwa tsa go lekanyetsa tse di sa tlhomamang, sekao, tekanyetso ya diatla, boalo, boleele jwa pensele, dibadisi, jalo jalo.	

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
4.3 **Boima**	**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa/tshwantshanya, rulaganya le go rekota mmese ka go dirisa sekale sa tekatekano le didirisiwa tsa go lekanyetsa tse di sa tlhomamang, sekao, diboloko, ditena, jalo jalo. • Dirisa puo go bua ka papiso/tshwantshanyo, sekao, bofefo/botlhofo, mmese.			**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa/tshwantshanya, rulaganya le go rekota mmese ka go dirisa sekale sa tekatekano le didirisiwa tsa go lekanyetsa tse di sa tlhomamang, sekao, diboloko, ditena, jalo jalo. • Dirisa puo go bua ka papiso/tshwantshanyo, sekao, bofefo/botlhofo, mmese.
4.4 **Mothamo/bolumu**	**Tekanyo e e sa tlhomamang** • Bapisa/tshwantshanya le go rulaganya boleng jwa seeledi (boteng) mo ditshelong tse pedi tse di beilweng go bapa. Barutwana ba netefatsa ka go tshela mo setshelong sa boraro fa go tlhokagala.	**Tekanyo e e sa tlhomamang** • Bapisa/tshwantshanya le go rulaganya boleng jwa seeledi (mothamo) jo bo ka tshwarwang ke ditshelo tse pedi fa di tladitswe (mothamo). • Dirisa puo go bua ka papiso/tshwantshanyo, sekao, bofefo/botlhofo, boima. • Fopholetsa, lekanyetsa, bapisa/tshwantshanya, rulaganya le go rekota mothamo wa ditshelo ka go dirisa didirisiwa tsa go lekanyetsa tse di sa tlhomamang, sekao, maswana le dikopi.		**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa/tshwantshanya, rulaganya le go rekota mothamo wa ditshelo ka go dirisa didirisiwa tsa go lekanyetsa tse di sa tlhomamang, sekao, maswana le dikopi.

THADISO YA MOPHATO 1 5. THANOLO YA TSHEDIMOSETSO YA DIPALO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
5.1 **Kgobokanya le go tlhaola didirisiwa** **5.2** **Kemedi ya didiriswa tse di kgobokantsweng di tlhaotswe.** **5.3** **Go buisana le go bega ka didirisiwa tse di kgobokantweng le tse di tlhaotswe.**	Kgobokanya le go **tlhaola** didirisiwa tsa letsatsi le letsatsi tse di bonwang. Thala setshwantsho sa didirisiwa tse di tlhaotsweng. • Neela mabaka a gore kgobokanyo e **tlhaotswe** jang Araba dipotso ka ga: - Tlhaolo e dirilwe jang? (dikgato) - Didirisiwa tse di tlhaotsweng di lebega jang/? (kumo) • Tlhalosa didirisiwa tse di tlhaotsweng	Kgobokanya le go **tlhaola** didirisiwa tsa letsatsi le letsatsi tse di bonwang. Thala setshwantsho sa didirisiwa tse di **tlhaotsweng**. • Neela mabaka a gore kgobokanyo e arogantswe jang Araba dipotso ka ga: - Tlhaolo e dirilwe jang? (dikgato) - Didirisiwa tse di tlhaotsweng di lebega jang/? (kumo) • Tlhalosa didirisiwa tse di tlhaotsweng		
5.4 **Kgobokanya le go rulaganya tshedimosetso**			**Katlanegiso:** Sediko sa tshedimosetso go dira kerafo ya setshwantsho • Kgobokanya le go rulaganya tshedimosetso - Ka ga phaposiborutelo kgotsa sekolo - Dikarabo tsa dipotso tse di boditsweng ke morutabana • Emela/ refosa tshedimosetso mo kerafong ya ditshwantsho. • Araba dipotso ka ga tshedimosetso e e mo kerafong ya setshwantsho	
5.5. Kemedi ya tshedimosetso.				
5.6 **Tshetshereganya le go rarabolola tshedimosetso**				Tshetshereganya tshedimosetso go tswa mo dithalong tse di neetsweng. **Katlenegiso:**: bonnye dikerafo tsa ditshwantsho di le pedi

3.4.2 MOPHATO WA 2-DIKAKANYO TSE DI TSEPAMENG TSA KGWEDITHARO

THADISO YA MOPHATO 2 1. DIPALO, MATSHWAO LE DIKGOLOAGANO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
PALO KGOLO YA DIKAKANYO: BALA KA DIPALOTLALO				
1.1 **Bala didiriswa**	• Bala didiriswa di le 100 ka nepagalo letsatsi ka letsatsi • Naya phopholetso ya palo ya didiriswa tse ka netefadiwang fa di balwa. • Ditogamaano tsa go kgobokanyo di tlhotlhelediwe.	• Bala didiriswa di le 150 letsatsi lengwe le lengwe ka nepagalo. • Naya phopholetso ya palo ya didiriswa tse ka netefadiwang fa dibalwa. • Ditogamaano tsa go kgobokanyo di tlhotlhelediwe	• Bala didiriswa di le 180 letsatsi lengwe le lengwe ka nepagalo. • Naya phopholetso ya palo ya didiriswa tse ka netefadiwang fa dibalwa. • Ditogamaano tsa go kgobokanyo di tlhotlhelediwe	• Bala didiriswa di le 200 letsatsi lengwe le lengwe ka nepagalo. • Naya phopholetso ya palo ya didiriswa tse ka netefadiwang fa dibalwa. • Ditogamaano tsa go kgobokanyo di tlhotlhelediwe
1.2 **Balela go ya pele le kwa morago**	**Bala go ya pele le kwa morago** • Simolola ka bonngwe go tloga mo palong nngwe le nngwe e e mo magareng ga 0 le 100 • Bosome go tloga mo dikatisong tsa l0 magareng ga 0 le 100 • Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 0 le 100 • Bopedi go tloga mo katisong tsa 2 mo gareng ga 0 le 100	**Bala go ya pele le kwa morago** • Simolola ka bonngwe go tloga mo palong nngwe le nngwe e e mo magareng ga 0 le 150 • Bosome go tlhoga mo dikatisong tsa l0 magareng ga 0 le 150 • Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 0 le 150 • Bopedi go tloga mo katisong tsa 2 mo gareng ga 0 le 150 • Botharo go tloga dikatisong tsa 3 mo gareng ga 0 le 99 • Bonne go tloga mo dikatisong tsa 4 mo gareng ga 0 le 100	**Bala go ya pele le kwa morago** • Simolola ka bonngwe go tloga mo palong nngwe le nngwe e e mo magareng ga 0 le 180 • Bosome go tlhoga mo dikatisong tsa l0 magareng ga 0 le180 • Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 0 le 180 • Bopedi go tloga mo katisong tsa 2 mo gareng ga 0 le 180 • Botharo go tloga dikatisong tsa 3 mo gareng ga 0 le 180 • Bonne go tloga mo dikatisong tsa 4 mo gareng ga 0 le 180	**Bala go ya pele le kwa morago** • Simolola ka bonngwe go tloga mo palong nngwe le nngwe e e mo magareng ga 0 le 200 • Bosome go tlhoga mo dikatisong tsa l0 magareng ga 0 le 200 • Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 0 le 200 • Bopedi go tloga mo katisong tsa 2 mo gareng ga 0 le 200 • Botharo go tloga dikatisong tsa 3 mo gareng ga 0 le 200 • Bonne go tloga mo dikatisong tsa 4 mo gareng ga 0 le 200

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
PALO KGOLO YA DIKAKANYO: Kemedi ya palotlalo				
1.3 **Letshwaopalo le leinapalo**	**Tlhaola,lemoga le go buisa dipalo** • Tlhaola, lemoga le go buisa letshwaopalo go tloga ka 0 go fitlha 100 • Kwala matshwaopalo go tloga go 0 go fitlha ka 100 • Tlhaola, lemoga le go buisa mainapalo go tloga ka 0 go fitlha 25 • Kwala mainapalo go tloga ka 0 go fitlha 25	**Tlhaola,lemoga le go buisa dipalo** • Tlhaola, lemoga le go buisa letshwaopalo go tloga ka 0 go fitlha 150 • Kwala matshwaopalo go tloga k a 0 go fitlha ka 150 • Tlhaola, lemoga le go buisa mainapalo go tloga ka 0 go fitlha 50 • Kwala mainapalo go tloga ka 0 go fitlha 50	**Tlhaola,lemoga le go buisa dipalo** • Tlhaola, lemoga,le go buisa letshwaopalo go tloga ka 0 go fitlha 180 • Kwala matshwaopalo go tloga k a 0 go fitlha ka 80 • Tlhaola, lemoga le go buisa mainapalo go tloga ka 0 go fitlha 75 • Kwala mainapalo go tloga ka 0 go fitlha 75	**Tlhaola,lemoga le go buisa dipalo** • Tlhaola, lemoga,le go buisa letshwaopalo go tloga ka 0 go fitlha 200 • Kwala matshwaopalo go tloga k a 0 go fitlha ka 200 • Tlhaola, lemoga le go buisa mainapalo go tloga ka 0 go fitlha 100 • Kwala mainapalo go tloga ka 0 go fitlha 100
PALO KGOLO YA DIKAKANYO:tlhalosa bapisa le tatelano ya dipalotlalo				
1.4 **Tlhalosa ,bapisa le tatelano ya dipalotlalo**	**Tlhalosa ,bapisa le tatelano ya dipalo go fitlha ka 25** • Bapisa dipalotlalo ka go dirisa e nnye thata go, le e kgolo thata go,ntsi go, le go lekana le. • Rulaganya dipalotlalo go simolola ka e nnye thatathata go fitlha go e kgolo thatathata, go e kgolo thatathata go fitlha go e nnye thatathata.	**Tlhalosa ,bapisa le tatelano ya dipalo go fitlha ka 50** • Bapisa dipalotlalo ka go dirisa e nnye thata go, le e kgolo thata go,ntsi go, le go lekana le. • Rulaganya dipalotlalo go simolola ka e nnye thatathata go fitlha go e kgolo thatathata, go e kgolo thatathata go fitlha go e nnye thatathata.	**Tlhalosa ,bapisa le tatelano ya dipalo go fitlha ka 75** • Bapisa dipalotlalo ka go dirisa e nnye thata go, le e kgolo thata go,ntsi go, le go lekana le. • Rulaganya dipalotlalo go simolola ka e nnye thatathata go fitlha go e kgolo thatathata, go e kgolo thatathata go fitlha go e nnye thatathata. **Dirisa lebaditatelano go bontsha tatelano,lefelo kgotsa maemo** • Baya didiriswa ka go latelana go tloga ka selo santlha go fitlha ka sa some-a-mabedi kgotsa go ya ntlha go fitlha go ya bofelo sekao: santlha, sabobedi, saboraro…sa bolesome	**Tlhalosa ,bapisa le tatelano ya dipalo go fitlha ka 99** • Bapisa dipalotlalo go fitlha go 99 o dirisa e nnye thata go le e kgolo thata go le e lekana le • Rulaganya dipalotlalo go simolola ka e nnye thatathata go fitlha go e kgolo thatathata, go e kgolo thatathata go fitlha go e nnye thatathata. **Dirisa lebaditatelano go bontsha tatelano,lefelo kgotsa maemo** • Baya didiriswa ka tatelana go tloga ka ya ntlha go yak o go ya masome-a-mabedi kgotsa ya ntlha go ya bofelo sekao:santlha,sabobedi,saboraro go fitlha go masome-a-mabedi

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
PALO KGOLO YA DIKAKANYO Boleng kemedi				
1.5 **Boleng Kemedi**	**Lemoga bolengkemedi jwa dipalo go tloga ka 11 go fitlha ka 25** • Tlhatlhamolola palopedi ka katiso ya bolesome le ya nngwe • Tlhaola le go bua ka boleng jwa palo nngwe le nngwe.	**Lemoga bolengkemedi jwa dipalo go tloga ka 11 go fitlha ka 50** • Tlhatlhamolola palopedi ka katiso ya bolesome le ya nngwe • Tlhaola le go bua ka boleng jwa palo nngwe le nngwe.	**Lemoga bolengkemedi jwa dipalo go tloga ka 11 go fitlha ka 75** • Tlhatlhamolola palopedi ka katiso ya bolesome le ya nngwe • Tlhaola le go bua ka boleng jwa palo nngwe le nngwe.	**Lemoga bolengkemedi jwa dipalo go tloga ka 11 go fitlha ka 99** • Tlhatlhamolola palopedi ka katiso ya bolesome le ya nngwe • Tlhaola le go bua ka boleng jwa palo nngwe le nngwe.
THARABOLOLO YA DIPALO MO TIRISONG				
1.6 **Maano a go rarabolola dipalo**	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Go aga le go kgaoganya dipalo • Koketsopedi le go aroganya ka bogare • Melapalo e e tshegetswang ka dithusathuto tse di angwang.	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Go aga le go kgaoganya dipalo • Koketsopedi le go aroganya ka bogare • Melapalo e e tshegetswang ka dithusathuto tse di angwang.	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Go aga le go kgaoganya dipalo • Koketsopedi le go aroganya ka bogare • Melapalo	Dirisa maano a a latelang go rarabolola dipalo o be o tlhalose tharabololo eo. • Dithusathuto tse di angwang, sekao, dibadisi • Go aga le go kgaoganya dipalo • Koketsopedi le go aroganya ka bogare • Melapalo
1.7 **Tlhakanyo le go ntsha**	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go tlosa, mme dikarabodi fitlhe mo go 20.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go tlosa, mme dikarabo di fitlhe mo go 50	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go tlosa, mme dikarabo di fitlhe mo go 75	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, go tlosa, mme dikarabo di fitlhe mo go 99

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.8 **Poeletso ya tlhakanyo e e isang kwa katisong**	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, tloso, mme dikarabo di fitlhe mo go 20	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, tloso a, mme dikarabo di fitlhe mo go 30	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, tloso, mme dikarabo di fitlhe mo go 40	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang tlhakanyo, tloso, mme dikarabo di fitlhe mo go 50
1.9 **Kgobokanyo le kabelano e e isang kwa karolong**	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gago e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo tsa go fitlha ka 20 ka dikarabo tse di ka akaretsang sesala.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gago ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo tsa go fitlha ka 30 ka dikarabo tse di ka akaretsang sesala.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gago ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo tsa go fitlha ka 40 ka dikarabo tse di ka akaretsang sesala.	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gago ya dipalo e e akaretsang karoganyo e e lekanang le kgobokanyo ya dipalotlalo dipalotlalo tsa go fitlha ka 100 ka dikarabo tse di ka akaretsang sesala.
1.10 **Kgobokanyo le kabelano e e isang kwa palophatlong**		Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang e akaretsa tharabololo ya palophatlo ya tsela yosi Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, jalo le jalo	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang e akaretsa tharabololo ya palophatlo ya tsela yosi Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, jalo le jalo	Tharabololo ya dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe ya dipalo e e akaretsang karoganyo e e lekanang e akaretsa tharabololo ya palophatlo ya tsela yosi. Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, jalo le jalo
1.11 **Tšhelete**	• Gopola le go supa tšhelete ya papetlana ya Aforika Borwa 10c, 20c, 50c, R1, R2, R5 le tšhelete ya dipampiri e leng R10, R20, R50 • Tharabololo palo ya tšhelete e e akaretsang palogotlhe le phetolelo ya sente e e fitlhang ka 50c le diranta tse di fitlhang ka R20.	• Gopola le go supa tšhelete ya papetlana ya Aforika Borwa 10c, 20c, 50c, R1, R2, R5 le tšhelete ya dipampiri e leng R10,R20,R50 • Tharabololo palo ya tšhelete e e akaretsang palogotlhe le phet-olelo ya sente e e fitlhang ka 20c le diranta tse di fitlhang ka R50.	• Gopola le go supa tšhelete ya papetlana ya Aforika Borwa 10c, 20c, 50c, R1, R2, R5 le tšhelete ya dipampiri e leng R10,R20,R50 • Tharabololo palo ya tšhelete e e akaretsang palogotlhe le phet-olelo ya sente e e fitlhang ka 75 le diranta tse di fitlhang ka R75.	• Gopola le go supa tšhelete ya papetlana ya Aforika Borwa 10c, 20c, 50c, R1, R2, R5 le tšhelete ya dipampiri e leng R10,R20,R50 • Tharabololo palo ya tšhelete e e akaretsang palogotlhe le phet-olelo ya sente e e fitlhang ka 50c le diranta tse di fitlhang ka R99.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
DIPALO TSE DI SENG MO TIRISONG				
1.12 **Maano (mekgwa le ditogamaano)**	Dirisa maano a a latelang fa ba dira dipalo: • Ditshwantsho kgotsa dithusathuto tse di kgongwang, sekao, dibadisi • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Molapalo o o tshegetswang ke dithusathuto tse di kgongwang.	Dirisa maano a a latelang fa ba dira dipalo: • Ditshwantsho kgotsa dithusathuto tse di kgongwang, sekao, dibadise • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo e e tshegetswang ka dithusathuto tse di kgongwang.	Dirisa maano a a latelang fa ba dira dipalo: • Ditshwantsho kgotsa dithusathuto tse di kgongwang, sekao, dibadisi • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo	Dirisa maano a a latelang fa ba dira dipalo: • Ditshwantsho kgotsa dithusathuto tse di kgongwang, sekao, dibadisi • Aga dipalo le go thuba dipalo • Koketsopedi le karoganyo ka bogare • Melapalo
1.13 **Tlhakanyo le tloso**	**Tlhatlhamano ya dipalo: 20** • Tlhakanya go fitlha go 20 • Go tlosa mo go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo tsa 10	**Tlhatlhamano ya dipalo: 1 - 5** • Tlhakanya go fitlha go 50 • Go tlosa mo go 50 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo tsa1 15	• Tlhakanya go fitlha go 75 • Go tlosa mo go 75 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo tsa 20	• Tlhakanya go fitlha go 99 • Go tlosa mo go 99 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo tsa 20
1.14 **Poeletso ya tlhakanyo e e isang kwa katisong**	• **Poeletso ya tlhakanyo e e isang kwa katisong** • Tlhakanya palo e lenngwe gantsi go fitlha 20 • Atisa1 go fitlha ka 10 ka 2 • Dirisa matshwao a a maleba (+, x, =, ☐)	• Atisa 1 go fitlha ka 10 ka 2 le 5 • Dirisa matshwao a a maleba (+, x, =, ☐)	• Atisa 1 go fitlha ka 10 ka 2,5 l e 4 • Dirisa matshwao a a maleba (+, x, =, ☐)	• Atisa 1 go fitlha ka 10 ka 2,5,3 le 4 • Dirisa matshwao a a maleba (+, x, =, ☐)

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.16 **Dipalo tsa tlhogo**	**Kgopolo ya dipalo:** **Tlhatlhamano 25** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo go fitlha go 25 mme o bue gore: • 1 e ntsi kgotsa 1 e nnye • 2 e ntsi kgotsa 2 e nnye • 10 e ntsi kgotsa e nnye **Gakologelwa ka bonako:** • gakologelwa tlhakanyo le tloso ya palo go fitlha **ka 10**	**Kgopolo ya dipalo:** **Tlhatlhamano 50** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo go fitlha go 50 mme o bue gore : • 1 e ntsi kgotsa 1 e nnye • 2 e ntsi kgotsa 2 e nnye • 3 e ntsi kgotsa 3 e nnye • 4 e ntsi kgotsa 4 e nnye • 5 e ntsi kgotsa 5 e nnye • 10 e ntsi kgotsa e nnye **Gakologelwa ka bonako:** • gakologelwa tlhakanyo le ya tloso palo go fitlha **ka 10**	**Kgopolo ya dipalo:** **Tlhatlhamano 75** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo tsa go fitlha go75 mme o bue gore: • 1 e ntsi kgotsa 1 e nnye • 2 e ntsi kgotsa 2 e nnye • 3 e ntsi kgotsa 3 e nnye • 4 e ntsi kgotsa 4 e nnye • 5 e ntsi kgotsa 5 e nnye • 10 e ntsi kgotsa e nnye **Gakologelwa ka bonako:** • gakologelwa tlhakanyo le tloso ya palo go fitlha **ka 15** • **tlhakanya kgotsa o tlosa katiso ya 10 go tloga ka 0 go fitlha go 50**	**Kgopolo ya dipalo:** **Tlhatlhamano 99** • Rulaganya setlhopha sa dipalo se se tlhophilweng. • Bapisa dipalo tsa go fitlha go 99 mme o bue gore: • 1 e ntsi kgotsa 1 e nnye • 2 e ntsi kgotsa 2 e nnye • 3 e ntsi kgotsa 3 e nnye • 4 e ntsi kgotsa 4 e nnye • 5 e ntsi kgotsa 5 e nnye • 10 e ntsi kgotsa e nnye **Gakologelwa ka bonako:** • gakologelwa tlhakanyo le tloso ya palo go fitlha **ka 20** • **tlhakanya kgotsa o tlosa ya dikatiso tsa 10 go tloga go 0 go fitlha go 100**
1.16 **Dipalo tsa tlhogo**	**Ditogamaano tsa go balela** Dirisa ditogamaano tsa go tlhakanya le go ntsha sentle : • Baya palo e tonna pele gore ba bale le go balela go ya kwa morago • Molapalo wa palo tsa tlhogo • Koketsopedi le karoganyo ka bogare • Go aga le go kgaogana • Dirisa kgolagano magareng ga tlhakanyo le tloso.	**Ditogamaano tsa go balela** Dirisa ditogamaano tsa go go balela go tlhakanya le go ntsha sentle : • Baya palo e tonna pele gore ba bale le go balela go ya kwa morago • Molapalo • Koketsopedi le karoganyo ka bogare • Dirisa kgolagano magareng ga tlhakanyo le tloso.	**Ditogamaano tsa go balela** Dirisa ditogamaano tsa gore ba bale le go tlhakanya le go ntsha sentle : • Baya palo e tonna pele gore ba bale kwa pele le go balela go ya kwa morago • Molapalo • Koketsopedi le karoganyo ka bogare • Dirisa kgolagano magareng ga tlhakanyo le tloso.	**Ditogamaano tsa go balela** Dirisa ditogamaano tsa go go balela go tlhakanya le go ntsha sentle : • Baya palo e tonna pele gore ba bale le go bala go ya kwa morago • Dirisa kgolagano magareng ga tlhakanyo le tloso. • Molapalo • Koketsopedi le karoganyo ka bogare • Go aga le go kgaogana

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.17 **Palophatlo**		• Dirisa le go neela maina a dipalophatlo mo tirisong e e tlwaelegileng e e akaretsang go aroganya ka bogare,dikwatara,nngwe-tharong le nngwe- tlhanong • Lemoga palophatlo ka mokgwa wa ditshwantsho • Kwala palophatlo $\frac{1}{2}$, le $\frac{2}{3}$ ka mafoko.	• Dirisa le go neela maina a dipalophatlo mo tirisong e e tlwaelegileng e e akaretsang go aroganya ka bogare,dikwatara,nngwe-tharong le nngwe-tlhanong • Lemoga palophatlo mo ditshwantsho • Kwala palophatlo $\frac{1}{2}$, le $\frac{2}{3}$ ka mafoko.	• Dirisa le go neela maina a dipalophatlo mo tirisong e e tlwaelegileng e e akaretsang go aroganya ka bogare,dikwatara,nngwe-tharong le nngwe- tlhanong • Lemoga palophatlo mo ditshwantsho • Kwala palophatlo $\frac{1}{2}$ le $\frac{2}{3}$ ka mafoko..

Mefuta ya Dipalo tsa Mophato 2

Tse ke dikao tsa mefuta e e botlhokwa ya dipalo tse morutabana a tshwanetseng go di naya barutwana ba gagwe gangwe le gape mo phaposingborutelo. Fa morutabana a dira ka setlhopha se sennye, o tshwanetse go ba naya palo ka molomo. Fa barutwana ba kgona go buisa, a ka ba naya dipalo gape ka go di kwala, mme o tshwanetse go ba naya tsona gape ka molomo. Dipalo tse di mo tirisong di ka akarediwa mo letlhareng laa tiro, mme di tshwanetse go nna dikhutshwane, di tlhamalale le go tlwaelega, mme morutabana o tshwanetse go netefatsa gore barutwana botlhe ba a di tlhaloganya.

Kgobokanya

- Kgobokanya le go tlosa sesala..

Lerato o rekisa diapole mo dikgetseng, kgetse nngwe le nngwe e na le diapole di le 10. O na le diapole di le 80. Lerato o ya go nna le dikgetse di le kae fa kgetse nngwe le nngwe e na le diapole di le lesome?

- Go kgobokanya le go akaretsa sesala

Molemirui o na le mae a le 47. Ke mabokoso a le makae mae a a tsayang mae a le 6 lebokoso lengwe le lengwe, a o ka atlhokang go paka mae otlhe.

Karoganyo

- **Aroganya le go tlosa sesala.**

Aroganya dimonamone di le 54 magareng ga ditsala tse 7 gore tsala nngwe le nngwe e bone dimonamona tse di le kanang.

- **Aroganya e e isang kwa palophatlong**

Aroganya dibara tsa tshokolete magareng ga ditsala di le 4 gore tsala nngwe le nngwe e bone karolo e e lekanang go se nne karolo epe e e salang.

- Go kokoanya dipalophatlo

Nkoko o neela Pule dinamune di le 12 .Pule o dira matute ka □ ya dinamune . Pule o dirisitse dinamone di le kae?

Palo ya mofuta o e tshwanetse go neewa barutwana fela fa ba setse ba rarabolotse dipalo tsa mofuta wa karoganyo wa tse nnene go fitlha go tse tlhano,tse di gogelang go fitlha go mofuta ya dipalophatlo le go itse maina a dikarolwana tsa palophatlo.

Kokoanyo ya dipalophatlo

Mokatise wa kgwele ya diatla o neela motshameki mongwe le mongwe halofo ya namune.Go batshameki ba le 14.O tlhoka dinamune tse kae?

Palo ya mofuta o e tshwanetse go neewa barutwana fela fa ba setse ba rarabolotse dipalo tsa mofuta wa karoganyo wa tse nnene go fitlha go tse tlhano,tse di gogelang go fitlha go mofuta ya dipalophatlo le go itse maina a dikarolwana tsa palophatlo.

Poeletso ya tlhakanyo

Dibaesekele di le 20 di na le maotwana a le makae?

Selekanyo

Molefe o tsamaya sekgala sa diboloko di le 6 ka letsatsi.o tsamaya diboloko di le kae mo bekeng.

Gerete

Rre Aphane o jala metlhala e le 7 ya dikhabitšhe.Go dikhebetšhe di le 8 mo motlhaleng. Ke dikhabetšhe di le kae tsotlhe?

Tlhakanyo le tloso

Go na le bonnye mefuta e le meraro ya motheo ya dipalo tsa go tlhakanya le tsa go tlosa mme mofuta mongwe le mongwe o ka bodiwa ka mekgwa e e farologaneng. Mefuta e ya motheo ke:

Tlhakanyo le tloso

Go na le bonnye mefuta e le meraro ya motheo ya dipalo tsa tlhakanya le tsa go tlosa mme mofuta mongwe le mongwe o ka bodiwa ka mekgwa e e farologaneng. Mefuta e ya motheo ke:

Tšhentšhi

Omphemetse o na le dimonamone di le 25.Mampa o mo naya di le 18.Omphemetse o nale le dimonamone di le kae?

Omphemetse o ne a nale le dimoamona di le 53 .O naya Mampa di le 32 .Omphemetse o sala ka tse kae?

Kopanya

Diphaposi tsa Mophato wa 2-Di na le dikhutlotharo tse di botala jwa naga di le 37 le tse di botala jwa legodimo di le 19.ba na le dikhutlotharo di le kae?

Ba na le ditshekeletsa di le 63,tse 27 ke tse di botala jwa naga mme tsotlhe di botala jwa legodimo.Ba na le di tshekeletsana tse kae tsa botala jwa legodimo?

Bapisa

Molebatsi o na le dipanana di le 13. Mmamotshonyane o na le dipanana di le tlhano. Molebatsi o na le dipanana di le kae go feta tsa go Mmamotshonyane?

Mekgwa e e farologaneng ya go botsa dipalo

Dipalo di tshwanetse go bodiwa ka mekgwa e e farologaneng. Sekao, bobedi jwa tsona ke dipalo tsa tšhentšhi, mme “di sa itsiweng” di fitlhelwa mo mafelong a a farologaneng a dipalo.

Omphemetse o na le dimonamone. Mampa o mo neela dimonamona di le 18.Jaanong o na le dimonamone di le 43. Jaanong Omphemetse o na le dimonamone di le kae?

Omphemetse o na le apole di le 25.Mampa o mo neela diapole tse dingwe. O na le diapole di le 43.Ke diapole di le kae tse Mampa a mo neileng tsona.

Mefuta ya dipalo ka tiriso e e farologaneng ya botsalano

Goitsemang o rekisa dipanana ka diranta di le 4 nngwe le nngwe. Dira lenaneo go mo thusa go bona ditlhotlhwa tsa ditheko tsa dipanana di le dintsi.

Dinomoro tsa dipanana	1	2	3	4	5	6	7	8	9	10
Tlhotlhwa ka R	4	8								

Dirisa lenaneo go bona tlhotlhwa ya dipanana di le 15

Mmankola o tlhokomela bana.O duedisa R20 ya sepalwang le R5 ya go tlhokomela bana.Mo feleletse tafole e .

Palo ya diura	1	2	3	4	5	10
Tlhotlhwa ka R	25	30				

Itse gore dipalo tsa Goitsemang le tsa ga Mmankola di fapaane

Mefuta ya dipalo e neilwe go kaela morutabana. Barutwana ga ba tshwanela go tshwarisiwa bothata ka maina a mefuta. Tlhokomela gore ga e se ka nako tsotlhe barutwana ba a tle ba dirise ditsela tse di farologaneng tsa go rarabolola dipalo ka mokgwa o morutabana a neng a sa o lebelela..Sekao dipalo tsa go arogana di ka dirwa ka go boeletsa dipalo tsa go tlosa,tlhakanya kgotsa go atisa.Mokgwa o barutwana ba dirang dipalo ka ona o tla fetoga mo tsamaong ya ngwaga fa ba ntse ba tlhaloganya le go tlwaela go gola ga mefuta ya dipalo le jaaka kgopolo ya tiriso ya dipalo e gola.

THADISO YA MOPHATO 2 2. DIPATERONE, MEDIRISO LE ALEJEBERA				
SETLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
2.1 **Dipaterone tsa Jeometeri**	**Kopolola ,ataloso le go tlhalosa** Kopolola, atolosa le go tlhalosa ka mafoko Dipaterone tse di bonolo tse di dirilweng ka didiriswa tse di bonwang; • Dipaterone tse di bonolo tsa dithalo, popego le didiriswa **Tlhatlhamano ya dipaterone** Dipaterone tse di bonolo tse e leng gore popego,kgotsa setlhopha sa dipopego di boelediwa ka mokgwa o o tshwanang. **Tlhama le go tlhalosa dipaterone tsa gago** • Bopa dipaterone tsa gago tsa jeometeri • Ka didiriswa tse di bonwang • Ka go thala mela,dipopego kgotsa didiriswa • Tlhalosa dipaterone tsa gago.	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa ka mafoko Dipaterone tse di bonolo tse di dirilweng ka didiriswa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa **Tlhatlhamano ya dipaterone** Dipaterone tse di bonolo tse e leng gore popego,kgotsa setlhopha sa dipopego di boelediwa ka mokgwa o o tshwanang. Dipaterone tse leng gore palo le bogolo jwa dipopego tsa tsona di afetoga mo kgatong e nngwe le nngwe ka tsela ya ponelopele ebong kgolo ya ka gale ya dipaterone . **Tlhama le go tlhalosa dipateronetsa gago** • Bopa dipaterone tsa gago tsa jeometeri • Ka didiriswa tse di bonwang • Ka go thala mela,dipopego kgotsa didiriswa Tlhalosa dipaterone tsa gago	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa ka mafoko Dipaterone tse di bonolo tse di dirilweng ka didiriswa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa **Tlhatlhamano ya dipaterone** Dipaterone tse leng gore palo le bogolo jwa dipopego tsa tsona di afetoga mo kgatong e nngwe le nngwe ka tsela ya ponelopele ebong kgolo ya ka gale ya dipaterone. **Tlhama le go tlhalosa dipaterone tsa gagwe** • Tlhama Dipaterone tsa Jeometeri - Ka didiriswa tse di bonwang - Ka go thala mela, dipopego kgotsa didiriswa Tlhalosa dipaterone tsa gago	**Dipaterone tse di re dikaganyeditseng** Supa, tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Ka tlhago • Go tswa mo botshelong jwa ka metlha jwa gompieno • Go tswa mo ngwaong-bosweng jwa rona

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
2.2 **Dipaterone tsa dipalo**	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 100 Thulaganyo e tshwanetse e bontshe go balela kwa pele le go ya kwa morago mo: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 100 • Bolesome go tswa mo katisong nngwe le nngwe ya 10 go ya magareng go 0 le 100 • Botlhano go tswa mo katiso nngwe le nngwe ya 5 magareng go 0 le 100 • Bobedi go tswa go katiso nngwe le nngwe ya 2 magareng go 0 le 100	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 150 Thulaganyo e tshwanetse go bontsha go balela kwa pele le go ya kwa morago mo: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare go 0le 150 • 150 • **150** • **0 le 150** • Boraro go tswa mo katisong nngwe le nngwe ya 3 e e mo gare go 0 le 150 • Bone go tswa mo katisong nngwe le nngwe ya 4 e e mo magareng go 0 le 150 **Tlhama le go tlhalosa dipaterone tsa gagwe** Tlhama le go tlhalosa dipaterone tsa gagwe tsa dipalo	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 180 Thulaganyo e tshwanetse go bontsha go balela kwa pele le go ya kwa morago mo: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 0 le 180 • 180 • 180 • 0 le 180 • Boraro go tswa mo katisong nngwe le nngwe ya 3 e e mo gare ga 0 le 180 • Bone go tswa mo katisong nngwe le nngwe ya 4 e e mo magareng ga 0 le 180 **Tlhama le go tlhalosa dipaterone tsa gagwe**	**Kopolola, atolosa le tlhaloso** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 200 Thulaganyo e tshwanetse go bontsha go balela kwa pele le go ya kwa morago mo: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 200 • 200 • 200 • 0 le 200 • Boraro go tswa mo katisong nngwe le nngwe ya 3 e e mo gare ga 0 le 200 • Bone go tswa mo katisong nngwe le nngwe ya 4 e e mo magareng ga 0 le 200 **Tlhama le go tlhalosa dipaterone tsa gagwe** Tlhama le go tlhalosa dipaterone tsa gagwe tsa dipalo

THADISO YA MOPHATO 2 3. BOALO LE POPEGO (JEOMETERI)				
SETLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
3.1 **Kemo, kitsiso le dikakanyo**		**Kemo ya puo** Tlhalosa kemo ya sediriswa ka kamano ya sona le se sengwe. Sekao, kwa godimo ga, fa pele ga, fa morago ga, moja, molema, kwa godimo ga, fa tlase ga,fa thoko ga **Kemo le dikaelo** • Sala dikaelo tsa go tsamaya mo phaposiborutelong morago	**Kemo le dikakanyo** **Tshwantshanya dikakanyo tse di farologaneng tsa sediriswa s aka metlha.** **Kemo le dikaelo** • Sala dikaelo tsa go tsamaya mo phaposiborutelong morago	

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.2 **Didiriswa tsa tekanyo-tlhakoretharo (3D)**	**Tlhatlhamano ya didiriswa** Lemoga le go naya didiriswa tse di tlhakoretharo maina mo phaposiborutelong le ditshwantshong. • Dipopego tsa bolo (dikgolokwe) • Dipopego tsa dibokoso (matlhakore-mabapitekano) **Diponagalo tsa didiriswa** Tlhalosa, aroganya le go bapisa didiriswa tse di tlhakoretharo go ya ka: • Bogolo • Selo se se kgolokwe • Selo se se relelang **Ditirwana tse di tsepilweng** Lemoga le go aga didiriswa tsa tlhakoretharo o dirisa metiriale o segolotsweng wa dipopego ,diboloko tsa kago,didiriswa tsa poeletso tsa tekanyotlhakorepedi,le didiriswa tsa tekanyetso tse dingwe tsa tekanyetsotlhakoretharo.		**Tlhatlhamano ya didiriswa** Lemoga le go naya didiriswa tse di tlhakoretharo maina mo phaposiborutelong le ditshwantshong. • Dipopego tsa bolo (dikgolokwe) • Dipopego tsa dibokoso (matlha-koremabapitekano) • Selennere **Diponagalo tsa didiriswa** Tlhalosa, aroganya le go bapisa didiriswa tse di tlhakoretharo go ya ka: • Bogolo • Didiriswa tse dikgolokwe • Didiriswa tse di relelang	**Tlhatlhamano ya didiriswa** Lemoga le go naya didiriswa tse di tlhakoretharo maina mo phaposiborutelong le ditshwantshong. • Dipopego tsa bolo (dikgolokwe) • Dipopego tsa dibokoso (matlha-koremabapitekano) • Selennere **Diponagalo tsa didiriswa** Tlhalosa, aroganya le go bapisa didiriswa tse di tlhakoretharo go ya ka: • bogolo • didiriswa tse dikgolokwe • didiriswa tse di relelang

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.2 **Didiriswa tsa tekanyo-tlhakoretharo (3D)**	**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 1** • **Kopisa setswantshi sa sengwe se morutabana a se neelang. Ditshwantshi le didiriswa tsa kago di ka dirwa go dirisiwa diboloko tsa kago, didiriswa kago poeletso le didiriswa tse dingwe tsa tekanyo-tlhakoretharo tsa tekano le disegwa tsa dipopego tsa tekanyotlhakorepedi Se se ka dirwa nako e ikemetseng** • Bapisa le go tlhalosa bogolo jwa didiriswa tse di tshwanang, sekao,dibokoso tse di tlhatlhagantsweng go tloga ka bogolo thatathata go fitlha go bonnye thatathata. **Dira ka tse** : dibolo le didiriswa tse di bopegileng jaaka dibolo. dibokoso tse di fapaaneng le didiriswa tse di bopegileng jaaka dikhutlonnetsepa tsa matlhakoremabapitekano Batlisisa gore ke didiriswa dife tse di kgonang go kgokologa,go relela le go tlhatlhagangwa. Tlhopa le go tlhalosa tekano le didiriswa tsa ka metlha ka go bua gore a di bopegile jaaka bolo,jaaka lebokoso le Selennere. Tiro e tiisiwang ka tiro e e kwalwang.		**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 3** Dira ka: • dibolo le ka didiriswa tse di bopilweng jaaka dibolo, ledi Selennere le didiriswa tsa popego ya Selennere, dibokoso tse di farologaneng le didiriswa tse dingwe tse di bopilweng jaaka khutlonnetsepa ya matlhakoremabapitekano kgotsa dikhubi. Batlisisa gore ke didiriswa dife tse di kgonang go kgokologa,go relela le go tlhatlhagangwa. Tlhopa le go tlhalosa tekano le didiriswa tsa ka metlha ka go bua gore a di bopegile jaaka bolo,jaaka lebokoso le selennere. Tiro e tiisiwang ka tiro e e kwalwang.	**Tshitshinyo ya tsepamo mo kgweditharong 4:** Tiro e tiisitswang ka tiro e e kwalwang.

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.3 **Dipopego** **Tekakanyo-tlhakorepedi (2D)**		**Tlhatlhamano ya dipopego** Lemoga le go naya leina la popego ya tekanyotlhakorepedi : (2D) • Didiko • Dikhutlotharo • Dikhutlonne • Khutlonnetsepa **Diponagalo tsa dipopego** Tlhalosa, aroganya le go bapisa dipopego tsa tekanyotlhakorepedi (2D) go ya ka: • Bogolo • Mmala • popego • Matlhakore a a tlhamaletseng • Matlhakore a a kgolokwe		**Tlhatlhamano ya dipopego** Lemoga le go naya leina la popego ya tekanyotlhakorepedi : (2D)**:** • Didiko • Dikhutlotharo • Dikhutlonne • Dikhutlonnetsepa **Diponagalo tsa dipopego** • Bogolo • Mmala • Popego • Matlhakore a tlhamaletseng • Matlhakore a a kgolokwe.

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.3 **Dipopego** **Tekakanyo-tlhakorepedi (2D)**		**Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 1** • Metshameko e e lokologileng ka dipopego tse di fapaaneng go akaretsa go dira ditshwantsho ka mesego ya dipopego tsa jeom-eteri. Seno se ka dirwa ka nako e e ikemetseng. • Kopolola ditshwantsho tse di bo-pilweng ka popego ya jeometeri.S se tla dirwa ka nako e e ikemet-seng. • Bapisa bogolo jwa didiriswa tse di tshwanang, sekao, rulaganya dikhutlonnetsepa go tswa go e nnye thatathata go fitlha go e kgolo thatathata le go dirise puo ya bogolo go tlhalosa dipopego. • Bua ka mebala ya dipopego mme morago o aroganye dipopego go ya ka mebala. • Tlhaola dipopego go ya ka gore a dina le matlhakore a a tlhama-letseng le a kgolokwe.Dira ka bogolo jo bo farologaneng jwa didiko le dikhutlonne le bogolo jo bo farologaneng jwadi khutlotharo le dikhutlonnetsepa • Tlhaola le kgobokanya dipopego go ya ka gore ke dikhutlotharo,ke dikhutlonne,ke dikhutlonnetsepa kgotsa didiko. • Tiro e tiisiwang ka tiro e e kwal-wang.		**Tshitshinyo ya ditirwana tse di tsepamiseditsweng kgweditharong 4** Tlhaola dipopego go ya ka gore a matlhakore a tsone a tlhamaletse kgotsa a kgolokwe. Dira ka bogolo jo bo farologaneng jwa didiko, khutlonne le dikhutlotharo le khotlonnetsepa tse dinang le popego e e farologaneng. Barutwana ba tlhaola le go kgobokanya dipopego go ya ka gore a ke dikhutlhotharo,khutlhonn e,khutlhonnetsepa kgotsa didiko. Tiro e sosobangwa ka tiro e e kwalwang

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.4 **Tekano**		**Tekano** • Lemoga le go thala mola wa tekano mo dipopegong tsa jeometeri tsa tekanyo ya tlhakorepedi kgotsa tse e seng jeometeri tsa tekanyo ya tlhakorepedi. **Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 2** • Mela ya tekanyo ya didiriswakgongwa le ditshwantsho. • Ditirwana tse di kwalwang di tshwanetse go akaretsa dikao fa mola wa tekanyo e se mola o o tlhamaletseng ka nako tsotlhe.		**Tekano** • Lemoga le go thala mola wa tekano mo dipopegong tsa jeometeri tsa tekano ya tlhakorepedi kgotsa tse e seng jeometeri tsa tekano ya tlhakorepedi. **Tshitshinyo ya ditirwana tse di tsepamiseditsweng Kgweditharo 4** • Mela ya tekanyo ya didiriswakgongwa le ditshwantsho. Ditirwana tse di kwalwang di tshwanetse go akaretsa dikao fa mola wa tekanyo e se mola o o tlhamaletseng ka nako tsotlhe.

THADISO YA MOPHATO 2 4. TEKANYO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
4.1 **Nako**	**Go ithuta nako** • Neela malatsi a beke ka tatelano. • Neela dikgwedi tsa ngwaga ka tatelano. • Baya malatsi a matsalo, meletlo ya ditumelo,malatsi a meletlo, malatsi a botlhe a boikhutso, ditiragalo tsa hisetori, ditiragalo tsa sekolo mo alemanakeng. • Neela nako ya diura di le 12 ka diura le ka halofo ya diura mo tshupanakong ya manaka. **Balela boleele jwa nako le go tsamaya ga nako.** • Dirisa ditshupanako go balela boleele jwa nako mo diureng kgotsa halofo ya diura.	**Go ithuta nako** • Neela nako ya diura di le 12 ka diura le ka halofo ya diura mo tshupanakong ya manaka **Balela boleele jwa nako le go tsamaya ga nako.** • Dirisa ditshupanako go balela boleele jwa ka diura kgotsa ka halofo yadiura.	**Go ithuta nako** • Neela malatsi a beke ka tatelano. • Neela dikgwedi tsa ngwaga ka tatelano. • Baya malatsi a matsalo, meletlo ya ditumelo,malatsi a meletlo, malatsi a botlhe a boikhutso, ditiragalo tsa hisetori, ditiragalo tsa sekolo mo alemanakeng. • Neela nako ya diura di le 12 ka diura le ka halofo ya diura mo tshupanakong ya manaka. **Balela boleele jwa nako le go tsamaya ga nako.** Dirisa alemanaka go balela le go tlhalosa boleele jwa nako ka malatsi le ka dibeke. Dirisa ditshupanako go balela boleele jwa ka diura kgotsa ka halofo ya diura.	**Go ithuta nako** • Neela nako ya diura di le 12 ka diura le ka halofo ya diura mo tshupanakong ya manaka **Balela boleele jwa nako le go tsamaya ga nako.** • Dirisa ditshupanako go balela boleele jwa ka diura kgotsa ka halofo ya diura.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota boleele o sa dirise tekanyetso e e sa tlhomamang, sekao, tekanyetso ya diatla, dikgato, boleele jwa pensele, dibadisi, jalo jalo. • Tlhalosa boleele jwa didirisiwa ka go bala le go bolela boleele ka metso e e sa tlhomamang. • Dirisa puo go bua ka dirisa papiso, sekao, boleele thata, khutshwane thata,botelele thata le bophara thata. **Itsise tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, rulaganya le go rekota boleele o dirisa dimetara (e ka nna dithobane tsa metara kgotsa mogala wa boleele jwa metara) jaaka metso ya boleele e e tlhomamameng tsa boleele.	**Tekanyo e e sa tlhomameng** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mmese/boima o dirisa sekaletekanyetsosa le didirisiwa tse di sa tlhomamang , sekao, diboloko, ditena. • Tlhalosa mmese/boima jwa didiriswa ka go bala le go baya metso e e sa tlhomamang. • Dirisa puo go bua ka papiso.sekao, bofefo, boima,bofefonyana,boimanyana		**Itsise tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota boleele o dirisa dimitara (e ka nna dithobane tsa mitara kgotsa mogala wa boleele jwa mitara) jaaka metso ya tekanyetso ya boleele.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
4.3 **Mmese/boima**		**Tekanyo e e sa tlhomameng** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mmese/boima o dirisa sekaletekanyetsosa le didirisiwa tse di sa tlhomamang , sekao, diboloko, ditena. • Tlhalosa mmese/boima jwa didiriswa ka go bala le go baya metso e e sa tlhomamang. • Dirisa puo go bua ka papiso.sekao, bofefo, boima,bofefonyana,boimanyana **Itsise tekanyo e e tlhomameng** • Bapisa , rulaganya le go rekota boima jwa didirisiwa tse di rekisiwang tse di pakilweng tse boima jwa tsona bo kwadilweng go ya ka dikilogeramo, sekao, 2-Dikilogerema tsa reisi le 1 kilogerama ya bupi jwa dikuku. • Fa go na le dikale mo phaposing ya go tlhapela kwa gae, barutwana ba lekanyetsa boima jwa bona go ya ka dikilogeramo ba dirisa sekale se sa tekanyetso. Tsholofelo ke gore barutwana ba bala fela go fitlha fa moleng o mogolo mo sekaleng sa tekanyo. Ba tlhalosa boima jwa bona ka gaufi le, go feta, kwa tlase ga, lekana le (palo ya dikilogeramo) tse ba di buisitseng mo sekaleng .		**Itsise tekanyo e e tlhomameng** Barutwana ba dira ditirwana tse di kwalwang go sobokanya tse di latelang go akaretso puiso ya ditshwantsho tsa: • Dikungo ka mmese o o kwadilweng mo go tsona. • Sekale sa phaposibotlhapelo se o nalete e supang palo fa moleng o mogolo.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
4.4 **Mothamo/Bolumu**			**Tekanyo e e tlhomameng** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mothamo wa ditshelo (ke gore, boleng jo ditshelo bo kgona go tshegetsa fa di tladitswe) ka go dirisa didirisiwa tse di sa tlhomamang go lekanyetsa, sekao, maswana/ dintsho le dikopi. • Tlhalosa boima jwa setshelo ka go bala le go bua gore se ka tladiwa ke diyuniti di le kae tse di sa tlhomamang. Sekao, botlolo e na le methamo ya dikopi di le nne. **Itsise tekanyo e e tlhomameng** Fopholetsa lekanyetsa**,b**apisa , rulaganya le go rekota boima jwa didirisiwa ka go lekanyetsa ka dilitara tse di dirisitsweng • Dibotlolo tsa mothamo wa 1litara • Jeke ya go lekanyetsa e e nang le mela ya dinomoro tse di kwadilweng ka dilitara • Bapisa, rulaganya le go rekota boima jwa didirisiwa tse di rekisiwang tse di pakilweng tse o boima jwa tsona bo kwadilweng go ya ka dilitara, sekao, 2-Diletara di tsa mašwi, 1 litara ya senotsididi, 5 diletara tsa pente.	**Itsise tekanyo e e tlhomameng** • Barutwa ba kwala ditirwana go sobokanngwa tse di latelang go bo go akaretswa ditshwantsho tsa : • Dikumo tse methamo ya tsona e kwadilweng mo go tsona gore ba di rulaganye go ya ka tatelano ya tsona. • Ditshwantsho tsa dijeke tse bolumo e leng gaufi le 1 letara kgotsa 2-Diletara tsa mola o mogolo. • Bala go ya kwa moleng o mogolo o o gaufi, tlhalosa bolumu ka gaufi le, e feta, e lekana le (ya diletara)

THADISO YA MOPHATO 2 5. GO RANOLA TSHEDIMOSO YA DIPALO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 1**	**KGWEDITHARO 1**	**KGWEDITHARO 1**
5.4 **Kgobokanyo le thulaganyo ya tshedimosetso**	**Katlenegiso** Tshedimosetso yotlhe e tshwanetse go dira kerafo ya setshwantsho sa phaposiburutelo go tsamaelana e kopanetswe. • Kgobokanyo tshedimosetso ka phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana. • Tlhagisa tshidimosetso ya kerafo ya ditshwantsho e e tsamaelanang e kopanetswe. • Araba dipotso ka tshedimosetso mo kerafong ya tswantsho e e tsamaelanang e kopanetswe.		**Katlenegiso:** Dira kerafo ya setshwantsho e e tsamaelanang e kopanetswe e le nngwe go tswa mo tshedimosetso e o e neetsweng ka nngwe ya popego ya sethswantsho kgotsa lebati la bojelo (tafole). • Kgobokanyo tshedimosetso ka phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana. • Tlhagisa tshedimosetso ya kerafo ya ditshwantsho e e tsamaelanang e kopanetsweng araba dipotso ka ga tsedimosetso ya ditshwantsho tse di kopanetsweng.	
5.5 **Tlhagiso ya tshedimosetso**				
5.6 **Tsetseregano le thanolo ya tshedimosetso**		Tsetsereganya tshedimosetso go tswa mo boemedi jo bo neetsweng. katlenegisa • Bonnyane e nne kerafo ya setshwantsho se se tsamaelanang se kopanetswe.		Tsetsereganya tshedimosetso go tswa mo boemedi jo bo neilweng. Katlenegiso: • Bonnyane e nne kerafo ya setshwantsho se se tsamaelanang se kopanetswe.

3.4.3 THADISO YA KGWEDITHARO MOPHATO 3

THADISO YA MOPHATO 3 1. DIPALO, MATSHWAO LE DIKGOLAGANO				
SETLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
KGOLO YA PALOKAKANYO:/Go bala ka dipalotlalo				
1.1 **Bala didiriswa**	Kgobokanya bonnye dilo tse 200 o fopholetsa le go bala ka boikanyego. Neela phopholetso e e amogelesegang ya dipalo tsa didiriswa tse di tla sekasekwang fa go balwa. Leano la go kgobokanya le a rotloediwa.	Kgobokanya bonnye dilo tse 500 o fopholetsa le go bala ka boikanyego. Neela phopholetso e e amogelesegang ya dipalo tsa didiriswa tse di tla sekasekwang fa go balwa. Leano la go kgobokanya le a rotloediwa.	Kgobokanya bonnye dilo tse 700 o fopholetsa le go bala ka boikanyego. Neela phopholetso e e amogelesegang ya dipalo tsa didiriswa tse di tla sekasekwang fa go balwa. Leano la go kgobokanya le a rotloediwa.	Kgobokanya bonnye dilo tse 1000 o fopholetsa le go bala ka boikanyego. Neela phopholetso e e amogelesegang ya dipalo tsa didiriswa tse di tla sekasekwang fa go balwa. Leano la go kgobokanya le a rotloediwa.
1.2 **Balela kwa pele le kwa morago**	Balela kwa pele le kwa morago ka: • Bo-1 go tswa mo palong nngwe le nngwe e e mo gare ga 0 le 200 • Bo-10 go tswa go palo nngwe le nngwe ya katisanetswa ya 10 e e mo gare ga 0 le 200. • Bo- 5 go tswa go ngwe le ngwe ya katisanetswa ya gare ga 0 le 200. • Bo- 2 go tswa go palo nngwe le nngwe katisanetswa e e mo gare ga 0 le 200. • Bo-3 go tswa go palo nngwe le ngwe ya katisanetswa ya 3 e e mo gare ga 3 le 200. • Bo- 4 go tswa go nngwe le nngwe ya katisanetswa ya 4 e e mo gare ga 0 le 200 • Bo-100 go fitlha go le gonnye go 500	Balela kwa pele le kwa morago ka: • Bo-1 go tswa mo palong nngwe le nngwe e e mo gare ga 0 le 500 • Bo-10 go tswa go palo nngwe le nngwe ya katisanetswa ya 10 e e mo gare ga 0 le 500. • Bo- 5 go tswa go ngwe le ngwe ya katisanetswa ya gare ga 0 le 500. • Bo- 2 go tswa go palo nngwe le nngwe katisanetswa e e mo gare ga 0 le 500. • Bo-3 go tswa go palo nngwe le ngwe ya katisanetswa ya 3 e e mo gare ga 3 le 500. • Bo- 4 go tswa go nngwe le nngwe ya katisanetswa ya 4 e e mo gare ga 0 le 500 • Bo50 le 100 go fitlha go le gonnye go 1000	Balela kwa pele le kwa morago ka: • Bo-1 go tswa mo palong nngwe le nngwe e e mo gare ga 0 le 700 • Bo-10 go tswa go palo nngwe le nngwe ya katisanetswa ya 10 e e mo gare ga 0 le 700. • Bo- 5 go tswa go ngwe le ngwe ya katisanetswa ya gare ga 0 le 700. • Bo- 2 go tswa go palo nngwe le nngwe katisanetswa e e mo gare ga 0 le 700. • Bo-3 go tswa go palo nngwe le ngwe ya katisanetswa ya 3 e e mo gare ga 3 le 700. • Bo- 4 go tswa go nngwe le nngwe ya katisanetswa ya 4 e e mo gare ga 0 le 700 • Bo 20,25,50,100 go fitlha go le gonnye go 1000	Balela kwa pele le kwa morago ka: • Bo-1 go tswa mo palong nngwe le nngwe e e mo gare ga 0 le 1000 • Bo-10 go tswa go palo nngwe le nngwe ya katisanetswa ya 10 e e mo gare ga 0 le 1000. • Bo- 5 go tswa go ngwe le ngwe ya katisanetswa ya gare ga 0 le 1000. • Bo- 2 go tswa go palo nngwe le nngwe katisanetswa e e mo gare ga 0 le 1000. • Bo-3 go tswa go palo nngwe le ngwe ya katisanetswa ya 3 e e mo gare ga 3 le 1000. • Bo- 4 go tswa go nngwe le nngwe ya katisanetswa ya 4 e e mo gare ga 0 le 1000 • Bo 20,25,50,100 go fitlha go le gonnye go 1000

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
KGOLO YA PALOKAKANYO :Kemelo/tshupo ya dipalotlalo				
1.3 **Letshwaopalo le leinapalo**	**Tlhaola ,go lemoga le go buisa leinapalo.** • Tlhaola,lemoga le go buisa letshwaopalo • 0 go fitlha go 500 • Kwala letshwaopalo 0 go fitlha ka 500 • Tlhaola, lemoga le go buisa leinapalo 0 go fitlha 250 • Kwala mainapalo 0 go fitlha ka 100	**Tlhaola ,go lemoga le go buisa leinapalo.** • Tlhaola,lemoga le go buisa letshwaopalo 0 go fitlha go 1000 • Kwala letshwaopalo 0 go fitlha ka 1000 • Tlhaola, lemoga le go buisa leinapalo 0 go fitlha 250 • Kwala mainapalo 0 go fitlha ka 250	**Tlhaola ,go lemoga le go buisa leinapalo.** • Tlhaola,lemoga le go buisa letshwaopalo • 0 go fitlha go 1000 • Kwala letshwaopalo 0 go fitlha ka 500 • Tlhaola, lemoga le go buisa leinapalo 0 go fitlha 500 • Kwala mainapalo 0 go fitlha ka 500	**Tlhaola ,go lemoga le go buisa leinapalo** • Tlhaola,lemoga le go buisa letshwaopalo • 0 go fitlha go 1000 • Kwala letshwaopalo 0 go fitlha ka 1000 • Tlhaola, lemoga le go buisa leinapalo 0 go fitlha 1000 • Kwala mainapalo 0 go fitlha ka 1000
KGOLO YA PALOKAKANYO: Tlhaloso, tshwantsho le thulaganyo ya dipalo				
1.4 **Tlhaloso, bapisa le thulaganyo ya dipalo**	Tlhalosa,bapisa le thulaganyo ya dipalo go fitlha ka 99 • Bapisa dipalogotlalo o dirisa nnyane go, kgolwane go, e ntsi go,e nnye go,e lekana le go fitlha kwa go 99. • Rulaganya dipalogotlalo go tloga go nnye thata go fitlha go kgolo thata go fitlha go 99.	Tlhalosa,bapisa le thulaganyo ya dipalo go fitlha ka 500 • Bapisa dipalogotlalo o dirisa nnyane go, kgolwane go, e ntsi go,e nnye go,e lekana le go fitlha kwa go 500 • Rulaganya dipalogotlalo go tloga go nnye thata go fitlha go kgolo thata go fitlha go 500.	Tlhalosa,bapisa le thulaganyo ya dipalo go fitlha ka 700 • Bapisa dipalogotlalo o dirisa nnyane go, kgolwane go, e ntsi go,e nnye go,e lekana le go fitlha kwa go 700 • Rulaganya dipalogotlalo go tloga go nnye thata go fitlha go kgolo thata go fitlha go 700 **Dirisa mabaditatelano go supa thulagano ya kemo kgotsa kemopalo.** • Dirisa,buisa le go kwala lebaditatelano,go akarediwa khutsafatso go fitlha ka 31st	Tlhalosa,bapisa le thulaganyo ya dipalo go fitlha ka 999 • Bapisa dipalogotlalo o dirisa nnyane go, kgolwane go, e ntsi go,e nnye go,e lekana le go fitlha kwa go 999. • Rulaganya dipalogotlalo go tloga go nnye thata go fitlha go kgolo thata go fitlha go 999.

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
KGOLO YA PALOKAKANYO Bolengkemedi				
1.5 **Bolengkemedi**	**Lemoga bolengkemedi go fitlha go 99** • Itse bolengkemedi ya palo ngwe le ngwe e emetse eng. • Tlhatlhamolola palonokopedi go fitlha ka 99 go dirisiwa katisanetswa ya masome le bongwe • Tlhaola le go bontsha bolengkemedi ya palo nngwe le nngwe	**Lemoga bolengkemedi go fitlha go 500** • Itse bolengkemedi ya palo ngwe le ngwe e emetse eng. • Tlhatlhamolola palonokopedi go fitlha ka 500 go dirisiwa katisanetswa ya masome le bongwe • Tlhaola le go bontsha bolengkemedi ya palo nngwe le nngwe	**Lemoga bolengkemedi go fitlha go 700** • Itse bolengkemedi ya palo ngwe le ngwe e emetse eng. • Tlhatlhamolola palonokopedi go fitlha ka 700 go dirisiwa katisanetswa ya masome le bongwe • Tlhaola le go bontsha bolengkemedi ya palo nngwe le nngwe	**Lemoga bolengkemedi go fitlha go 999** • Itse bolengkemedi ya palo ngwe le ngwe e emetse eng. • Tlhatlhamolola palonokopedi go fitlha ka 999 go dirisiwa katisanetswa ya masome le bongwe • Tlhaola le go bontsha bolengkemedi ya palo nngwe le nngwe
THARABOLOLO YA TIRISO YA DIPALO				
1.6 **Togamaano ya bokgoni tharabololo**	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo Katametso ka bolosome	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo Katametso ka bolosome	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo Katametso ka bolosome
1.7 **Thakanyo le tloso**	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go tlhakanya le go tlosa ka dikarabo go fitlhelela go 99.	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go tlhakanya le go tlosa ka dikarabo go fitlhelela go 400.	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go tlhakanya le go tlosa ka dikarabo go fitlhelela go 800.	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go tlhakanya le go tlosa ka dikarabo go fitlhelela go 999
1.8 **Tlhakanyo e e boeleditaweng e lebisang kwa katisong.**	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go atisa ka dikarabo go fitlhelela go 50	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go atisa ka dikarabo go fitlhelela go 75	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go atisa ka dikarabo go fitlhelela go 75	Rarabolola tiriso ya dipalofoko le go tlhalosa dikarabo tsa gago tsa dipalo o akaretsa go atisa ka dikarabo go fitlhelela go 100

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.9 **Kgobokanyo le kgaoganyo e e isang kwa karolong**	Rarabolola tiriso dipalo le go tlhalosa ka dikarabo tsa gago go dipalo tse di akaretsang karogano e e lekanang le setlhopha go fitlhela go 50 tse di tla akaretsang sesala.	Rarabolola tiriso dipalo le go tlhalosa ka dikarabo tsa gago go dipalo tse di akaretsang karogano e e lekanang le setlhopha go fitlhela go 75 tse di tla akaretsang sesala.	Rarabolola tiriso dipalo le go tlhalosa ka dikarabo tsa gago go dipalo tse di akaretsang karogano e e lekanang le setlhopha go fitlhela go 75 tse di tla akaretsang sesala.	Rarabolola tiriso dipalo le go tlhalosa ka dikarabo tsa gago go dipalo tse di akaretsang karogano e e lekanang le setlhopha go fitlhela go 100 tse di tla akaretsang sesala.
1.10 **Kgaoganyo e e lebisang kwa dipalophatlhong**	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di mo tirisong tse di akaretsang karoganyo e e lekanang, tse di lebisang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopaneng le tse di sa kopanang. Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, j.j	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di mo tirisong tse di akaretsang karoganyo e e lekanang, tse di lebisang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopaneng le tse di sa kopanang. Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, j.j	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di mo tirisong tse di akaretsang karoganyo e e lekanang, tse di lebisang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopaneng le tse di sa kopanang. Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, j.j	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di mo tirisong tse di akaretsang karoganyo e e lekanang, tse di lebisang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopaneng le tse di sa kopanang. Sekao: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$, j.j
1.11 **Tshelete**	• Go lemoga le go tlhaola dipapetlana le tshelete ya dipampiri tsa Aforika Borwa. Rarabolola dipalo tsa tshelete di akaretsa palogotlhe le tshentshe ka diranta le disente.	• Go lemoga le go tlhaola dipapetlana le tshelete ya dipampiri tsa Aforika Borwa. Rarabolola dipalo tsa tshelete di akaretsa gotlhe le tshentshe ka diranta le disente.	• Go lemoga le go tlhaola dipapetlana le tshelete ya dipampiri tsa Aforika Borwa. Rarabolola dipalo tsa tshelete di akaretsa palogotlhe le tshentshe ka diranta le disente. Fetola gare ga diranta le disente.	• Go lemoga le go tlhaola dipapetlana le tshelete ya dipampiri tsa Aforika Borwa. Rarabolola dipalo tsa tshelete di akaretsa palogotlhe le tshentshe ka diranta le disente. Fetola gare ga diranta le disente.
PALELOMMALEDI E E SENANG TIRISO				
1.12 **Ditogamaano** **(mekgwa le maano)**	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo Katametso ka bolosome	Dirisa togamaano a a latelang go rarabolola dipalo Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo Katametso ka bolosome	Dirisa togamaano a a latelang go rarabolola dipalo • Tiriso ya togamaano fa go dirwa dipalotharabololo • Go aga le go tlhatlhamolola dipalo • Koketsopedi le go kgaoganya ka bogare • Mola palo Katametso ka bolosome

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.13 **Tlhakanyo le tloso**	• Tlhakanya go fitlha ka 99 • Tlosa go tloga ka 99 • Dirisa matshwao a a maleba (+, –, =, ☐) • Katiso ya kgokagano ya dipalo go 20	• Tlhakanya go fitlha ka 400 • Tlosa go tloga ka 400 • Dirisa matshwao a a maleba (+, –, =, ☐) • Katiso ya kgokagano ya dipalo go 30	• Tlhakanya go fitlha ka 800 • Tlosa go tloga ka 800 • Dirisa matshwao a a maleba (+, –, =, ☐) • Katiso ya kgokagano ya dipalo go 30	• Tlhakanya go fitlha ka 999 • Tlosa go tloga ka 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Katiso ya kgokagano ya dipalo go 30
1.14 **Tlhakanyo-poeletso e lebisang kwa katisong**	• Atisa dipalo go tloga 1-10 ka 2, 5, 3, 4 • Dirisa matshwao a a maleba (+, =, ☐)	• Atisa 2, 4, 5, 10, 3, go fitlha go palogotlhe 50 • Dirisa matshwao a maleba (+, =, ☐)	• Atisa 2, 3,4, 5, 10, go fitlha go palogotlhe 100 • Dirisa matshwao a maleba (+, =, ☐)	• Atisa 2,3, 4, 5, 10, go fitlha go palogotlhe 100 • Dirisa matshwao a maleba (+, =, ☐)
1.15 **Karolo**	• Arola dipalo go fitlha go 50 ka 2, 5, 10 • Dirisa matshwao a a maleba (÷, =, ☐)	• Arola dipalo go fitlha go 50 ka 2, 4, 5, 10,4 • Dirisa matshwao a a maleba (÷, =, ☐)	• Arola dipalo go fitlha go 50 ka 2, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, ☐)	• Arola dipalo go fitlha go 50 ka 2, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, ☐)

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.16 **Dipalo tsa tlhogo**	**Palokakanyo:Tlhatlhamano ya 200** • Rulaganya sete ya dipalo e e tlhopilweng:Tlhatlhamano ya 200 • Bapisa dipalo go fitlha ka 200 le go bua gore ke efe: - 1 go feta kgotsa 1 ko tlase - 2 go feta kgotsa 2 ko tlase - 3 go feta kgotsa 3 ko tlase - 4 go feta kgotsa 4 ko tlase - 5 go feta kgotsa 5 ko tlase - 10 go feta kgotsa ko tlase **Kgakologelo ka bonako:** • Gakologelwa dintlha ka ga go tlhakanya le tlosa go fitlha go 20 • Tlhakanya kgotsa go tlosa katisanetswa ya lesome go tloga ka 0 go fitlha ka 100	**Palokakanyo:Tlhatlhamano ya 500** • Rulaganya setlhopha sa dipalo sese tlhopilweng:Tlhatlhamano ya 500 • Tshwantsha dipalo go fitlha ka 500 le go bua gore ke efe: - 1 go feta kgotsa 1 ko tlase - 2 go feta kgotsa 2 ko tlase - 3 go feta kgotsa 3 ko tlase - go feta kgotsa 4 ko tlase - 5 go feta kgotsa 5 ko tlase - 10 go feta kgotsa ko tlase **Kgakologelo ka bonako** • Gakologelwa dintlha tsa go tlhakanya le tlosa go fitlha kwa 20 • Tlhakanya kgotsa go tlosa katisanetswa tsa 10 gotloga go 0 go fitlha go 100	**Palokakanyo:Tlhatlhamano ya 750** • Rulaganya setlhopha sa dipalo sese tlhopilweng:Tlhatlhamano ya 750 • Tshwantsha dipalo go fitlha ka 750 le go bua gore ke efe: - 1 go feta kgotsa 1 ko tlase - 2 go feta kgotsa 2 ko tlase - 3 go feta kgotsa 3 ko tlase - Go feta kgotsa 4 ko tlase - 5 go feta kgotsa 5 ko tlase - 10 go feta kgotsa ko tlase **Kgakologelo ka bonako** • Gakologelwa dintlha tsa go tlhakanya le tlosa go fitlha kwa 20 • Tlhakanya kgotsa go tlosa katisanetswa tsa 10 gotloga go 0 go fitlha go 100	**Palokakanyo:Tlhatlhamano ya 999** Rulaganya setlhopha sa dipalo sese tlhopilweng:Tlhatlhamano ya 999 • Tshwantsha dipalo go fitlha ka 1 000 le go bua gore ke efe: - 1 go feta kgotsa 1 ko tlase - 2 go feta kgotsa 2 ko tlase - 3 go feta kgotsa 3 ko tlase - Go feta kgotsa 4 ko tlase - 5 go feta kgotsa 5 ko tlase - 10 go feta kgotsa 10 kwa tlase **Kgakologelo ka bonako** • **Gakologelwa dintlha tsa go tlhakanya le tlosa go fitlha kwa 20** • **Tlhakanya kgotsa go tlosa katisanetswa tsa 10 gotloga go 0 go fitlha go 10** • Dintlha ka ga katiso le karolo tsa: - Lenaneo la katiso go fitlha ka 2 x10 - Lenaneo la katiso go fitlha ka 10 x10

SETLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
1.16 **Dipalo tsa tlhogo**	**Togamaano tsa tlhogo** Dirisa ditogamaano ya palelo • Baya palo e tonna pele, balela kwa pele kgotsa kwa morag • Molapalo • Koketso pedi le go kgaoganya ka bogare • Go aga le go tlhatlhamolola dipalo • Dirisa kamano magareng ga tlhakanyo le go tloso	**Togamaano tsa tlhogo** Dirisa ditogamaano tsa palelo • Baya palo e tonna pele balela kwa pele kgotsa kwa morago • Molapalo • Koketso pe di le go kgaoganya ka bogare • Go aga le go tlhatlhamolola dipalo • Dirisa kamano magareng ga tlhakanyo le go tlosa	**Togamaano tsa tlhogo** Dirisa ditogamaano tsa palelo • Baya palo e tonna pele balela kwa pele kgotsa kwa morago • Molapalo • Koketso pe di le go kgaoganya ka bogare • Go aga le go tlhatlhamolola dipalo • Dirisa kamano magareng ga tlhakanyo le go tlosa • Dirisa kamano ya katiso le karolo	**Togamaano tsa tlhogo** • Dirisa ditogamaano tsa palelo • Baya palo e tonna pele balela kwa pele kgotsa kwa morago • Molapalo • Koketso pe di le go kgaoganya ka bogare • Go aga le go tlhatlhamolola dipalo • Dirisa kamano magareng ga tlhakanyo le go tlosa • Dirisa kamano ya katiso le karolo
1.17 **Dipalophatlo**	• Dirisa le go neela maina a dipalophatlho tse di kopaneng mo tirisong e e tlhwaelesegileng,e e akaretsang dihalofo,dikotare,nngwe tharong,nngwetlhanong . • Lemoga dipalophatlho mo mo sekaong sa setshwantsho • Kwala palophatlho jaaka halofo nngwe tharong	• Dirisa le go neela maina a dipalophatlho tse di kopaneng mo tirisong e e tlhwaelesegileng,e e akaretsang dihalofo,dikotare,nngweborobeding,nngwe tharong,nngwethatarong,nngwetlhanong, . • Lemoga dipalophatlho mo mo sekaong sa setshwantsho • Kwala palophatlho jaaka halofo nngwe tharong	• Dirisa le go neela maina a dipalophatlho tse di kopaneng mo tirisong e e tlhwaelesegileng,e e akaretsang dihalofo,dikotare,nngweborobeding,nngwe tharong,nngwethatarong,nngwetlhanong, . • Lemoga dipalophatlho mo mo sekaong sa setshwantsho • Simolola go lemoga gore halofo tse pedi kgotsa tharotharong e dira nngwe.	• Dirisa le go neela maina a dipalophatlho tse di kopaneng mo tirisong e e tlhwaelesegileng,e e akaretsang dihalofo,dikotare,nngweborobeding,nngwe tharong,nngwethatarong,nngwetlhanong, . • Lemoga dipalophatlho mo mo sekaong sa setshwantsho • Simolola go lemoga gore halofo tse pedi kgotsa tharotharong e dira nngwe.

Mefuta ya dipalo ya mophato wa boraro

Tse ke mefuta e e botlhokwa ya dipalo tse morutabana a tlhokang go di neela barutwana gangwe le gape. Morutabana fa a dira ka ditlhopha tse di nnye ,a ka botsa barutwana dipotso ka tsa molomu,fa barutwana ba kgona go ipuisetsa ba ka neelwa tirokwalo.

Dipalo tse di mo tirisong di ka akarediwa mo papetlaneng ya tiro,mme e tshwanetse go nna khutsane,e le e ba e itseng .Morutabana o tshwanetse go netefatsa fa barutwana ba tlhaloganyo

Kgobokanyo

Kgobokanyo,go tlogetswe sesala

Boitumelo o rekisa borotho bo le mo dikgetsing tse 12.O na le marotho a le 118, ka marotho a le 12 mo kgetsing a ka dira dikgetsi tse kae?

Kgobokanyo,go tsenyelediwa sesala mo karabong

Molemirui onale mae a le 227.O tlhoka mabokoso a le kae go paka mae otlhe mo mabokosong a a tsenyang mae a le marataro bokoso?

Kgaoganyo

Kgaoganyo go tlogelwa sesala

Ditsala tse tlhano di kgaoganya dimonamone tse 84 gore mongwe le mongwe a bone palo ya dimonamone tse di lekalekanang.

Kgaoganyo e eisang ko dopalophatlho

Kgaoganya e e isang kwa palophatlong

Kgaoganya dibara tse 15 tsa tshokolete magareng ga ditsala di le thataro gore tsala nngwe le nngwe e bone karolo e e lekanang go se nne karolo epe e e salang.

Kgokaganyo/kgolagano ya dipalophatlho

Mmemogolo o neela Neohadi R12.Neohadi o batla go boloka nngwe tharong ya madi, o tshwanetse go boloka bokae?

Mofuta o wa palo o tshwanetse go neelwa barutwana fela fa ba setse ba kile ba rarabolola dipalo tse tlhano tsa kgaoganyo di isa ko dipalophatlho le maina a tsona.

Kgobokanyo ya dipalophatlho

Mokatise wa kgwele ya diatla o neela motshameki mongwe le mongwe halofo ya namune.Go batshameki ba le 14.O tlhoka dinamune tse kae?

Palo ya mofuta o e tshwanetse go neewa barutwana fela fa ba setse ba rarabolotse dipalo tsa mofuta wa karoganyo wa tse nnene go fitlha go tse tlhano,tse di gogelang go fitlha go mofuta ya dipalophatlo le go itse maina a dikarolwana tsa palophatlo.

Kgaoganyo e e lekanyeditsweng

Resego o monnye mo goThabang.Fa Resego a ja kuku e le nngwe,Thabang o tlhoka go ja tse pedi,Fa Resego a ja tse pedi,Thabang o tlhoka tse nne.Morago ga malatsinyana ba jele dikuku dile 12 mmogo.Mongwe le mongwe wa bona o jele tse kae?

Lorato le Mosa ba dira tiro mmogo.Lorato o dira diura tse tharo fa Mosa a dira tse nne.Ba duelwa R60.Go ya ka diura tsa bone tsa tiro monngwe le monngwe o tshwanetse go bona bokae?

Tlhakanyo poeletso

Dikoloi tse 36 di na le maotwana a le kae?

Kelo

Khumo o boloka 35c beke le beke.Morago ga dibeke di le 8 Khumo o tla bo a bolokile bo kae?

Digerete

Rre Morone o jala mela e le 20 ya ditlhare tsa dinamone.Go na le ditlhare di le 12 mo moleng. go na le ditlhare tse kae tse tsotlhe ?

Tlhakanyo le tloso

Go na le bonnye mefuta e le meraro ya motheo ya dipalo tsa tlhakanyo le go tlosa mme mofuta mongwe le mongwe o ka bodiwa ka mekgwa e e farologaneng. Mefuta e ya motheo ke:

Tshentshe

Reoneetswe o kgobokanya dikgomaretsi di le 234.Neohadi o mo neela tse dingwe di le 80.Reoneetswe jaanong o na le dikgomaretsi di le kae?

Go na le bapalami ba le 500 mo tereneng mme go fologa bapalami ba le 176.Go setse bapalami ba le kae?

Kopanyo

Nosisi o kgobokanyetsa porojeke ya sekolo ya diriswapoeletso ya didiriswa.O kgobokanya dibotlolo tsa dipolasitiki di le 124 le meteme e le 268.O kgobokantse didiriswa tse kae?

Lebenkele le na le dipaki tsa ditshepisi di le 368,tse 82 ke dichippos tse dingwe tsotlhe ke Ziksnacks.Go di pakete di le kae tsa diziksnacks tse di setseng?

Bapisa

Mophato wa 2 o kgobokantse R446. Mophato wa 3 o kgobokantse R729.Mophato wa mophato wa 3 o kgobokantse tshelete e kae go feta mophat wa 2?

Mekgwa e e farologaneng ya go botsa dipalo

Dipalo di tshwanetse go bodiwa ka mekgwa e e farologaneng. Sekao, bobedi jwa tsona ke dipalo tsa tšhentšhi, mme “di sa itsiweng” di fitlhelwa mo mafelong a a farologaneng a dipalo.

Lebenkele le na le dipakete tsa bupi jwa bogobe ba rulaganya tse 55 gape jaanong go dipakete tse 170 tsa bupi jwa bogobe.Kwa tshimologong go ne go na le dipakete di le kae?

Lebenkele le na le dipakete tsa sukiri di le 500.Fa ba sena go rekisa dipakete dingwe ba salelwa ke dipakete tsa sukiri 324.Ba rekisitse dipakete tse kae?

Ditiro le kamano ya dipalo ka ditsela tse di farologaneng

Heila o reka dipae ka R4 e le nngwe.Mo direle tafole go mo thusa go bona tlhotlhwa ya thulaganyo tse dikgolo.

Palo ya dipae	1	2	3	4	5	10	20
Tlhotlhwa ka R	4	8					

Dirisa lenaneo go bona tlhotlhwa ya dipae tse 7 le dipae tse 23.

Sedick o tlhokomela bana.O duedisa R20 ya sepalangwa le R5 ya go tlhokomela bana.Mo feleletse lenaneo le .

Palo ya diura	1	2	3	4	5	10
Tlhotlhwa mo R	25	30				

Ela tlhoko gore dipalo ka ga Heila le Sedick di rarabololwa ka mekgwa e e farologaneng

Mefuta ya dipalo e neilwe go kaela morutabana. Barutwana ga ba tshwanela go tshwarisiwa bothata ka maina a mefuta. Tlhokomela gore ga e se ka nako tsotlhe barutwana ba a tle ba dirise ditsela tse di farologaneng tsa go rarabolola dipalo ka mokgwa o morutabana a neng a sa o lebelela..Sekao dipalo tsa go arogana di ka dirwa ka go boeletsa dipalo tsa go tlosa,tlhakanya kgotsa go atisa.Mokgwa o barutwana ba dirang dipalo ka ona o tla fetoga mo tsamaong ya ngwaga fa ba ntse ba tlhaloganya le go tlwaela go gola ga mefuta ya dipalo le jaaka kgopolo ya tiriso ya dipalo e gola.

THADISO YA MOPHATO 3 DIPATERONE, MEDIRISO, LE ALIJEBERA				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
2.1 **Dipaterone tsa Jeometeri**	**Kopolola, ataloso le go tlhalosa** Kopolola,atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka didirisiwa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go ditshwantsho tsa methalo, dipopego kgotsa didirisiwa **Dipaterone tse di tlhatlhamaneng:** Dipaterone tse di bonolo mo dipopegong kgotsa setlhopha sa dipopego di tse di boeleditsweng ka mokgwa o o tshwanang **Tlhama le go tlhalosa dipaterone tsa gago** • Tlhama dipaterone tsa gagwe tsa jeometeri - Ka didiriswa tse di bonwang - Ka gothala mela,dipopego kgotsa didiriswa. • Thalosa dipaterone ya gago	**Kopolola, ataloso le go tlhalosa** Kopolola,atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka didirisiwa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go ditshwantsho tsa methalo, dipopego kgotsa didirisiwa **Dipaterone tse di tlhatlhamaneng:** **Dipaterone tse di farologaneng** Dipaterone tse di bonolo mo dipopegong kgotsa setlhopha sa dipopego di tse di boeleditsweng ka mokgwa o o tshwanang **D**ipaterone mo palo kgotsa bogolo jwa dipopego mo kgatong e nngwe le e ngwe di fetogang ka tsela ya ponelopele,se se raya gore koketsego ya dipaterone e e diragalang ka metlha. **Tlhama le go tlhalosa dipaterone tsa gago** • Tlhama dipaterone tsa gagwe tsa jeometeri. • Ka didiriswa tse di bonwang • Ka gothala mela,dipopego kgotsa didiriswa. • Thalosa paterone ya gago	**Kopolola, ataloso le go tlhalosa** Kopolola,atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka didirisiwa tse di bonwang. • Dipaterone tse di bonolo tse di dirilweng ka go ditshwantsho tsa methalo, dipopego kgotsa didirisiwa **Dipaterone tse di tlhatlhamaneng:** Dipaterone tse di farologaneng Dipaterone mo palo kgotsa bogolo jwa dipopego mo kgatong e nngwe le e ngwe di fetogang ka tsela ya ponelopele,se se raya gore koketsego ya dipaterone e e diragalang ka metlha. **Tlhama le go tlhalosa dipaterone tsa gago** • **Tlhama dipaterone tsa gagwe tsa jeometeri.** • **Ka didiriswa tse di bonwang** • **Ka gothala mela,dipopego kgotsa didiriswa.** **Thalosa paterone ya gago**	**Dipaterone tse di re dikologileng** Supa, tlhalosa ka mafoko le go kwalolola Dipaterone tsa Jeometeri • Tsa tlholego • Go tswa go tsa botshelo jwa tsatsi le letsatsi mo segompienong • Go tswa go tsa ngwao boswa jwa rona.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
2.2 Dipaterone tsa dipalo	**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 200 Thulaganyo e tshwanetse e bontshe go bala go ya kwa pele le go ya kwa morago : • Palogare e e totobaditsweng ko mophatong wa 2 ka tekatekanyo e e okeditsweng • 100 go fitlha bonnye go 500	**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 500 Thulaganyo e tshwanetse e bontshe go bala go ya kwa pele le go ya kwa morago : • Palogare e e totobaditsweng ko mophatong wa 2 ka tekatekanyo e e okeditsweng • 50, 100 go fitlha bonnye ka 1 000	**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 750 Thulaganyo e tshwanetse e bontshe go bala go ya kwa pele le go ya kwa morago : • Palogare e e totobaditsweng ko mophatong wa 2 ka tekatekanyo e e okeditsweng • 20 ,25 ,50, 100 go fitlha bonnye ka 1 000	**Kopolola, atolosa le go tlhalosa** Kopolola, atolosa le go tlhalosa thulaganyo ya dipalo tse di bonolo bonnye go fitlha go 1000 Thulaganyo e tshwanetse e bontshe go bala go ya kwa pele le go ya kwa morago : • Palogare e e totobadits-weng ko mophatong wa 2 ka tekatekanyo e e okeditsweng • 20 ,25 ,50, 100 go fitlha bonnye ka 1 000

THADISO YA MOPHATO 3 3. BOALO LE POPEGO (JEOMETERI)				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
3.1 **Maemo, kitsiso le dipono**		**Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sediriswa sa letsatsi le letsatsi • Neela sedioriswa sa letsatsi le letsatsi leina fa o bontsha pontsho e e sa tlwaelegang. **Maemo le ditaelo** • Sala ditaelo go dikologa mo phaposing kgotsa mo sekolong • Neela ditaelo go dikologa mo phaposing kgotsa mo sekolong	**Maemo le dipono** • Bala le go ranola le go taka mem-mapa e e sa tlhomamang kgotsa dipono tse di kwa godimo tsa go kgobokanya didiriswa. • Batla didiriswa mo mmapeng **Maemo le ditaelo** • Sala ditaelo morago go tloga mo le-felong go fitlha go lefelo le lengwe mo mmapeng o o sa tlhomamang.	
3.2 **Sediriswa sa tekanyetso-tlhakoretharo**		**Tlhatlhamano ya didiriswa** Lemoga le go neela maina le go neela maina a didiriswa mo phaposingborutelong le mo ditshwantshong a tekanyetsotlhakoretharo • Popego ya bolo (kgolokwe) • Popego ya lebokoso (matlhakorema-bapitekano) • Di Selennere	**Tlhatlhamano ya didiriswa** Lemoga le go neela maina le go neela maina a didiriswa mo phaposingborutelong le mo ditshwantshong a tekanyetsotlhakoretharo • Popego ya bolo (kgolokwe) • Popego ya lebokoso (matlhakore-mabapitekano) • Di Selennere • Dipiramiti • Dikhounu tsa sebebetsididi	**Tlhatlhamano ya didiriswa** Lemoga le go neela maina le go neela maina a didiriswa mo phaposingborutelong le mo ditshwantshong a tekanyetsotlhakoretharo • Popego ya bolo (kgolok-we) • Popego ya lebokoso (matlhakoremabapite-kano) • Di Selennere • Dipiramiti • Dikhounu tsa sebebet-sididi

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.2 **Sediriswa sa tekanyetso-tlhakoretharo**		**Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa Sediriswa sa tekatekanyetsotlhakoretharo ka dintlha tse:: • Dipopego tsa tekanyetsotlhakorepedi tse di dirang difatlhego tsa didiriswa tsa tekanyetsotlhakoretharo. • Boalo jo bo sephaphathi kgotsa jo bo obegileng **Tsepamo mo ditirwaneng** • Lebelela le go aga didiriswa sa tekanyetsotlhakoretharo tse di neetswengo o dirisa didiriswa tse di ka kgonngwang jaaka dipopego tsa tekanyetsotlhakorepedi tse di segil-weng jaaka, seloko,matlhokwana a meno,matlhaka a go nwa, le didiriswa tsa Jeometeri tse dingwe tsa tekkany-etsotlhakoretharo . **Tshitshinyo e e tsepameng le ditirwana tse di latelanang tsa kgwedithаro 2** Dira ka dikgolokwe, matlhakoremabapitekano le di Selennere jaaka ba dirile mo mophatong 2, di neele maina le go di kgobokanya. Tsepama mo mofuteng wa boalo mo sedirisweng sa mofuta mongwe le mongwe. Farologantsha boalo go ya ka gore a bo obegile kgotsa bo sephaphati.. Dirisa Khateboto ya khutlonne go dira lebokoso. Bolela ka boalo jo bo sephaphati mo matlhakoremabapitekano le di Selennere le go di tlhalosa go ya ka gore a di kgolokwe, khutlonne kgotsa khutlonnetsepa. Tiro e e sobokantsweng ka ditirwana tse di kwalwang	**Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa Sediriswa sa tekatekanyetsotlhakoretharo ka dintlha tse: Dipopego tsa tekatekanyetsotlhakorepedi tse di dirang difatlhego tsa didiriswa tsa tekanyetsotlhakoretharo. • Boalo jo bo sephaphathi kgotsa jo bo obegileng **Tsepamo mo ditirwaneng** • Lebelela le go aga didiriswa sa tekanyetsotlhakoretharo tse di neetswengo o dirisa didiriswa tse di ka kgonngwang jaaka dipopego tsa tekanyetsotlhakore pedi tse di segil-weng jaaka, seloko,matlhokwana a meno,matlhaka a go nwa, le didiriswa tsa Jeometeri tse dingwe tsa tekany-etsotlhakoretharo . **Tshitshinyo e e tsepameng le ditirwana tse di latelanang tsa kgwedithаro 3** Dira ka dikgolokwe, matlhakoremabapitekano le di Selennere jaaka ba dirile mo mophatong 2, di neele maina le go di kgobokanya. Tsepama mo mofuteng wa boalo mo sedirisweng sa mofuta mongwe le mongwe. Farologantsha boalo go ya ka gore a bo obegile kgotsa bo sephaphati.. Dirisa Khateboto ya khutlonne go dira lebokoso. Bolela ka boalo jo bo sephaphati mo matlhakoremabapitekano le di Selennere le go di tlhalosa go ya ka gore a di kgolokwe, khutlonne, khutlonnetsepa kgotsa khutlotharo. Neela le go khobokanya didiriswa tsa tekanyetso fa godimo. Dirisa ditlhokwana tsa meno, matlhaka a go nwa, pampiri e e golokilweng go dira phiramiti. Tiro e e sobokantsweng ka ditirwana tse di kwalwang	**Diponagalo tsa didiriswa** Tlhalosa, tlhaola le go bapisa Sediriswa sa tekatekanyetsotlhakoretharo ka dintlha tse: • Dipopego tsa tekate-kanyetsotlhakorepedi tse di dirang difatlhego tsa didiriswa tsa tekanyetsotl-hakoretharo. • Boalo jo bo sephaphathi kgotsa jo bo obegileng **Tshitshinyo e e tsepameng le ditirwana tse di latelanang tsa kgwedithаro 4** Tiro e e sobokantsweng ka ditirwana tse di kwalwang.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.3 **Popego ya tekatekanyetso tlhakore pedi (2D)**	**Tlhatlhamano ya didiriswa** • Dikgolokwe • Khutlotharotsepa • Khutlonne • Dikhutlonnetsepa **Diponagalo tsa dipopego** Tlhalosa, tlhaola,le go bapisa dipopego tsa tekatekanyetsotlhakore pedi ka dintlha tse: • dipopego • matlhakore a tlhamaletseng • matlhakore a a kgolokwe **Tshitshinyo e e tsepameng le ditirwana tse di latelanang tsa kgwedithаro 1** Neela maina le go kgobokanya didriswa Tsepama mo mofuteng wa matlhakore a popego e nang le ona.. Farologantsha dipopego ka go bolela fa matlhakore a le kgolokwe kgotsa a tlhamaletse. • Thala didiko, dikhutlhonne, Khutlon-netsepa le dikhutlotharo. Tiro e a gatelelwa ka go kwala ditirwana.		**Tlhatlhamano ya didiriswa** • Didiko • Khutlotharotsepa • Khutlonne • Dikhutlonnetsepa **Diponagalo tsa dipopego** Tlhalosa, tlhaola,le go bapisa dipopego tsa tekatekanyetsotlhakore pedi ka dintlha tse: • dipopego • matlhakore a tlhamaletseng • matlhakore a a kgolokwe **Tshitshinyo e e tsepameng le ditirwana tse di latelanang tsa kgwedithаro 2** Neela maina le go kgobokanya didriswa Tsepama mo mofuteng wa matlhakore a popego e nang le ona.. Farologantsha dipopego ka go bolela fa matlhakore a le kgolokwe kgotsa a tlhamaletse. • Thala didiko, dikhutlhonne, Khutlon-netsepa le dikhutlotharo. Tiro e a gatelelwa ka go kwala ditirwana .	

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4
3.4 **Tekano**		**Tekano** Tlhomamisa mola wa tekanyetso ka momeno wa pampiri le tshupatshwano. **Tshitshinyo e e tsepamisitsweng go kgweditharo 2** Ditirwana tsa momeno wa pampiri o o godisa tlhaloganyo ya tekanyo e akaretsa: • Ditirwana tseo pente e metsi e bewang mo godimo ga letlhare pele le menwa. • Tirwana tseo pampiri e segwang kgotsa e gagolwa go tloga mo mola wa momeno.		**Tekano** • Lemoga le go thala mola wa tekano ya dijeometeri tsa tekanyotlhakorepedi(2D) le dipopego tse e seng tsa di jeometeri. **Tshitshinyo e e tsepamisitsweng go kgweditharo 4** • Dithutiso tse di kwadil-weng di tshwanetse go akaretsa dikao fa: • Fa mola wa tekanyetso o sa rapalalang ka metlha. • Mo goleng gantsi mola wa tekanyo mo dipope-gong kgotsa didiriswa.

THADISO YA MOPHATO 3 4. TEKANYO				
DITLHOGO	**KGWEDITHARO 1**	**KGWEDITHARO 2**	**KWEDITHARO YA 3**	**KGWEDITHARO 4**
4.1 **Nako**	**Go ithuta nako** • Buisa malatsi mo alemanakeng • Kwala malatsi a matsalo , meletlo ya sedumedi, malatsi a botlhe,ditiragalo tsa hisitori,ditiragalo tsa sekolo mo alemanakeng • Bolela nako ya diura tse 12 ka: - Diura - Halofo ya diura - Kwatara ya diura - Metsotso Mo tshupanako ya manaka le ya didijitale le didiriswa tse dingwe tsa didijitale tse di supang nako jaaka mogala wa letheka.	**Go ithuta nako** • Buisa malatsi mo alemanakeng • Kwala malatsi a matsalo , meletlo ya sedumedi, malatsi a botlhe,ditiragalo tsa hisitori,ditiragalo tsa sekolo mo alemanakeng • Bolela nako ya diura tse 12 ka: - Diura - Halofo ya diura - Kwatara ya diura - Metsotso Mo tshupanako ya manaka le ya didijitale le didiriswa tse dingwe tsa didijitale tse di supang nako jaaka mogala wa letheka **Go balela boleele jwa nako le tsamao ya nako** Dirisa alemanaka go balela le go tlhalosa boleele jwa nako ka malatsi kgotsa dibeke kgotsa dikgwedi • Dirisa tshupanako go balela boleele jwa nako ka diura kgotsa halofo ya diura.	**Go ithuta nako** • Buisa malatsi mo alemanakeng • Kwala malatsi a matsalo , meletlo ya sedumedi, malatsi a botlhe,ditiragalo tsa hisitori,ditiragalo tsa sekolo mo alemanakeng • Bolela nako ya diura tse 12 ka: - Diura - Halofo ya diura - Kwatara ya diura - Metsotso Mo tshupanako ya manaka le ya didijitale le didiriswa tse dingwe tsa didijitale tse di supang nako jaaka mogala wa letheka **Go balela boleele jwa nako le tsamao ya nako** Dirisa alemanaka go balela le go tlhalosa boleele jwa nako ka malatsi kgotsa dibeke kgotsa dikgwedi o akaretsa: • Go fetolela magareng ga malatsi le dibeke • Go fetolela magareng ga dibeke le dikgwedi • Go dirisa ditshupanako go balela boleele jwa nako mo diureng, halofo ya diura le dikwatara tsa diura.	**Go ithuta nako** • Buisa malatsi mo alemanakeng • Kwala malatsi a matsalo , meletlo ya sedumedi, malatsi a botlhe,ditiragalo tsa hisitori,ditiragalo tsa sekolo mo alemanakeng • Bolela nako ya diura tse 12 ka: - Diura - Halofo ya diura - Kwatara ya diura - Metsotso Mo tshupanako ya manaka le ya didijitale le didiriswa tse dingwe tsa didijitale tse di supang nako jaaka mogala wa letheka **Go balela boleele jwa nako le tsamao ya nako** Dirisa alemanaka go balela le go tlhalosa boleele jwa nako ka malatsi kgotsa dibeke kgotsa dikgwedi o akaretsa: • Go fetolela magareng ga malatsi le dibeke • Go fetolela magareng ga dibeke le dikgwedi • Go dirisa ditshupanako go balela boleele jwa nako mo diureng, halofo ya diura le dikwatara tsa diura.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KWEDITHARO YA 3	KGWEDITHARO 4
4.2 **Boleele**		**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota boleele o sa dirise tekanyetso e e sa tlhomamang, sekao, tekanyetso ya diatla, dikgato, boleele jwa pensele, dibadisi, jalo jalo. • Tlhalosa boleele jwa didirisiwa ka go bala le go bolela boleele ka metso e e sa tlhomamang. • Dirisa puo go bua ka dirisa papiso, sekao, boleele thata, khutshwane thata,botelele thata le bophara thata. **Go itsise tekanyo e e tlhomameng** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota boleele o dirisa dimitara(gongwe thupa ya dimitara kgotsa mogala wa boleele jwa dimitara) jaaka uniti ya boleele e e tlhomameng	**Go itsise tekanyo e e tlhomameng** • Fopholetsa, lekanyetsa , bapisa, rulaganya le go re-kota boleele o dirisa dimitara(gongwe thupa ya dimitara kgotsa mogala wa boleele jwa dimitara) jaaka uniti ya boleele e e tlhomameng • Fopholetsa, lekanyetsa le go rokata boleele o dirisa thupa ya disentimitara.	

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KWEDITHARO YA 3	KGWEDITHARO 4
4.3 **Mmese/Boima**		**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mmese/boima o dirisa sekaletekanyetsosa le didirisiwa tse di sa tlhomamang, sekao, diboloko, ditena. • Dirisa puo go bua ka papiso.sekao, bofefo, boima,bofefonyana,boimanyana **Itsise tekanyo e e tlhomameng** Bapisa , rulaganya le go rekota boima jwa dilo tse di rekiswang tse boima jwa tsona bo kwadilweng mo dipaketeng jaaka dikilogerama sekao 2dikilogeramo tsa reise,1kilogeramo ya bupi kgotsa digeramo sekao 500 digeramo tsa letswai. • Mo go nang le dikale tsa phaposi ya ntlwana botlhapelo barutwana ba ka lekanyetsa boima jwa mmele wa bona ka dikilogerama ba dirisa sekale sa phaposi ya ntlwana botlhapelo . Tsholofelo ke gore barutwana ba balela fela gaufi le mola o mogolo. Ba tlhalosa boima jaaka gaufi le/bontsi go feta kgotsa go lekana(ya dikilogerama) ba bala mo sekaleng. • Mo go nang le dikale tsa go lekanyetsa ka boima jwa dikarolwana tse di kgaogantsweng ka digerama di le teng, Barutwana ba ka lekanyetsa boima kgotsa didiriswa tse di farololganeng. Ga go phetolelo e batlegang magareng ga gerama le dikilogerama		**Go itsise tekanyetso e e tlhomameng** **Barutwana ba dira ditirwana go gatelela tse di latelang, go akaretsa go buisa ditshwantsho tsa:** • Dikuno tseo boima jwa tsona bo tlhagisitsweng mo go tsona. • Sekale sa phaposi ya botlhapelo mo lenaka le lebisitseng go mola o mogolo wa sekale.

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KWEDITHARO YA 3	KGWEDITHARO 4
4.4 **Mothamo le Bolumu**	**Tekanyetso e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mothamo wa ditshelo (ke gore, boleng jo ditshelo bo kgona go tshegetsa fa di tladitswe) ka go dirisa didi-risiwa tse di sa tlhomamang go lekanyetsa, sekao, maswana/ dintsho le dikopi. • Tlhalosa boima jwa setshelo ka go bala le go bua gore se ka tladiwa ke diyuniti di le kae tse di sa tlhomamang. Sekao, botlolo e na le methamo ya dikopi di le nne.			

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KWEDITHARO YA 3	KGWEDITHARO 4
4.4 **Mothamo le Bolumu**	**Go itsise tekanyetso e e tlhomameng** • Fopholetsa, lekanyetsa, bapisa le go rulaganya le go rekota mothamo wa didiriswa ka go le-kanyetsa ka dilitara, dihalofo tsa dilitara, le dikotara tsa dilitara. - Go dirisa dibotlolo tsa boleng jwa litara e le nngwe, kgotsa ditshelo tse boleng jwa tsona bo tlhagisitsweng ka dimililitara jaaka meteme ya dinotsididi. - Dijeke tseo dinomoro tse di kgaogantsweng ka mela di bontsha dilitara, dihalofo tsa dilitara, dikotara tsa dilitara - Dijeke tseo dinomoro tse di kgaogantsweng ka mela di bontsha dimililitara - Dikopi le maswaana mme di bontsha boleng jwa tsona • Bapisa, rulaganya le go rekota boleng jwa dithekiso tsa didi-riswa tse di phuthetsweng tseo boleng jwa tsona bo tlhagisits-weng ka dilitara jaaka dilitara di le 2 tsa maświ ,litara e le nngwe ya senotsidididi, dilitara di le 5 tsa pente,kgotsa ka dimililitara sekao dimililitara tse 500 maświ ,340 dimililitara tsa senotsidi-di,750 dimilitara tsa olie. • Itse gore kopi e e tlhomameng ke 250dimilimitara . • Itse gore leswaana la tee ke 5dimilimitara Ga go diphetolelo tse di tlhokegang magareng ga dimililitara le dilitara			**Go itsise tekanyetso e e tlhomameng** **Ditirwana tse di kwadilweng di sobokantswe tse di latelang go akaretsa go bala ditshwantsho tsa:** • Dikuno tseo boima ba tsona bo tlhagisitsweng mo go tsona ka tatelano; • Dijeke tse dibolumu di atametseng 1litara kgotsa 2dilitara tsa mola o mogolo kgotsa halofo ya litara kgotsa kotara ya litara • Dijeke tseo dibolumu di leng gaufi le mola o mogolo wa dimililitara Se se solofetsweng ke gore barutwana ba balela fela go mola wa dipalo o mogolo.Ba tlhalosa bolumu jaaka gaufi, bontsi go feta, bontsi kgotsa bonnye kgotsa go lekana le.(ya dilitara)tse ba di badileng mo jekeng. Ga go diphetolelo tse di tlhokegang magareng ga dimililitara le dilitara

DITLHOGO	KGWEDITHARO 1	KGWEDITHARO 2	KWEDITHARO YA 3	KGWEDITHARO 4
4.5 **Modiko/ Perimeta**			**Modiko/ Perimeta** Batlisisa boleele o lebisitse dipopego tsa didikatlhakorepedi le didiriswa tsa didikatlhakoritharo o dirisa tshwantsho kgotsa diuniti tse di sa tlomamang.	
4.6 **Boalo**				**Boalo** Batlisisa boalo o dirisa dithaele.

THADISO YA MOPHATO 3 5. THANOLO YA TSHEDIMOSETSO YA DIPALO				
DITLHOGO	**KGWEDITHARO YA 1**	**KGWEDITHARO 2**	**KGWEDITHARO 3**	**KGWEDITHARO 4**
5.1 **Go kgobokanya le go rulaganya tshedimosetso**	**Katlenegiso :** Tshedimosetso e e feletseng ya sediko go dira kerafonoko. Kgobokanya tshedimosetso ka phaposi kgotsa sekolo go araba dipotso tseo di boditsweng ke morutabana. Dirisa dinyalano go rekota tshedimosetso ka dikarolwana tse di neetsweng. Tlhagisa tshedimosetso ka • Ditafole • Kerafonoko Bua le go **araba** dipotso ka tshedimosetso ka ditafole le kerafonoko		**Katlenegiso** Rulaganya sesha tshedimosetso e o e neetsweng bonnyane kgotsa nyalano kgotsa tafole e le mokerafonoko. Tlhagisa tshedimosetso mo kerafonoko. Araba dipotso ka tshedimosetso e e mo kerafonoko.	
5.2 **Go tlhagisa tshedimosetso**				
5.3 **Tsetseregano le thanolo ya tshedimosetso**		Sekaseka tshedimosetso go tswa mo tlhagisong e e neilweng. . **Go atlenegisitswe** Tsetsereganya tshedimosetso go tswa mo boemedi jo bo neetsweng. katlenegisa • Bonnyane e nne kerafo ya set-shwantsho se se tsamaelanang se kopanetswe.		Sekaseka tshedimosetso go tswa mo tlhagisong e e neilweng **Go atlenegisitswe** Tsetsereganya tshedimosetso go tswa mo boemedi jo bo neilweng. Katlenegiso: • Bonnyane e nne kerafo ya setshw-antsho se se tsamaelanang se kopanetswe.

3.5 Dintlha tsa tshedimosetso le dikaelo tsa go ruta

Mananeo a a fa tlase a naya morutabana:

- Dikaralo tsa diteng le ditlhogo tse di dirwang ke mephato mo kgweditharong nngwe le nngwe;
- Dikgopolo le dikgono tse di tsepameng tse di tshitsinngwang tsa kgweditharo nngwe le nngwe;
- Dintlha tsa tshedimosetso le dikaelo tsa go ruta; le
- Nako e e betsweng kwa thoko go ya ka setlhogo sengwe le sengwe mo pakathutong ya ura le metsotso e le some-a-mabedinne.

3.5.1 Tshedimosetso ya dintlha tsa go ruta tsa mophato 1

MOPHATO 1 KGWEDITHARO 1

1. DIPALO, MATSHWAO LE DIKGOLAGANO

Mo kgweditharong ya ntlha, nako e dirisetswa go godisa dikgopolo tsa pele ka ga dipalo. Dikgono tsa pele tse di godisitsweng mabapi le dipaterone , popego le boalo,tekanyo le tshedimosetso, e nna karolo ya motheo wa dikgono tsa sekolo ka kakaretso, mme go etswe tlhoko dikgono tsa dipalo.

Nyalanyo

Nyalano e lebisa kwa go tlhaloganyeng dikgopolo tse di tsamaelanang di kopanetse, tse e leng gape motheo wa go bapisa dipalo mo didirisweng tse di mo ditlhopeng.Fa moithuti a kgona go lemoga "go tshwana"go tla kgonagala gore a bapise disete tse pedi.Tshwano ke tlhokego ya tshomarelo.Tshomarelo ke bokgone jo bo botlhokwa mo go lekanyetseng,dipalo le boalo le popego.

Karoganyo

Fa ba aroganya, barutwana ba lebelela go tshwana le dipharologanyo. Barutwana ba godisa bokgoni jwa go tlhalosa le jwa go tlhaola. Go tlhalosa go raya gore barutwana ba kgona go lemoga le go naya maina a dilo tse di ba potologileng. Go **tlhaola** go raya gore barutwana ba kgona go tlhopha sediriswa fa ba neilwe tlhaloso. Barutwana ba tlhaola go ya ka diponagalo tse di rileng. Barutwana ba aroganya didiriswa go ya bogolo, mmala, popego, boleele, boima, **mothamo** le bolumu. Karoganyo e dirwa ka:

- Didiriswa tsa tsatsi le letsatsi fa ba dira ka tshedimosetso;
- Dipopegong tsa jeometeri le didiriswa tse di mo sebopegong le mo boalong ; le
- Diponagalo tsa didiriswa mo tekanyong.

Papiso

Fa barutwana ba bapisa didiriswa, ba tsepama mo dipharologanyong magare ga didiriswa. Barutwana ba ka tsepama mo

- kgolo kgotsa nnye;
- boima/boima kgotsa botlhofo;
- boleele kgotsa bokhutshwane;
- bolele kgotsa botsididi;
- lolea kgotsa tletse;
- bontsi kgotsa bonnye; le
- sa ntlha, sa bofelo kgotsa mo gare.

Go ithuta go bapisa ke karolo ya tsepamo ya

- ditirwana tsa tekanyo tsa pele;
- ditirwana tsa pele tsa popego le boalo (go tsenyeletsa go dira ka maemo); le
- ditirwana tsa pele mo dipateroneng.

Mo ditirwaneng tsa dipalo, barutwana ba bapisa didiriswa mo ditlhopheng tse di farologaneng. Ba ithuta go tlhaola ditlhopha tse di nang le dididriswa tse lekanang le tse di mo go bona, le go farologanya magareng ga ditlhopha tse di nang le didiriswa tse dintsi kgotsa tse di kwa tlase ga tsa ditlhopha tse dingwe.

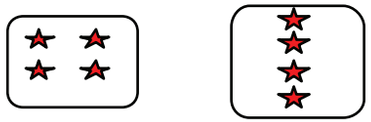
Thulaganyo

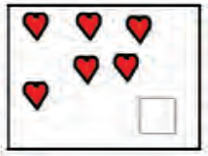
Thulaganyo ke motheo wa thulaganyo ya dipalo.Go baya le go bala didiriswa go thusa barutwana ba bannye go netefatsa gore ba bala sediriswa sengwe gangwe fela.Go baya didiriswa ka thulaganyo fa o bala e ela motheo wa go tlhaloganya thulaganyo ya dipalo.Go dira ka dipaterone tse di tsenyeleditseng dipopego kgotsa didiriswa mo tshimologong go thusa barutwana go tsepamisa mogopolo mo go rulaganyeng.Mo nakong e e tlang barutwa ba dirisa bokgoni jwa go dira ka dipalo tsa dipaterone.

Go fopholetsa

Phopholetso ke go lemoga ka bonako palo ya didiriswa tse di kgobokantsweng ntle le go di bala.Phopholetso e thusa barutwana go bona dikgobokanyo tse dinnye jaaka uniti e le nngwe.Se se neela barutwana ka go nna le motheo wa go sale gale wa go dira ka dipalo.

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.1 **Bala didiriswa**	Bala didiriswa ka nepagalo go fitlha ka 50. Naya phopholetso e e isegang ya palo ya didiriswa tse di ka netefatswang ka go di bala.	Bala didiriswa ka nepagalo go fitlha ka 10. Naya phopholetso e e isegang ya palo ya didiriswa tse di ka netefatswang ka go di bala	Go bala go thusa barutwana go godisa temogo ya bona ya bogolo jwa dipalo mme e bile e baya motheo wa go balela ka dipalotlalo. Ka kgweditharo ya ntlha, barutwana ba godisa dikgono tse di latelang: • go bala gotlhe • Go balela pele • Molaotheo wa dikhutlo • Go dira ka ditlhangwa tse di kwadilweng Go bala mo kgweditharong 1 go tsepame mo go godiseng dikgono tsa go bala tsa barutwana. Kgodiso ya dikgono tsa go bala e ba letlelela go: • Go bala didiriswa tse di kgobokantsweng le tse di sa kgobokanngwang; • Go bala go ya kwa pele le kwa morago; • Ditiro tsa go bala; • Go bala go ya ka tatelano mo molapalong; • Go godisa temogo ya bogolo jwa dipalo ka go di rulaganya le go di bapisa; le • Go fopholetsa le go bonelapele. Go bala didiriswa Pele ga barutwana ba bala didiriswa, ba tlhoka tšhono ya go ikatisa ka go bala ka molomo. Barutwana ba tlhoka go nna le lenaane le le rulaganeng la molomo la maina a dipalo: nngwe, pedi, le tharo go fitlha ka 20. Rotloetsa barutwana go bitsa diraeme tsa dipalo le go tshameka metshameko e e natlafatsang go bala ka molomo. Bokgoni jo jwa go bala ka molomo kgotsa go bala ka go boeletsa bo mosola go godisa kitso ya maina a dipalo le temogo ya diraeme/dipaterone mo dipalong. Barutwana jaanong ba bala sediriswa sengwe le sengwe mme ba bapise maina a dipalo le didiriswa. Seno se akaretsa go tshwara le go sutisa sediriswa le go bua leina la palo. Go botlhokwa gore barutwana ba tlhaloganye gore palo e e biditsweng la bofelo e e emela sediriswa sa bofelo mo setlhopheng. Ba tshwanetse go itse le go tlhaloganya gore palo ya bofelo e e builweng e bontsha bogolo jo bo mo setlhopheng kgotsa bokhutlo jwa dipalo mo seteng. Ga se barutwana botlhe ba ba kgonang go bala ka molomo le go bua maina a dipalo ka tatelano, bao ba ka nayang bokao mo go baleng ga bona. Ba ka tlola dipalo, ba ka re go na le dibadisi di le nne mme tota di le tlhano. Go botlhokwa gore barutwana ba bale palo e e tshwanang ya didiriswa tse di farologaneng	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.1 **Bala didiriswa**	Bala didiriswa ka nepagalo go fitlha ka 50. Naya phopholetso e e isegang ya palo ya didiriswa tse di ka netefatswang ka go di bala.	Bala didiriswa ka nepagalo go fitlha ka 10. Naya phopholetso e e isegang ya palo ya didiriswa tse di ka netefatswang ka go di bala.	Sekao: • Bala dibadisi di le thataro • Ntlisetse diphensele di le thataro • Bala dikonopo di le thataro Tshomarelo Barutwana ba tla simolola go lemoga fa ba bala palo ya didiriswa gore palo ga e tlhotlhetswe ke bogolo kgotsa maemo. Mongwe a ka botsa: ke dinaledi di le kae mo karateng nngwe le nngwe?  Maemo kgotsa thulaganyo ya dinaledi e farologane mme palo ya dinaledi tse di mo karateng nngwe le nngwe e a lekana. Go botlhokwa gore fa o bala didiriswa tse di angwang barutwana ba lemoge bonnye jwa palo ya didiriswa kwa ntle ga go di bala. Sekao, Go lemoga • tlhano, jaaka e le palo ya menwana mo seatleng se le sengwe • dibadisi tse tharo, di rulagantswe ka mokgwa mongwe le mongwe • nngwe go fitlha go thataro, go tswa ka thulaganyo ya marontho a a mo letaeseng le seno se ntse se itsege jaaka phopholetso. Ka jalo: Dikgopolo tsa dipalo tsa motheo di godisiwa ka go bala didiriswa tsa tota. Barutwana ba ithuta: • go golaganya dipalo tsa mafoko le kgobokanyo ya didiriswa; • go aga setshwantsho sa tlhaloganyo sa bokao jwa palo, k.g. e bogolo jo bo kae; le • gore leina la palo ya sediriswa sa bofelo se se badilweng e emela palogotlhe ya didiriswa tse di mo setlhopheng.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.1 **Bala didiriswa**	Bala didiriswa ka nepagalo go fitlha ka 50. Naya phopholetso e e isegang ya palo ya didiriswa tse di ka netefatswang ka go di bala.	Bala didiriswa ka nepagalo go fitlha ka 10. Naya phopholetso e e isegang ya palo ya didiriswa tse di ka netefatswang ka go di bala	Ditaelo le dipotso go tshegetsa go bala didiriswa • Bala dithobanyana tse 10. Di rulaganye ka mola. • Rulaganya dithobanyane gape mme o di bale gape. A palo e santse e tshwana? • Bala dikhurumelo tse tsa mabotlolo kwa ntle ga go di kgoma. • A go palo e e tshwanang ya e nngwe le nngwe? • O akanya gore go na le dikeraeyone di le kae? • A di di dintsi kgotsa di dinnye go ya jaaka o ne o akantse ? • O itse jang gore o na le palo eo? • O itse jang gore o badile keraeyone e nngwe le e nngwe? • O ka tlhotlhomisa jang karabo ya gago? Go ya kwa ditlhangweng tse di kwadilweng Barutwana ba tlhoka go newa ditšhono go bala dithalo tsa didiriswa. Sekao: Di kae?  **Go balela pele** Fa barutwana ba kgona go bala didiriswa tsotlhe go simolola ka nngwe ka go itshepa, ba tshwanetse go balela pele go tloga mo go di setseng di kgobokantswe tse ba di tshwereng. Sekao: Kopa barutwana go bala didiriswa di le supa mme morago ga fa, ba simolola ka sediriswa sa bosupa, bala tse tharo gape go fitlhela ban a le tse di lesome. Go balela pele ke togamaano e e lekaneng go feta go gaisa go bala gotlhe mme barutwana ba tla dirisa go balela pele fa ba bala. **Didiriswa:** Go mosola go aga kgobokanyo ya didiriswa tse di farologaneng tse barutwana ba ka di dirisang jaaka dibadisi. **Sekao:** • Ditlhokwana tsa mokgwaro • Dithobanyane tsa bebetsididi • Dithapo tsa diperekisi • Dinawa • Dikhurumelo tsa mabotlolo	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.2 **Go balela go ya kwa pele le kwa morago**	**Go balela go ya kwa pele le kwa morago mo** Bongwe go tswa mo palong nngwe le nngwe fa gare ga 0 le100 **Balela go ya pele mo:** • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 magareng ga 0 le100 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 magareng 0 le 100 • Bobedi go tswa mo katisanetswa nngwe le nngwe ya 2 magareng ga 0 le 100	**Go balela go ya kwa pele le kwa morago mo:** Bongwe go tswa mo palong nngwe le nngwe e e magareng ga 1 le 20	**Go balela go ya kwa pele ka bongwe** Go balela ka molomo kgotsa go tshwara ka tlhogo ke kgato e e mosola mo go boeletseng maina a dipalo tse di rulagantsweng. Fa barutwana ba kgona go dira se, ga go reye gore ba tlhaloganya bogolo jwa dipalo tse ba di buang. Ga go na kamano mo palong le bogolo jwa palo. Mo kgweditharong 1 go solofetswe gore barutwana ba balele go ya kwa pele le kwa morago ka bongwe go fitlhelela ka 20. Go balela go ya pele le kwa morago go ka dirwa le barutwana botlhe. Netefatsa gore barutwana ga ba bue/opele dipalo kwa ntle ga go di tlhaloganya. Mo ditlhopheng tse di tsepameng le tse di ikemetseng ka bo tsona, dira ditirwana tse di latelang go tlaleletsa bokao mo go baleng. • Simolola ka pedi go fitlhelela ka robedi • Bala go simolola ka nne (4) go fitlhela ka 10 • Bala go simolola ka pedi go fitlhelela ka robedi. O badile dipalo di le kae? **Go balela go fitlhelela ka lesome** Kwa tshimologong, barutwana ba tla simolola go bala go fitlhelela go lesome mme ba ikatise ka maina a dipalo go ya ka thulaganyo ya ona. Barutwana ba ka lapisiwa ke go bala ka molomo mme ba tshwanetse go dira se ka mekgwa e e farologaneng, e seng jalo ba bala/opela fela. Go tshwara dipalo ka tlhogo go tshwanetse go tshegetswa ka go bala matshwao a dipalo le go bala didiriswa. Barutwana ba tshwanetse go bontshiwa ditshwantsho tsa pono tsa dipalo tse di rulagantsweng. Ditshwantsho tsa pono tse di latelang di ka dirisiwa: • Go bala dibaga • Abakhase • Molapalo Kwa tshimologong go ka dirisiwa molapalo le dipalo tsotlhe tse di tlhagileng/emetsweng, mme morago molapalo ka dipalo dingwe tse di sa emelwang di ka dirisiwa.. Seno se raya gore barutwana ba tshwanetse go itse thulaganyo ya dipalo go tlatsa diphatla. Go balela go ya kwa morago Go balela go ya kwa morago ke bokgoni jo bo boima/thata mo barutwaneng, mme go tlhokagala ikatiso kgapetsakgapetsa. Simolola go balela go ya kwa morago go tswa mo palong e barutwana ba e itseng e leng 2, mme o e godise ka go lebelela palo nngwe le nngwe e e kwa godimo.	

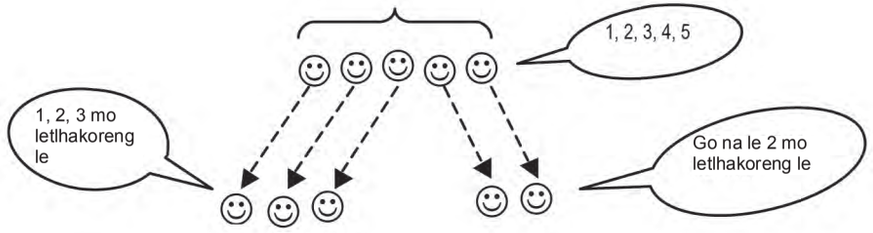
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.2 **Go balela go ya kwa pele le kwa morago**	**Go balela go ya kwa pele le kwa morago mo** Bongwe go tswa mo palong nngwe le nngwe fa gare ga 0 le100 **Balela go ya pele mo:** • Bolesome go tswa mo katisanetswa nngwe le nngwe ya 10 magareng ga 0 le100 • Botlhano go tswa mo katisanetswa nngwe le nngwe ya 5 magareng 0 le 100 • Bobedi go tswa mo katisanetswa nngwe le nngwe ya 2 magareng ga 0 le 100	**Go balela go ya kwa pele le kwa morago mo:** Bongwe go tswa mo palong nngwe le nngwe e e magareng ga 1 le 20	Go bala go fitlhelela go 20 Go bala go feta lesome go ka tlhoka gore barutwana ba bue thulaganyo ya go bala fa morago ga morutabana. Go botlhokwa gape gore barutwana ba rotloetswe go simolola go bala go tswa mo palong nngwe le nngwe. Fa ba simolola ka 8 go matsapa thata go na le fa ba simolola ka 1. Barutwana ba tla dirisa kgono e fa ba balela kwa pele mo tlhakanyong. Didiriswa • Go bala dibaga go fitlhelela ka 20 • Abakhase • Dipapetlana tsa dipalo di thusa go godisa bokgoni jwa barutwana jwa go bala tshedimosetso mo lenaneong. Ka barutwana ba bala go fitlhelela ka 10, papetlana e tshwanetse go bontsha tshedimosetso e e latelang fela: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 • Molapalo o o bontshang dipalo go fitlha ka 20	

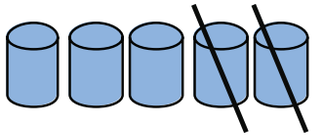
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.3 **Matshwaopalo le mainapalo**	Tlhaola, lemoga le go buisa dipalo • Tlhaola, lemoga le go buisa matshwaopalo 1 go fitlha go 100 • Kwala matshwaopalo 1 go fitlha go 20 • Tlhaola, lemoga le go buisa mainapalo 1 go fitlha go 10 • Kwala mainapalo 1 go fitlha go 10	Tlhaola, lemoga le go buisa dipalo • Tlhaola, lemoga le go buisa matshwaopalo 1 go fitlha go 20 • Kwala matshwaopalo 1 go fitlha go 5 • Tlhaola, lemoga le go buisa mainapalo 1 go fitlha go 5 • Kwala mainapalo 1 go fitlha go 5	Go buisa le go kwala maina le matshwao a dipalo Barutwana ba tshwanetse go ithuta go: • kwala matshwao le maina a dipalo • buisa matshwao a dipalo • bua dipalo Go buisa le go kwala matshwao a dipalo go tshwanetse go golaganngwa le ditirwana tsa go bala. Barutwana ba tshwanetse go newa ditshono tsa go nyalanya matshwaopalo le mainapalo mo didirisweng tse ba di kgobokantseng tse ba di balang. Ka mokgwa o, barutwana ba golaganya matshwaopalo, mainapalo, kemedi ya palo le bokao jwa palo Ditirwana tse dingwe Go ikatisa go kwala Barutwana ba ka ikatisa go kwala matshwaopalo ka mekgwa e e farologaneng: • Ka go thala mo godimo ga dipalo. • Go dira ditirwana tsa go kopanya marontho le matshwaopalo. • Ka go kwala mo motlhabeng • Ka go kwala mo patitšhokong kgotsa mo samenteng • Ka go penta • Go roka dipalo ba dirisa wulu. Tirwana e, ke yona tota e e mosola mo go gatele-leng tshimologo fa o kwala dipalo. • Ka go thala dipalo tse ditonna tse di segolotsweng mo pampiring kgotsa mo leseleng/khaing. Go buisa dipalo Seno se ka dirwa ka: • Go supa dipalo mo molapalong kgotsa mo papetlaneng ya dipalo • Go buisa dikarata tsa dipalo Go nyalanya matshwapuiso le didiriswa tse di kgobokantsweng Seno se ka dirwa ka: • Go nyalanya palo ya didiriswa le dipalo • Go balela didiriswa tse di mo setlhopheng kwa godimo le go tlhopha karata ya dipalo e e maleba e e nyalanang le palo ya didiriswa. • Go bala didiriswa mo ditshwantshong le go kwala letshwaopalo.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.4 **Tlhalosa, bapisa le go rulaganya dipalo**	Tlhalosa, bapisa le go rulaganya didiriswa go fitlha go 20 • Tlhalosa le go bapisa kgobokanyo ya didiriswa go ya ka ntsi, nnye le lekana le. • Tlhalosa le go rulaganya kgobokanyo ya didiriswa go tswa go ntsi go fitlha go nnye le go tswa go nnye go fitlha go ntsi. Tlhalosa, bapisa le go rulaganya didiriswa di go fitlha go 20 • Tlhalosa le go bapisa dipalotlalo go ya ka nnye go na le, tonna thata go , nnye thata go , go lekana le. • Tlhalosa le go rulaganya dipalo go tswa go tse dinnye thatathata go fitlha go tse ditonna thatathata, go tswa go tse ditonna thatathata go fitlha go tse dinnye thatathata.	Tlhalosa, bapisa le go rulaganya didiriswa go fitlha go 5 • Tlhalosa le go bapisa kgobokanyo ya didiriswa go ya ka bontsi, nnye; e feta , e nnye go na le; e tshwana le, di dintsi fela jaaka, e farologane • Tlhalosa le go rulaganya kgobokanyo ya didiriswa go tswa go ntsi go fitlha go nnye le go tswa go nnye go fitlha go ntsi. • Tlhatlhamanya dipalo • Tlhalosa, bapisa le go rulaganya didiriswa go fitlha go 5 • Tlhalosa le go bapisa dipalotlalo go fitlha ka 5 ka go dirisa puo, sekao, go ya ka , nnye go na le, tona go na le, ntsi go na le. • Tlhalosa le go rulaganya: - Dipalo go tswa go tse dinnye thata go fitlha go tse di tonna thata le go tswa go tse dinnye thata go fitlha go tse ditonna thata. - Dirisa puo, sekao, pele ga, morago ga, mo gare ga.	Go bapisa le go rulaganya dipalo go thusa barutwana go itshekisa tlhaloganyo ya bona ya bogolo jwa dipalo. E tla ba thusa go godisa kakanyo ya gore palo e bogolo kgotsa e bonnye jo bo kae fa go bapisiwa le dipalo tse dingwe. Fa barutwana ba na le tlhaloganyo ya bogolo jwa dipalo, ba tla itemogela bonolo jwa matswao a motheo. Mo Kgatong ya Motheo, seno se bidiwa boleng jwa dipalo. Dikgono tsa go bala di mosola mo papisong le thulaganyong ya dipalo. Thulaganyo ya dipalo e akaretsa: • Go ithuta ka mabalapalo/dinomoro tsa khadinale a a nayang boleng jwa palo. • Go dirisa, go buisa le go mainapalo le matshwaopalo. • A ba na le puo ya go bapisa dipalo Go bapisa palo ya didiriswa. Seno gantsi se dirwa ka go nyalanya dilo ka bongwe ka bongwe. Barutwana ba bala kgobokanyo ya didiriswa mme ba di nyalanye mainapalo le didiriswa bongwe ka bongwe. Papiso ya didiriswa tse di kgobokantsweng e ikaegile ka maitemogelo a barutwana a go bala. Go mosola go tsepama mo dikgopolong tsa bontsi le bonnye fa o bapisa dipalo. Fa o bapisa didiriswa, puo ya papiso e a godisiwa. Sekao: di dintsi jgo na le, ke palo e e lekanang/e e tshwanang le, e lekana le, e feta, e nnye go na Thulaganyo ya didiriswa tse di kgobokantsweng Fa barutwana ba bala e bile ba bapisa ditlhopha di le pedi tsa didiriswa, ba itemogela le go ithuta dikamano di le pedi tse di botlhokwa: • Dikgobokanyo di le pedi di a lekana fa fela di arogana leinapalo le le lengwe, le fa kgobokanyo e ka rulaganngwa ka mokgwa o o farologaneng. • Go bala dipalo go emetse thulaganyo ya dipalo tse di latelanang tse di oketegang ka nngwe nako le nako sekao:tlhano e tla morago ga nne ke ka mo o kgobokanyo ya botlhano e fetang kgobokanyo ya bone kgotsa kgobokanyo ya bonne e nnye mo kgobokanong ya palo ya didiriswa tsa botlhano. Go rulaganya le go bapisa dipalo Fa barutwana ba rulaganya dipalo, ba ka dirisa bokgakala magareng ga dipalo go itse gore ke palo efe e kgolwane. Sekao, ba tla re; 5 e kgolo go na le 2 ka ntlha ya fa 5 e tla fa morago ga 2. Barutwana ba tshwanetse go nyalanya palo ya di diriswa le go e bapisa le setlhopha sa di diriswa tse robonngwe go setlhopha sa didiriswa tse pedi.Mo mophatong wa 2 le wa 3 barutwana bat la rulaganya le go bapisa dipalo go tlhalosa boleng jwa dinoko tsa dipalo.Barutwana ba tshwanetse go rulaganya dipalo ba dirisa ditshwantsho tse di fapaneng.Barutwana b aka rulaganya dipalo ba dirisa molapalo.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.4 **Tlhalosa, bapisa le go rulaganya dipalo**	Tlhalosa, bapisa le go rulaganya didiriswa go fitlha go 20 • Tlhalosa le go bapisa kgobokanyo ya didiriswa go ya ka ntsi, nnye le lekana le. • Tlhalosa le go rulaganya kgobokanyo ya didiriswa go tswa go ntsi go fitlha go nnye le go tswa go nnye go fitlha go ntsi. Tlhalosa, bapisa le go rulaganya didiriswa di go fitlha go 20 • Tlhalosa le go bapisa dipalotlalo go ya ka nnye go na le, tonna thata go , nnye thata go , go lekana le. • Tlhalosa le go rulaganya dipalo go tswa go tse dinnye thatathata go fitlha go tse ditonna thatathata, go tswa go tse ditonna thatathata go fitlha go tse dinnye thatathata.	Tlhalosa, bapisa le go rulaganya didiriswa go fitlha go 5 • Tlhalosa le go bapisa kgobokanyo ya didiriswa go ya ka bontsi, nnye; e feta , e nnye go na le; e tshwana le, di dintsi fela jaaka, e farologane • Tlhalosa le go rulaganya kgobokanyo ya didiriswa go tswa go ntsi go fitlha go nnye le go tswa go nnye go fitlha go ntsi. • Tlhatlhamanya dipalo • Tlhalosa, bapisa le go rulaganya didiriswa go fitlha go 5 • Tlhalosa le go bapisa dipalotlalo go fitlha ka 5 ka go dirisa puo, sekao, go ya ka , nnye go na le, tona go na le, ntsi go na le. • Tlhalosa le go rulaganya: - Dipalo go tswa go tse dinnye thata go fitlha go tse di tonna thata le go tswa go tse dinnye thata go fitlha go tse ditonna thata. - Dirisa puo, sekao, pele ga, morago ga, mo gare ga.	**Sekao:** • Tsaya palo 3 mme o e beye mo molapalong • Tlhopha palo e e fa morago ga 4 mme o e beye mo maemong a yona a tshwanelo mo molapalong. • Tlhopha palo e e magareng ga 3 le 5 mme o e beye mo maemong a teng a tshwanelo mo molapalong • Tlhopha palo e e fa pele ga 2 mme o e beye mo maemong a yona a tshwanelo mo molapalong • Tlhopha palo e e fa pele ga 3 mme o e beye mo maemong a yona a tshwanelo mo molapalong. Dikarata tsa dipalo Sekao: Barutwana ba ka pakolola dikarata go ya ka tatelano ya tsona. Go ya mo ditlhangweng tse di kwadilweng Barutwana ba ka tiisa kitso ya bona ka go feleletsa ditirwana tse di mo Dibukeng tsa Tiro. Seno se ka dirwa ka nako ya barutwana ka bosi. Lebalapalo le bolengkemeditatelano Lebalapalo le raya palo yotlhe mo setlhopheng kgotsa mo kgobokanyong. Bolengkemeditatelano e raya maemo a sediriswa mo setlhopheng sa didiriswa tse di kgobokantsweng. Kgolagano ya mabalapalo le bolengkemeditatelano e tshwanetse go ka dirwa. Barutwana ba tla lemoga se fa ba bala didiriswa tse di kgobokantsweng mme ba tla itse gore fa ba kgomile sediriswa sa botlhano, seno se tla bo se raya gore ba badile go fitlhela ka tlhano. Dibolengkemeditatelano di tla dirwa fela mo Kgweditharong 4.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
THARABOLOLO YA DIPALO DI LE MO TIRISONG				
1.6 **Ditogamaano tsa go rarabolola dipalo**	Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgong-wang, sekao. dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le thuba dipalo • Koketsopedi le kgaog-anyo ka bogare • melapalo	Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgong-wang sekao. dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Melapalo e e tsheget-swang ke didiriswa tse di kgongwang, sekao. Dibaga tse di balang	Mo kgweditharong e, barutwana ba tla simolola go rarabolola dipalofoko ba dirisa ditogamaano tse di latelang: • didiriswa tse di kgongwang • Methalo • Melapalo **Dithalo didiriswa tse di kgongwang** Barutwana ba tla thala ditshwantsho ba dirisa didiriswa tse di kgongwang go rarabolola dipalo. Kwa bofelong jwa kgweditharo, barutwana ba kgona go thala ditshwantsho tse di nang le dipalo go tlhalosa tiragatso le tharabololo. Go botlhokwa gore ditshwantsho kgotsa dithalo di nne le dipalo tse di tlhalosang tiragatso le tharabololo ka: • Maduo a a kopaneng • dipalo **Melapalo** Tiriso ya melapalo e tla thusa barutwana go balela le go ba naya tsela ya go rekota dikakanyo tsa bona le go di latedisa.Gape e letlelela barutwana go nna le setshwano sa go rekota seo se ba kgontshang go tlhalosa dipalo tse ba di rarabolotseng.Mo tsamaong ya kgweditharo barutwana bat la itsise melapalo le go e simolola go e dirisa jaaka togamaano ya go balela.Mo tshimologong fa o dirisa molapalo,kgole ya dibaga e ka bewa fa godimo ga molapalo kgotsa kwa tlase go thusa barutwana go bala. Pele ga barutwana ba dirisa molapalo jaaka togamaano ya go balela ba tshwanetse go o dirisa go: • Bala go ya kwa pele le kwa morago • Buisa matshwaopalo • Kwala matshwaopalo • Baya dipalo ka maemo mo malapalong • Rulaganya le go bapisa dipalo	

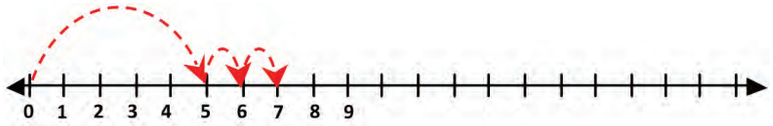
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.7 **Go tlhakanya le go ntsha**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 20.	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 5.	Dipalo tsa mafoko gantsi di dirisiwa jaaka matseno mo tirisong ya matshwao. Barutwana ba simolola ka go rarabolola dipalo ba dirisa didiriswa tse di kgongwang, mme seno se godisiwa go: • Thala ditshwantsho; • Thala ditshwantsho le go kwala dipalo go tlhalosa letshwao; le • Go dirisa dipalo fela. Sekao**:** Go na le bana ba le tlhano mo letantsêng (see-saw). Ba bararo ba bona ba mo letlhakoreng le le lengwe. Go na le bana ba bakae mo letlhakoreng le le lengwe? Mo kgweditharong ya ntlha, barutwana ba ka rekota palofoko e ka mokgwa o o latelang: **Ditogamaano tsa go balela** Go bala gotlhe go rarabolola palo ya letantsê (see-saw).  Fano barutwana ba bala setlhopha sengwe le sengwe mme morago ba bale kgobokanyo yotlhe, ka jalo ba bala bonnye gararo. Go bala gotlhe go rarabolola palo ya letantsê (see-saw). Barutwana ba balela pele go tswa mo go tharo go fitlhelela mo go tlhano. Seno ke leano le le kgonagalang le le ka dirisiwang. Ke itse gore go na le bana ba le bararo mme ngwana a le mongwe o dira bana ba le bane, mme ngwana yo mongwe o tsaya bana ba le batlhano. Go na le bana ba le babedi mo letlhakoreng le le lengwe“”. Go dira ka tlhatlhamano ya dipalo tse 1-5, barutwana ba ka dirisa menwana ya bona jaaka dibadisi tse di sa tshwaraganang.	

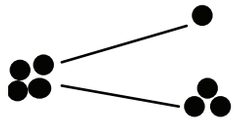
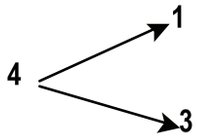
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.7 **Go tlhakanya le go ntsha**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 20.	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 5.	*Go tlhakanya le go ntsha ba dirisa didiriswa* Barutwana ba dirisa didiriswa tse di kgongwang ka mekgwa mengwe go fitlha mo karabong. Barutwana ba dirisa didiriswa go aga bokao jwa go tlhakanya le go ntsha ka go dirisa didiriswa tse ba ka di kgomang, tshwarang le tse di sutang. Mokgwa o barutwana ba dirisang didiriswa ka ona gantsi o laolwa ke kagego ya palofoko. **Go rekota ditshwantsho tsa go tlhakanya le go ntsha** • **Rekota ba dirisa didiriswa tse di kgongwang** Barutwana ba ka dirisa didiriswa tse di kgongwang go bala gotlhe le go balela kwa pele. Le gale barutwana ba ka dirisa gape ditogamaano tse fa ba thala ditshwantsho tse di botshang go tlhaloganya ga gagwe, ditogamaano tsa go bala le tharabololo. • **Rekota ka ditshwantsho fela**  **Rekota ka ditshwantsho le dipalo** Gore barutwana ba kgone go dirisa dipalo le ditshwantsho go tlhalosa kakanyo ya bone ba tlhoka: • Ba kgone go lemoga dipalo 1-5 • Bala didiriswa di le tlhano mme ba itse gore 5 e emela didiriswa tsotlhe tse di badilweng. • Kwala dipalo • Rulaganya le go bapisa dipalo	

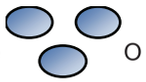
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.7 **Go tlhakanya le go ntsha**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 20.	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 5.	**Mefuta ya dipalo ya go tlhakanya le go ntsha** Go na le mefuta e le meraro ya motheo ya dipalo ya go tlhakanya le go ntsha mme mofuta mongwe le mongwe o ka tlhagisiwa ka mekgwa e e farologaneng. Mefuta ya dipalo tsa motheo ke: *Sesala/go sala* Boitumelo o ne a na le diapole di le pedi. Masego a mo naya diapole di le tharo. O na le diapole di le kae jaanong? Boitumelo o ne a na le diapole di le tlhano. O neile Masego diapole di le nne. O na le diapole di le kae jaanong? *Kopanya* Keorapetse o na le dimabole tse di tala di le pedi le tse pedi tsa botala jwa legodimo. O na le dimabole di le kae gotlhe? Keorapetse o na le dimabole di le nne. Tse tharo tsa tsona di ditala mme tse dingwe di botala jwa legodimo. Keorapetse o na le dimabole di le kae tsa botala jwa legodimo? *Bapisa* Kearapetse o na le dipanana di le tlhano. Olerato o na le panana e le nngwe. Dipanana tsa ga Keorapetse di feta tsa ga Olerato ka di le kae? Didiriswa**:** Barutwana ba ka dirisa dibadisi tse di sa tshwaraganang go ba thusa go bona gore go diragala eng fa o kopanya boleng/dipalo kgotsa fa o di kgaoganya. Dibadisi tse di sa tshwaraganang di thusa barutwana go bona gore go diragala eng fa ba bala gotlhe. Dikao tsa dibadisi tse di sa tshwaraganang ke tse: Dibadisi Dithabanyane tse di balang Dikhurumelo tsa mabotlolo Dithapo tsa diperekisi Matlapa Dikhube tse di tlhatlhagantsweng. Go dira ka tlhatlhamano ya dipalo tse 1-5, barutwana ba ka dirisa menwana ya bona jaaka dibadisi tse di sa tshwaraganang.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.9 **Kgobokanyo le karoganyo e e isang kwa karoganyong**	Rarabolola dipalo tse di mo tirisong tse di akaretsang karoganyo e e lekanang le kgobokanyo ka dipalotlao tse di fitlhang ko go 20 ka dikarabo tse di ka akaretsang disala.	Rarabolola dipalo tse di mo tirisong tse di akaretsang karoganyo e e lekanang le kgobokanyo ka dipalotlao tse di fitlhang ko go 5 ka dikarabo tse di ka akaretsang disala.	Mo mophatong wa 1, kgopolo ya go aroganyo e tswanetse go itsisiwe ka go naya barutwana dipalo di le mo tirisong tse di akaretsang karoganyo le kgobokanyo. Letshwao la karoganyo le simolola go dirisiwa mo mophatong 3. Fa tlase ke dikao tsa mefuta ya dipalofoko tse di ka dirisiwang. **Kgobokanyo** *Kgobokanyo, go latlha sesala* Botsang o rekisa maphutse mo dikgetsing tsa maphutse tse pedi. O setse ka maphutshe a le matlhano. A ka nna le dikgetsi di le kae tsa maphutshe fa a tsentse maphutshe a le mabedi mo kgetsing nngwe le nngwe? *Kgobokanyo, go akaretsa sesala mo karabong* Go na le diapole di le nne. Go ka tladiwa dikgetsi di le kae tsa diapole fa kgetsi nngwe le nngwe e na le diapole di le pedi. **Karoganyo** *Karoganyo,go latlha sesala* Aroganya dimonamone di le tharo mo ditsaleng di le tharo gore botlhe ba bone dimonamone tse di lekanang. **Rekota setshwantsho go kgobokanya le go aroganya** Fa o bontsha karologanyo ya dipalofoko, barutwana ba tla aroganya selo se le sengwe kgotsa sediriswa se le sengwe ka nako. Barutwana ba mophato wa 1 ba ka kgona go aroganya sediriswa kgotsa selo se le sengwe ka nako, mme seno se tla bonshiwa mo direkotong tsa bona. Fa ngwaga o tswelela, barutwana ba tla kgona go rekota ba dirisa ditshwantsho le dipalo go bontsha palo e e aroganngwang.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
DIPALELO TSE DI SENG MO TIRISONG Go na le mekgwa e mentsi ya go nagana ka go rulaganya thuto le go ithuta go balela/dira dipalo. Mokgwa mongwe ke wa go nagana ka tlhatlhamano ya dipalo. Tlhatlhamano ya dipalo e barutwana ba dirang ka yona e tla laola mofuta wa didiriswa tse ba di dirisang le mokgwa o ba rekotang ditharabololo tsa bona ka teng. Ka jalo, mokgwa mongwe wa go nagana ka dipalelo mo Kgatong ya Motheo ke go emele dipalo, Seno se dirwa ka: • go dirisa didiriswa tse di kgongwang; • go thala ditshwantsho; • go dirisa ditshwantsho le matshwao; • go dirisa dipalo le metsu; kgotsa • go dirisa dipolelo tsa dipolelo. Barutwana ba tswa mo go diriseng didiriswa tse di kgongwang mme ba simolola go dira ka matshwaopalo ka go inaganela le dipolelo tsa dipalo. Dipalalo di wela mo tirisong ya tharabololo ya maemo a dipalo. Barutwana ba godisa dikgono tsa go rarabolola dipalo gore ba kgone go dira ka dipalo. Barutwana ba tshwanetse go dira dipalelo tse di seng mo tirisong.				

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.12 **Ditogamaano (mekgwa le maano)**	Dirisa ditogamaano tse di latelang fa o dira dipalelo: • didiriswa tse di kgong-wang, sekao dibadisi • thala ditshwantsho • go aga le go thuba dipalo • koketsopedi le kgaog-anyo ka bogare. • melapalo	Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme o tlhalose tharabololo ya dipalo.: • didiriswa tse di kgong-wang, sekao. dibadisi • ditshwantsho go ntsha kgang ya dipalo • melapalo e e tsheget-swang ke didiriswa tse di sa kgongweng, sekao. Dibaga tsa go bala	Mo kgweditharong ya ntlha, barutwana ba tla rarabolola dipalo ba dirisa didiriswa tse di kgongwang. Go botlhokwa gore barutwana ba dirise didiriswa tse di farologaneng tse di tlhphilweng ka kelotlhoko go tshegetsa gkodiso ya kgopolo/kakanyo e e rutiwang. Fa barutwana ba gola mo go diriseng didiriswa, go bontsha se ba se naganang, ba ka rekota dipalelo ka go di thala. Go ka nna le barutwana bangwe ba ba ka tlhagisang/bontshang dipalelo tsa bona ka go thala mme bas a dirise didiriswa tse di kgongwang. **Melapalo e e tshegeditsweng ke didiriswa tse di kgongwang** Fa o dirisa melapalo jaaka togamaano, go kgontsha go balela, barutwana ba tshwanetse go bob a kile ba dirisa: • didiriswa tse dingwe, sekao. Dibaga tse di balang, dipalopatlisiso; • melapalo go bala go ya kwa pele le kwa morago; le • molapalo gore baya le go rulaganya dipalo. Molapalo o o rulaganeng o tshwanetse go dirisiwa (mme o siametse fa)) barutwana ba dira dipalo tsa go tlhakanya le tsa go ntsha. Molapalo o o rulaganeng o tshwanetse go bontsha dipalo tsotlhe mo go ona. • Simolola ka go ruta go tlhakanya o dirisa molapalo a) Morutabana o baya molapalo mo patitšhokong o o simololang ka 1 go fitlha go 5. O bontsha barutwana go rarabolola dipalo 3 + 2 ba dirisa molapalo. O baya setshwantsho sa mmutlwa mo go 0. Sekao**:** Mmutlwa o tlola go tswa go 0 go fitlha go 5 mme o tlola metlolo e mengwe e mebedi. O tlotse metlolo e mekae gotlhelele?  Barutwana ba dirisa menwana ya bona go tlola mo melapalong ya bona ya ditulo tsa bona , fa morutabana a naya dipolelo tsa sipalo mmogo le dikarabo tsa go fitlha ka 10,Sekao**:** 1 + 2 =3.	

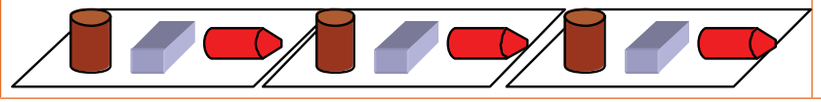
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.13 **Tlhakanyo le tloso**	Tlhatlhamano ya dipalo: 1 -20 • Tlhakanya go fitlha ka 20 • Go ntsha go tswa mo 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatiso ka kgolagano ya dipalo go fitlha ka 10	Tlhatlhamano ya dipalo: 1 -5 • Go tlhakanya go fitlha ka 5 • Go ntsha go tswa no go 5 • Ikatisa ka kgolagano ya dipalo go fitlha ka 5	Mo kgweditharong ya 1, barutwana ba tlhaloganya go tlhakanya jaaka go kopanya ditlhopha le go balela pele. Ba dirisa go tlhaloganya ga bona gore go tlhakanya go ka dirwa ka tatelano nngwe le nngwe mme e bile ba ka itlhophela gore ba ya go bala jang. Ba dirisa mogala wa dibaga, ba thala setshwantsho kgotsa molapalo go dira dipalelo tsa bona jaaka 3 + 2 kgotsa 1 + 4 ka go balela pele.tlhatlhamolola dipalo gore ba kgone go di tlhakanya. Mo Kgweditharong 1, barutwana ba ranola/tlhalosa lereo “go tlosa” Ba dirisa kemedi go “tlosa” ba dirisa didiriswa le dithalo tsa ditshwantsho le dipolelopalo.Ba lemoga gore sesala sa palo ya didiriswa ke karabo ya go balela.Ba rekota tlhakanyo le tloso ka go dirisa: • Didiriswa tse di kgongwang; • Ditshwantsho kgotsa dithalo; kgotsa • Ditshwantsho le dipalo. **Dira ka tlhatlhamano ya dipalo tsa 1 – 5** Fa barutwana ba dira kgotsa ba balela mo tlhatlhamanong e ya dipalo, ba ka aga go tlhaloganya go tlhakanya le go ntsha ka mokgwa o o latelang: • Dirisa didiriswa tse di kgongwang go emela dipalo le go balela • Rekota dipalelo tsa bona ba dirisa ditshwantsho kgotsa sekao/malebela. • Rekota dipalelo tsa bona ba kopanya ditshwantsho le dipalo. **Go aga le go tlhatlhamolola dipalo** Go tlhakanya le go ntsha mo mophatong wa 1 go tsepame mo go direng gore barutwana ba nagane ka dipalo jaaka di dirilwe ka dipalo tse dingwe. Nako e ntsi barutwana ba tsaya karolo mo ditirwaneng tsa bontlha-bongwe –bontlha-bongwe jo bo isang kwa palogotlheng. Ditirwana tse, di tsepamisitswe mo palong e le nngwe. Sekao, fa ba dira ka palo 4 barutwana ba tla: • Tlhatlhamolola 4 ka mekgwa e e farologaneng; • bua kgotsa o balele dikarolo kwa godimo; kgotsa thala kgotsa o di kwale fa fat-she.  	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.13 **Tlhakanyo le tloso**	Tlhatlhamano ya dipalo: 1 -20 • Tlhakanya go fitlha ka 20 • Go ntsha go tswa mo 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatiso ka kgolagano ya dipalo go fitlha ka 10	Tlhatlhamano ya dipalo: 1 -5 • Go tlhakanya go fitlha ka 5 • Go ntsha go tswa no go 5 • Ikatisa ka kgolagano ya dipalo go fitlha ka 5	• Barutwana gape ba ka kgona go dirisa dikarata tsa dipalo go bontsha dikarolo tsa dipalo. Ka jalo fa ba o batla go bontsha 4, dingwe tsa dikarata tse di latelang di ka dirisiwang: 1 3 2 2 • Dikgopolo tse, di ka tshegetswa ka go rekota mo dibukeng dithutiso ka nako ya bona. 4 1 3 Fa ba dira ka dipalo tsa go ntsha, barutwana ba dira gantsi ka dipalo tsa dikgannyana tse di godisang go tlhaloganya gore go ntsha ke go “tsaya sengwe”. Barutwana ba tshwanetse go dira ditirwana tse di tlogetsweng. Ditirwana tse, di tshegetsa go tlhaloganya dipalo tsa go ntsha mme di tlhoka gore karolo nngwe e fitlhiwe kgotsa di se itsiwe. Example: Ke na le  O ka re nka be ke na le 5 Letshwao ga le simololwe mo kgweditharong e. Barutwana ba tshwanetse go newa mekgwa e mentsi ya go kwala dipolelo tse di tla thusang fa letshwao le simololwa mo Kgweditharong 2. Sekao: **Sekao 1** ☐ le ☐ di dira 2 **Sekao 2** ☐ le ☐ di dira 3	

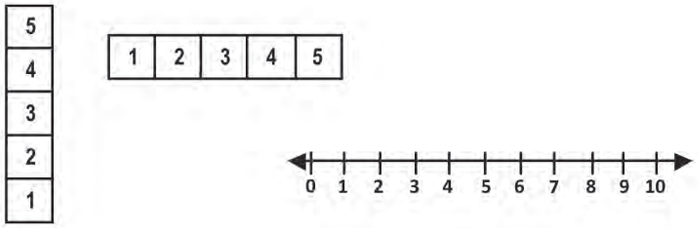
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.13 **Tlhakanyo le tloso**	Tlhatlhamano ya dipalo: 1 -20 • Tlhakanya go fitlha ka 20 • Go ntsha go tswa mo 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatiso ka kgolagano ya dipalo go fitlha ka 10	Tlhatlhamano ya dipalo: 1 -5 • Go tlhakanya go fitlha ka 5 • Go ntsha go tswa no go 5 • Ikatisa ka kgolagano ya dipalo go fitlha ka 5	**Dikgolagano tsa dipalo** Mo kgweditharong e, barutwana ba ikatisa ka kgolagano ya dipalo tse di fitlhang ka 5. Seno se ka bontshwa ka ditshwantsho le ka dipalo tsa dipolelo ba dirisa mefuta e e farologaneng ya ditshwantsho. Go tlhakanya **Sekao:** *Go dira ka 5 kgotsa go iponela ditsala di le 5 ba dirisa ditshwantsho le dipalo* Tshasa mebala mo dikhutlong go dira 5 Sekao: _____ le _____ di dira 5 _____ le_____ di dira 5 _____ le_____ di dira 5 _____ le_____ di dira 5 **Puo ya go tlhakanya le go tlosa** Barutwana ba tshwanetse go ikatisa gape ka puo ya go tlhakanya le go tlosa. **Tlhakanyo:** Go tlhakanya, le go oketsa ka , go kopanya,gotlhe, dira, palogotlhe **Go tlosa:** Go tlosa tsaya sengwe, pharologanyo, magareng, nnye,fokoditswe ka Mo Kgweditharong 2, barutwana ba tla “fetolela” puo ya go tlhakanya le go tlosa mo matshwaong. Barutwana ba tshwanetse go kgona go tsibogela mefuta ya ditaelo tse di latelang : • Oketsa ka 3 go feta • Tlhakanya 1 go feta • Tlosa 3 • Oketsa ka 1 go feta • Oketsa ka 3 le 2 go feta • 4 tlosa 2 • 3 tlhakanya le 1	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.16 **Dipalo tsa tlhogo**	**Dikgopolo tsa dipalo: tlhatlhamano ya 20** • Rulaganya setlhopha sa dipalo tse di neilweng tse di kgethilweng. • Tshwantshanya dipalo tsa go fitlha ka 100 mme o bue gore ke efe e e fetang /e ntsi kgotsa e nnye. • Itse gore ke palo efe e e leng 1 go feta kgotsa e e leng nnye ka 1 go na le palo e e neilweng. • Itse gore ke palo efe e e leng 2 go feta kgotsa e e leng nnye ka 2 go na le palo e e neilweng. • Itse gore ke palo efe e e fetang kgotsa e e leng nnye ka 10 mo palong e e neilweng. **Gopola ka bonako:** • Kgolagano ya dipalo tsa go fitlha ka 10 • Gopola dintlha tsa go tlhakanya le tsa go ntsha tsa go fitlhela ka 10	**Dikgopolo tsa dipalo: tlhatlhamano ya 5** • Rulaganya setlhopha sa dipalo tse di neilweng tse di kgethilweng. • Tshwantshanya dipalo tsa go fitlha ka 10 mme o bue gore ke efe e e fetang /e ntsi kgotsa e nnye. • Itse gore ke palo efe e e leng 1 go feta kgotsa e e leng nnye ka 1 go na le palo e e neilweng. • Itse gore ke palo efe e e leng 2 go feta kgotsa e e leng nnye ka 2 go na le palo e e neilweng.	Nako ya dipalo tsa tlhogo e godisa barutwana' mo: • Kutlo ya dipalo e e tseneletseng; • Puo ya dipalo; • Dikgono tsa go batla mabaka; le • Dikgono tsa theetso. Ka nako ya dipalo tsa tlhogo, barutwana ba tshwanetse go newa tšhono ya go tlhalosa mekgwa. Nako ya dipalo tsa tlhogo e aga temogo ya dipalo (ba utlwe dipalo sentle) mme ba simolole go ruta barutwana gore ba dire jang gore ba dire dipalo ka go temeka. Palo 5 ga e sa tlhola e le palo fela. Sekao, mo palong 4, barutwana ba tshwanetse go itse gore: • E tla mo morago ga 5; • E tla pele ga 6; • E ka amanngwa le didiriswa di le 5; • Ba ka kwala matshwao; le • Ba ka kwala mainapalo. **Dikgopolo/dikakanyo tsa palo** Dikao tsa dipotso le ditirwana tse di ka bodiwang le tse di ka dirwang: • Ithute go ema ka mola mme o botse: ke mang wa ntlha, wa bobedi, wa boraro kgotsa wa bofelo? • Ke efe e e nnye, 3 kgotsa 5? • Ke efe e e ntsi, 2 kgotsa 4? • Nneye palo e e magareng ga 1 le 3, • Nneye palo e e magareng ga 2 le 5. A go na le palo e le nngwe fela? • Baya dikarata tse tsa dipalo ka thulaganyo go tswa mo go palong e nnye go fitlha go e kgolo/tona. Dipotso tsa go bala di ka bodiwa: • Simolola ka 3 mme ba bale go ya kwa pele ka bongwe go fitlha ka 10.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDITHARO 1	DINTLHA DINGWE TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	
1.16 **Dipalo tsa tlhogo**	**Ditogamaano tsa tlhaloganyo** Dirisa ditogamaano tsa go balela go tlhakanya le go ntsha ka nonofo: • Baya palo e kgolo pele gore ba bakgone go balela kwa pele le kwa morago. • Molapalo • Koketsopedi le kgaog-anyo ka bogare. • Go aga le go thuba/ tlhatlhamolola	**Dikgopolo tsa dipalo: tlhatlhamano ya 5** ▯ Rulaganya setlhopha sa dipalo tse di neilweng tse di kgethilweng. ▯ Tshwantshanya dipalo tsa go fitlha ka 10 mme o bue gore ke efe e e fetang /e ntsi kgotsa e nnye. ▯ Itse gore ke palo efe e e leng 1 go feta kgotsa e e leng nnye ka 1 go na le palo e e neilweng. ▯ Itse gore ke palo efe e e leng 2 go feta kgotsa e e leng nnye ka 2 go na le palo e e neilweng.	Nako ya dipalo tsa tlhogo e godisa barutwana' mo: • Kutlo ya dipalo e e tseneletseng; • Puo ya dipalo; • Dikgono tsa go batla mabaka; le • Dikgono tsa theetso. Ka nako ya dipalo tsa tlhogo, barutwana ba tshwanetse go newa tšhono ya go tlhalosa mekgwa. Nako ya dipalo tsa tlhogo e aga temogo ya dipalo (ba utlwe dipalo sentle) mme ba simolole go ruta barutwana gore ba dire jang gore ba dire dipalo ka go temeka. Palo 5 ga e sa tlhola e le palo fela. Sekao, mo palong 4, barutwana ba tshwanetse go itse gore: • E tla mo morago ga 5; • E tla pele ga 6; • E ka amanngwa le didiriswa di le 5; • Ba ka kwala matshwao; le • Ba ka kwala mainapalo. **Dikgopolo/dikakanyo tsa palo** Dikao tsa dipotso le ditirwana tse di ka bodiwang le tse di ka dirwang: • Ithute go ema ka mola mme o botse: ke mang wa ntlha, wa bobedi, wa boraro kgotsa wa bofelo? • Ke efe e e nnye, 3 kgotsa 5? • Ke efe e e ntsi, 2 kgotsa 4? • Nneye palo e e magareng ga 1 le 3, • Nneye palo e e magareng ga 2 le 5. A go na le palo e le nngwe fela? • Baya dikarata tse tsa dipalo ka thulaganyo go tswa mo go palong e nnye go fitlha go e kgolo/tona. Dipotso tsa go bala di ka bodiwa: • Simolola ka 3 mme ba bale go ya kwa pele ka bongwe go fitlha ka 10.	

Mophato 1 KGWEDITHARO 1 2. Dipaterone,Mediriso le Alejebera				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa kgweditharo 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako (mo thulaganyetsong ya ura le metsotso e le 24)**
2.1 **Dipaterone tsa Jeometeri**	**Kopololo, katoloso le tlhaloso** Kopolola,atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didi-riswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshelong jo boswa jwa letsatsi ka letsatsi • Go tswa mo ngwaoboswa ya rona	**Kopololo le katoloso** Go kopolola le go atolosa dipaterone tse di bonolo ka go dirisa: • Di diriswa tse dikgongwang • Ka go thala(sekao:ka go di dirisa mebala le dipopego)	**Go kopolola paterone go thusa barutwana go bona le lemoga tatelano ya gore paterone e dirwa jang.** **Go atolosa paterone go thusa barutwana go netefatsa gore ba tlhalogantse sentle tatelano ya paterone.** Barutwana ba ka kopolola le go atolosa dipaterone tse di dirilweng ka didiriswa tse dikgongwang le pele ba kalokologa go dirisa dikeraeone le pensile go simolola go kopolola le go atolosa go thala dipaterone. Dipaterone di ka dirwa ka didiriswa tse di bonwang letsatsi ka letsatsi mo diphaposing bo rutelo jaaka dibadisi,mokgwaro,lebokoso la mokgwaro,dipopego tsa digeometiri,ditalama/dibaga,ditoloki tsa tlhale,mabokoso,dikgwele le dikerayone le pensele jalo le jalo.Barutwana b a ka dira di diriswa ka letsopa/seloko kgotsa tlhama/tege ya go tshameka tsotlhe tse di ka dirisiwa go bopa dipaterone. Mo mophatong wa 1 barutwana baka tsepama mo dipateroneng tse dipopego/di diriswa di boelediwang ka mokgwa o o tshwanang. Sekao 1: Mo dipateroneng tse dinngwe bogolo jwa di didiriswa mo ditlhopheng bo a farologana,fele ditlhopha di boelediwa ka mokgwa o o tshwanang. Sekao 2: Dipaterone di ka dirwa ka go dirisa sediriswa se le senngwe mme se fetolo mebala nako nngwe le nngwe. Sekao 3: Mo dipateroneng tse dinngwe didiriswa tse di farologaneng di ka dirisiwa go dira ditlhopha,mme ditlhopha tsa di diriswa di ka boelediwa gangwe le gape 	Thuto1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako (mo thulaganyetsong ya ura le metsotso e le 24)
2.1 **Dipaterone tsa Jeometeri**	**Kopololo, katoloso le tlhaloso** Kopolola,atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshelong jo boswa jwa letsatsi ka letsatsi • Go tswa mo ngwaoboswa ya rona	**Kopololo le katoloso** Go kopolola le go atolosa dipaterone tse di bonolo ka go dirisa: • Di diriswa tse dikgongwang • Ka go thala(sekao:ka go di dirisa mebala le dipopego)	Go thusa barutwana ba mophato 1 go bona gore ke setlhopha sefe se sentseng se boelediwa,go botlhokwa go baya setlhgopha sengwe le sengwe mo pampering tse di fapaaneng kgotsa di bonagale mo bolokong e lenngwe mo pampiri Sekao 4: Dipaterone di ka dirwa ka go boeletsa ditlhopha tsa di diriswa.Setlhopha se ka dirwa ka di didiswa tse di tshwanang di beilwe mo maemong a a farologaneng. Go dira dipaterone ke karolo e e botlhokwa ya thuto e e kwa tlase go diragala fela jalo ka puo.Dikgono tsa botshelo le dipalo. Sekao: Dipaterone ke karolo ya dipina le mmino o monngwe,morethetho,mmino gape le botaki jwa pono. Go na le ditšhono mo barutwaneng tsa go ikatisetsa dikgono tsa paterone ya pono tse ba di dirisang mo dipalong fa ba ithuta ka dikgono tsa botshelo segolo se tonna fa ba dira/lokela dibaga kgotsa go thala dipaterone.	Thuto1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako (mo thulaganyetsong ya ura le metsotso e le 24)
2.2 **Dipalo tsa dipaterone**	**Kopololo, katoloso le go tlhalosa** Kopolola, atolosa le go tlhaloso dipalo tse di bonolo go ya ka tatelano go tswa ka bonnye go fitlha go 100. **Itlhamele dipaterone ka bowena** Itlhamele dipaterone ka bowena tsa dipalo	**Kopololo, katoloso le go tlhalosa** Kopolola, atolosa le go tlhaloso dipalo tse di bonolo go ya ka tatelano bonnye go fitlha ka 20. Tatelano e tshwanetse go bontsha go balela kwa pele le morago mo: bonngweng go simolola ka palo e nngwe le nngwe magareng ga 1 le 20	Mo Kgatong ya Motheo , dipaterone tsa dipalo di aga kgolo ya dikakanyo tsa dipalo mo barutwaneng.Dipalo tsa dipatorone digolagantswe le matshwao a dipalo le kamano ya tsona. Tatelano ya dipalo e ka golaganngwa le go bala.Tatelano ya dipalo e ka kopangwa le go godisa bokgoni jwa go bala jwa go bala.Jaaka bokgoni le kgolo ya barutwana di fetoga le tatelano ya dipalo e tla fetoga. Fa barutwana ba bala ka molomo ba ka bontshiwa tatelano ya dipalo tse di kwadilweng ka tsela tse di farologaneng sekao:  Barutwana ba ka tlatsa jaanong dipalo tse di tlogetsweng tse di neetsweng ka mokgwa o o netsweng ka tatelano e e fa godimo. Gopola le gale gore barutwana b aka kwala dipalo go fitlha ka 5.barutwana baka nne ba tlatsa dipalo tse di tlogetsweng ka molomo le go dirisa dikarata tsa dipalo.Lebelela dintlha tse di tlhalositsweng,di bapisitsweng le gorulagangwa. **Sekao 1**: Patlisiso ya palopapetlana ya dipalo 1 2 ___ 4 5 6 ___ 8 **Sekao 2:**Tatelano ya dipalo Kwa bofelong jwa kgweditharo, tlhatlhamano ya dipalo e tshwanetse go fitlha 20.Barutwana b aka dira ka tatelano gotlhe ya go tloga ka 1-20 kgotsa karolonngwe ya tatelano. **Sekao 3**: Mola palo. 	Dithuto 3

MOPHATO 1 KGWEDITHARO 1 3. BOALO LE DIPOPEGO(DIPALO-POPEGO)				
DITLHOGO	**DIKGOPOLO LE DIKGONO: TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA**	**DIKGOPOLO LE DIKGONO: TSEPAMISO MO KGWEDI THARO 1**	**DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA**	**BOLEELE JWA NAKO** **PAKATHUTO YA URA LE METSOTSO E LE 24**
Maemo, Kitsiso le dikgopolo	**Maemo a puo** Tlhalosa kemo le kamano ya sediriswa mo go se sengwe sekao fa go dimo ga,mo pele ga,mo morago ga,molema,moja,godimo,tlase,go bapa le. **Kemo le pono.** Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe **Kemo le dikaelo/ditaetso** • Sala morago ditaelo go tsa-maya mo phaposing • Sala morago ditaelo/dikaelo go bapisa sediriswa le se sengwe.Tsenya pensile mo lebokosong	**Maemo a puo** Tlhalosa ya kemo le kamano ya sediriswa mo go se sengwe sekao fa go dimo ga,mo pele ga,mo morago ga,molema,moja,godimo,tlase,go bapa **Kemo le pono.** • Go dirisa puo ya kemo e a e ithutileng fa a sala ditaelo morago • Sala morago ditaelo go tsa-maya mo phaposing • Sala morago ditaelo/dikaelo go bapisa sediriswa le se sengwe.Tsenya pensile mo lebokosong	**Maemo a puo** Maemo a puo a tshwanetse go itsisewe ka mokgwa wa tiriso ya didiriswa tse di akaretsang barutwana mo mminong le metshameko e e tsamaisang mmele .Se se ka dirwa fa go rutwa mo phaposi yotlhe kgotsa go rutwa ga ditlhopa tse di tsepameng.Tsitsinyo ke gore go fediwe dipakathuto tse pedi mo thutong ka ga boemo/maemo mo kweditharong ya 1,mme tswelela go itsise le go katisa mafoko a thuto kemo mo phaposing ka nako ya go rutwa ga ditlhopa tse tsepameng le phaposi yotlhe.Maemo a puo e ka dirwa ka nako ya pakathuto ya thuta-puo le dikgono tsa botshelo. Go mosola go ruta maemo a mafoko ka bo bedi ka nako e le nngwe sekao godimo le tlase; moteng le kwa ntle. Mosola wa kemo ya mafoko: molema,maja kwa pele/ morago kwa morago,mo pele ga mo godimo/fa tlasa mo teng/kwa ntle fa tlase/godimo tlase/godimo gaufi/kgakala magareng Puo ya thuto kemo/boemo e ka tiisiwa ka ditiro tsa go thala,go tshasa mmala le go bapisa/nyalanya sethalo le mafoko **Kemo le dikaelo** Santlha barutwana ka ka ithuta puo ya thuto kemo mme ba dirise kitso eo go: • Ditaelo go tsamaisa kgotsa go bapisa di diriswa go ya ka kamano le tse dingwe.Sekao go baya dikerayone tse di nyalanang le dipadisa • Ditaelo go itsamaisa mo phaposing.Sekao tla mo pele ga phaposi,ema fa thoko ga setulo sa gago,tlola setshola matlakala j.j	Thuto 2

DITLHOGO	DIKGOPOLO LE DIKGONO: TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	DIKGOPOLO LE DIKGONO: TSEPAMISO MO KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO PAKATHUTO YA URA LE METSOTSO E LE 24
3.2 **Didiriswa tsa tekanyo-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong. • Dibolo(dikgolokwe) • Sebopego sa lobokoso(porisime). **Dipopego tsa sediriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Mmala • Didiriswa tse di kgokologang. • Didiriswa tse di relelang **Ditiro tse di tsepameng**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe) • Sebopego sa lobokoso(porisime **Dipopego tsa sedirwa/didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Mmala **Ditiro tse di tsepameng** Lemoga le go aga didiriswa tsa tekanyetsotlhakoretharo o dirisa material wa diangwa jaaka diboloko tse di agang,didiriswa tsa poeletso le dilwana tsa go aga.	Go ruta barutwana go latela dikaelo go tshwanetse go rutwa ka mokgwa wa tiriso mo barutwana ba itirisang kgotsa ba nyalanya di diriswa go ya ka ditaelo Diro e ntsi ya dipopegotlhakoretharo(3-D)mo mophatong wa 1,e tshwanetse go dirwa ka di diriswa mo phaposing.Re itemogela lefatshe ka ka mokgwa wa tlhakoretharo,ka jalo go ruta ka di diriswa-popego go thusa barutwana go aga le go oketsa kitso e ba nang le yona Barutwana ba bantsi ba itemogela mathata ka go ranola dipopegotlhakoretharo go tswa mo ditshwantshong.Go dira ka di diriswa-popego go thusa barutwana go ranola ditshwantsho tsa jeometeri.Fa o na le d i diriswa popego o ka di fetola go di lebelela go tswa mo matlhakoreng a a farologaneng.O ka bona gore e lebega jang go tswa kwa tlase le kwa morago. Fa o nale ditshwantsho,o tshwanetse go ikakanyetsa dikarolo tse di sa bonaleng.Se ga se bonolo mo barutwaneng ba ba nnye.Fa barutwana ba neetswe thanolo ya setshwantsho ntle le go se bona kgotsa go se tshola,go a go nna thata go tlhaloganya dipopego tsa sediriswa popego **Kago ka didiriswa tsa popegotlhakoretharo** Barutwana ba simoloal ka tshameko e e gololosegileng ka mefuta e e farologaneng le go aga dilo tse ba di ikgethelang,Se se ka dirwa nako e e tsepamedisitsweng moithuti. Dirisa dilo tse di kgonang go dirisiwa gape jaaka lebokoso la mokgwaro kgotsa diboloko go dira sebopego jaaka terena,kgomo roboto j.j.Barutwana ba ka dira khopi ya setshwantsho ka nako e e totobetseng.Go botlhokwa go boisana le barutwana gore goring go dirisiwa mefuta mengwe ya dipopego.Se se thusa barutwana go tsepamisa mogoplo mo dipopego tsa popegotlhakoretharo.Sekao fa tora/torio e agilwe ka mabokoso a mokgwaro kgotsa diboloko,o ka ba botsa gore a o ka aga torio ka dikgwele tsa maoto fela?Ba tshwanetse go tlhalosa dikarabo tsa bona	Thuto 3

DITLHOGO	DIKGOPOLO LE DIKGONO: TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	DIKGOPOLO LE DIKGONO: TSEPAMISO MO KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO PAKATHUTO YA URA LE METSOTSO E LE 24
3.2 **Didiriswa tsa tekanyo-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong. • Dibolo(dikgolokwe) • Sebopego sa lobokoso(porisime). **Dipopego tsa sediriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Mmala • Didiriswa tse di kgokologang. • Didiriswa tse di relelang **Ditiro tse di tsepameng**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe) • Sebopego sa lobokoso(porisime **Dipopego tsa sedirwa/didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Mmala **Ditiro tse di tsepameng** Lemoga le go aga didiriswa tsa tekanyetsotlhakoretharo o dirisa material wa diangwa jaaka diboloko tse di agang,didiriswa tsa poeletso le dilwana tsa go aga.	**Temogo le naya maina a dibolo(kgolokwe) le diporisime** Barutwana ba tlhaola le go tlhalosa popego ya dibolo le mabokoso Barutwana ba tlhalosa di diriswa ponego tsa letsatsi le letsatsi ka go bua gore a dibopegile jaaka bolo kgotsa lebokoso sekao sekena se bopegile jaaka lebokoso,namone e bopegile jaaka bolo. Go botlhokwa gore barutwana ba bone le go dira ka mefuta e e farologaneng ya e e tshwanang le bolo le lebokoso. Barutwana ba tshwanetse go neelwa di diriswa tse di kgolokwe tse di farologaneng sekao dikgwele tse di sa lekaneng ka bogolo,dinamone,dimabole.j.j Barutwana ba tshwanetse go neelwa di diriswa tse di tshwanang le porisimo sekao diboloko,setena le mabokoso a bogolo jo bo sa lekaneng Barutwana ba tlhaola didiriswa tse di bopegileng jaaka bolo,lebokoso fa ba neetswe kgobokanyo ya didiriswa.Barutwana ba ka neela maina a tse di bopegileng jaaka lebokoso mo phaposing le dira tse di bopegileng jaaka bolo kgotsa lebokoso ba dirisa mmopa/taka kgotsa tege e e tshamekang **Go tshwantsha le go tlhalosa dipopegotlhakoretharo:bogolo** Barutwana ba tshwantsha bogolo jwa dipopego tse di tshwanang • Rulaganya dibolo go ya ka bogolo • Dirisa puo(tlotlofoko) ya bogolo go tshwantsha diponagalo “leboko-so le legolo mo bolong,gonne nka tsenya bolo mo lebokoseng” **Go tlhalosa dipopegotlhakoretharo:Mmala** Barutwana ba bua ka mmala wa sebopego le go tlhaola dibopego go ya ka mmala. Go tlhaola le go naya dipepego maina le mmala wa tsona,tshwantsho ya bogolo e ka dirwa ka nako ya go ruta dipaterone **Tiro kwalo** Le fa thuto ya didiriswa tsa dipopegotlhakoretharo e dirwa kamokgwa wa tiriso,tiro e tshwanetse go tiisiwa ka tiro-kwalo	Thuto 3

DITLHOGO	DIKGOPOLO LE DIKGONO: TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	DIKGOPOLO LE DIKGONO: TSEPAMISO MO KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO PAKATHUTO YA URA LE METSOTSO E LE 24
3.2 **Didiriswa tsa tekanyo-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong. • Dibolo(dikgolokwe) • Sebopego sa lobokoso(porisime). **Dipopego tsa sediriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Mmala • Didiriswa tse di kgokologang. • Didiriswa tse di relelang **Ditiro tse di tsepameng**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe) • Sebopego sa lobokoso(porisime **Dipopego tsa sedirwa/didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Mmala **Ditiro tse di tsepameng** Lemoga le go aga didiriswa tsa tekanyetsotlhakoretharo o dirisa material wa diangwa jaaka diboloko tse di agang,didiriswa tsa poeletso le dilwana tsa go aga.	**Puo** Go mosola go godisa bokgoni jwa barutwana jwa go bua ka dipopegotlhakoretharo • Puo ka ga bogolo:tonna,tonnanyana,kgolo,nyenyane,nyenyane go feta,nyenyane thata • mmala • **Puo ka ga didiriswa,mabokoso,dibolo(barutwana gab a solofel-we go itse bokao jwa dikgolokwe le porisime)** • Puo ya temo go tlhalosa kago **Sekao** - fa go dimo ga,fa tlase - morago,fa pele - gobapa,fa tlhoko - fa tlhase, go feta - go bapa,magareng - moteng, kwa ntle Puo ka bogolo le mmala di ka godisiwa ka go ruta thutapuo le dikgono tsa botshelo mme di dirisiwe mo thutong ya dipalo.Puo ka ga boemo le jona e ka ka go ruta thutapuo le dikgono tsa botshelo mme di dirisiwe mo thutong ya dipalo.	Thuto 3

MOPHATO 1 KGWEDITHARO 1 TEKANO				
DITLHOGO	**DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA**	**TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI THARO 1**	**DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA**	**NAKO** Mo 2 thutong ya ura le metsotso e le 24
4.1 **Nako**	**Neeletsano ya nako** Puisano ka neeletsano ya nako • Go rulaganya ditiragalo tsa gale gotswa mo botshelong jwa bone • Go tshwantsha boleele jwa nako ba dirisa puo jaaka bole elenyana,bokhutsane,bonako,bonya • Go rulaganya ditiragalo go dirisiwa puo jaaka maabane,gompijeno,kamoso **Go buisa nako** • Go tlhalosa fa sengwe se diragala go dirisiwa puo sekao mo mosong,thapama, maitsiboa,pele,thari • Go raya maina le go rulaganya ka tatelano malatsi a beke • Go raya maina le go rulaganya ka tatelano dikwedi tsa ngwaga • Go baya malatsi a botsalo mo alemanakeng	**Neeletsano ya nako** Talk about passing of time Puisano ka neeletsano ya nako • Go rulaganya ditiragalo tsa gale gotswa mo botshelong jwa bone • Go tshwantsha boleele jwa nako ba dirisa puo jaaka bole elenyana,bokhutsane,bonako,bonya • Go rulaganya ditiragalo go dirisiwa puo jaaka maabane,gompijeno,kamoso **Go buisa nako** • Go tlhalosa fa sengwe se diragala go dirisiwa puo sekao mo mosong,thapama,maitsiboa,pele,thari • Go tlhaola le go rulaganya ka tatelano malatsi a beke • Go raya maina le go rulaganya ka tatelano dikwedi tsa ngwaga • Go baya malatsi a botsalo mo alemanakeng	Barutwana ba tshwanetse go ithuta go bua ka • tatelano ya ditiragalo le . • Boleele jwa nako Bontsi jwa tiro bo diragala tsatsi le letsatsi ka nako ya go ruta phaposi yotlhe kgotsa nako e ekobiseditsweng ditlhopha tsa go ruta.barutwana ba bua le go araba dipotso ka dilo tse di diragalang, ba dirisa puo jaaka mo mosong,thapama,maitsiboa,pele,le thari **Neeletsano ya nako** Barutwana ba rulaganya ka tatelano ba dirisa puo jaaka maabane,gompijeno,kamoso Barutwana ba tshwantsha boleele jwa nako go dirirsiwa puo jaaka bole elenyana,bokhutsane,bonako,bonya barutwana ba bua ka go rulaganya ditiragalo tsa gale gotswa mo matshelong a bone.Ba rulaganya ditshwantsho jaaka • Dikgato tsa go dira sametshise kgatsa kopi ya tee • senepe se sesupang lesea le gola go nna motho yo mogolo • tshekothelo ya diphologolo jaaka lee go nna koko kgotsa lee go nna segwagwa kgotsa lee go nna serurubele le • ditiragalo tsa galo tsa letsatsi(go tsoga,go nna kwa sekolong,go tshameka go ja dijo tsa maitsibowa,go robala) **Go buisa nako** • Barutwana ba ithuta malatsi a beke ka dipina le diraeme.Se ke ikatiso ya tsatsi leletsatsi • Malatsi a botsalo a a maleba a beiwa mo alemanakeng • Barutwana ba ithuta dikgwedi tsa ngwaga ka dipina le diraeme	thuto 2

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	NAKO Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya e seng ka tlwaelo** • Go tshwantsha le go rulaganya boleele,bodimo le bophara jwa didiriswa tse pedi kgatsa go feta ka go se baya fa thoko ga se sengwe • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,moleele sephara • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go dirisiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/kelo ka mokgwa o o sa tlwaelesegang	**Go lekanya e seng ka tlwaelo** • Go tshwantsha le go rulaganya boleele,bodimo le bophara jwa didiriswa tse pedi kgatsa go feta ka go se baya fa thoko ga se sengwe • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,moleele sephara	Go lekanya mo mophatong 1go dirwa e seng ka tlwaelo.Ga godirwe go lekanya ka boleele go dirirsiwa kelo ya kemo Go atlenegisiwa gore thuto ya dipalo e tsepame mo boleeleng bonnye ga bedi ka kgweditharo(Kgweditharo 1 le 3)Tsepamo mo kgweeditharo 1 e ka nna mo papiso mme mo kgweditharo 3 barutwana ba ka dira ka kelo ya tekanyo e e e sa tlwaelegang.Barutwana ba ikatisa le go tiisa dikgopolo tse ka nako ya moithuti ka nosi go ralala ngwaga **Papiso e elebaneng le boleele jwa didiriswa** Go nna lekgolo ya kitso boleele le puo. Barutwana ba simolola go nagana le go bua ka boleele ka go bapisa di diriswwa tse pedi(setshwantsho sa didiriswa tse pedi) ka diponagalo tse di bonagalang tsa boleele **Sekao:** • Karolo ya thudi e e telele le e e khutshwane • Setlhare se se telele le se sekhutsane • molapo o o atlhameng le o mosesane Barutwana ba ka dira kgotsa go thala dikai jaaka • go dirisa seretse kgotsa tege e e tshamekang go dira noga e e telele le e e khutsane • go dirisa diboloko go dira torio telele le e khutsane • go thala morutabana yo moleele le yo mokhutshwane Fa barutwana ba setse ba kgona go bua ka boleele ka phapaano,ba ka itsesiwa puo e e nt□wa ya papiso,sekao “ke dirile terene e e telele mme Neohadi o dirile e e khutshwane” Go bapisa boleele ka go baya sediriswa go bapa le se sengwe	Thutong 2

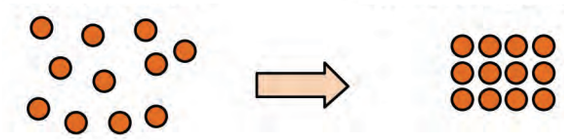
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	NAKO Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya e seng ka tlwaelo** • Go tshwantsha le go rulaganya boleele,bodimo le bophara jwa didiriswa tse pedi kgatsa go feta ka go se baya fa thoko ga se sengwe • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,moleele sephara • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go dirisiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/kelo ka mokgwa o o sa tlwaelesegang	**Go lekanya e seng ka tlwaelo** • Go tshwantsha le go rulaganya boleele,bodimo le bophara jwa didiriswa tse pedi kgatsa go feta ka go se baya fa thoko ga se sengwe • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,moleele sephara	Fa barutwana ba kgona go bua ka boleele ka phetelelo (telele, khutshwane j.j) le go bapisa boleele jwa didiriswa tse di sa tshwaneng ka pono ya ntlha,ba ka tswelela ka dikai tse ba kgonang go di lemoga ka pono ya ntlha go tlhokega go di bapisa. Sekao : • go bona gore ke ofe wa bana ba ba bedi yo moleele fa ba eme ka mekotla • go bapisa dikerayone go lemoga e ekhutshwane Barutwana ba tshwanetse go neelwa ditshono go tshwantsha dikai tse pedi tsa didiriswa jaaka matlhoka,diphensele,matlhaka a go nwa, boleele jo bo farologaneng jwa dithudi,dipampiri j.j Ditshwantsho tsa didiriswa tse pedi di ka bapisiwa le go lekalekangwa fa di lolamisiwa kwa godimo kgotsa kwa tlase Barutwana ba ka tswelela go bapisa le go rulaganya didiriswa tse pedi kgotsa tse tharo.Se itsewe jaaka serriation • ditlhopa tsa barutwana ba eme ka mekotla ka bobedi gore ba eme ka mola go tloga ka yo mokhutshwane go fitlha go yo moleele • Go dira mola wa boraro kgotsa go feta go tswa go bokhutshwaneng go fitlha go botelele,bosesane kgotsa boatlhamo.Didiriswa di akaretsa diphensele,dikerayone,mabotlolo,ditlhoka,ditlhako j.j Barutwana ba nna le kgolo ya boleele le puo ka nako e le yosi go tlhalosa boleele.se ga se tlhoke dipalo ,e ka dirwa pele mo tshimologong ya kgweditharo 1pele barutwana ba tiisa kitso ya dipalo le diopereisene go fitlha kwa go 5 Lemororo go lekanya e le tiro ya bokgoni jwa tiriso,barutwana ba tshwanetse ba dira ditiro kwalo tse di ka tsenyeletsang go thala le go tshasa mmala gore ba ikatise go dirisa kerayone le go kala fa ba lekanya	Thutong 2

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	NAKO Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya boima go dirisiwa sekalatekanyo le tekanyo e e sa thomamang jaaka diboloko,setena j.j • Go dirisa puo ga bua ka tshwantshiso sekao bofefo, thata, bofefonyana, thatanya • Tlhalosa boima jwa didiriswa ka go bala le go supa boima jwa tsona le metso ka mokwa oo sa tlhomamang	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya boima go dirisiwa sekalatekanyo le tekanyo e e sa thomamang jaaka diboloko,setena j.j • Go dirisa puo ga bua ka tshwantshiso sekao bofefo, thata, bofefonyana, thatanya	Go lekanya mo mophatong 1 go dirwa e seng ka tlwaelo.Ga gona go kelo/metso kgotsa sediriswa se se dirisiwang fa go dirwa ka boima Go atlenegisiwa gore thuto ya dipalo e tsepame mo boimeng bonnye ga bedi ka kgweditharo(Kgweditharo 1 le 4)Tsepamo mo kgweeditharo 1 e ka nna mo papiso mme mo kgweditharo 4 barutwana ba ka dira ka kelo ya tekanyo e e e sa tlwaelegang.Barutwana ba ikatisa le go tiisa dikgopolo tse ka nako ya moithuti ka nosi go ralala ngwaga **Papiso e e lebaneng le boleele jwa didiriswa** Go nna lekgolo ya kitso boleele le puo. Barutwana ba simolola go nagana le go bua ka boima ka go bapisa di diriswa tse thata le tse di bofefo.Ba leka go tsholetsa sediriswa se se boima le se se bofefo.Se se ka tiisiwa ka go supa le go bapisa dithalo tse di thata le tse di bofefo. Fa barutwana ba kgona go bua ka boimago ka go fapaana,thata le bofefo,barutwana ba ka bapisa di diriswa tse pedi mme ba bue gore ke efe e e thata le gore ke efe e e bofefo.Se se ka dirwa go tshwere sediriswa mo letsogong mme go bapisiwa gore ke efe e boima le gore ke efe e bofefo Barutwana ba tshwanetse go kwala tiro yotlhe e ka nna ka sethalo kgotsa tiro ya go lebaganya. Go bapisa boima go dirisiwa sekalatekano/boima Sekalatekano sa kgwebo se ka dirisiwa,fa se seo,o ka itirela sele sengwe ka go dirisa hangere ya diaparo,kopi ya yogate,marago lebotlolo la 2L (mabotlolo a a tshwanang a kgomarediwa mo matlhakoreng a hangereng • Barutwana ba ka tsenya didiriswa tse di tshwanang mo matlhakoreng oo mabedi a hangere gore motheo/letlase la hangere le nne ka thapamo.se se supa gore boima jwa didiriswa din a le b[oima jo bo lekanang • Barutwana ba bapisa didiriswa ka go di tenya mo matlhakoreng a sekalatekano mme ba bone gore ke dife tse di thata kgota bofefo • Barutwana ba tswelela ka go tsenya didiriswa tse dintsi mo sekalatekano go go bapisa go re ke dife tse dithata le gore ke dife tse dibofefo le gore ke dife tse di nang le boima jo bo tshwanang • Se se ka atolosetswa ka di karolo go mo barutwana ba tlhatlhobang boima jwa didiriswa tse di tsamayang ka bobedi go fitlhela ba kgona go rulaganya ka tatelano tse tharo kgotsa go feta tse di thata kgotsa bofefo	Dithuto di le 2

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	NAKO Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya boima go dirisiwa sekalatekanyo le tekanyo e e sa thomamang jaaka diboloko,setena j.j • Go dirisa puo ga bua ka tshwantshiso sekao bofefo, thata, bofefonyana, thatanya • Tlhalosa boima jwa didiriswa ka go bala le go supa boima jwa tsona le metso ka mokwa oo sa tlhomamang	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya boima go dirisiwa sekalatekanyo le tekanyo e e sa thomamang jaaka diboloko,setena j.j • Go dirisa puo ga bua ka tshwantshiso sekao bofefo, thata, bofefonyana, thatanya	Didiriswa di ka thopiwa go tsenyeleditswe tse di tonna di le bofefo le tse dinnye di le thata sekao:kgetsana ya 250g ya letswai e bapisiwa le lebokoso la 400g la mmadi wa sefitlholo.Se se thusa barutwana go tlhaloganya gore boima bo tsalanya le bogolo/selekayo fa go dirisiwa sediriswa se se tshwanang Barutwana ba nna le kgolo ya boleele le puo ka nako e le nosi go tlhalosa boleele.se ga se tlhoke dipalo ,e ka dirwa pele mo tshimologong ya kgweditharo 1 pele barutwana ba tiisa kitso ya dipalo le diopereishene go fitlha kwa go 5 **Go Kwala** Lemororo go lekanya e le tiro ya bokgoni jwa tiriso,barutwana ba tshwanetse ba dira ditiro kwalo tse di ka tsenyeletsang go thala le go tshasa mmala gore ba ikatise go dirisa kerayone le go kala fa ba lekanya	Dithuto di le 2

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI THARO 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	NAKO Mo thutong ya ura le metsotso e le 24
4.4 **Mothamo, bolumu**	**Go lekanya e seng ka tlwaelo** Go bapisa le go rulaganya boleng jwa seeledi(bolumu)mo ditshoding tse pedi di bapisitswe.Barutwana ba netefatsa ka go tshela mo setshoding sa boraro fa go tlhokega • Go bapisa le go rulaganya boleng jwa seeledi jo setshodi se kgonang go se tshola fa se tladiwa(mothamo) • Tiriso ya puo go bua ka papiso sekao ggo feta, bonnye, tletse, lolea • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go kwala mothamo wa ditshodi ka go dirisa go dirisiwa sekalatekanyo e sa thomamang sekao ,leswana,dikopi j.j • Go tlhalosa mothamo wa ditshodi ka go bala le go supa gore ke metso e kae e ka dirisiwang go tlatsa setshodi sekao :lebotlolo le na le mothamo wa dikopi di le nne.	**Go lekanya e seng ka tlwaelo** • Go bapisa le go rulaganya boleng jwa seeledi(bolumu)mo ditshoding tse pedi di bapisitswe.Barutwana ba netefatsa ka go tshela mo setshoding sa boraro fa go tlhokega • Tiriso ya puo go bua ka papiso sekao go feta, bonnye, tletse, lolea	Mothamo/boteng ke eng? Bolumu ke eng? Mothamo/boteng ke bokgoni jwa setsholo go tshola setshediwa.Bolumu ke sebaka/lebala le sedirisa se kgonang go se nna/tsaya.Lebotlolo le ka nna le mothamo wa dikopi di le nne mme ka dinko tse dingwenenka nna le mothamo fela wa kopi e le nngwe.Barutwana ba mophato wa 1 ga ba tshwanela go itse pharologano marareng a mothamo le bolumu. Go lekanya mo mophatong wa 1 go dirwa e seng ka tlwaelo.Ga gona go kelo/metso kgotsa sediriswa se se dirisiwang fa go dirwa ka boima. Go atlenegisiwa gore thuto ya dipalo e tsepame mo boimeng bonnye ga bedi ka kgweditharo(Kgweditharo 1 le 4)Tsepamo mo kgweeditharo 1 e ka nna mo papiso mme mo kgweditharo 4 barutwana ba ka dira ka tlhotlhwa ya tekanyo e e e sa tlwaelegang.Barutwana ba ikatisa le go tiisa dikgopolo tse ka nako ya moithuti ka nosi go ralala ngwaga **Papiso e e lebaneng le motlhamo /bolumu mo ditshelong (setshola setshediwa)** Go nna lekgolo ya kitso ya bolumu le puo e e dirisiwang. Barutwana ba simolola go nagana le go bua ka bolumu ka go bapisa di diriswa tse pedi gore ke eng se se tshwanang. • tletse le lolea • go feta(kgolo go)/(potlana go)/bonnye • lekana/tshwana Barutwana ba ka tlatsa le go leafatsa setshola ba dirisa metsi kgotsammu j.j.Ka gore ga e tlhoke dipalo, e ka dirwa pele mo tshimologong ya kgweditharo 1pele barutwana ba tiisa kitso ya dipalo le diopereisene go fitlha kwa go 5 **Go Kwala** Lemororo go lekanya e le tiro ya bokgoni jwa tiriso,barutwana ba tshwanetse ba dira ditiro kwalo tse di ka tsenyeletsang go thala le go tshasa mmala gore ba ikatise go dirisa go: • dirisa kerayone kgotsa pensile le • Kwala fa go lekanyetsa	thuto e le 1

MOPHATO 1 KGWEDITHARO 1 GO DIRA KA TSHEDIMOSETSO				
DITLHOGO	**DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA**	**TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1**	**DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA**	**BOLEELE JWA NAKO** Mo thutong ya ura le metsotso e le 24
Go dira ka didiriswa tse di kgobokantsweng				
5.1 **Kgobokanya le go tlhaola didiriswa**	**Kgobokanya le go rulaganya didiriswa** Kgobokanya o rulaganye didiriswa letsatsi le letsatsi	**Kgobokanya le go rulaganya didiriswa** Kgobokanya o rulaganye didiriswa letsatsi le letsatsi **Neela kemedi ya didiriswa tse di kgobokantsweng** Thala setshwantsho sa didiriswa tse di kgobokantsweng **Bua le go bega ka didiriswa tse di kgobokantsweng** • Neela mabaka a gore kgobo-kanyo e tlhaotswe jang Araba dipotso ka: - Tlhaolo e dirilwe jang (Kgato) - tlhaolo ya didiriswa tse di kgobokantsweng di ntse jang(Kumo) • Tlhalosa kgobokanyo le mothalo • Tlhalosa gore didiriswa tse di kgobokantsweng di tlhaotswe jang	Go tlhaola, go tshwantsha le go tlhalosa tlhaolo ya didiriswa tse kgobokantsweng ke dikgono tse di mošola tse barutwana ba di godisang mo mephatong e e kwa tlase ya sekolo (lebelela dintlha ka ga dikgono tsa pele tsa dinomore mo tshimologong ya tshedimosetso ya dintlha) Kgato e, e aga dikgono tse barutwana batla a di dirisang fa ba dira ka tshedimosetso. Barutwana ba ka nna ba newa didiriswa tse di kgobokantsweng, ba bo ba kopiwa go di tlhaola. Sekao, naya ditlhopa tsa barutwana dipadisi tsa mefuta e e tshwanang o ba kope go di tlhaola go ya ka mmala, naya barutwana kgobokanyo ya mefuta e e farologaneng ya dithapo tsa diperekisi, mokgwaro, dikhurumelo tsa dibotlolo, o kopa barutwana mo ditlhopeng go di tlhaola. Morago barutwana mo ditlhopheng ba thala setshwantšho se ba se dirileng. Ka tsela e, barutwana ba kwala se ba se dirileng. Ba araba dipotso tsa ditlhopha. **Sekao** O kokoantse dipadisi tsa gago jang?""Ke dirile setlhopha sa mebala "Setlhopha se segolo sa dibadise e ne e le sa mmala ofe?""Mmala wa me o mogolo wa setlhopa sa dipadisi o ne o le mohibidu" O ne o nale mebala e kae e e farologaneng ya dipadisi"Ke ne ke na le mebala e e farologaneng e le tlhano. Barutwana ba ka nna ba ipatlela didiriswa tsa bona tse ba tla di kgobokanyang. Sekao, barutwana ba ka nna ba kgobokanya matlhare mo patlelong ya sekolo, kgotsa ba tlise ditshelo tsa dijo go tswa kwa gae,	Dithuto di le2
5.2 **Kemedi ya didiriswa tse di kgobokantsweng di tlhaotswe**	**Neela kemedi ya didiriswa tse dikgobokantsweng** Thala setshwantsho sa didiriswa tse di kgobokantsweng			
5.3 **Bua le go beg aka didiriswa tse di kgobokantsweng di tlhaotswe.**	Bua le go bega ka didiriswa tse di kgobokantsweng di tlhaotswe. • Neela mabaka a gore kgobo-kanyo e tlhaotswe jang • Araba dipotso ka: - Tlhaolo e dirilwe jang (Kgato) • Didiriswa tse di tlhaotsweng di lebega jang?(Kumo) • Tlhalosa kgobokanyo le mothalo • Tlhalosa gore didiriswa tse di kgobokantsweng di tlha-otswe jang			

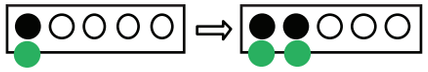
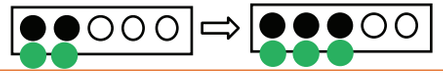
MOPHATO 1 KGWEDITHARO 2 DIPALO, MATSWAO LE DIKGOLAGANO				
DITLHOGO	**DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA**	**TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1**	**DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA**	**BOLEELE JWA NAKO** Mo-thutong ya ura le metsotso e le 24
KATOLOSO YA KGOPOLO YA DIPALO: Bala dipalotlalo				
1.1 **Bala didiriswa**	Bala didiriswa di le 50 ka nepagalo. • Naya phopholetso ya palo ya didiriswa tse di ka netefadi-wang fa di balwa.	Bala didiriswa di le 20 ka nepagalo • Naya phopholetso ya palo ya didiriswa tse di ka netefadi-wang fa di balwa. • Go bala ka go kgobokanya go a rotloediwa	**Pharologanyo ke eng go Kgweditharo 1?** **Mo Kgweditharong 2, go atoloswa go balwa ga dipalo tatelano. Go santse go na le tlhaloganyo tsepamiso ya gore dipaloina di bontsha palo ya didiriswa mo seteng.Barutwana ba bala didiriswa . le mo Kgweditharong ya 2 ba tshwanetse go ithuta go baya di diriswa mo maemong a a maleba fa ba bala gore fa ba lekola dibadisi tsa bona thulaganyo ya tsona e ba thuse go bala bonolo.** **Sekao:** Dibadisi tse e seng tsa ditlhopha Dibadisi tse di rulagantsweng ka ditlhopha  Mo kgweditharong e barutwana tswelela go atolosa dikgono tsa bona tsa go bala le go ithuta: • Go bala gotlhe; • Go tswelela go bala ;. • Motheo wa dipalofoko le go dira ka ditlhangwa kwalwa. Mo kgweditharong 2 barutwana ba simolola:: • Go bala didiriswa tseo di sa kgongweng kgotsa go di tshwara .	

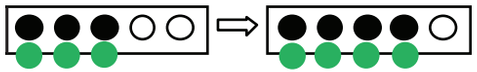
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.1 **Bala didiriswa**	Bala didiriswa di le 50 ka nepagalo. • Naya phopholetso ya palo ya didiriswa tse di ka netefadi-wang fa di balwa.	Bala didiriswa di le 20 ka nepagalo • Naya phopholetso ya palo ya didiriswa tse di ka netefadi-wang fa di balwa. • Go bala ka go kgobokanya go a rotloediwa	**Sekao:** Opa diatla ga 15. Tsholetsa godimo menwana e le 8. **Phopholetso** Phopholetso ya dipalo tsa di diriswa mo ditlhopeng e atolosa ponelopele ya botlhokwa jwa dikgono. E thusa barutwana go lemoga gore a ba nepile mo ponelongpele ya bona.Se se botlhokwa fa ba dira dioporeishene:ba ka itekola go lemoga fa dikarabo tsa bona di nepagetse.Go botlhokwa gore barutwana ba bale dibadisi tse e seng tsa ditlhopha le tse e leng tsa ditlhopha mo dithalong .Leka go bapisa dibadisi tse e seng tsa ditlhopha le tsa ditlhopha ka go lopa barutwana go phopholetsa gore ke efe e e nang le dibadisi tse dintsi.Ba ka phopholetsa palo ya dibadisi mo setshwantshong sengwe le sengwe.B a ka kwala palo ya dibadisi.Jaanong ba ka dibala.Ba ka bapisa phopholetso tsa bona le dipalo.Botsa barutwana gore ba di badile jang.Leka go tlhomamisa fa barutwana bangwe ba badile ka ditlhopha. **Phopholetso** Barutwana ba oketsa kgono ya bona ka go lemoga kgobokanyo e nnye ya di badisi. **Go bala ka ditlhopha** Barutwana ba tlhoka ditlhopha tsa di badisi tsa bo 2,bo 5, le bo 10, gore ba thusiwe go bala ka thulaganyo ya 2 ,5, ;le 10. Di karata tsa dipalo di tshwanetse go bewa mo kgobokanyong ya di badisi go bontsha palo ya di badisi tse di badilweng. Go bala ka ditlhopha go tla baakanyetsa barutwana ikatisanetswa mo kgatong ya magareng. **Metswedi:** Tlhokomelo e e feletseng e tshwanetse go neelwa mefuta ya dithusa thuto tse di tla dirisiwang. • Dithusathuto tse di rulagantsweng,jaaka mogala wa dibadisi tsa dibaga. • Sediriswa sa dibaga(abakhase) sa go ithuta go bala ka ditlhopha tsa bolesome. • Aga dingatana tsa 2,5 le lesome le go bala gotlhe.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.2 **Balela go ya pele le kwa morago**	**Balela go ya pele le kwa morago** • Simolola ka bonngwe go tloga mo palong nngwe le nngwe e e mo magareng ga 0 le 100 • Bosome go tloga mo dikatisong tsa l0 magareng ga 0 le 100 • Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 0 le 100 • Bopedi go tloga mo katisong tsa 2 mo gareng ga 0 le 100	**Balela go ya pele le kwa morago** • Bongwe go tswa mo palong nngwe le nngwe e e mo gare go 0 le 50. **Balela go ya kwa pele:** • **Bosome go tloga go mo katisong ya 10** • **Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 1 le 50** • **Bopedi go tloga mo katisong tsa 2 mo gareng ga 1 le 20**	Pharologanyo ke eng go kgweditharo ya 2,ba rutwana ba balela go 50 ka bonngwe. Ba bala ka thulaganyo ya bo 10, 5, le 2. Go bala ka molomo ba tlola Go tlola ba bala ke leina le lengwe la go bala ka ditlhopha. E thusa godisa kitso e e leng teng ya dipaterone tsa dipalo.Go bala o tlola go rotloetsa barutwana go bala le go akanya ka ditlhopha,go oketsa bokgoni jwa bone.E thusa katoloso ya dikgono phopholetso tsa bona . Go bala ka ditlhopha go ba lemosa kamano gareng ga dipalo tse di sa latelaneng le tse di latelanang.E neela motheo wa dipalo tsa dipaterone le tsa katiso . **Ditirwana tse di tswelelang** Tshitshinyo tse di farologaneng tsa go bala o tlola : • Simolola go bala dipalo tse di rulagantsweng mme o gatelela palo ya bobedi nako le nako.Sekao barutwana ba opa diatla ,ba bolela palo ya bobedi ka lentswe le le kwa godimo Kopa barutwana go bala mme ba balele ka mo pelong palo nngwe le nngwe ya bobedi. Di ka atolosiwa mo barutwaneng ka go bala/ bua palo ya boraro,bonne,kgotsa ya botlhano. • O ka kgaoganya barutwana ka ditlhopha,mme setlhopha sengwe le sengwe se ka bona tshono ya go bua palo e e latelang. Fa o kgaoganya barutwana ka ditlhopha tsa tlhano,sethopha sengwe le sengwe se bale palo ya botlhano. • Laela barutwana go kgoma dikarolo tsa mmele sekao:Go tshwara tlhogo fa o bala nomoro ya ntlha , go fapanya mabogo goama magetla ba bala palo ya bobedi ,ba ipetsa dirope fa ba goeletsa nomoro ya boraro. • Go opa diatla o tsamaisana le mmino o ntse o tlola o bala . **Go bala dibadisi go godisa dikgono tsa go bala ka molomo.** Ditirwana tsa go bala, mo phaposing go godisa dikgono tse di farolo botlhokwa thata ganeng . Fa o itsise ditlhopha tiriso tsa dibadisi golemo bogolo go bala o tlola .	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.2 **Balela go ya pele le kwa morago**	**Balela go ya pele le kwa morago** • Simolola ka bonngwe go tloga mo palong nngwe le nngwe e e mo magareng ga 0 le 100 • Bosome go tloga mo dikatisong tsa l0 magareng ga 0 le 100 • Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 0 le 100 • Bopedi go tloga mo katisong tsa 2 mo gareng ga 0 le 100	**Balela go ya pele le kwa morago** • Bongwe go tswa mo palong nngwe le nngwe e e mo gare go 0 le 50. **Balela go ya kwa pele:** • **Bosome go tloga go mo katisong ya 10** • **Botlhano go tloga mo dikatisong tsa 5 mo magareng ga 1 le 50** • **Bopedi go tloga mo katisong tsa 2 mo gareng ga 1 le 20**	**Ditirwana tse di tswelelang** **Gerite ya Dipalo** Kopa barutwana go ntshofatsa dipalo tse ba di tlhaotseng fa ba bala ka bo 2, bo 5, le bo 10.Botsa gore ba lemogile eng ka dipalo, Fapanya dipalo tse barutwana ba simololang mo go tsona. **Tswelelo mo setlhangweng se se kwalwang** • Molapalo – Barutwana ba kgona go bontsha go tlola ba bala mo molapalong . • Tatelano ya dinomoro – Barutwana ba tshwanetse go feleletsa tatelano e e bonolo ya dinomoro mo bo felong jwa kgweditharo(lebelela diteng tsa dipalo tsa dipaterone.) **Sekao:** • 2, 4, 6; 8 ___ • 5,10,15, 20,___ • 10, 20, 30, 40,__	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.3 **Letshwaopalo le leinapalo**	**Tlhaola,lemoga le go buisa dipalo** • Tlhaola le go buisa letshwao-palo go tlhoga ka 1 go fitlha go 100. • Kwala matshwaopalo go tlhoga go 1 go fitlha ka 20. • Tlhaola,lemoga le go buisa mainapalo go tlhoga go 1 go fitlha go 10 • Kwala mainapalo go tlhoga ka 1 go fitlha 10	**Tlhaola,lemoga le go buisa dipalo** Tlhaola le go buisa letshwaopalo go tlhoga ka 1 go fitlha go 50 • Kwala matshwaopalo go tlhoga go 1 go fitlha ka 20. • Tlhaola,lemoga le go buisa mainapalo go tlhoga go 1 go fitlha go 10 • Kwala mainapalo go tlhoga ka 1 go fitlha 10	**Pharologanyo ke eng go Kgwedi-tharo 1?** Mokgwedi-tharong ya 2 , go itse tatelano ya dipalo ,go buisa le go kwala matshwaopalo le mainapalo go a oketsega. Go bala mo molapalong le mo geriting ya dipalo go neela barutwana katiso ya go tlhaola, go lemoga, bua lego buisa matshwaopalo . Neela barutwana dithuto tse di tswelelang go tsepamisa maikutlo a bona mo mokwalong o o mo tikologong wa matshwaopalo . **Sekao:** • Leba dinomoro tsa matlhare le tsa dibuka . • Tlhaola malatsi a botsalo mo alemanakeng. **Ditirwana tse di tswelelang** • Morutabana o neela ditaelo tse di latelang go bona nomoro , mme barutwana ba dirisa di karata tsa tsekedima go bontsha di karabo tsa bona. - Batla nomoro e e fa pele ga 12 - Batla nomoro e e fa morago ga 12 - Batla nomoro e e fetang 11 ka 3 - Batla nomoro e e kwa tlase ga 14 ka1.	

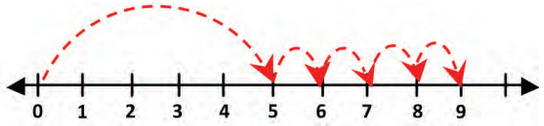
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.4 **Tlhalosa,bapisa le go rulaganya ya dipalo**	**Tlhalosa,bapisa le tatelano ya didiriswa go fitlha ka 20** • **Tlhalosa le go bapisa:**Kgobokanyo ya didiriswa go ya bontsi,bonnye, bontsi go feta bonnye go feta, go lekana le, bontsi jaaka,pharologanyo . • **Tlhalosa le go rulaganya** Kgobokanya didiriswa go tloga go tse dintsi go fitlha go tse di nnye le go tloga go tse di nnye go fitlha go tse dintsi. **Tlhalosa , bapisa le go rulaganya dipalo go fitlha go 20** • **Tlhalosa le go bapisa** palogotlalo go ya ka bonnye go , bogolo go, bontsi go bonnye go go lekana le . • **Tlhalosa le go rulaganya** dipalo : - Go tloga go e nnye go fitlha go e kgolo le go tloga go e kgolo go fitlha go e nnye. - Pele ga , morago ga , fag are / magareng ga , - O dirisa molapalo go tloga go 0 – 20 • **Tlhalosa le go rulaganya** o dirisa puo sekao , pele ga , morago ga mogare ga le mo magareng ga.	**Tlhalosa,bapisa le tatelano ya didiriswa go fitlha ka 10** **Tlhalosa le go bapisa:** Kgobokanyo ya didiriswa go ya bontsi,bonnye, bontsi go feta bonnye go feta, go lekana le , bontsi jaaka,pharologanyo. • **Tlhalosa le go rulaganya** Kgobokanya didiriswa go tloga go tse dintsi go fitlha go tse di nnye le go tloga go tse di nnye go fitlha go tse dintsi. **Tlhalosa , bapisa le go rulaganya dipalo go fitlha go 10** • **Tlhalosa le go bapisa** palogotlalo go ya ka bonnye go , bogolo go, bontsi go bonnye go go lekana le . • **Tlhalosa le go rulaganya** dipalo : - Go tloga go e nnye go fitlha go e kgolo le go tloga go e kgolo go fitlha go e nnye. - Pele ga , morago ga , fag are / magareng ga , - O dirisa molapalo go tloga go 0 – 10 • **Tlhalosa le go rulaganya** o dirisa puo sekao , pele ga , morago ga mogare ga le mo magareng ga.	**Pharologanyo ke eng go Kgweditharo 1 ?** Mo kgweditharong ya 2,barutwana ba tswelela go : • Bapisa le go rulaganya di diriswa ; • Bapisa le go rulaganya dinomoro; le • Go dirisa puo ya papiso le thulaganyo; Mo kgweditharong e barutwana ba tswelela go bapisa le go rulaganya dibadisi. Mo kgweditharong e barutwana ba ka simolola go aga kgolaganyo magareng ga do nomoro ka go tsepama mo go nngwe le pedi go feta le nngwe kgotsa di le pedi le tse pedi kwa tlase . • Fa ba bapisa disete ba tshwanetse go tlhalosa ka gore,"Ke na le dipadisi di le pedi go feta tsa gagwe "kgotsa o na le e le nngwe bonnye go tsa me.. • Fa o bapisa dipalo ba tshwanetse go itse go go bolela ba re: "Nngwe go feta nne ke tlhanokgotsa supa e ntsi gabedi go tlhano" **Go aga kitso ya go feta bonngwe ya kgopolo** Kgopolo ya bontsi go feta le bonnye goke tshimologo ya tlhakanyo le tloso e e sa tlhomamang. E letlelela morutwana go tlhaloganya bogolo jwa palo le thulaganyo ya bogolo jwa dipalo • Laela barutwana go baya palo 1 mo sebakeng sa ntlha se se senang sepe ya letlhomeso la karata ya tlhano. Laela barutwana go baya padisi e le nngwe kgotsa tse pedi fa thoko ga padisi ya ntlha  Botsa: O na le dipadisi tse kae jaanong? Nngwe o bogolo jo bokae go nngwe? • Laela barutwana go baya padisi e le nngwe go feta mo godimo ya 5. 	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.4 **Tlhalosa,bapisa le go rulaganya ya dipalo**	**Tlhalosa,bapisa le tatelano ya didiriswa go fitlha ka 20** • **Tlhalosa le go bapisa:**Kgobokanyo ya didiriswa go ya bontsi,bonnye, bontsi go feta bonnye go feta, go lekana le, bontsi jaaka,pharologanyo . • **Tlhalosa le go rulaganya** Kgobokanya didiriswa go tloga go tse dintsi go fitlha go tse di nnye le go tloga go tse di nnye go fitlha go tse dintsi. **Tlhalosa , bapisa le go rulaganya dipalo go fitlha go 20** • **Tlhalosa le go bapisa** palogotlalo go ya ka bonnye go , bogolo go, bontsi go bonnye go go lekana le . • **Tlhalosa le go rulaganya** dipalo : - Go tloga go e nnye go fitlha go e kgolo le go tloga go e kgolo go fitlha go e nnye. - Pele ga , morago ga , fag are / magareng ga , - O dirisa molapalo go tloga go 0 – 20 • **Tlhalosa le go rulaganya** o dirisa puo sekao , pele ga , morago ga mogare ga le mo magareng ga.	**Tlhalosa,bapisa le tatelano ya didiriswa go fitlha ka 10** **Tlhalosa le go bapisa:** Kgobokanyo ya didiriswa go ya bontsi,bonnye, bontsi go feta bonnye go feta, go lekana le , bontsi jaaka,pharologanyo. • **Tlhalosa le go rulaganya** Kgobokanya didiriswa go tloga go tse dintsi go fitlha go tse di nnye le go tloga go tse di nnye go fitlha go tse dintsi. **Tlhalosa , bapisa le go rulaganya dipalo go fitlha go 10** • **Tlhalosa le go bapisa** palogotlalo go ya ka bonnye go , bogolo go, bontsi go bonnye go go lekana le . • **Tlhalosa le go rulaganya** dipalo : - Go tloga go e nnye go fitlha go e kgolo le go tloga go e kgolo go fitlha go e nnye. - Pele ga , morago ga , fag are / magareng ga , - O dirisa molapalo go tloga go 0 – 10 • **Tlhalosa le go rulaganya** o dirisa puo sekao , pele ga , morago ga mogare ga le mo magareng ga.	Botsa: O na le dipadisi tse kae jaanong? Nngwe o bogolo jo bokae go pedi ?  • Laela barutwana go baya padisi e le nngwe go feta mo letlhomesong la bone la karata ya 5. Botsa dipotso Ask questions: O na le dipadisi tse kae jaanong? Nngwe o bogolo jo bokae go tharo ? Go tlhoka dipadisi tse kae go dira tlhanoHow many counters do you need to make five? Botsa, “O ka mpolelela eng ka palo ya 4?(A e nnye go 5.) O ka mpolelela eng ka palo ya 2? (A3 e nnye go 5.) **Go rulaganya dipalo** Barutwana ba tlhoka go rulaganaya dipalo ba dirisa ditshwano tse di farologaneng. • Kokoanya ditshwano Barutwana ba bapisa setlhopha sa didiriswa tse 9 go sethopha sa didiriswa tse 2 . • Motlhala wa ditshwano Fa barutwana ba rulaganya dipalo ba ka dirisa sekgala mo gare ga dipalo go itse gore ke palo efe e kgolo .sekao, ba tla re:ke 9 e kgolo go 2 gonne 9 o tla morago ga 2. Go rulaganya ga dipalo go ka dirwa mo nakong e e ikemetseng.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.4 **Tlhalosa,bapisa le go rulaganya ya dipalo**	**Tlhalosa,bapisa le tatelano ya didiriswa go fitlha ka 20** • **Tlhalosa le go bapisa:**Kgobokanyo ya didiriswa go ya bontsi,bonnye, bontsi go feta bonnye go feta, go lekana le, bontsi jaaka,pharologanyo . • **Tlhalosa le go rulaganya** Kgobokanya didiriswa go tloga go tse dintsi go fitlha go tse di nnye le go tloga go tse di nnye go fitlha go tse dintsi. **Tlhalosa , bapisa le go rulaganya dipalo go fitlha go 20** • **Tlhalosa le go bapisa** palogotlalo go ya ka bonnye go , bogolo go, bontsi go bonnye go go lekana le . • **Tlhalosa le go rulaganya** dipalo : - Go tloga go e nnye go fitlha go e kgolo le go tloga go e kgolo go fitlha go e nnye. - Pele ga , morago ga , fag are / magareng ga , - O dirisa molapalo go tloga go 0 – 20 • **Tlhalosa le go rulaganya** o dirisa puo sekao , pele ga , morago ga mogare ga le mo magareng ga.	**Tlhalosa,bapisa le tatelano ya didiriswa go fitlha ka 10** **Tlhalosa le go bapisa:** Kgobokanyo ya didiriswa go ya bontsi,bonnye, bontsi go feta bonnye go feta, go lekana le , bontsi jaaka,pharologanyo. • **Tlhalosa le go rulaganya** Kgobokanya didiriswa go tloga go tse dintsi go fitlha go tse di nnye le go tloga go tse di nnye go fitlha go tse dintsi. **Tlhalosa , bapisa le go rulaganya dipalo go fitlha go 10** • **Tlhalosa le go bapisa** palogotlalo go ya ka bonnye go , bogolo go, bontsi go bonnye go go lekana le . • **Tlhalosa le go rulaganya** dipalo : - Go tloga go e nnye go fitlha go e kgolo le go tloga go e kgolo go fitlha go e nnye. - Pele ga , morago ga , fag are / magareng ga , - O dirisa molapalo go tloga go 0 – 10 • **Tlhalosa le go rulaganya** o dirisa puo sekao , pele ga , morago ga mogare ga le mo magareng ga.	**Ditirwana tse di tswelelang** *Go rulaganya dipalo* Barutwana ba rulaganya dikarata tsa dipalo go tloga go 1 go fitlha go 13 go tloga go e nnye go fitlha go e kgolo. Barutwana ba pitikolola dikarata tsa bona. Ba tlhopha karata dingwe le dingwe tse nne,ba dirulaganya go simolola go e nnye go fitlha go e kgolo le go botsa tsala gora e lekole gore a e nepagetse. Fa ba kgona dikarata di le 4 ba ka tlhopha dikarata di le 5.Ba di rulaganye ka tatelano le go kopolola dipalo go simolola ka e nnye go fitlha go e kgolo. **Tirwana e e kwalwang** Barutwana ba tlhoka go tiisa go tlhaloganya ga bona ka go feleletsa ditirwana tsa bona tsa go kwala. **Dikao:** Kwa bokhutlong jwa kgweditharo ba tshwanetse go kgona go feleletsa dipolelopalo tse di tshwanang le tse: 1 go feta 3 ke_____ 1 go feta 4 ke _____ 1 e nnye go 2 ke _____ ____ e kgolo go 4 ka 1 ____ e nnye mo go 3 ka 1	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.6 **Maano a go rarabolola dipalo**	Dirisa dithekeneiki tse latelang fa o rarabolola dipalo le go tlhalosa tharabololo ya dipalo: • Dithusathuto tsa dikgonngwa. Sekao : dibadisi • Ditshwantsho go thala di-palokgang • Go kgobokanya le go arog-anya dipalo • Oketsa gabedi le go hafola • Melapalo	Dirisa dithekeneiki tse latelang fa o rarabolola dipalo le go tlhalosa tharabololo ya dipalo: • Dithusathuto tsa dikgonng-wa.Sekao : dibadisi • Ditshwantsho go thala di-palokgang • Go kgobokanya le go arog-anya dipalo • Koketso gabedi le go hafola □ Melapalo o tshegetswa ke dithusathuto tsa dikgonngwa sekao: Dibaga tse di balwang	**Pharologanyo ke eng mo kgweditharong 1 ?** Mo kgweditharong e barutwanaga ba itsisiwe koketso-gabedi le go hafola lekgetho la ntlha Lebelela dintlha tsa thuto mo karolong ya ntlha. Kwa bofelong jwa kgweditharo barutwana ba simolola go rarabolola dipalofoko go dirisiwa dithekeniki tse di latelang: • Ditshwantshiso le dithusathuo tsa dikgongwa • Go kgobokanya a go aroganya dipalo • Go oketsa gabedi le go hafola • Molapalong **DItshwantshiso kgotsa dithusathuto tsa dikgongwa** Barutwana ba t la tswelela go thala ditshwantsho le go le dirisa dithusathuto tsa dikgonngwa go rarabolola dipalo.Go botlhokwa gore ditshwantsho le ditshwantshiso din ne le dipalo le tsone dipalofoko . **Go kgobokanya le go aroganya** E ke nngwe ya dithekeniki tsa botlhokwa mo kgatong ya motheo. Go dirisa thekeniki e go neela barutwana tshono ya go tlhatlhamolola le kopanya dipalo go thusa gore go palelo e nne bonolo. **Sekao:** 6 + 4 □ 5 + 1 + 4 4 + 15 + 5 □ 10 Thenekeniki e e dirisiwa kgapetsakgapetsa kwa kgatong ya magareng.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.6 **Maano a go rarabolola dipalo**	Dirisa dithekeneiki tse latelang fa o rarabolola dipalo le go tlhalosa tharabololo ya dipalo: • Dithusathuto tsa dikgonngwa. Sekao : dibadisi • Ditshwantsho go thala di-palokgang • Go kgobokanya le go arog-anya dipalo • Oketsa gabedi le go hafola • Melapalo	Dirisa dithekeneiki tse latelang fa o rarabolola dipalo le go tlhalosa tharabololo ya dipalo: • Dithusathuto tsa dikgonng-wa.Sekao : dibadisi • Ditshwantsho go thala di-palokgang • Go kgobokanya le go arog-anya dipalo • Koketso gabedi le go hafola • Melapalo o tshegetswa ke dithusathuto tsa dikgonngwa sekao: Dibaga tse di bal-wang	**Koketso gabedi le go hafola** Thekeniki e e matswakabele mme e tlhoka tlhaloganyo e e tseneletseng ya dipalo.Barutwana ba ba kgonang go tlhopha thekeniki e ga ba okaoke mo togamanong e ba e dirisang. Mo kgweditharong e barutwana ba simolola go oketsa dipalo gabedi ka gonne ba balela go fitlha mo go 10.Mo tshimologong koketso gabedi le halofo di ka dirisiwa jaaka togamano ya palelo kakanyo e tshwanetse go rutwa . Mo mophatong wa 2 barutwana ba ne ba tlhagisediwa polelopalo mme ba botswa potso ';Re ka dirisa jaang koketso gabedi e e gaufi go bona karabo ya 5 + 6 = □?" : " Barutwana ba lemoga gore 5 le 6 di gaufi thata le e ngwe .Dithusathuto tse di kgonnwang di dirisiwa go bontsha gore :" O ka oketsa 5 gabedi go dira ditlhopha tse pedi tsa botlhano.ke tlhakanye bo tlhano ba ba bedi go dira 10 ka salelwa ke 1 e ke tshwanetseng go e tlhakanya le yona .Karabo ke 11.Ba dirisa puo ya bona kgotsa ditshwantsho ,barutwana ba santse ba ka dirisa thekiniki e . Mo mophatong wa 3 barutwana ba ka kgona go diragatsa thekiniki fa palelo e le ya mono wa dipalo tse tharo. Mo kgweditharong e barutwana bat la dirisa koketso gabedi le halofo mo di tseleng tse di latelang: **Koketso gabedi:** • Diteraesekele di le pedi,Di na le maotwana a le kae? • Manape le Thato ba na le dimmabole di le 4 mongwe le mongwe .Dimmabole tsotlhe di kae? Barutwana ba ka rala ditshwantsho le go dirisa dithusathuto tse di kgogwang go bontsha gore palo e oketsegile gabedi. **Halofo:** • Mo kgweditharong ya 2 barutwana ba ithuta ka ga halofo gore ba kgone go dirisa thekeniki e mo kgweditharong ya 3. • Koketso gabedi le halofo e tshwanetse go ithutiwa mo boemong bo bo seng mo tirisong. Doubling and halving should be prac-tised in context-free situations.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.6 **Maano a go rarabolola dipalo**	Dirisa dithekeneiki tse latelang fa o rarabolola dipalo le go tlhalosa tharabololo ya dipalo: • Dithusathuto tsa dikgonngwa. Sekao : dibadisi • Ditshwantsho go thala di-palokgang • Go kgobokanya le go arog-anya dipalo • Oketsa gabedi le go hafola • Melapalo	Dirisa dithekeneiki tse latelang fa o rarabolola dipalo le go tlhalosa tharabololo ya dipalo: • Dithusathuto tsa dikgonng-wa.Sekao : dibadisi • Ditshwantsho go thala di-palokgang • Go kgobokanya le go arog-anya dipalo • Koketso gabedi le go hafola • Melapalo o tshegetswa ke dithusathuto tsa dikgonngwa sekao: Dibaga tse di bal-wang	**Molapalo** Go dirisa molapalo go tla thusa barutwana go balela: • Go rekota se ba se tlhaloganyang; record their thinking; • Go ela thoko di kakanyo tsa bona; le . • Go nna le setshwano sa rekoto se ba ka se dirisang go tlhalosa gore ba rarabolotse bothata jaang. Go simolola ka kgweditharo ya 1 barutwana ba ntse ba dirisa molapalo Fa barutwana ba ntse ba tswelela mo kgatong ya motheo ba rotloediwe go dirisa molapalo ka tsela e e tseneletseng. Mo kgweditharong ya 1 ,barutwana ba badile ka bo nngwe .Se se bontshiwa mo molapalong ka go tlola ka bo nngwe. **Sekao 1:** Go na le basimane ba le 5 le basetsana ba le 4 ba ba dira dithuto tsa tlaleletso tsa botaki mo sekolong.Ke barutwana ba le kae mo phaposing ya botaki?  Mo kgweditharong 2 barutwana ba ka tswelela go bala ka bo nngwe mme ka rotloediwa go dirisa molapalo go bontsha go balela kwa pele ka ditlhopha . **Sekao**: Barutwana ba kgona go ikgaogana ka 4 mo ditlhopheng tse 2. Molapalo o tla supa metlolo e 2 go tloga go 5 	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.7 **Tlhakanyo le tloso**	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago mo dipalo tse di akaretsang tlhakanyo , tloso ka dikarabo go fitlha go 20 .	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago mo dipalo tse di akaretsang tlhakanyo , tloso ka dikarabo go fitlha go 10	**Pharologanyo ke eng mo kgweditharong 1**? Mo kgweditharong e barutwana ba ithuta dipalofoko le tiro ba simolola go itshepa mo dithekeniking fa ba rarabololaTsepamo mo kgweditharong e , e nne mo go rekoteng. Barutwana ba tshwanetse go kwala dipalopolelelo jaaka sesupo se se kwadilweng sa dipalo go fitlha 5 Barutwana ba tla tswelela go dithusa- thuto tse di kgongwang le ditshwantshiso go emela palelo tsa bona go tloga go 5 go fitlha go 10 .	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.8 **Tlhakanyo-poeletso e e lebisang kwa katisong.**	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago mo dipalo tse di akaretsang tlhakanyo , tloso ka dikarabo go fitlha go 20	Rarabolola dipalofoko mo tirisong le go tlhalosa tharabololo ya gago mo dipalo tse di akaretsang tlhakanyo , tloso ka dikarabo go fitlha go 10	Tatelano ya palopalelo mo kgweditharong e letlelela barutwana go simolola poeletso ya tlhakanyo.Go balela go 10 e letlelela go rekota **Sekao** • 1+1+1 • 2+2+2+2 • 3+3+3 Mo kgweditharong ya 1 kakanyo le go tlhaloganya tlhakanyo di a agwa barutwana ba tshwanetse go tlhakanaya ditlhopha tse lekanang Mo kgweditharong barutwana ba dira ka dipalofoko tse letlang setshwano sa poeletso ya tlhakanyo. Poeletso ya tlhakanyo e itsisiwe kgapetsakgapetsa mo barutwaneg ka ditlhopha tsa dipalo tse di lekanang.Kwa tshimologong barutwana ba ka itsisiwe mo ditlhopheng tse di lekanang ka letsatsi le lengwe le lengwe.. Dipalo tse di akaretsang poeletso ya tlhakanyo di mo sepopegong se se latelang: • Ditlhopha tsa: diatla, dinao, dikausu ditlelafo tsa diatla, ditlhako, Ee ditsebe,maotwana a baesekele . • Ditlhopha tsa: maotwana a teraesekele, dikhutlo tsa khutlotharo • Ditlhopha tsa: maotwana a sejanaga, maotwana a setulo • Ditlhopha tsa: menwana ya diatla, menwana ya dinao, Puo ya poeletso tlhakanyo e botlhokwa Barutwana ba neelwe tshono go tlhalosa ka molomo seo ba se bonang. **Go rekota setshwano sa poeletso tlhakanyo** • Go dirisa dithusathuto tse dikgongwang .Barutwana ba tla bontsha palelo tsa bona ba dirisa dithusathuto tse di kgobokantsweng . • Mo e leng ditshwantsho fela Barutwana bat la rala ditshwantsho go bontsha gore ba dirile ditlhopha jaang go tlhakanya . • Go rekota mo ditshwantshong le mo dipalong Ditshwantshiso di tla bontsha ditshwantsho di tshegeditswe ke dipalo • Go ela kwa setlhangweng se se kwetsweng	

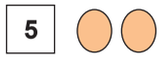
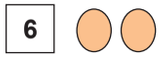
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.11 **Tšhelete**		• Go lemoga le go tlhaola tshelete ya dipapetlana ya Aforika Borwa • Rarabolola leraraane la tšhelete o akaretsa tšhelete yotlhe le tšhentšhi go fitlha go diranta di le 10 le disente di le 20	Go ruta barutwana ka tshelete,go tlhalosa dikakanyo tse: • Tšhelete ke eng • Goreng tšhelete e le botlhokwa • Tshelete e dirisiwa jaang letsatsi le lstsatsi • Barutwana ba bala tšhelete jaang Barutwana ba ithuta ka tšhelete pele ba kena sekolol.Barutwana bangwe ba ka bo ba tlhaloganya boleng jwa tšhelete le go lemoga maina a tšhelete ya dipapetlana le ya dipampiri. Mo kgweditharong e barutwana ba rutiwe motheo wa go tlhaloganya go dirisa tšhelete mo boemong jwa tiriso e e nepagetseng. Se se mo tirisong ya kemo ya go tshameka mabenkele. • tlisa tšhelete ya Aforika Borwa ya dipapetlana le ya dipampiri diranta di le 20 le di le 10 kwa sekolongBarutwana ba tsamaisa menwana mo matlhakoreng a dipapetlana mme ba buisane gore di farologana jaang.Ba buisane ka matshwao a a fitlhelwang mo papetlaneng le mo tšheleteng ya pampiri nngwe le nngwe. • Barutwana ba baya dipapetlana ka fa tlase ga pampiri e tsh-esane le go dirisa selo se sekwalang se se boleta o tshasa mo godimo ga sona s.k a dirisa phensele tsa mebala .Ba sega se se kopolotsweng ba se kgomaretsa mo dibukeng tsa bona tsa tiro le go neela maina a dipapetlana tseo. • Ba gatisa le go sega setshwano sa papetlana ya 5c, 10c le 20c. Ba kgomaretsa dipapetlana tsa di farologaneng tse di lekanang le 20c le10cs.k 20c = 10c + 5c + 5c 20c = 5c + 5c + 5c + 5c • Palotlalo go fitlha go 20c - tšhelete ya dipapetlana e le nosi. - Barutwana ba ba setseng ba itse go bala ka bo 5 le ka bo 10 ba tla dirisa kitso e go bona palo yotlhe. - Morutabana o neela morutwana mongwe le mongwe pampiri e e gatisitsweng papetlana tsa di 5c,10c le 20c . • O ba bolelela gore ba ntshe papetlana efe sekao dipapetlana di le tharo tsa di 5c .	

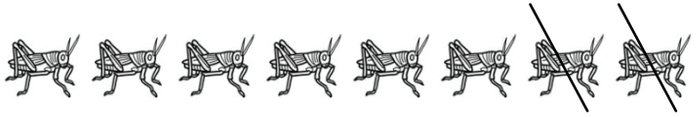
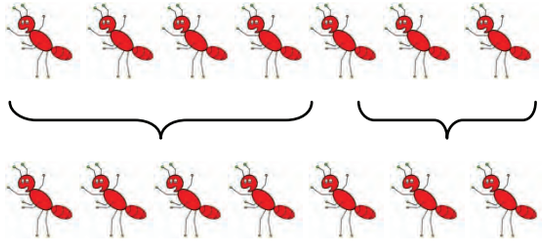
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.11 **Tšhelete**		• Go lemoga le go tlhaola tshelete ya dipapetlana ya Aforika Borwa • Rarabolola leraraane la tšhelete o akaretsa tšhelete yotlhe le tšhentšhi go fitlha go diranta di le 10 le disente di le 20	• Ba bala ka bo 5 kgotsa ba dira poeletso ya tlhakanyo, 5c+5c+5c. - Morutabana o laela barutwana go ntsha 20c a dirisa di-papetlana tse di farologaneng .Ba netefatse gore monngwe le monngwe o ntsha 5c tse pedi le papetlana ya 10c e le nngwe. - Barutwana ba feleletsa letlhare la tiro mo ba bonshang gore ke dipapetlana dife tse ba tshwanetseng go di dira gore palogotlalo e nne disente di le 20. **Sekao:** 20c = 10c + 10c or 5c+ 5c + 5c + 5c= 20c kgotsa 5c+5c + 10c =20c • Neela ka tšhentšhi o dirisa fela dipapetlana ka tšhentšhi - Morutabana o dira tlhakanyo le tloso ya dipapetlana ka na-mana sekao: o tlosa 5c go nna le 20c . - Morutabana o botsa : Fa o neela morekisi 15c , go setse tšhelete e kae?"Barutwana ba ba nang le bothata go dira ka dipapetlana ba dirisa dibadisi go ba etleetsa. - Barutwana ba feleletsa letlhare la tiro fa ba dirang gone gore bat le ba bone tšhentšhi ya dilwana tse ba di rekileng ka phokoletso ya 20c **Sekao:** • 10c – 5c = 5c • 20c – 10c =10c – Dipalotlalo tsa lesome • 20 – 5c – 5c – 5c = 5c: Poeletso ya tloso	

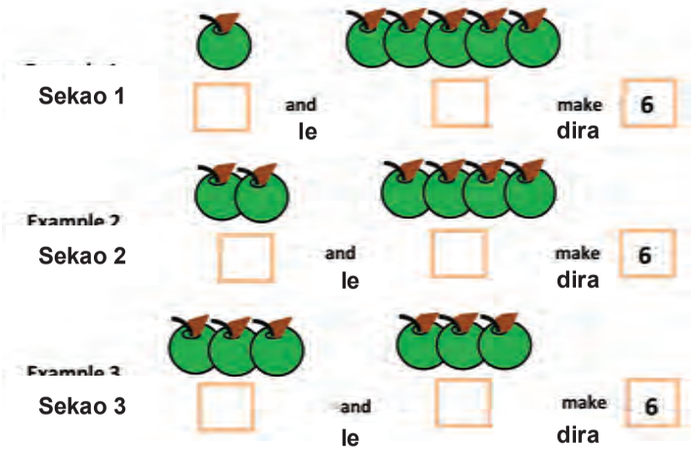
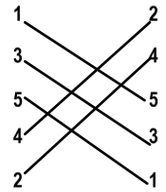
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
DiCONTEXT-FREE CALCULATIONS				
1.12 **Ditogammano (mekgwa le maano)**	Dirisa dithekeniki tse di latelang fa o dira dipalo: • Dithusathuto tse di kgong-wang Sekao : dibadisi • Thala di tshwantsho. • Go aga le go aroganya dipalo. • Go oketsa gabedi le go hafola • molapalo	Dirisa dithekeniki tse di latelang fa o dira dipalo: • Dithusathuto tse di kgong-wang Sekao : dibadisi • Thala di tshwantsho. • Go aga le go aroganya dipalo. • Go oketsa gabedi le go hafola • Melapalo e tshegetswang ke dithusathuto tse di kgong-wang sekao: dibaga tsa go badisa	**Pharologanyo ke eng mo kgweditharong 1**? Mo kgweditharong 2 barutwana ba simolola go balela go 10. Go dira mo tatelanong ya dipalo tse go raya gore bothegeniki jwa go balela bo ka godisiwa le rutwa . Ditogamano tse di ithutwa mo legatong lwa dinomoro tsa dipalo. **Go aga le go aroganya dipalo** Go aga le go aroganya ditirwana tsa dipalo go tswelela go godisa kgatlhego ya barutwana mo bogolong jwa dipalo.Ditirwana tse di tlhoma motheo wa tiro ya dipalo.Tlhatlhamolola le kopanya dipalo go ka thusa go ka dira dipalo bonolo . Go ithuta gangwe le gape mo mofuteng o wa ditirwana go roetloetsa barutwana godirisa ditogamano tsa dipalo(mathematikisi.) **Go oketsa gabedi le go hafola** Pele ga go oketsa gabedi le go hafola go dirisiwa jaaka togamanao ya go balela dipalo go tlhokega gore go tlhalogangwe le go ithutiwa pele . • Go dirisa dithusathuto tsa dikgonngwa Se, se ka kgonwa go dirwa ka taelo e lebaneng.Bolela le go bontsha barutwana fa go le dithupana tsa dibadisi tse o tla kgonang go oketsa kgoboko gabedi ka go ala gape dithupana tse tlhano tse dintsi tse di balwang . • **Go tswelela ka ditlhangwa tse di kwadilweng** o dirisa ditshw-antsho. . • **Barutwana:** Ba ka neelwa ditshwantshiso tsa go oketsa gabedi, mme di ka emela ditshwantshiso tsa ditshwantsho. • Go dirisa dipalo Barutwana ba simolola ka go feleletsa dipolelo jaaka : - Go oketsa gabedi ka 1 ke... - Go oketsa gabedi ka 2 ke... - Go oketsa gabedi ka 3 ke... - Go oketsa gabedi ka 4 ke...	

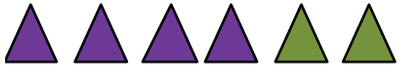
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.12 **Ditogammano (mekgwa le maano)**	Dirisa dithekeniki tse di latelang fa o dira dipalo: • Dithusathuto tse di kgong-wang Sekao : dibadisi • Thala di tshwantsho. • Go aga le go aroganya dipalo. • Go oketsa gabedi le go hafola • molapalo	Dirisa dithekeniki tse di latelang fa o dira dipalo: • Dithusathuto tse di kgong-wang Sekao : dibadisi • Thala di tshwantsho. • Go aga le go aroganya dipalo. • Go oketsa gabedi le go hafola • Melapalo e tshegetswang ke dithusathuto tse di kgong-wang sekao: dibaga tsa go badisa	**Melapalo e tshegeditsweng ka dithusathuto tse di kgongwang** Fa barutwana ba dirisa melapalo jaaka thegeniki go kgona go balela barutwana ba tshwanetse pele gore ba bo ba dirisitse : • Ba dirisitse mola o mongwe wa dithusathuto jaaka dibadisi tsa dibaga, le metlhala ya dipalo ; • Melapalo go balela kwa pele le kwa morago le • Melapalo gore o tle o rulaganye dipalo ka kemo le tatelano. Mola palo o rulagantsweng o tshwanetse go dirisiwa (O siametse fa) barutwana ba dira ka go tlhakanya le go tlosa. Molapalo o o rulagantsweng o tshwanetse go bontsha dipalo tsotlhe mo go ona.	
1.13 **Tlhakanya le tloso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	**Pharologanyo ke eng mo kgweditharong 1**? Mo kgweditharo 2,tatelano ya dipalo di oketsegile go tloga go 5 go fitlha go 10. Mo kgweditharong e barutwana ba tshwanetse go simolola go tlhaloganya: • Pharologantsho ya tlhaeletsano ya tlhakanyo le • tirisano magareng ga go tlhakanya le go tlosa Pele barutwana ba tla itsisiwe matshwao a go tlhakanya le go tlosa,ba tshwanetse ba bo ba na le maitemogelo a a tletseng mo go: • go bala gotlhe; • go balela kwa pele go tloga go palo e kgolo. • O dirisa o tlhaloganya puo ya go tlhakanya le go tlosa; le • Go rulaganya le go tshwantsha dipalo.	

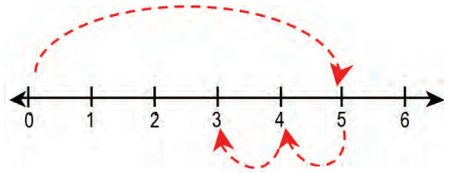
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tloso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	Mo kgweditharo e, barutwana ba tswelela go aga go tlhaloganya ga bona ga go tlhakanya le go tlosa. Go tlhakanya le go tlosa go amanya thata le go bala. Kgopolo ya 1 go feta go kgotsa go feta 2 go tsamaelana le le palo e e latelang mo tatelanong ya go bala. Mo kgweditharong e barutwana bat la dirisa matshwao go kwala dipolelopalo kgapetsakgapetsa le ka go itshepa. Kgatelopele ya go dirisa matshwao go tshwanetshwe ga dirwa ka matsetseleko. Go botlhokwa gore barutwana ba kgone go tlhaloganya bokao jo bo farologaneng jo bo tsamaelanang le matshwao. Barutwana ba tshwanetse go tlhaloganya le go dirisa mafoko a tshwana jaaka,oketsa,gape,tse tsotlhe,tse tsotlhe di dira,tlosa,pharologanyo magare ga go tlosa pele ga matshwao a itsisiwe. Barutwana ba tshwanetse go araba pele dipotso di tshwana le: 3 le 2;5 o tlosa 3, pele letshwao le dirisiwa. **Go rekota ditshwantshiso** Go balela go 10 go raya gore barutwana ba tla nna ba ntse ba rekota tiriso ya go balela: • dithalo kgotsa dithusathuto tse di kgongwang;kgotsa • ditshwantsho le dipalo;kgotsa • dipalo fela. Kwa bofelong jwa kgweditharo,mo tatelanong ya dipalo go tloga go 1 go fitlha go 5,,barutwana ba tshwanetse go itshepa mo go diriseng dipalo fela ntle le go thala ditshwantsho go emela dipalo tsa bona.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tlhoso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	**Ditogamano tsa go balela fa go tlhakanngwa le go tlosa** *Go tlhakanya ka go bala gotlhe.* Barutwana ba tla simolola fa go 1 le go bala go fitlha go 5 mme o tswelele ka go bala go fitlha go 7. *Go tlhakanya ka go balela kwa pele:* Barutwana bat la balela kwa pele go tloga go 5 go fitlha go 7  Bothegeniki jo bon a le kgono e e gaisang go na le go balela ka bonngwe. Barutwana ba tla dirisa thegeniki go fitisisa fa go balela ga tatelano ya dipalo e ntse e oketsega. *Bala go tloga mo palong e kgolo.*  Barutwana ba balela kwa pele go tloga mo palong e kgolo,e eleng 6, mme ba tswelela go bala go fitlha go 8. *Go tlosa ka go ntsha* 7 – 3 = 7 - 3 = 4 Fa o rekota tloso barutwana ba ka thalela mola mo godimo ga ditshwantshiso go supa go tlosa.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tlhoso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	*Go tlosa ka go balela kwa pele.* 6 – 2 = ☐ Barutwana ba ka bala go tloga go 2 go fitlha go 6.Learners can count on from 2 to 6.Ba tlhoka go ela tlhoko ba badile dipalo tse kae go tloga go 2 go fitlha go 6. *Go tlosa ka go balela kwa morago* 8 – 2 = ☐  Barutwana ba ka simolola go tloga go palo e kgolo,e e leng 8,le go balela dikgato tse 2 kwa morago go fitlha go 6. **Go aga le go aroganya dipalo** Se se ka dirwa ka ditsela tse di farologaneng.  7 = 4 + 3 7 = 4 + 3 **Dipalotlamo** Mo tsamaong ya kgweditharo e barutwana ba ithuta dipalotlalo go fitlha go 7. Tse di tla tlhagisiwa mo ditshwantshong le mo dipolelopalong ba dirisa ditshwantshiso tse di farologaneng.	

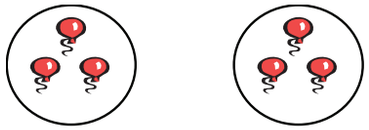
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tloso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	Go tlhakanya **Dikao:** *Go dira bo 6 kgotsa batla ditsala tse 6 ka go dirisa ditshwantsho kgotsa dipalo.*  *Go dira 6 o dirisa ditshwantsho le dipalo* Mmalafatsa/tshasa go bontsha 6 ka tsela tse di farologaneng ☐☐☐☐☐☐ _____ le _____ di dira 6 *Go dirisa dipalo fela* Nyalana dipalo ka dipara go go neela 6:  	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tloso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	**Tiriso Commutativity** Mo tsamaong ya kgweditharo barutwana ba simolola go lemoga pharologantsho ya tiriso ya tlhakanyo kwa ntle ga go itse lereo. **Sekao:** Bala dikutlhotharo **6 + 2 = ☐** **2 + 6 = ☐** Mokwalo o o amanang le go tlhakanya le go tloso ya dipolelopalo – go tlhaloganya kamano magareng ga go tlhakanya le go tlosa. Mo tsamaong ya kgweditharo e barutwana ba ithuta gore ba kgona go kwala palopolelo ya tloso boemong jwa palopolelo ya tlhakanyo. **Sekao:**  4 + 2 = 6 le 6 – 2 = 4 2 + 4 = 6 le 6 – 4 = 2 **Letshwao la tekano** Letshwao la tekano ga le a tshwanelwa go ka itsisiwe ka bonako. Go tla nna botlhokwa go dirisa matshwao ka tsela e e lokologileng le go neela barutwana tshono ya go ka dirisa metshu go na le letshwao la tekano. **Sekao:** Mmogo di dira **4 le 2 ☐** 6	

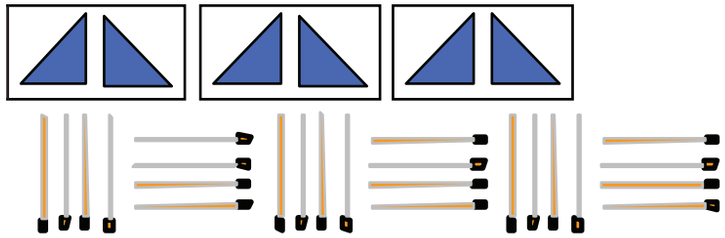
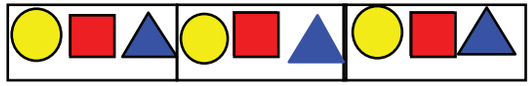
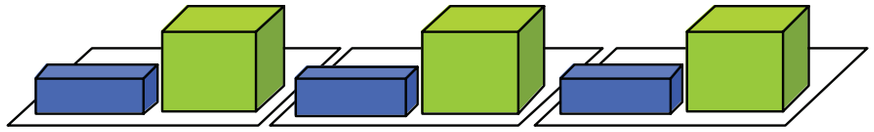
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tlhoso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	**Go dirisa melapalo** Go itsise tloso go fitlha go 10 mo molapalong. Morutabana o dirisa molapalo go tlosa dipalo go fitlha go 10,sekao 5 – 2 = Sekao:Mmutla o tlolela kwa go 5,mme wa tlolela ga 2 kwa morago mme wa ema fa go 3.Jaanong 5 – 2 = 3  **Ditirwana tsa go kwala** Barutwana ba tshwanetswe go tlhagisetswa mefuta e e farologaneng ya ditshwantshiso go tshegetsa go tlhaloganya go tlhakanya le go tlosa. Ba tlhoka ditirwana tsa go kwala tse di botsang dipotso tse di tlhaloganyesegang sentle go: • Go balela kwa pele; • Go tlhakanya ka go balela kwa pele go tloga go palo e kgolo;kgotsa • Go tlosa ka go thala mola fa godimo ga ditshwantsho go supa tloso.	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.13 **Tlhakanya le tlhoso**	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 10	Tatelano ya dipalo:1-20 • Tlhakanya go fitlha go 20 • Tlosa go tloga go 20 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ithute dipalotlamo go fitlha go 7	**Kgopolo ya go oketsa gabedi** Palo tatelano e barutwana ba dirang ka yona e ba letla go oketsa ga bedi.Se se tla rutwa ka ditsela tse di farologaneng ga e tla dirwa fa barutwana ba bala didiriswa. **Sekao**:Barutwana ba ka dira ditlhopha tse 2 tsa dibadisi,dibadisi tse 4,dibadisi tse 6,dibadisi tse 8 le dibadisi tse 10.Dipolelopalo di tsamaelane le ditshwantsiso. **Oketsa 1 ke…….** **Oketsa 2 ke…….** **Oketsa 3 ke…….** **Oketsa 4 ke…….** **Oketsa 4 ke…….**	

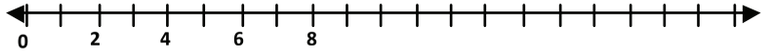
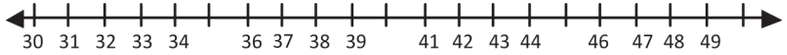
DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.14 **Tlhakanyo-poeletso e lebisitse kwa katisong**	• Poeletso ya tlhakanyo(jaaka dipalo tse di tshwanang) go fitlha go 20 • Dirisa matshwao a a maleba (+, =, ☐)	• Poeletso ya tlhakanyo(jaaka dipalo tse di tshwanang) go fitlha go 10 • Dirisa matshwao a a maleba (+, =, ☐)	**Pharologanyo ke eng mo kgweditharong 1**? Mo kgweditharong 2, barutwana ba simolola poeletso ya tlhakanyo go fitlha go 10. Fa barutwana ba setse ban a le kgopolo e e siameng ya dipalo go tloga go 1 go fitlha go 5,poeletso ya tlhakanyo e tla dira tlhaloganyo go bona. Tlhakanyo e e boelediwang e itsisiwe barutwana jaaka ditlhopha tsa dipalo tse di lekanang. Go dira ka setlhopha sa didiriswa go botlhokwa go tlhaloganya katiso.Barutwana ba tshwanetse go kgona go: • Go dira ditlhopha tsa didiriswa tse di lekanang; • Ba tlhalose thulaganyo;le • Go bala palo yotlhe ya didiriswa. Mo tshimologong barutwana ba ka bala ka bonngwe mme fa ba ntse ba bontsha thelelo ka go tlola go bala ba tshwanetse go bala didiriswa ka bobedi.botlhano le bolesome. Barutwana ba tshwanetswe go senolelwa go mefuta e e farologaneng ya ditshwantsiso tse di tla tshegetsang go tlhaloganya poeletso ya tlhakanyo. Dipalo tse di akaretsang poeletso ya tlhakanyo di mo sepopegong se se latelang: Go ka nna botlhokwa go ka itsise barutwana go ditshwantsho tse di lekanang tsa ditlhopha tsa tsatsi le letsatsi,sekao; Ditlhopha tsa 2 – diatla,dinao,dikausu,ditlelafo tsa diatla,ditlhako,dit sebe,maotwana a dibaesekele. Ditlhopha tsa 3 – maotwana a teraesekele,dikhutlo tsa dikutlotharo **Sekao:** Go maotwana a le makae otlhe? Go menwana e le kae? Feleletsa polelopalo e e fa tlase: ☐ + ☐ + ☐ = 15	

DITLHOGO	DIKGOPOLO LE DIKGONO TSE DI TLHOKAGALANG KWA BOFELONG JWA NGWAGA	TSEPAMO MO DIKGOPOLONG LE DIKGONO TSA KGWEDI-THARO YA 1	DINTLHA TSA TSHEDIMOSETSO KGOTSA DIKAELO TSA GO RUTA	BOLEELE JWA NAKO Mo-thutong ya ura le metsotso e le 24
1.14 **Tlhakanyo-poeletso e lebisitse kwa katisong**	• Poeletso ya tlhakanyo(jaaka dipalo tse di tshwanang) go fitlha go 20 • Dirisa matshwao a a maleba (+, =, ☐)	• Poeletso ya tlhakanyo(jaaka dipalo tse di tshwanang) go fitlha go 10 • Dirisa matshwao a a maleba (+, =, ☐)	**Go rekota ditshwantsiso tsa poeletso ya tlhakanyo.** Tsepamo mo, ke kgodiso ya puo le go tshegetsa tlhaloganyo ya katiso.Barutwana bat la rekota se ba se tlhaloganyang ka ditshwantsho tse ba di dirisang.Barutwana ba newe ditshwantsho tsa ditlhopha tsa didiriswa le go thala didiko go potologa ditlhopha tsa didiriswa tse di supilweng.  Puo e e ka dirisiwang e ka nna ditlhotshwana tsa bo 2 ga 3 kgotsa ditlhopha tsa 2 ga 3.Fa barutwana ba itshepa mo go tlhaloseng kemo ya ditshwantsho ba dirisa puo,ba ka tlhalosa dipolelopalo. Dipolelopalo: 3 + 3 =6	
1.16 **Dipalo tsa tlhogo**	**Kgopolo ya palo: tatelano go 20** • Rulaganya sete ya dipalo tse o di tlhophetsweng. • Bapisa dipalo go fitlha go 20 le go bolela gore ke efeng e leng 1,2 le 10 ntsi kgotsa nnye. **Kgopolo ka bonako:** • Dipalotlamo go fitlha go 10 • Gopola dintlha tsa tlhakanyo le tloso go fitlha go 10. **Ditogamano tsa palo tsa tlhogoMental strategies** Dirisa ditogamano tsa go balela le go tlosa ka bokgoni: • Baya palo e tonna pele ka tulaganyo gore o kgone go balela pele le morago. • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya.	**Kgopolo ya palo: tatelano go 10** ▯ Rulaganya sete ya dipalo tse o di tlhophetsweng ▯ Bapisa dipalo go fitlha go 10 le go bolela gore ke efeng e leng 1 le 2 ntsi kgotsa nnye	**Pharologanyo ke eng mo kgweditharong 1**? Mo kgweditharo 2,tatelano ya dipalo e oketsega go tloga go 5 go fitlha go 10. Dikao tsa dipotso le ditirwana tse di ka bodiwang le go dirwa: • Simolola ka 3 le go balela kwa pele ka nngwe go fitlha go 10. • Ke efe e nnye go 8 kgotsa 5? • Ke efe e ntsi ke 8 kgotsa 4? • Ke efeng e leng nnye ka 2 ka 9? • Ke efeng e leng bontsi ka 2 go 3? • Neela ka palo gareng ga 1 le 3. • Neela ka palo gareng ga 6 le 10.a go palo e le nosi fela? • Baya dikaratapalo ka tatelano go tloga go palo e nnye go fitlha go e kgolo.	

Mophato 1 Kgweditharo 2 2-Dipaterone,Tiriso le Alejebora/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako (mo thulaganyetsong ya ura le metsotso e le 24)**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dik-gongwang • Ka go thala mela,dipopego kgotsa didiriswa. • Dipaterone tse di re di kaganyeditseng • Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeom-eteri: • Mo tlhagong /tlholego • Go tswa mo botshel-lono boswa jwa letsatsi ka letsatsi • Go tswa mo ngwao-boswa ya rona	**Go kopolola le go atolosa le go tlhalosa** Go kopolola le go atolosa le go tlhalosaka mafoko: • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgong-wang • Dipaterone tse di bonolo tse di di-rilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dik-gongwang • Ka go thala mela,dipopego kgotsa didiriswa	**Go kopolola paterone go thusa barutwana go bona lemoga /tatelano ya gore paterone e dirwa jang.** **Go atolosa paterone go thusa barutwana go netefatsa gore ba tlhalogantse sentle tatelano ya paterone.** **Go tlhalosa paterone go thusa barutwana ka kgolo ya bo kgoni jwa puo le go bua. E thusa gape go bona le gore morutwana o kgona go ranola dipaterone jang.** Mo mophatong wa 1 barutwana b aka tsepama mo dipateroneng tse dipopego/di diriswa di boelediwang ka mokgwa o o tshwanang. Mo kgweditharong ya 2 barutwana ba le bantsi ba setse ba lokologa ka go dirisa dikeraeone le diphentshele fa ba thala.Barutwana b aka tswelela ka go kopolola le go atolosa dipaterone dipaterone tse di dirilweng ka ditshwantsho go na le di didiriswa. barutwana ba tshwanetse go gape ba tsepama mo go tlhaloseng dipaterone.. Ga go bonolo mo nakong tsotlhe mo morutwaneng go tlhalosa dipaterone.Morutabana a k aba thusa go ithuta se se solofetsweng gore ba bue ka sona. Ka go botsisa dipotso jaaka: “O bona popego efeng mo pateroneng e?” “A di tshwana tsotlhe ka mmala?” “A o bona e lenngwe kgotsa tse di fetang bongwe tsa dipopego mo di pateroneng?” “A dipopego di lebeltse go lo gongwe?” “A go na le dipalo tse di tshwanang tsa di diriswa mo setlhopheng sengwe le sengwe?” “Ke di diriswa di le kae mo setlhopheng sengwe le sengwe?” “A dipopego tsotlhe di tshwana ka bogolo?” jalo le jalo?” Mo kgweditharo 2 dingwe tsa dilo tse di tshwanetseng go lebelelwa e ka nna tiriso ya popego tlhokorepedi ya geometiri le tlhakore tharo ya geometiriya di diriswa e barutwana b a ithutileng yona mo KGWEDITHARO 1.Barutwana b aka dira popego ya tlhokorepedi ka go sega pampiri kgotsa karata kgotsa ba di thala.Barutwana b aka dira dipaterone ka popego ya lebokoso le dikgwele tse ba di dirileng kaletsopa/mmopa/tege. Dipaterone di ka dirwa ka go dirisa popego ya tlhakore e lenngwe mme mmmala wa sediriswa o fetoga nako nngwe le nngwe sekao: Go botlhokwa mo mophato wa 1 go thusa barutwana go bona/lemoga gore ke setlhopha sefe se se ntseng se boelela,ka go baya setlhopha sengwe le sengwe mo pampering e e farologaneng kgotsa go e bontsha mo gareng ga poloko ya pampiri	1 Thuto

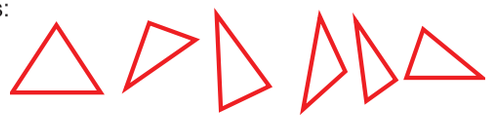
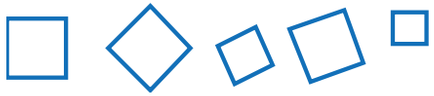
Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako (mo thulaganyetsong ya ura le metsotso e le 24)
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dik-gongwang • Ka go thala mela,dipopego kgotsa didiriswa. • Dipaterone tse di re di kaganyeditseng • Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeom-eteri: • Mo tlhagong /tlholego • Go tswa mo botshel-lono boswa jwa letsatsi ka letsatsi • Go tswa mo ngwao-boswa ya rona	**Go kopolola le go atolosa le go tlhalosa** Go kopolola le go atolosa le go tlhalosaka mafoko: • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgong-wang • Dipaterone tse di bonolo tse di di-rilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dik-gongwang • Ka go thala mela,dipopego kgotsa didiriswa	Dipaterone di ka diriwa go tswa mo ditlhopheng tse ditshwanang tse di boeletsang, mo setlhopha sengwe le sengwe se nang le mofuta mongwe wa sediriswa mme maemo a se diriswa tsa ditlhopha a fetoga.Ditlhopha tse di tshwanang di a boelediwa sekao:  Mo dipateroneng dingwe di diriswa tse di fapaaneng di diriswa go bopa/go aga mme ditlhopha tsa di diriswa di boeletswa ka mokgwa o o tshwanang sekao:  Mo dipateroneng dingwe bogolo jwa di diriswa mo ditlhopheng bo a refosana, mme ditlhopha di boeletswa ka mokgwa o o tshwanang.  Barutwana b aka dira dipaterone ka go dira dibaga/ditalama.Dipaterone di ka dirwa gape mo thutong ya Dikgono tsa Botshelo	1 Thuto

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako (mo thulaganyetsong ya ura le metsotso e le 24)
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 100 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 1 le 50 • Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 50 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-50 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 20 • Tlhama dipaterone ka bowena • Tlhama dipaterone tsa dipalo ka bowena.	Tatelano ya dipalo e ka golagangwa le go bala.Jaaka bokgoni le kgono yago bala ya barutwana e fetoga,mefuta ya tatelano ya palo e barutwana ba dirang ka yona e ka gola. Ditatelano di tshwanetse go bontsha go balela pele le kwa morago: • Bonngwe go tloga go palo nngwe le nngwe magareng ga 1 le 50. • Bolesome go tloga go dikatinesetswa dingwe le dingwe tsa 10 magareng ga 0 le 50.Tens from any multiple of 10 between 0 and 50 • Botlhano go tloga go dikatinesetswa dingwe le dinngwe tsa 5 magareng ga 0 le 50;Fives from any multriple of 5 between 0 and 50; • Bobedi go tloga go dikatinisetswa tsaga 2 magareng ga 0 le 20 Fa barutwana ba bala ka molomo b aka bontshiwa tatelano ya palo e e kwadilweng ka mefuta e e farologang.Ba ka nne ba supa dipalo tse ba di badileng sekao: 1 **2** 3 **4** 5 **6** 7 **8** 9 **10** 11 **12** 13 **14** 15 **16** 17 **18** 19 **20** Barutabana ba ka tlatsa dipalo tse di tlogetsweng tse di filweng ka mokgwa wa tatelano e e fa godimo. Gopola barutwana ba kwala fela dipalo ka matshwao go fitlha 10.Barutwana ba tshwanetse go tlatsa dipalo tse ditlhaelang ka tatelano go feta 10 fa: • E diriwa ka molomo • Karata ya dipalo di fiwa go tsengwa mo diphatla tse di sa tladiwang. • Lenaane la matshwao a dipalo a a neelwa.Barutwana b aka thala mola go tswa mo dipalong tse di tlhophilweng tse di siamisitsweng go tswa m o maemong a a tshwanetseng go aga. dikao dingweke tse dilatelang: Mola palo ka dipalo dingwe tse di tlogetsweng. 30 31 32 34 36 38 40 41 43 46 47 48 50 Tatelano e e bontshang go bala go ya pele kgotsa kwa morago ka bongwe ka bonngwe ka dipalo dinngwe di tlogetswe. Barutwana ba bapisa go tswa mo papetlaneng e e filweng.Ba thala mola go bontsha gore dipalo tse ditlhophilweng di ka tsengwa. 40, 41, 42, __, 44; __, __, 47, ___, 49, 50. 50, 49, 48, __, __, 45, 44, ___, ____, 41, 40 Tse di kwadilweng ka tatelano go ya pele ka katiso e e kwa dilweng mo godimo ka dipalo tse di tlogetsweng.	Thuto 3

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako (mo thulaganyetsong ya ura le metsotso e le 24)
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 100 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 1 le 50 • Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 50 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-50 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 20 • Tlhama dipaterone ka bowena • Tlhama dipaterone tsa dipalo ka bowena.	Mola palo e e bontshang ntlha kgaolo le barutwana ba tlatsa tse di nngwe.  Papetlana ya dipalo ka tatelano ya go bala tsotlhe le tse di tlotsweng. 1 | 3 | 5 | 7 | 9 11 | 13 | 15 | 17 | 19  Barutwana b aka tshasa mebala kgotsa ba akaretsa dipalo tse ba ditlotseng. Kwa bo khutlong jwa kgweditharo, tlhatlhamano ya dipalo e ya go fitlha ka 50.Barutwana b aka dira ka tatelano yotlhe got log aka 1-50 kgotsa karolo ya tatelano.	Thuto 3

MOPHATO 1 KWEDITHARO 2 BOALO LE DIPOPEGO(DIPALO-POPEGO)				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 2**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** Mo pakathutong ya ura le metsotso e le 24
3.1 **Maemo, kitsiso le dipono**	**Puo ya maemo** Tlhalosa ya kemo le kamano ya sediriswa mo go se sengwe sekao fa go dimo ga, mo pele ga, mo morago ga, molema, moja, godimo, tlase, go bapa **Maemo le pono** Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe **Maemo le ditaelo** • Sala morago ditaelo go tsa-maya mo phaposing • Sala morago ditaelo go bapisa sediriswa le se sengwe.Tsenya pensile mo lebokosong		Puo ya boikemedi e godisitsweng mo kgweditharong ya 1 e tshwanetse go boelediwa ka nako ya go rutwa ga barutwana botlhe mo kgweditharong e yotlhe.Dirisisa nako e e nnye go katisa puo ka dinako tsotlhe Tiro ya kemo ya puo e ka tiisiwa ka tiro kwala jaaka go thala,go tshasa mmala kgotsa papiso ya methalo le mafoko.Se se ka dirwa ka nako ya tiro ya go ikemela Dikarololwana tsa kemo ya puo di ka katisiwa fa barutwana ba dira ka popegotlhakorepedi(2-D)	
3.2 **Didiriswa tsa tekanyo-tlhako-retharo**	Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dipopego tsa lobokoso **Dipopego tsa sedirwa**: Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • mmala • didiriswa tse di kgokologang • Didiriswa tse di relelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka diboloko,didiriswa tse di kgonang go dirisiwa gape		Barutwana ba tswelela go aga didiriswa tse di dirilweng ka didiriswwa tse di ka dirisiwwang gape ka nako ya bona.	

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo pakathutong ya ura le metsotso e le 24
3.3 **Didiriswa tsa popegotlhako-repedi**	**Tlhatlhamano ya dipopego** Lemoga go neela maina a popegotlhakorepedi • Didiko • Dikhutlotharo Dikhutlonnetsepa **Dipopego tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • mmala • popego • matlhakore a atlhamaletseng • matlhakore a a kgolokwe	**Tlhatlhamano ya dipopego** Lemoga go neela maina a popegotlhakorepedi • Didiko • DiKhutlotharo • Dikhutlonnetsepa **Dipopego tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • mmala • popego • matlhakore a atlhama-letseng • matlhakore a a kgolok-we	Bontsi jwa tiro ka ga dipopego e e dirilweng mo mophatong wa 1,e dirilwe ka dithusaa thuto.Tiro yptlhe e tshwanetse go tiisiwa ka tiro-kwalo Barutwana ba ba simolola ka metshakeko ya boikgethelo ba dirisa dipopego le ditshwantsho tse di segilweng tsa popego jeometeri.Se se ka dirwa ka nako ya go rutwa ga dikgono tsa botshelo kgotsa fa ba dira ba le nosi. Barutwana ba kopolola ditshwantsho tsa popego jeometeri tse ba ka di neelwang ke morutabana kgotsa ba di fitlhela mo bukeng ya moithuti. Se ka thusa barutwana go itemogela dipopego tse di farologaneng ka bogolo jaaka sediko, khutlonnetsepa, maemo a a farologaneng khutlotharo le khutlonnetsepa..Se se ka dirwa ka nako ya go rutwa ga dikgono tsa botshelo kgotsa fa ba dira ba le nosi. **Go tshwantsha le tlhalosa popegotlhakoretharo:Bogolo** Barutwana ba tshwantsha dipopego tse di tshwanang ka bogolo jaaka: • go rulaganya didiko go ya ka bonnye go fitlha go se segolo • go kgobokanya dikhutlonne tse di tshwanang mmogo Dirisa puo ya bogolo go tshwantsha go tshwantsha dipopego tse di farologaneng sekao “ke thadile khutlotharo moteng ga khutlonne,ka jalo khutlotharo e nnye mo khutlonneng” **Tlhaloso ya dipopegotlhakoretharo:mmala** Barutwana ba bua ka mebala ya dipopego le go di tlhaola dipopego go ya ka mmala Go thaola le go naya maina le mmala wa dipopego,tshwantshanyo ka bogolo e ka tiisiwa ka nako ya di paterone **Go lemoga le neela didiko,khutlotharo le khutlonne maina** Barutwana ba tshwanetse go dira ka didiko le dikhutlonne tsa bogolo jo bo farologaneng, dikhutlotharo di bopegile go farologana le tse dingwe.	Thuto tse 3

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo pakathutong ya ura le metsotso e le 24
3.3 **Didiriswa tsa popegotlhako-repedi**	**Tlhatlhamano ya dipopego** Lemoga go neela maina a popegotlhakorepedi • Didiko • Dikhutlotharo Dikhutlonnetsepa **Dipopego tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • mmala • popego • matlhakore a atlhamaletseng • matlhakore a a kgolokwe	**Tlhatlhamano ya dipopego** Lemoga go neela maina a popegotlhakorepedi • Didiko • DiKhutlotharo • Dikhutlonnetsepa **Dipopego tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • mmala • popego • matlhakore a atlhama-letseng • matlhakore a a kgolok-we	Go botlhokwa gore barutwana ba se bone fela popego e le nngwe • Dikhutlotharo tse di sa tshwaneng ka popego di beilwe mo maemong a a farologaneng.Tse ke dingwe tsa tsona triangles:  • Dikhutlonne tsa bogolo jo farologaneng di le mo maemong a a farolo-ganeng.Tse ke dingwe tsa tsona  • Didiko tsa bogolo jo bo farologaneng. Tse ke dingwe tsa tsona. Go botlhokwa gore barutwana ba dirise ditshwantsho tsa dipopego tse di segilweng.Se se ka dira gore barutwana ba bone dikhutlonne le dikhutlotharo di beilwe mo maemong a a farologaneng Barutwana ba tlhaola dipopego tse di nang le matlhare a tlhamaletseng le a a kgolokwe Barutwana ba tlhaola dipopego tse di tshwanang jaaka khutlotharo,khutlonne le sediko Tiro e ka tiisiwa ka tiro kwalo mme di ka tsenyeletsa go bapisa/lebaganya maina le dipopego	Thuto tse 3

MOPHATO WA 1 KGWEDI-THARO YA 2 4. GO LEKANYA				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 2**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** **Mo thutong ya ura le metsotso e le 24**
4.1 **Nako**	**Tsamao ya nako** Buisana ka ga tsamao ya nako • Rulaganaya ditiragalo tse di tlwaelegileng tsa matshelo a bone • Tshwantshanya boleele jwa nako o dirisa puo sekao telele, khutsane, bonako, bonya. • Rulaganya ditiragalo o dirisa puo jaaka maabane, gompi-eno l;e kamoso. **Go bua ka nako** • Tlhalosa tiragalo ya selo o dirisa puo sekao mo mosong,thapama, bosigo. • O itse malatsi a beke • Dikgwedi tsa ngwaga • Baya malatsi a botsalo mo kalentareng.		Barutwana ba tshwanatse go ithuta go bua ka ga • Thulaganyo ya ditiragalo. • Boleele jwa nako Barutwana ba tswelela ka golaganya ka go tlotla ka thulaganyo ya nako ya letsatsi le letsatsi mo nakong yotlhe ya go ruta kgotsa go ikaega ka nako ya thuto ya setlhopha . Barutwana ba a tlotla le go araba dipotso fa dil;o di diragala, ba dirisa puo jaaka moso ,thapama , bosigo ,phakela le thari . Barutwana ba dirisa puo jaaka maabane, gompieno, kamoso malatsi a beke le dikgwedi tsa ngwaga mo tatelanong ya ditiragalo. Barutwana ba dirisa puo e jaaka teletsana go, kgotsa khutshwanyane, bonakonyana bonyanyana go bapisa nako. Barutwana ba tlotla ka thulaganyo ya ditiragalo go tloga mo matshelong a bona. Ba rulaganya tatelano ya ditshwantsho jaaka: • Dikgato tsa go dira sametšhisi kgotsa kopi ya teye ; • Kerafobotshwantsho e bontshang lesea le goletseng go nna motho yo o godileng ; • Tshekotshelo ya diphologolo sk .lee go kokwana , kgotsa lee go seg-wagwa kgotsa lee go serurubele le; • Ditiragalo tsa ka gale mo letsatsing (go tsoga ,go nna sekolong , go tshameka , go ja selalelo , go robala). Tswelela go baya malatsi a matsalo mo kalantareng go anama le ngwaga otlhe.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Tekanyetso e sa tlwaelegang** • Bapisa le go rulaganya boleele , bogodimo , kgotsa bophara ga gabedi kgotsa ka go baya bontsi jwadilwana go bapa . • Dirisa puo go tlotla ka papiso Sk. Boleele , bokhutshwane ,molelele , bophara . • Lekanyetsa . go lekanya , bapisa, rulaganya le go rekota boleele o dirisa bole-kanyetsi jo seng jwa kemo sk; sekgala sa seatla dikgato phensele boleele,dipalo jalo-jalo .		Ditekanyetso tsotlhe tsa Kereite ya 1 ke tse sa tlwaelegang. Ga go na se dirilweng ka selekanyetso sa boleele ka maemo a dikarolwana. Mo kgwedi kgwediharong ya 1 go tshitsintswe gore barutwana ba tsepame go • Lebana dipapiso tsa boleele jwa dilwana ka go di baya go bapa le e nngwe le e nngwe; • Thulagnyo le papiso ya boleele ; kotsa bogodimo kgotsa bophara jwa dilwana tse tharo kampo go feta, ka go baya dilwana ka dipara go bapa go nngwe le e nngwe , Go fitlhela dilwana tsotlhe di le ka tatelano ; le • Go aga puo ya motlotlo le pharologanyo mo boleeleng mo bogodimong le bophareng jalo-jalo. Ka nako ya tiro ya boikemelo go ralala kgwediharo , barutwana ba ka ikatisa le go lomaganya thulaganyo le papiso ya boleele kgotsa bogodimo kgotsa bophara jwa dilwana tse pedi kgotsa go feta , ka go baya dilwana ka bobedi go bapa go e nngwe le e nngwe, Go fitlhela dilwana tsotlhe di kgonwa goo ka rulagangwa. Tiro yotlhe e tshwanetse go rekotiwa.	
4.3 **Boima**	**Tekanyetso e tlwaelesegileng** • Lekanyetsa, o lekanye, o bapise, o rulaganye , le rekota boima go dirisiwa dile-kanyetso tse di e seng mo maemong le le tekanyo s.k. maparego le ditena jalo-jalo. • Dirisa puo go tlotla ka papiso s.k.bofefo , boima ,bofefoa-na, boimana		Ditekanyetso tsotlhe tsa Kereite ya 1 ke tse sa tlwaelegang. Ga go na se dirilweng ka selekanyetso sa boleele ka maemo a dikarolwana .go tshitsintswe gore barutwana ba tsepame go • Bapisa o lebisitse mo boima jwa dilwana; le • go rulagangwe go bapisiwe boima jwa dilwana tse pedi go fitlha go feta ka go baya dilwana ka bobedi mo tekanyong ,go fitlhela dilwana tsotlhe di rulagantswe ; le • Go aga puo go tlotla ka pharologanyo ya boima. Ka nako ya tiro ya boikemelo go ralala kgwediharo, barutwana ba ka ikatisa le go lomaganya thulaganyo le papiso ya boima jwa dilwana tse pedi kgotsa go feta , ka go baya dilwana ka bobedi go bapa go e nngwe le e nngwe, Go fitlhela dilwana tsotlhe di kgonwa go ka rulagangwa. Tiro yotlhe e tshwanetse go rekotiwa.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Tekanyetso e sa tlwaelagang** • Bapisa le go rulaganya bokanang kang jwa (bolumu/ mothamo) ya seedi mo dit-shelong tse pedi o di beye fa thoko ga e nngwe le e nngwe . Barutwana ba tlhomamisa ka go tlatsa setshelo sa boraro fa go tlhokafala • Bapisa le go rulaganya se-lekanyo sa seedi se ditshelo tse pedi di ka se tshegetsang fa di tlatswa (mothamo) • Dirisa puo go tlotla ka papiso s.k.go feta , bonnye go, tletse , lolea • Lekanyetsa le go lekanya le go bapisa , le go rulaganya mothamo wa ditshelo ka go dirisa selekano se se seng mo maemong s.k. dintsho le dikopi.	**Tekanyetso e sa tlwaelegang** • Bapisa le go rulag-anya selekano sa seedi (mothamo/bolumu) mo ditshelong tse pedi tse di beilweng go bapa go nngwe le nngwe. Barut-wana ba tlhomamisa ka go tshela mo teng ga setshelo sa boraro fa go tlhokafala • Bapisa le go rulaganya selekano sa seedi sa ditshelo tse pedi tse di ka se tshegetsang fa se tladiwa (mothamo) • Dirisa puo go tlotla ka bapiso s.k.go feta, bon-nye go , tletse ,lolea. • Lekanyetsa le go lekanya le go bapisa, le go rulaganya moth-amo wa ditshelo ka go dirisa selekano se se seng mo maemong s.k. dintsho le dikopi.	Ditekanyetso tsotlhe tsa Kereite ya 1 ke tse sa tlwaelegang. Ga go na se dirilweng ka selekanyetso sa boleele ka maemo a dikarolwana. Tsepamiso e tshitsintsweng mo kgweditharong ya 1 e ne e le gore go agwe puo go tlotla ka diphelelo le dipapiso mo bolumung. Tsepamiso mo kgweditharong ya 2 e lebiswe go papiso. Tsepamiso mo kgweditharong ya 4 barutwana ba ka dira ka dikarotshana tse e eseng ka tlwaelo tsa tekanyetso. Barutwana ba kgona go ikatisa le go lomaganya dikgopolo ka nako ya tiro ya boikemelo go ralala ngwaga otlhe. **Papiso e tsepameng ya bolumu ya ditshelo** • Go aga kakanyo ya bolumu le puo go tlotla ka yona Barutwana ba simolola go akanya le go tlotla ka bolumu ka go e bapisa, gore ke eng se se tshwanang mo ditshelong tse pedi kgotsa thala ditshelo tse pedi tse di tshwanang. Tsepamiso e nne go - Tletse le lolea; - Go feta/nnyenyane go; le - Go lekana le/ go tshwana. Barutwana ba tlatsa le go dira ditshelo lolea. • Bapisa bolumu ya ditshelo tse pedi kgotsa go feta tse di farologanyeng ka go tshela mo go setshelo sa boraro. Fela fa morutwana a kgona go tlotla ka phetapheto ya bolumu (Lolea le go tlala.) le go bapisa dibolumu(tse go tlhamaletseng gore ka pono go na le pharologanyo.) mo ditshelo tse pedi tse di tshwanang, ba ka tswelela ka go bapisa methamo/bolumu mo ditshelo tse pedi tse di sa tshwaneng. Tsepamo e kgethegileng e nne mo bophareng le bosesane jwa ditshelo s.k. • Tlatsa selekanyo se tshwanang botlole ya 2-Dilitara le botlole ya 500 dimililitara ; le • Botsa barutwana gore ke lebotlole lefe le tsentseng go feta. Barutwana ba itse go tlhomamisa ka go tlatsa setshelo sa boraro ka seedi le go tshwaya bogodimo jwa seedi sa sona. Barutwana ba bašwa ga se gantsi ba tlhokomelang gore setshelo se atlhame go le kae fa go buiwa ka mothamo/bolumu; ba atisa thata go lebelela fela gore setshelo se tletse go fitlhelela kae. Barutwana ba tshwanetse go abelwa maitemogelo a mantsi ka go bapisa methamo/dibolumu mo ditshelong ka bophara jo bo farologanyeng. **Kgatiso** Barutwana ba tshwanetse go gatisa rekota tiro yotlhe.	2-Dithuto

MOPHATO WA 1 KGWEDITHARO 2 5. THANOLO YA TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 2**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako**
((mo pakathutong ya ura le metsotso e le 24)	**Kgobokanya le go rulaganya didiriswa** Kgobokanya le go tlhaola didiswa letsatsi le letsatsi	**Kgobokanya le go rulaganya didiriswa** **Kgobokanya le go tlhaola didiswa letsatsi le letsatsi**	Lebelela dintlha tsa kgwedi-tharo 1 Mo kgwedi-tharong ya 2 barutwana ba tswelela go dira ka dikgobokanyo ka tsela e e tshwanang mme fela ba kaediwa go le gonnye. Fa barutwana ba kaeditswe tsela ya go tlhaola le go tshwantsha kgobokanyo mo nakong e e tsepamedisitsweng ditlhopa, ba ka nna ikatisa ka nako e ba dirang ba le nosi. Fa barutwana ba ikatiseditse go araba dipotso ka ga didiriswa tse ba di kgobokantseng, o ka simolola go ba botsa go tlhalosa kgobokanyo ya bone kwa ntle ga go ba botsa dipotso tse di tsepamediseditsweng go ba kaetsa	Thuto e le 1
5.2 **Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng**	Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng Thala setshwantsho sa didiriswa tse di kgobokantsweng	**Represent sorted collection of objects** **Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng** **Thala setshwantsho sa didiriswa tse di kgobokantsweng**		
5.3 **Bua le go beg aka didiriswa tse di kgobokantsweng di tlhaotswe**	**Bua le go beg aka didiriswa tse di kgobokantsweng di tlhaotswe.** • Neela mabaka gore kgobokanyo e tlhaotswe jang • Araba dipotso go bontsha gore - Didiriswa di tlhaotswe jang (kgato) - Kgobokanyo e e tlhaotsweng e ntse jang(kumo) • Tlhalosa kgobokanyo le mothalo • Tlhalosa gore kgobokanyo e tlhaotswe jang	**Bua le go beg aka didiriswa tse di kgobokantsweng di tlhaotswe.** • Neela mabaka gore kgobokanyo e tlhaotswe jang • Araba dipotso go bontsha gore • Didiriswa di tlhaotswe jang (kgato) • Kgobokanyo e e tlhaotsweng e ntse jang(kumo) • Tlhalosa kgobokanyo le mothalo • Tlhalosa gore kgobokanyo e tlhaotswe jang		
Go atlegenedisitswe gore go dira ka dipalo tsa tshedimosetso go tsepamedisiwe mo kgwedi-tharong ya 3 le 4				

MOPHATO 1 KGWEDITHARO 3 1.DIPALO, MATSHWAO LE DIKGOLAGANO				
Ditlhogo	**Dikgopolo le dikgono** **Tse di tlhokagalang kwa bofelong jwa ngwaga**	**Dikgopolo le dikgono** **Tsepamo go kgweditharo 1**	**Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta**	
PALO YA DIKGOPOLOTSE DIBOPANG: Bala ka palotlalo				
1.1 **Bala didiriswa**	Bala didiriswa ka nepagalo go fitlhelela bonnye ko go 50. Naya phopholetso e e dumelesegang ya palo ya didiriswa tse di ka netefatswang ka go balwa.	Bala didiriswa ka nepagalo go fitlhelela bonnye ko go 50. Naya phopholetso e e dumelesegang ya palo ya sediriswa se se ka netefatswang ka go bala..	**Ke eng se se farologaneng go tswa mo kgweditaro 2?** Mo kgweditaho 3, barutwana ba tselela go bala didiriswa tse di kgongwang tsa letsatsi le letsatsiGo tla nna le tsepamisio mo ka kutlwisiso go theo ya lebalapalo. Mo kgweditarong e barutwa ba tswhanetse go ithuta go baya didiriswa ka tatelano ge ba bala gore ge ba netefatsa go bala, paakanyo e ba thusa go bala bonolo..Sekao, babadi ba kgona go ba baya aka mola. Mo kgweditharong e, barutwa ba tsweletsa katoloso ya dikgono tsa bona tsa go bala le ikatisoand: • Bala gotlhe; • Go bala ka.; • Motheo wa lebalapalo ya dipalo; le • Dira ka ditlhangwa kwalo. **Phopholetso** Barutwana ba tswelela ka ikatiso ba lemoga kgobokanyo e nnye ya sediriswa. **Go bala le le setlhopha** Go thusa barutwana go bala mo dikgaotsong tse pedi, tlhanole lesome. Ba tshwanetse go baya didiriswa ka ditlhopha tse pedi, tlhano le lesome gore o kgone go bala setlhopha sa didiriswa.Palo ya dikarata e tshwanetse go bontsha go nngwe ya kgobokanyo go bontsha palo ya didiriswa tse di badilweng. Go bala ka setlhopha e tla paakanya barutwana go tlhaloganya katiso. **Didiriswa:** Ela tlhoko ditlhoko tse di tshwanetseng neelwa go mofuta wa sediriswa se se diriswang. • Popego ya didiriswa, jaaka mogala wa go bala dibaga, di ka dirisiwa. • Kgatatalamo e ka dirisiwa go katisa go bala ka setlhopha gangwe le gape. • Ba ka dira ditlhopha tse 2, ditlhopha tse 5le lesome ka matlhokwana a mokgwaro kgotsa diikotana tsa go bala morago ba di bale tse tsotlhe.	

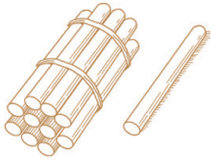
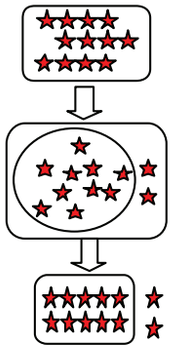
Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.2 **Go balela go ya kwa pele le kwa morago**	**Go balela go ya kwa pele le kwa morago mo** Bonngwe go simolola go tswa mop along e nngwe fela e e leng mo gare ga 0 - 100 **Go balela go ya kwa pele mo** • Masome go tloga go katiso le lesome gare ga 0 le 100 • Tlhano go tloga go nngwe fela ya go atisaa ya tlhano gare ga 0 le 100.. • Katiso ya dipalo go tswa go 2 l gare ga 0 le 100.	**Go balela go ya kwa pele le kwa morago mo** Bonngwe go simolola go tswa mop along e nngwe fela e e leng mo gare ga 0 - 80 **Go balela go ya kwa pele mo** • 10s go tloga go katiso le lesome gare ga 0 le 80 • Tlhano go tloga go nngwe fela ya go atisaa ya tlhano gare ga 0 le 80.. • Katiso ya dipalo go tswa go 2 l gare ga 0 le 80.	**Ke eng se se farologaneng go tswa mo kgweditaro 1 ?** Mo kgweditharong ya boraro, barutwana ba bala go fitlho go somarrobedi. Ba tswelela go bala ka katiso ya pedi, tlhano le lesome. **Tsweletso ya dithutiso:** **Dithutitso tsa barutwana botlhe.** Go balela go ya kwa pele le kwa morago go fitlha go 80 • Barutwana ba balela kwa pele le kwa morago.. • Morutabana o bontsha dipalo go tswa mo papetlaneng ya dinomoro barutwana ba bala go fitlha go 70. • Barutwana ba bala bo tlhano go tsa go 25 le 60. • Barutwana ba bala masome go fitlha go simolola 0 go 80. Tlola-bala dirisa bo-tlhano le bolesome go fitlha go palo 80 • Barutwana ba bala bolesome go 50 morutabana a ntse a ba bontsha mo papetlaneng ya dipalo. O bontsha go atisa bo 5 mo gopapetlaneng ya le ban aba bala. . • Barutwana ba balela kwa pele le kwaa morago mo bolesome.. O dirisa papetlana ya 100, ba tshwanetse go araba mefuta e e tshwanang ya melao. • Balela kwa pele ka bolesomemo go tswa go 20. • Go balela go ya kwa morago mo go bongwe go tswa go 56. • 80, 70, 60: e re dipalo tse tharo tse di latelang o dirisa papetana ya 100 ya gago. **Tiro ka barutwana** Dikgono tsa go tlola go bala di tshwanetse go dirisiwa go ditiro tse di kwadilweng. Sekao: Barutwana ba latlhela matlho: • Feleletsa tatelano ya dipalo tse di bonolo, • Tlatsa mo dipalong tse di tlogetsweng mo motlhaleng wa dipalo le mela ya dipalo. • Kwala mo thoko ga dipalo tse pedi tse di latelang 66, 65, 64,__, __,	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.3 **Matshwaopalo le mainapalo**	**Lemoga le go bala dipalo** • Lemoga le go bala matshwaopalo 0 - 100 • Kwala matshwaopalo 0 – 100. • Tlhaola le go bala mainapalo • 1 – 10 • Kwala mainapalo 1-10	**Lemoga le go bala dipalo** • Lemoga le go bala matshwaopalo 0 -o 80 • Kwala matshwaopalo 0 – 80. • Tlhaola le go bala mainapalo • 1-10 • Kwala mainapalo 1-10	**Ke eng se se farologaneng go tswa mo kgweditaro 2?** Mo kgweditharo 3, Palo ya tekanyo e tlhatlhogetse go 80. Jaanong go solofetswe gore barutwana ba kwala matshwaopalo go 20. B atshwanteste go nna le bokgoni ba go dira se gonne ba bala go fitlha go 20 jaanong go kwala dipalao ka mafoko.Barutwana ba tswelela ka go ikatisetsa go buisa le go kwala maina a dipalo tsa bona. Ba tswanetse go nna le bokgoni ba go nyalanya dikao go leinapalo. Buka ya dithutiso le go kwala mo kamusong – buka ya dithutiso e ka dirwa ka nako ya moithuti. Sekao sa tiro e e kwadilweng:: Nyalanya mafoko go selo Nngwe ✂ Pedi ✱ ✱ ✱ ✱ Tharo ✸✸ Nne ✶✶✶✶✶✶ Tlhano ✖✖✖✖✖✖✖✖✖✖ Thataro ❁❁❁ Supa ✷✷✷✷✷✷✷ Robedi ※ ※ ※ ※ ※ Lesome ✦✦✦✦✦✦✦✦✦ **Ke eng se se solofetsweng mo go moithuti?** • Ba kgona go buisa dikao go fitlha go 50 • Ba kgona go kwala dikao tsa dipalo go fitlha go 20 • Ba kgona go buisa maina a diplalo go fitlha go 10 • Ba kgona go kwala maiana a dipalo go fitlha go 10	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.4 **Tlhalosa, go tshwantsha le go rulaganya dipalo**	**Go rulaganya le go tswhantsha dilo.** • Farologanya tshobokanyo ya dilo go ya ka bontsi, bonnye mmalwa, bo-golo go tsotlhet, bonnye go tsotlhe t; go di feta tsotlhe, bonnye go tsotlhe; e tshwana le,bontsi fela jaaka s, farologaneng. • Rulaganya kgobokanyo ya dilo go tswa go tse dintsi go tse dinnye le tse dinnye go di feta. • Tekanyo go fitlhelela go dilo di le 100 **Go rulaganya le go farologanya dipalo .** • Go rulaganya dipalo - Go tswa bonnyeng go fitlha go bogolo le go tswa bogolong go ya bonnyeng - pele, morago, mo gare le mo thoko - dirisa mola wa dipalo 0.- 100 • Farologanya palotlalo go ya ka e nnye go e kgolo go di feta e ntsi go di feta le nnye go di feta , e lekana le • Kwalelano ya nngwe go nngwe • Tlhatlhamano ya dipalo go fitlha go100	**Go rulaganya le go farologanya dilo tse 15.** • Farologanya tshobokanyo ya dilo go ya ka bontsi, bonnye mmalwa, bogolo go tsotlhe, bonnye go tsotlhe go di feta tsotlhe, bonnye go tsotlhe; e tshwana le, bontsi fela jaaka , farologaneng • Go rulaganya kgobokanyo ya dilo go tswa go tse dinnye go ya go tse dintsi • Tlhatlhamano ya dipalo go fitlha ka 15 **Go rulaganya le go farolganya dipalo go 15** • Rulaganya dipalo - Go tswa bonnyeng go fitlha go bogolo le go tswa bogolong go ya bonnyeng - pele, morago, mo gare le mo thoko - dirisa mola wa dipalo 0- 80 • Farologanya palotlalo go ya ka e nnye go e kgolo go di feta e ntsi go di feta le nnye go di feta , e lekana le • Kwalelano ya nngwe go nngwe • Tlhatlhamano ya dipalo go fitlha go15	**Ke eng se se farologaneng go tswa mo kgweditharo 2?** **Mo kgweditharong** 3, barutwana ba tswelela go : • Go rulaganya le go farologanya kgobokanyo ya dilo, • Go rulaganya le go farologanya dipalo, le • Go dirisa puo ya thulaganyo le pharologanyo. **Tsweletso ya ditiro:** Morutabana a re palo sekao. 12. Morutabana o botsa dipotso:E kae palo mo moleng wa dipalo? Ke palo e e feng e e tlang morago ga palo 12? Ke palo e e feng e e tlang morago ga palo 12? 12 ke 1 e feta _____ 12 ke 1 e nnye go _____	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.4 **Tlhalosa, go tshwantsha le go rulaganya dipalo**	**Dirisa dipalotatelano go bontsha thualaganyo, felo kgotsa maemo** • Baya dilo ka mola go simolola ka ya ntlha go fitlha go ya lesome, kgotsa go simolola ka go fitlha go ya bofelo,. Sekao ya ntlha, bobedi, lboraro…lesome, bofelo (lebalatatelano la dipalo) Lebalatatelano la dintlha tsa dipalo tekanyong 1-10	**Dirisa dipalotatelano go bontsha** **Thualaganyo, felo kgotsa maemo** Baya dilo ka mola go simolola ka ya ntlha go fitlha go ya lesome, kgotsa go simolola ka go fitlha go ya bofelo,. Sekao ya ntlha, bobedi, lboraro…lesome, bofelo (lebalatatelano la dipalo	**Ke eng se se farologaneng go tswa mo kgweditaro 2?** **Mo kgweditharong** 3, barutwana ba tswelela go : • Go rulaganya le go farologanya kgobokanyo ya dilo, • Go rulaganya le go farologanya dipalo, le • Go dirisa puo ya thulaganyo le pharologanyo. **Tsweletso ya ditiro:** Morutabana a re palo sekao. 12. Morutabana o botsisa dipotso:E kae palo mo moleng wa dipalo? Ke palo e e feng e e tlang morago ga palo 12? Ke palo e e feng e e tlang morago ga palo 12? 12 ke 1 e feta _____ 12 ke 1 e nnye go _____	
1.5 **Bolengpalo**	**Lemoga bolengpalo jwa dipalo tse di nang le dinomoro tse pedi go fitlha ka** • Kgaogantsha dipalo tse di le dinomoro tse pedi go masome le bonngwe go 20 sekao. 12, 10 le 2	**Lemoga bolengpalo jwa dipalo tse di fitlhang go 2- le dinomoro tse di fitlhang go 15** • Kgaoganya dinomoro tse pedi go masome le bonngwe go fitlha ka 15 sekao. 12 i 10 le 2	**Ke eng se se farologaneng go tswa mo kgweditaro 2 ?** Mo tsamaong ya kgweditharo e barutwana bat la simolola go kgaoganya dipalo ka katiso ya bolesome le ya bongwe/ ba dirisa bongwe :: • Nyalanyo ya dilo gg lesome; le • Foromo e e kwadilweng 14 = 10 le 3. Go tlhaloganya go go feleletseng ga tnonofo ya bolengfelo go ralala motheo le kgato ya bogare mo mophatong wa 1. Barutwana ba simolola go nagana ka ditlhopha di le lesome kgotsa dilo le didiriswa kgotsa bongwe. Ba simolola go dira diphetogo go lebelela 10 jaaka bongwe bo le bongwe kgotsa 1 lesome. Go simolola go tlhaloganya bolengfelo mo kgweditaron e,barutwana ba tlhoka go: • Ba itse nomoro ya maina a bona ba bale ka tatelano ka boitshepi go bon-nyane ba 20; • Kwala le go buisa sekao sa palo; • Dira tlhakanya e e bonolo le go ntsha; • Bala sebopego sa selo ka ditlhophacount; le • O kgone go emela setlhophabe able to represent the groups.	

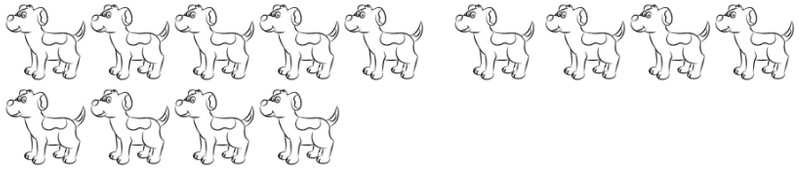
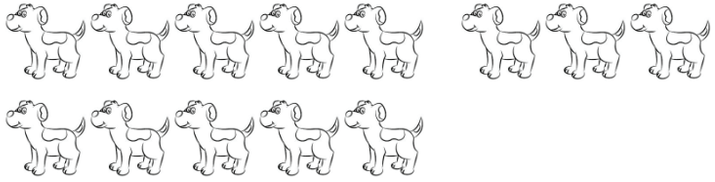
Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.5 **Bolengpalo**	**Lemoga bolengpalo jwa dipalo tse di nang le dinomoro tse pedi go fitlha ka** • Kgaogantsha dipalo tse di le dinomoro tse pedi go masome le bonngwe go 20 sekao. 12, 10 le 2	**Lemoga bolengpalo jwa dipalo tse di fitlhang go 2- le dinomoro tse di fitlhang go 15** • Kgaoganya dinomoro tse pedi go masome le bonngwe go fitlha ka 15 sekao. 12 i 10 le 2	**Tlhatlhamolola dipalo go bolesome le nngwe /bongwe** Go tsepamisa mo mophatong wa 1 e mo go direng setlhopha sa lesome le e e lokologileng. Pele go tlhatlhamolola dipalo go lesome le bongwe, barutwana ba tshwanetse go nna le ikatiso e e tletseng mo go tlhatlhamololeng dipalo mka go dirisa mekgwa e e farologaneng yam o kgweditharong ya 1 le 2. Se se tshwanetse go bo di dirilwe ka mokwa o o kwadilweng. **Go dirisa selekanyo se setseneletseng sa didiriswa** Ditshwano tse di kgongwang di botlhokwa mo go ageng maikutlo a dipalo le tshwantshanya dipalo le motheo wa boleng jwa maemo a dipalo.Fa o bala mo masomeng ebile o kgobokanya ka masome barutwana ba simolola go tlhaloganya gore dikatisanetso tsa 10 le go tswala sekgala sa go bala sekao. 26, 27, 28, 29,30,31,32. B tshwanetse go simolola go ela tlhoko gore lefoko le sekao 10 se emetse bongwe fela. Go dira selekanyo sa didiriswa se se tseneletseng ka go baya dilo go bopa lesome bongwe le go tlhaloganya gore 10 ke setlhopha sa lesome le bongwe. Go botsha barutwana setlhopha sa lesome o be o ba bolelel gore 14 ke lesome le le lengwe le 4 ke nngwe e ka se tlhakanye tlhaloganyo ya gore 14 ke 1 lesome le 4 ke nngwe.Go baya dilo ka setlhopha go dira setlhopha sa lesome se naya bokao jo bo feleletseng. O dirisa kgatlatalama,barutwana ba tswhanetse go bontsha: lesome le le lengwe; lesome le le lengwe 2 bonngwe; lesome le le lengwe 3 bonngwe; le lesome le le lengwe 4 bonngwe. Solofela gore baithjuti ba tla bala ka bonngwe go dira ditlhopha ka bo lesome. Go bontsi e tla nna tsela e le nosi ya go neela dipalo kgotsa o bolele gore go ne le tse kae.	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.5 **Bolengpalo**	**Lemoga bolengpalo jwa dipalo tse di nang le dinomoro tse pedi go fitlha ka** • Kgaogantsha dipalo tse di le dinomoro tse pedi go masome le bonngwe go 20 sekao. 12, 10 le 2	**Lemoga bolengpalo jwa dipalo tse di fitlhang go 2- le dinomoro tse di fitlhang go 15** • Kgaoganya dinomoro tse pedi go masome le bonngwe go fitlha ka 15 sekao. 12 i 10 le 2	Barutwana ba kgona go dira dingatana di le lesome le tse di sa tshwaragana ka bonngwe go bontsha gore 11 e ka robiwa ngatana e le nngwe ya lesome lle ennwe gape e e sa tshwaraganang.  Tlhakorentsi e e kopantsweng e ka gaelelwa go dira torio kgotsa dikholomo di le 10. Go baya boleng ba dikaratabo ka dirisiwa go bontsha bolesome le bonngwe. **Go suta go setlhangwa se se kwadilweng.** **Thuto ka ditshwantsho go e emetseng setlhopha k a bo lesome le ka bonngwe** Barutwana ba ka rutiwa ka ditshwantsho tse di letlelelang go setlhopha sa bo lesome le ka bonngwe b aba setseng. **Sekao:** Mo bokhutlong ba kgweditharong e barutwana ba tshwanetse go kgona go kwala: 13 = 1 lesome le 3bonngwe b aba sa tshwaraganang 13 = 10 le 3 **Didiriswa tse di atlenegisitsweng** Didiriswa tse di ka bofaganang: • Dithobane tsa go bala • Dibadisi tse di ka kgonang go tsena ka mo gare ga tlhale. • Ditlhokwa tsa molelo • Ditlhokwa tsa bebetsididi • Tlhakorentsi tse di kopantsweng • Dibaga tsa dibadisi • Kgatlatalama 	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.6 **Ditogamaano tsa go rarabolola mathata**	Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme ba tlholose tharabololo ya dipalo : • Selekanyo sa didi-riswasekao. dipadisi • Ditshwantsho go thala kgang • Go aga le go tlhatlhamo-lola dipalo • Koketso le hafola • Mela ya dipalonumber lines	: Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme ba tlholose tharabololo ya dipalo • Selekanyo sa didiriswasekao. dipadisi • Ditshwantsho go thala kgang • Go aga le go tlhatlhamolola dipalo • Koketso le phokotso • Mela ya dipalonumber lines	**Ke eng se se farologaneng go tswa mo kgweditaro 2?** Ditogamaano tsa go bala di tswlelela pele didiriwa. Koketso le hafolo di ka dirisiwa jaaka togamaano ya go bala mo kgeditharong e.Fela, barutwana ba tshwanetse go go tswelelapele ba dira koketso le khafolo mo bothateng ba mafoko le mo maemong a setlhangwa se se lokologileng. Mo bokhutlong ba kgweditharong e barutwana ba simolola go rarabolola bothata ba mafoko ba diirisa ditogamaano tse di latelang: • Ditshwantsho kgotsa selekanyo tsa didiriswa • Go aga kgotsa go tlhatlhamolola dipalo • Koketso le halofo • Mela ya dipalo • Lebelela diteng go KGWEDITHARO 2.	
1.7 **Go tlhakanya le go ntsha**	Rarabolola mafoko mo setlhangweng mme o tlhalose tharabolo lo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 20.	e o tlhalose tharabolo lo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 15.	**Ke eng se se farologaneng go tswa mo kgweditaro 2?** Lebelela diteng go KGWEDITHARO 2 Fela tiro ka dinomoro go fitlha go 15.	
1.8 **Poeletso ya tlhakanyo e e isang kwa katisong**	Rarabolola mafoko mo setlhangweng mme o tlhalose tharabolo lo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 20.	e o tlhalose tharabolo lo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 15.	Lebelela diteng go KGWEDITHARO 2 Fela tiro ka dinomoro go fitlha go 15.	
1.9 **Kgobokanyo le karoganyo e e isang kwa karologantshong**	Rarabolola mafoko mo setlhangweng mme o tlhalose tharabolo lo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 20.	e o tlhalose tharabolo lo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 15.	Lebelela diteng go KGWEDITHARO 2 Fela tiro ka dipalo go fitlha go 15.	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.11 **Tšhelete**	• Lemoga le go tlhaola tšhelete ya dipapetlana le a pampiri a Aferika Borwa . - Tshipi 5c, 10c, 20, 50c, R1, R2, R5 • Dipampiri. R10 and R20 • Go rarabolola dipalo tsa tšhelete go akaretsa dipalotlalo le madi le madi a a salang mo diranteng kgotsa mo desenteng go fitlha go 20c kgotsa diranta go fitlha go R20	• Lemoga le go tlhaola tšhelete ya dipapetlana le ya pampiri a Aferika Borwa 5c, 10c, 20c, 50c, R1, R2; R5 Go rarabolola dipalo tsa tšhelete go fitlha go R20 le disente go fitlha go 20c	**Dipalotlalo – Diranta fela** Barutwana ba dira ka R1, R2, R5, R10 le R20 madi a banka a dipampiri. Ba tlhakanya tšhelete yotlhe go fitlha go R20 Tiriso ka go dirisa tšhelete a tshameko. Sekao: R5 + R10 = R15 R10 + R10 + R10 = R30 –tlhakanyo e e boleditsweng R5 +R2 + R8 = R15 – tlatsa go fitlhelela go 10 **Tšhelete ya polelo – Diranta fela** Barutwana ba dira ka R1, R2, R5, R10 le R20 Dipampiri. B dirisa go tlosa ba dirisa tšhelete ya pampiri. Barutwana ba feleletsa pampiri ya tiro mob a direlang teng dipoelo go dinthana tse ba di rekileng ka Sekao: R10 – R8 = R2 R15 – R5 = R10	
DIPALELO				
1.12 **Togamaano** **(mekgwa kgots ditogamaano)**	Dirisa ditogamaano tse di latelangfa ba diragatsa dipalelo: • Selekanyo sa didi-riswasekao. dipadisi • Ditshwantsho go thala kgang • Go aga le go tlhatlhamo-lola dipalo • Koketso le hafola • Mela ya dipalonumber lines	Dirisa ditogamaano tse di latelangfa ba diragatsa dipalelo: • Selekanyo sa didiriswa • Go aga le go kgaoganya dinomoro • Koketsopedi le halofo • Dinomoro tsa mola di rotloet-swa ke selekanyo sa didiriswa jaaka dibaga tsa go bala.	Barutwana ba tshwanetse go rarabolola tiriso e e lokologileng ba dirisa ditogamaano tse di latelang: • Go aga kgotsa go kgaoganya dinomoro. • Koketsobedi le halofo • Molapalo	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.13 **Tlhakanya le tloso**	Tlhatlhamano ya dipalo : 0 -20 • Tlhakanya go fitlha ka 20 • Tlosa go tloga mo 20 • Dirisa matshwao a a maleba • (+, –, =, ☐) • Ithuta ka kgolagano ya dipalo go fitlha ka 10	Tlhatlhamano ya dipalo : 0 -15 • Tlhakanya go fitlha ka 15 • Ntsha go tswa mo 15 • Dirisa matshwao a a maleba • (+, –, =, ☐) • Ikatisa ka kgolagano ya dipalo go fitlha ka 9	**Ke eng se se farologaneng go tloga mo kgweditaro 3?** Mo kgweditharong ya 2, palelo ya tlhatlhamano ya dipalo e okotsega go tswa go 10 go 15 Tatelano ya go dira matshwao a go tlhakanya le go tlosa, barutwana ban ne le maitemogelo a a lekaneng: • Dirisa go tlhaloganya ga puo ya go go tlhakanya le go tlosa. • Bala gotlhe • Balela go tloga go palo e kgolo. • Rulaganya le go farologanya dinomoro. **Togamaano ya palelo fa o dirisa tlhakanya le go tlosa.** Mo kgweditharong e, barutwana ba tla tswelela ba dira ditogamaano tse di latelang; • Go dira tlhakanya ka go balela gotlhe. • Go dira go tloga ka go bala • Balela go tswa go nomoro e kgolo • Dira go ntsha ka go tlosa • Go tloga ka go balela kwa morago Mo kgweditharong e barutwana bat la: **Fetolela palo go lesome le go tlosaa kgotsa go tlhakanya.** Togamaano e e ka rutiwa ka tlhatlhamano ya dipalo e e kwa tlase o dirisa dinomore tse di kwa godimo. Sekao: 9 + 6 = ☐ Barutwana ba ka bua jaana: “ke tla tsaya tsela e le nngwe go tswa go 6 le go tlhakanya le 9 go dira 10.” Jaanong 9 + 6 e ka nna jaana 10 + 5 = 15 Sekao: 8 + 5 = ☐ Barutwanai ba ka bua jaana: “ke tla tsaya 2 tlosa go tloga go 5 ya tlhakana le go dira 10.” Jaanong 8 + 5 e ka kwalwa e jaana 10 + 3 = 13	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.13 **Tlhakanya le tloso**	Tlhatlhamano ya dipalo : 0 -20 • Tlhakanya go fitlha ka 20 • Tlosa go tloga mo 20 • Dirisa matshwao a a maleba • (+, –, =, ☐) • Ithuta ka kgolagano ya dipalo go fitlha ka 10	Tlhatlhamano ya dipalo : 0 -15 • Tlhakanya go fitlha ka 15 • Ntsha go tswa mo 15 • Dirisa matshwao a a maleba • (+, –, =, ☐) • Ikatisa ka kgolagano ya dipalo go fitlha ka 9	Fa o rutiwa togamaano e, barutwana b aka dirisa dithusathuto tsa go kgongwa go tlhaloganya togamaano. Sekao,: Baya dintšwa ka setlhopha go dira 10  **9 + 4**  **10 + 3** $9 + 4 = 10 + 3 = 13$ **Kgaoganya dipalo tse mo dikarolong tse nnye go dira palelo bonolo** Barutwana bat la kgaoganya dinomore mo dikarolong tse di farologaneng. Ba tla dikgaoganya ka dikarolwana tse di ka kgonagalang.parts. • Dirisa metsi le dinomoro go bontsha kakanyo 8 + 6 = ☐ 8 + 2 + 4 8 + 2 ☐ 10 + 4 = 14 8 + 7 = ☐ 8 + 2 + 5 8 + 2 ☐ 10 + 5 = 15 15 – 9 = ☐ 15 – (5+4) 15 – 5 ☐ 10 - 4 = 6	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.13 **Tlhakanya le tloso**	Tlhatlhamano ya dipalo : 0 -20 • Tlhakanya go fitlha ka 20 • Tlosa go tloga mo 20 • Dirisa matshwao a a maleba • (+, –, =, □) • Ithuta ka kgolagano ya dipalo go fitlha ka 10	Tlhatlhamano ya dipalo : 0 -15 • Tlhakanya go fitlha ka 15 • Ntsha go tswa mo 15 • Dirisa matshwao a a maleba • (+, –, =, □) • Ikatisa ka kgolagano ya dipalo go fitlha ka 9	**Dirisa le go ka kitso e e fetileng jaaka togamaano** Togamaano e e fat lase e letla barutwana go bopa polelo le palo temoso. Boeletsa togamaano e e fat lase e tla rotloetsabarutwana go supentshana mo kamanong magareng ga dinomore le go rutwa ga barutwana. Ba ka kgonagala go diragatsa kitso ya bona ya tatelano ya go balela. **Baa nomoro e kgolo pele gore o kgone go balela pele kgotsa kwa morago** 4 + 12 = □ Rulaganya 4 + 12jaaka 12 + 2 o balele pele go 4 go tswa 12. **Tlhaola koketsobedi e e gaufi** 7 + 6 Barutwana b aka tlhalosa gore palo e ka kwalwa, 6 + 6 -1 (koketsobedi tlhakanya 1) or 7 + 7 - 1 (koketsobedi 7 ntsha1). Barutwana b aka kwala ditogamaano tsa bona ba dirisa metsu. 6 + 6 □ 12 + 1 = 13 **Dirisa kitso ya tiriso ka kamano ya go tlhakanya le go ntsha** 15 – 9 = □ Barutwana ba itse gore dipalo/palo e ka kwadiwa jaaka go tlhakanya dipalo " ke itse gore : 9 + □ = 15." Barutwana b aka dirisa palelo gore ba dire palelo.. **Palotlamo** Gore o dire dipalotlamo barutwana ba tshwanetse go neelwa thefosano ya ditirwana. Se se dirwa. Tse di dirwa ka nako ya gago.. Molapalo o ka dirisiwa go dira tlhamo ya 9. **Dikakanyo tsa koketsobedi** Barutwana ba tshwanetse go kwala polelopalo mo kgweditharong e. 1 + 1 = □ 2 – 1 = □ 2 + 2 = □ 4 – 2 = □ 3 + 3 = □ 6 – 3= □ 4 + 4 = □ 8 – 4 = □ Barutwana ba tshwanetse go kgona go arabela dipotso tse: • Koketsotharo 3. • Pedi ke eng 3? • Ke kgokolositse bo thataro ba babedi. Dintlha tsa me ke bokae? • Go na le dikausu di le kae mo paeng ya 5?	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.14 **Poeletso ya go tlhakanya go isa kwa go atiseng**	• Boeletsa go tlhakanya (imo palong e le nngwe) go 20 • Dirisa matshwao a a maleba (+, =, □)	• Boeletsa go tlhakanya(i.e. the same number) to 15 • Dirisa matshwao a a maleba (+, =, □)	**Ke eng se se farologaneng go tswa mo kgweditaro 2?** Mo kgweditharo 3, Barutwana ba tswelela go nonofa mo puong ya poeletso ya go tlhakanya. Sekao: • 2-Ditlhopha tse 3 • 4 ditlhopha tse 2 Barutwana ba tswelela go kwala polelopalo go tlhagosa Go tlola ga polelo go tshwanetse go tswelela go thusa barutwana go balela dilo le ditshwantsho tsa setlhopha. Fa ditshwantsho kgotsa dilo di beilwe ka ditlhopha tsa bedi, Barutwana ba balele mo peding e seng mo bonngweng go bona palogotlhe ya dinomoro tsa dilo.	
1.16 **Dipalo tsa tlhogo**	**Kgopolo ya palo 20** • Rulaganya setlhopha sa dipalo tse di neilweng. • Bapisa dipalo tse di fitlhang kwa go 20 mme o bue gore ke efe e e leng kgolo kgotsa nnye. • Itse gore ke nomoro efe e ntsi ka 1 kgolo 1 lnnye • Itse gore ke nomoro efe e kgolo 2e ntsi kgotsa 2 nnye. • Itse gore ke nomoro efe e kgolo go 10 kgolo kgotsa 10 lnnye.	**Kgopolo ya palo 15** • Rulaganya setlhopha sa dipalo tse di neilweng. • Bapisa dinomoro, bua gore ke efe e ntsi le gore ke efe e nnye. • Itse gore ke nomoro efe e nsti ka nngwe kgotsa nnye ka nngwe. • Itse gore ke nomoro efe e ntsi ka pedi kgotsa nnye ka pedi • Boeletsa go bitsa: • Palotlamo mo go 5 • Boeletsa goo tlhakanya le go ntsha dintlha mo 5 Togamano ya palelo Dirisa togamaamo ya palelo go tlhakanya le go ntsha ka kgono Go tlosaa go go maleba: • Bla palokgolo pele ka tatelano ya go balela pele kgotsa go balela morago • Molapalo • Koketsopedi le mafoko • Go aga le go kgaoganya	**Ke eng se se farologaneng go tswa mo kgweditaro 3?** Mo khweditharong e 2, tlhatlhamano ya dipalo e gola go tswa mo 10 go fitlha go 15. Sekao sa dipalo le ditirwana tse di ka botswang le go dirwa: • Simolola ka 3 balela go fitlha go 10 gangwe. • Baithutti ba botsa: Ke mang wa ntlha?, sbobedi?, boraro kgotsa bofelo? • Ke efe e nnye go 14 kgotsa 8? • Ke efe e e ntsi go 8 kgotsa 4? • Ke eng se se nnye mo go 2 ennye mo go 13? • Ke eng se sentsi mo go 2 le 8? • Neela dinomoro momagereng ga 1 le 3. • Neela nomore magareng ga 10 le 14. A go nomoro e le nngwe fela? • Baa dikaratapalo ka tatelano gotswa go e nnye go fitlha go palokgolo	

Ditlhogo	Dikgopolo le dikgono Tse di tlhokagalang kwa bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo go kgweditharo 1	Dinltha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta	
1.16 **Dipalo tsa tlhogo**	**Gopola ka bonako:** • Palotlamo go 10 • Go gopola go tlhakanya le go tlosa dintlha go fitlha go 10 **Togamaano ya palelo** Dirisa togamaano ya palelo o tlhakanye le go tlosa ka Baya palo e kgolo pele ka tatelano ya go balela pele kgotsa go balela kwa morago. • Molapalo • Koketsopedi le halofo • Go aga le go kgaoganya		**Gopola ka bonako** Bontsha dipalo go tlhakanya o dira 5 (Kwala kemopalo, ditsekadima) • 1 • 2 • 3 • 4 Bontsha dinomore fa moleng fa …. e tserwe go tswa go 5(Kwala o dirisa kemopalo, ditsekedima) • 1 • 2 • 3 • 4 1 + 2 = 3 ke eng 2 + 1? A karabo e a tshwana? 3 + 1 = 4 ke eng 1 + 3? A karabo e a tshwana? **Palelo ya ditogamaano:** Dirisa palelo ya ditogamaano go tlhakanya le go ntsha ka kgono. Tlhakanya tse di latelang go baa palokgolo pele o bolele: 1 + 2 2 + 3 1 + 4 Koketsopedi 1. Ke eng 2ka bobedi? Ke eng halofo ya 4? Dirisa molapalo Ke go tlola go le kae go tswa go 3 go fitlha 5? Ke go tlola go lekae? Go tswa kwa morago ga 5 go fitlha go 2?	

Mophato 1 Kgweditharo3 2. Dipaterone, Tiriso le Alejebora/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela, dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshellono boswa jwa letsatsi ka letsatsi • Go tswa mo ngwaoboswa ya rona	**Go kopolola le go atolosa le go tlhalosa** Go kopolola le go atolosa le go tlhalosaka mafoko: • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela, dipopego kgotsa didiriswa	Mo mophatong wa 1 barutwana b aka tsepama mo dipateroneng tse di elemete di boelediwang ka nako tsotlhe. Lebelela dintlha tsa KGWEDITHARO 2	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola, go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 100 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 80 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 1 le 80 Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 80 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-80 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 80 • Tlhama dipaterone ka bowena • Tlhama dipaterone tsa dipalo ka bowena.	Tatelano ya dipalo e ka golagangwa le go bala.Jaaka bokgoni le kgono yago bala ya barutwana e fetoga,mefuta ya tatelano ya palo e barutwana ba dirang ka yona e ka gola. Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago: • Bonngwe go tloga go palo nngwe le nngwe magareng ga 1 le 80 • Bosome go tloga mo dikatisanetswa dingwe le dingwe tsa 10 magareng ga 0 le 80 • Botlhano go tloga ka dikatisanetso dingwe le dingwe ya 5 magareng ga 0-80 • Bopedi go tloga ka dikatisanetso dingwe le dingwe ya 2 magareng ga 0 le 80 Fa barutwana ba bala ka molomo b aka bontshiwa tatelano ya palo e e kwadilweng ka mefuta e e farologang.Ba ka nne ba supa dipalo tse ba di baling sekao: **Sekao sa 1: Tiriso ya karata ya dipalo** 1 **2** 3 **4** 5 **6** 7 **8** 9 **10** 11 **12** 13 **14** 15 **16** 17 **18** 19 **20** 21 **22** 23 **24** 25 **26** 27 **28** 29 **30** 31 **32** 33 **34** 35 **36** 37 **38** 39 **40** **Sekao 2: Dirisa mola palo go lemoga dipaterone** **Bala ka nngwe –someng go tloga 50 go fitlha 80** Barutwana ba bala dipalo go fitlha 80 mme ba kwala fela dipalo 1 go fitlha 15. Dipaterone tsa dipalo ka dipalo tse di fetang 15 e ka dirwa ka: • Tshaba mebala mo dipalong mo dipateroneng mo papetlana ya dipalo • Sekeletsa dipalo mo pateroneng mo tlhatlhamanong ya dipalo kgotsa papetlana ya dipatlo • Dirisa karata ya dipalo go paka tatelano ya dipalo. • Dirisa karata ya dipalo go bontsha dipalo tse di tlhaelang mo tatelanong ya dipalo tse dikwadilweng tse di neetsweng. • Dirisa papetlana ya matshwao a dipalo tse di neetsweng go thala mola go tloga godipalo tse di siameng tse ditlhophileng mo maemong a di tshwanetseng go nna mo go ona. Barutwana b aka nne ba fiwa dipalo tse di kwadilweng ka tatelano mme go na le tse di tlogetsweng.Ba tshwanetse ba fiwa papetlana ya dipalo tse di kgonegang go tloga mob a ka tlhophang dikarabo tse di siameng. Barutwana ba ka nna ba tlatsa dipalo tse di tlogetsweng tse di neetsweng mo mefuteng e elatelaneng e e fa godimo,ga mogo le tse di tlatsa dipalo tse di tlogetsweng mo go tse di kwadilweng ka ttelano sekao 2, 12, 22, ___, 42, 52, 62.	Dithuto 3

MOPHATO 1 KWEDITHARO 3 BOALO LE DIPOPEGO(DIPALO-POPEGO)				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwanako** Mo pakathutong ya ura le metsotso e le 24
3.1 **Kemo,dikaelo le dipono**	**Puo ya kemo** Tlhalosa kemo le kamano ya sediriswa mo go se sengwe sekao fa go dimo ga,mo pele ga,mo morago ga,molema,moja,godimo,tlase,go bapa **Kemo le dipono** Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe tsa tsatsi lengwe le lengwe. **Kemo le dikaelo** • Sala morago ditaelodikaelo go tsamaya mo phaposing • Sala morago ditaelo/dikaelo go bapisa sediriswa le se sengwe.Tsenya pensile mo lebokosong		Puo ya boikemedi e godisitsweng mo kgweditharong ya 1 e tshwanetse go boelediwa ka nako ya go rutwa ga barutwana botlhe mo kgweditharong e yotlhe.Dirisisa nako e e nnye go katisa puo ka dinako tsotlhe Dikarololwana tsa kemo ya puo di ka katisiwa fa barutwana ba dira ka popegotlhakorepedi(3-D) Tiro ya kemo le kaelo di ka tiisiwa ka tiro kwala jaaka go thala, go tshasa mmala kgotsa papiso ya methalo le mafoko.Se se ka dirwa ka nako ya bona.	

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwanako Mo pakathutong ya ura le metsotso e le 24
3.2 **Didiriswa tsa Popegotlha-koretharo**	**Tlhatlhamano ya di diriswa** Lemoga le go neela maina le go maina a didiriswa mo phaposingborutelo le mo ditshwantshong tsa tekanyetsotlhakoretharo. • Dipopego tsa dibolo(dikgolokwe • Popego ya lobokoso Diponagalo tsa didiriswa Tlhalosa,tlhaola le go tshwantsha sediriswa sa popegotlhakoretharo go ikaegilwe ka dintlha tse: • bogolo • mmala • Didiriswa tse dikgokologang • Didiriswa tse di relelang **Tsepamo mo ditirwaneng** Lebelela le go aga didiriswa tsa tekatekanyetsotlhakoritharo o dirisa didiriswa tse di kgongwang jaaka diboloko tsa go aga,didiriswa tse di boeletswang go diriswa le dilwana tsa go aga.	**Tlhatlhamano ya di diriswa** Lemoga le go neela maina le go maina a didiriswa mo phaposingborutelo le mo ditshwantshong tsa tekanyetsotlhakoretharo • Dipopego tsa dibolo(dikgolokwe • Popego ya lobokoso Diponagalo tsa didiriswa Tlhalosa,tlhaola le go tshwantsha sediriswa sa popegotlhakoretharo go ikaegilwe ka: • bogolo • mmala • Didiriswa tse dikgokologang • Didiriswa tse di relelang	**Tsepamo mo dipopegong tsa popegotlhakoretharo** Barutana ba dira ka dipopego tse di bopegileng jaaka bolo,mabokoso a a lebegang jaaka khutlonnetsepa,porisime le popegotaese.Barutwana ba ka dira dipopego tse di kgoromediwang mme ba di pege fa godimo ga e e kgokologang. Ba batlisisa gore ke efe e e kgokologang e e ralelang. Barutwana ba batlisisa gore a ba ka kgona go dira torio ka go dirisa fela dibolo kgotsa mabokoso Ka nako e ba dirang ba le nosi,barutwana ba ka tswelela ka go dira: • tlhaola didiriswa go ya ka bogolo • tlhaola didiriswa go ya ka mmala • Aga/bopa ka didiriswa le • Dira bolo kgotsa mabokoso ka seretse kgotsa tege e e tshame-kang **Go lemoga le go naya maina a dibolo le mabokoso** Barutwana ba tswelela tlhaola le go tlhalosa dipopego tsa jeometeri le dipopego tse dingwe mme bue gore a di bopegile jaaka bolo kgotsa bokoso. sekao setene se se bopegile jaaka lebokoso,namone e bopegile jaaka bolo **Tiro e e kwadilweng** Tiro e e bonagalang tsa didiriswa kopangwa/tiisiwa ka go kwalwa.	Thuto tse 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwanako Mo pakathutong ya ura le metsotso e le 24
3.3 **Dipopego tsa popegotlha-korepedi**	**Tlhatlhamano ya dipopego** Lemoga le go naya maina a dipopegotlhakorepedi • Didiko • Dikhutlotharo • Dikhutlonnetsepa **Dipopego tsa dipopego** **Tlhalosa,tlhaola le go bapisa dipopego tsa tekanyetsotlhakorepedi ka dintlha tse:** • bogolo • Mmala • popego • matlhakore a tlhamaletseng • matlhakore a kgolokwe Tekano	Ga go rotloediwe tsepamo mo popegotlhakorepedi mo kgweditharong 3,fela barutwana ba ka tshwelela go dira ditshwantsho ka dipopegotlhakorepedi tse di segilweng kgotsa ba ka dira tiro kwalo ka nako ya go dira ba le nosi ka nako ya dikgono tsa botshelo kgotsa dipalo		
3.4 **Tekano**	**Tlhomamisa mola wa tekanyetso mo mmeleng wa gago**: • Lemoga le go thala mola wa tekatekano mo dipopegong tsa jeometeri tsa tekanyo ya tlhakorepedi kgotsa tse e seng jeometeri tsa tekanyo ya tlhakorepedi.	• **Tlhomamisa mola wa te-kanyetso mo mmeleng wa gago:** • Lemoga le go thala mola wa tekatekano mo dipopegong tsa jeometeri tsa tekanyo ya tlhakorepedi kgotsa tse e seng jeometeri tsa tekanyo ya tlhakorepedi.	Barutwana ba lebelela mola wa tekatekanyo mo ditshwantshong le dipopego Tiro yago kwala gay a tshwanela go nna fela “thala mola wa tekatekanyo/kgaoganya ka bogare”.Barutwana bat thale mola wa tekatekanyo mo dipopego tse di farologaneng mo mebeleng ya bona.	Thuto 1

MOPHATO WA 1 KGWEDITHARO 3 4.TEKANYO				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** **Mo thutong ya ura le metsotso e le 24**
4.1 **Nako**	**Tsamao ya nako** Bolela ka tsamao ya nako • Rulaganya ditiragalo tsa gale tsa matselo a bone • Bapisa boleele jwa nako ka go dirisa puo e jaaka boleele, bokhutsane, bonako, le bonya. • Rulaganya ditiragalo o dirise puo e jaaka maabane, gompieno, ka moso. **Bolela nako** • Tlhalosa fa sengwe se direga o dirisa jaaka moso, thapama, bosigo masa, lotlatlana • Itse malatsi a beke. • Itse dikgei tsa ngwaga. • Kwala malatdsi a matsalo mo khalentareng		Barutwanan ba tshwanetse go ithuta go bua ka ga • Tatelano ya ditiragalo; le • Boleng jwa nako Barutwana ba tshwelela go buisana ka nako ka malatsi otlhe fa ba rutwa botlhe ka phaposi kgotsa ka ditlhopa le fa fetola nako ya dithuto. Barutwana ba botsa le go araba dipotso ka nako e dilo di diragetseng ka teng jaaka phakela, thapama, bosigo, masa le lotlatlana. Barutwana ba rulaganya ditiragalo ba bua jaana maabane, gompieno, ka moso, malatsi a beke le dikgedi tsa ngwaga. Barutwana ba bapisa boleele jwa nako jaaka teletana kgotsa khutsanyane le ka bonako kgotsa ka bonya. Barutwana ba buisa ka go thulaganya ga ditiragalo mo matselong a bone. E bile ba rulaganya tatelano ya ditshwantso jaaka • mekgwa ya dira samentshise le kopi ya tee • setshwantso se se supang lesea le gola go nna mogodi • Tshekotshelo ya diphologolo jaaka lee go koko, lee go segwagwa, lee go serurubele le • Ditiro tsa gale tsa letsatsi (go tsoga , go ya sekolong, go tshameka, go ja dilalelo, le go robala) Go tshwelela go kwala malatsi a botsalo mo khalentareng ngwaga yotlhe.	

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya go go sa tlhomamang** • Bapisa le go rulaganya boleele, bogodimo le bophara jwa dilo tse pedi kgotsa go feta ka go lebaganya. • Dirisa puo ya go bapisa jaaka teletsana, khutsanyane, telele thata, bopharaphara • Lekanyetsa, lekanya, bapisa rulaganya le go kwala boleele o dirisa ditekanyetso tse di sa tlwaelesegang jaaka mabogo, boleele jwa dipensele le dibadisa jalo jalo	**Go lekanya go go sa tlhomamang** • Lekanyetsa, lekanya, bapisa rulaganya le go kwala boleele o dirisa ditekanyetso tse di sa tlwaelesegang jaaka mabogo, boleele jwa dipensele le dibadisa jalo jalo	**Pharologanyo ke eng mo kgweditharo** Dithekanyo tsothe mo mophatong 1 ke tse di sa tlhomamang. Go seka ga dirisiwa ditekanyo tse di tlhomameng tsa boleele. Mo kgweditharo 1 go atlenegisiwa gore barutwana ba rutwe go lemoga • Papiso e e lebaganeng ya boleele jwa dilwana o di lebaganya • Go rulaganya le go bapisa boleele, bogodimo, le bophara jwa dilwana tse tharo kgotsa go feta ka go di lebaganya ka bobedi go fitlhela o ka di rulaganwa ; le go • Tlhama puo ya go ka bua ka dipharologanyo tsa boleele, bo-godimo, bophara jalo jalo Mo kgweditharong yotlhe ka nako ya go dira ka bongwe, barutwana ba ikatise le go tiisa go rulaganya le go bapisa boleele kgotsa bogodimo kgotsa bophatra jwa dilwanana tse tharo kgotsa go feta ka go di lebaganya ka bobedi go fitlhela tsotlhe di ka latelana. Tiro yotlhe e tshwanetse go rekodiwa. Mo kgweditharo 3 barutwana ba ka tlhokomedisiwa tiriso ya go lekanya go go sa tlhomamang ka di yuniti tse di sa tlwaelesegang tsa boleele. **Go lekanya go go sa tlhomamang ga boleele ka tiriso ya diyuniti tse di sa tlwaelesegang tsa boleele** Barutwana ba ka rutwa melawana le ditiriso tsotlhe tsago lekanya o dirisa diyuniti tse di sa tlwaelesegang. Tekanyo ka diyuniti tse di sa tlwaelesegang go se bonwe jaaka tekanyo e e boemo tlase go tekanyo ya diyuniti tse di tlhomameng. Go lekanya boleele ka diyuniti tse di sa tlwaelesegang go tsenyeletsa go balela gore ke diyuniti tse kae tsa tse di tlhopilweng tse di tshwanang ka boleele jwa dilwana tse di lekantsweng. Barutwana ba tshwanetse go lekanya dilwanan tse di farologaneng ba dirisa mefuta ya lekanyi jaaka diyuniti tse di sa tlwaelesegang.	Dithuto 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya go go sa tlhomamang** • Bapisa le go rulaganya boleele, bogodimo le bophara jwa dilo tse pedi kgotsa go feta ka go lebaganya. • Dirisa puo ya go bapisa jaaka teletsana, khutsanyane, telele thata, bopharaphara • Lekanyetsa, lekanya, bapisa rulaganya le go kwala boleele o dirisa ditekanyetso tse di sa tlwaelesegang jaaka mabogo, boleele jwa dipensele le dibadisa jalo jalo	**Go lekanya go go sa tlhomamang** • Lekanyetsa, lekanya, bapisa rulaganya le go kwala boleele o dirisa ditekanyetso tse di sa tlwaelesegang jaaka mabogo, boleele jwa dipensele le dibadisa jalo jalo	Go na le mefuta e meraro ya go dirisa diyuniti tse di sa tlwaelesegang. • Tlhomaganya ka tsela mefuta ya dilwanan tse di farologaneng tes di lekanwang tsa boleele jo bo lekanang, jaaka bokoso ya mokgwaro, dikhurumelo tsa dibotlolo tse di tshwanang kgotsa dibadisa, dipensele tse dintsha.Sekao, go lekanya bophara jwa tafole, dipensele tse dintsha di tshwanetse go dirisiwa go kgabaganya tafole. Fa se se botlhokwa ke gore • Dilwana tsotlhe e nne tsa boleele jo bo lekanang.O ka se re buka e bophara jwa dikhurumelo tsa dibotlolo tas selekano se se farologaneng jaaka sekhurumelo sa 2litarabotlolo ya mashi, dikhurumelo tsa dibotlolo tsa polasetiki tsa dino tsididi, dikhu-rumelo tsa dibotlolo tsa tsipi,; le • Go se nne le diphatla fag are ga dilwana: di tshwanetse go lebaganwa gore di tshwaragane. • Dirisa dilwan tse pedi tse di tshwanangtsa diyuniti tse di sa tlwaelesegang.Di lebaganye, mme o sutise ya ntlha ka fa lethakoreng la ya bobedi. Se se dirwa fa o lekanya ka boalo jwa mabogo, bophara jwa maoto. • Dirisa nngwe ya dilwana tsa seemo se se sa tlhomamang sa go lekanya go e dikolosa fa godimo mkgotsa go dira gore ntlha ya yone e robale pele e relela. Barutwana ba tshwanetse go rutwa go bua / bega yuniti e ba e dirisang ka metlha, jaaka buka e lekana le dikhurumelo tsa dibotlolo tse sephara tse 12, le phaposi borutelo e boleele jwa 38 dikgato. Fa barutwana ba tlile ba dirisa yuniti nngwe ga ntsinyana go lekanya, ba ka phopholetsa gore e ka lekana le diyuniti tse kae tsa boleele. Go phopholetsa go botlhokwa pele o lakanya, mme go ka dirwa fela fa barutwana ba kile balekanya ka yuniti eo pele.	Dithuto 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya go go sa tlhomamang** • Bapisa le go rulaganya boleele, bogodimo le bophara jwa dilo tse pedi kgotsa go feta ka go lebaganya. • Dirisa puo ya go bapisa jaaka teletsana, khutsanyane, telele thata, bopharaphara • Lekanyetsa, lekanya, bapisa rulaganya le go kwala boleele o dirisa ditekanyetso tse di sa tlwaelesegang jaaka mabogo, boleele jwa dipensele le dibadisa jalo jalo	**Go lekanya go go sa tlhomamang** • Lekanyetsa, lekanya, bapisa rulaganya le go kwala boleele o dirisa ditekanyetso tse di sa tlwaelesegang jaaka mabogo, boleele jwa dipensele le dibadisa jalo jalo	Barutwana ba tlhoka go rutiwa gore fa o bapisa boleele, bogodimo kgotsa bophara go dirisiwe yuniti e e tshwanang. Sekao, fa bophara jwa mojako e le bophara jwa mabogo a 20 le bophara jwa tafole e le boleele jwa dipensele di le 8, o ka se re mojako o sepharanyana go feta tafole. • Barutwanan ba tlhoka go lekanya ka mefuta e e farologaneng ya diyuniti tse di sa tlhomamang. • ba simolole go tlhaloganya go re fa o lekanya ka yuniti e nnye , o tla lekanya gantsi jaaka, bophara jwa phaposi borutelo e ka nna dikgato tse 20 le boleele jwa maoto a le 48, le • Simolola go dirisa diyuniti tse di siametseng se o se lekanyang, jaaka go lekanya bophara jwa phaposi borutelo ka dikhurumelo tsa dibotlolo ke tsenyo ya nako. **Go rekota go lekanya** Lefa go lekanya e le dikgono tsa tiriso, barutwana ba tshwanetse go rekota ditekanyo ka nako tsotlhe. **Go lekanyetsa boleele jaaka mo tirisong ya go rarabolola dipalo le dipalelo** Ka nako e e beetsweng Dipalo, Tiriso le Botsalano barutwana ba ka rarabolola dipalo tse di dirisiwang mo tirisong ya go lekanya ga boleele jo bo sa tlhomamang, sekao Boemo jwa bokoso ya molora wa go tlhatswa ke dibokoso tsa mokgwaro tse 8. Bokoso ya seriele e boemo jwa dibokoso tse 13 tsa mokgwaro. Ka jalo bokoso ya seriele e feta ya molora ka boemo jo bo kae? Elatlhoko sekgala sa tlhatlhamano ya dipalo se se siametseng kgweditharo eo.	Dithuto 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	Go lekanya go go sa tlhomamang • Phopholetsa, lekanya, bapisa, rulaganya le go rekota boima o dirisa seemo se se sa tlhomamang sa go lekanya le go lekantsa jaaka diboloko, ditene jalo jalo • Dirisa puo go bua ka go bapisa jaaka bofefo, boima, bofefonyana , boima thata		Go lekanya gotlhe mo mophatong 1 ke go go sa tlhomamang. Ga gona go lekanya ga boima jo bo tlhomameng. Mo kgweditharong 1 go atlenegisiwa gore barutwana ba tsepame mo • Go bapisa boima jwa dilwana go go tlhamaletseng • Go bapisa le go rulaganya boima jwa dilwana tse tharo kgotsa go feta, ka go di baya ka bobedi mo tekanyong, go fitlhela dilwana tsotlhe di ka latelana; le • Tlhotlheletsa puo ya go bua ka di pharologanyo tsa boima. Ka nako ya tiro ya bonngwe mo ngwageng yotlhe, barutwana ba ka ikatisa le go gatisa thulaganyo le bapiso ya bioma jwa dilwana tse 3 (tharo) kgotsa go feta, ka go baya dilwana ka bobedi mo selekanyong, go fitlhela dilwana tsotlhe di ka lebaganwa. Tiro yotlhe e tshwanetse go rekodiwa.	
4.4 **Mothamo / Bolumo**	**Go lekanya go go sa tlhomamnag** • Bapisa le go rulaganya boleng jwa seeledi (bolumo) ka di tshegetsi tse pedi di leba-gane. Barutwana ba tlhotl-homisa ka go tshela mo go ya boraro fa go tlhokega. • Bapisa le go rulaganya boleng jwa seeledi se ditshegetsi tse pedi di ka bo tshegetsang fa se tletse (mothamo) • Dirisa puo go bua ka ga pap-iso jaaka go ntsi go, potlana go, tletse, lolea • Lekanyetsa le go lekanya, bapisa le go rulaganya mothamo wa ditshegetsi ka go dirisa go lekanya go go sa tlwaelesegang ga seemo sa mashwana le dikopi.		Ditekanyetso tsotlhe mo mophato 1 ke tse di sa tlhomamang. Ga gona tekanyo e e tlhomameng ya boleele ka diyuniti tse di tlwaelesegileng e e dirwang. Go fitlhela jaanong mo gare ga ngwaga tsepamo ya mothamo / bolumo e ntse e le ka go • go tsweletsa puo go bua ka mothamo / bolumo; • go bapisa bolumo ya ditshegetsi tse pedi tse di tshwanang; le • Go bapisa bolumo ya ditshegetsi tse di farologaneng ka bo-phara, o tshela mo setshegetsing sa boraro. Lebelela tiro ya KGWEDITHARO 2. Barutwana ba ka ikatisa le go gatisa ditlhogo tse ka nako ya tiro ka bonngwe.	

MOPHATO WA 1 KGWEDITHARO 3 5. THANOLO YA TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 3**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** (Mo paka-thutong ya ura le metsotso e le 24)
Go dira ka didiriswa tse di kgobokantsweng				
5.1 **Kgobokanyo le tlhaolo ya didiriswa**	**Kgobokanya le go rulaganya didiriswa** Kgobokanya le go tlhaola didiriswa tsa letsatsi le letsatsi	Go tlhaola didiriswa tse di kgobokantsweng ga go sa tlhole go tsepamedisitswe bogare jwa ngwaga.Le gale go ka nna ga diriwa ka nako e barutwana ba dirang ditirwana ba le nosi. Go atlenegenedisiwa gore go dira ka dipalo tsa tshedimosetso go tsepamedisiwe mo kgedi-tharong ya 3 : lebelela kwa tlase		
5.2 **Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng**	**Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng** Thala setshwantsho sa didiriswa tse di kgobokantsweng			
5.3 **Bua le go bega ka didiriswa tse di kgobokantsweng**	**Bua le go bega ka didiriswa tse di kgobokantsweng di tlhaotswe.** • Neela ka mabaka gore kgobokanyo e tlhaotswe jang • Araba dipotso go bontsha gore - Tlhaolo e dirilwe jang (kgato) - Tlhaolo e e kgobokantsweng e ntse jang(kumo) • Tlhalosa kgobokanyo le mothalo • Tlhalosa gore didiriswa tse di kgobokantsweng di tlhaotswe jang			

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
Go dira ka tshedimosetso				
5.4 **Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposiborutelo kgotsa sekolo mme o arabe dipotso tse di bodiwang ke morutabana	**Kgobokanya le go rulaganya tshedimosetso.** • Kgobokanya tshedimosetso ka ga phaposiborutelo kgotsa sekolo mme o arabe dipotso tse di bodiwang ke morutabana • Tshwantsha tsedimosetso **Tshwantsha tshedimosetso ya ditshwantsho** • **Tsetsereganya le go rarabolola tshedimosetso** • Araba dipotso ka tsedimosetso ya ditswantsho	**Tsepamo e e atlegenedisitsweng: dipalo tsa tshedimosetso e e feletseng** Mo Dipalong tsa tshedimosetso • Barutwana ba kgobokanya tshedimosetso go araba dipotso. Potso e, e bodiwa ke morutabana kgotsa mo bukeng mo thutong ya motheo le mo thutong ya bogare • Barutwana ba tlhaola le go tshwantsha tshedimosetso ka ditsela tse di ka dirang tsheka-tsheko bofefo. Tsela e barutwana ba mophato 1 ba ka ikatisang ka yone ya go tshwantsha ke kerafo e e dirisediwang ditshwantsho. • Barutwana ba sekaseka tshedimosetso ka go araba dipotso tse di bodiwang ke morutabana mo kerafenong e e dirisediwang ditshwantsho Kerafo ya setshwantsho ys phaposi Mo mophatong 1 go mošola go simolola dipalo tsa tshedimosetso ka go dira kerafo e e dirisediwang ditshwantsho.Go dira mmogo mo phaposing go thusa barutwana go tsaya karolo mo dkgatong tsotlhe kwa ntle gago ga go latlhegelwa ke kgato nngwe ka botlalo Go dira go naya morutabana tšhono ya go tsepamisa barutwana mo dintlheng kgolo ka ga dipalo tsa tshedimosetso le se ba tshwanetseng go se itse ka ga dipopego tsa botlhokwa tsa kerafa ya setshwantsho. • gore o tšhwaya leng kerafo e e dirisediwang ditshwantsho le jang. • gore o tšhwaya leng ditlhopa le jang • Kerafo e e dirisediwang ditshwantsho e tshwanetse go nna le ntlha kgolo e e tlhalosang bokao jwa setshwantsho sengwe le sengwe. • Ditshwantsho kgotsa diphatlha tsa ditshwantsho di tshwanetse go nna tsa bogolo jo bo lekanang • O baya jang ditshwantsho ka go lekalekana • O bala jang kerafo Go dira ka tshedimosetso yotlhe go ka tsaya dithuto tse di farologaneng.	dithuto 3	
5.5 **Tshwantsha tshedimosetso**	Tshwantsha tshedimosetso ya ditshwantsho			
5.6 **Tsetsereganya le go rarabolola tshedimosetso**	• **Tsetsereganya le go rarabolola tshedimosetso** • Araba dipotso ka tsedimosetso ya ditswantsho.			

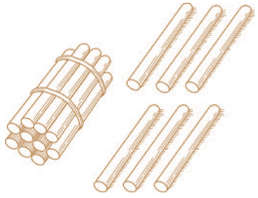
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 3	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
5.6 **Tsetsereganya le go rarabolola tshedimosetso**	• **Tsetsereganya le go rarabolola tshedimosetso** • Araba dipotso ka tsedimosetso ya ditswantsho.	**Kgobokanya, rualganya le go tshwantsha tshedimosetso** Barutana mo kgatong ba tshwanetse go netefatsa gore ditlhogo tse di farologaneng tsa kgobokanyo ya tshedimosetso di a tlhopiwa le go sekasekiwa mo mophatong o mongwe le o mongwe.. Dikai tse di maleba tse di fetileng di akaretsa go rulaganya gape maemo a bosa a letsatsi le letsatsi a kgwedi mo patlaneng, go bopa kerafo e e dirisediwang ditshwantsho kgotsa go dira kerafo e e dirisediwang ditshwantsho ya matsalo a barutwana. **Sekaseka tshedimosetso** Barutwana ba araba dipotso tse di tshwanang le: "Ke maemo a fe a bosa a a tshwanang thata mo kgweding e" "Ke maemo a fe a bosa a a tshwanang go le gonnye mo kgweding e" Malatsi a go neng go le letsatsi a oketsegile go le go kae go feta a go neng go le maruru? Go dira ka tshedimosetso yotlhe go ka tsaya dithuto tse di farologaneng	dithuto 3	

MOPHATO 1 KGWEDITHARO 4 1. DIPALO, MATSHWAO LE DIKGOLAGANO				
Ditlhogo	**Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.**	**Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1**	**Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.**	**Nako**
TLHABOLOLO YA DIKAKANYO TSA DIPALO: Bala ka palotlalo				
1.1 **Bala dididriswa**	Bala didiriswa tsotlhe. ka nepagalo go fitlha 50. Neela palo ya didiriswa tse di ka tlhotlhomisiwang le go fopholediwa.	lala didiriswa ka nepagalo go fitlha go 50 Neela dipalo tse di fopholeditsweng ka nepagalo ya diiriswa tse di ka tlhotlhomiswang.	**Ke eng se farologaneng mo kgweditharong 3?** Mo kgweditharong ya 4 barutwana ba oketsa tlhatlhamano ya go bala.Tsepamo e sale mo go tlhaloganyeng molawana wa lebala palo.Mo kgweditharong e barutwana ba tshwanetse go ithuta go baya didiriswa ka tatelano fa ba bala gore fa ba tlhatlhoba go bala, thulaganyo e ba thuse go bala ka bofefo. Sekao: Babadi ba ka bewa ka mela. Mo kotareng e, barutwana ba tswelela ka go oketsa bokgoni jwa bona jwa go ikatisa le go bala.Du • Go bala gotlhe; • Go tswelela go bala; • Molawana wa dipalo wa lebalapalo le; • Tiriso ya diteng tse di kwadilweng. Barutwana ba tshwanetse go dira tshwaragano magareng ga bolengkemeditatelano le lebalapalo. Se se bonwe fa go etswe tlhoko gore go kgaotsa go bala go fitlha go se diriswa sa 50 go kaya gore ba badile didiriswa di le 50.Ka nako yone eo ba itse gore mokgwa wa tatelano ya go bala didiriswa ga e tshweaetse go bala dilo.Barutwana ba tloka go gokaganya magareng ga dipalofako le palotlhaka. **Go bala ka ditlhopha** Gore o thuse barutwana go bala ka go kgaotsa ka bobedi, botlhano le bolesome, ba tlhoka go dira ditlhopha tsa dilo ka 2,5, le 10. Dikarata tsa dipalo di tshwanetse go bontshwa fa di tsewa go bontsha palo ya didiriswa tse di badilweng. Go bala ka ditlhopha go tla siamisetsa barutwana go tlhaloganya katiso le go bala. Mo bofelong jwa kgweditharo e barutwana ba tshwanetse go lemoga kgobokanyo ya phatlolo ya dipalo.Sekao: “Ke a itse gore ke 10 gonne ke baya 4 mo letlhakoreng le thataro mo letlhakoreng le lengwe. **Didiriswa:** Go tshwanetsego elwa tlhoko mofuta wa didiriswa tse di tla diriswang. • Sethusathuto se se bopegileng, jaaka tlhale ya palo ya dibaga e ka diriswa. • Kgatlatalama e ka diriswa go diragatsa palo mo ditlhopheng tsa bolesome. • Barutwana ba ka dira ditlhopha tsa 2, ditlhopha tsa 5 le lesome mme go balwe tsotlhe.	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.2 **Balela kwa pele le kwa morago**	**Balela kwa pele le kwa morago mo go:** • 1 go simolola go palo nngwe le nngwe mo gare ga 0-100 **Balela kwa pele** • Bolesome go tloga go katiso nngwe le nngwe Ya 10 magareng ga 0-100 • Botlhano go tloga go katiso nngwe le nngwe Ya 10 magareng ga 0-100 • Bopedi go tloga go katiso nngwe le nngwe Ya 10 magareng ga 0-100	**Balela kwa pele le kwa morago mo go:** • 1 go simolola go palo nngwe le nngwe mo gare ga 0-100 **Balela kwa pele** • Bolesome go tloga go katiso nngwe le nngwe Ya 10 magareng ga 0-100 • Botlhano go tloga go katiso nngwe le nngwe Ya 10 magareng ga 0-100 • Bopedi go tloga go katiso ya pedi magareng ga 0-100	**Pharologanyo ke eng mo kgweditharong 1 ?** Mo kgweditharo 4 barutwana jaanong ba bala ka kgaotso ya 10, 5 le 2 go fitlha go 100. Go bala ka kgaotso go nna togamaano e botlhokwa ya kitso e bat la e dirisang mo mophatong wa 2 le wa 3, mme e tla thusa barutwana ba dira dipalo. Mo bofelong jwa kgweditharo barutwana ba tshwanetse go: Bala ka molomo o arabe dipotso jaaka tse: • Simolola ka 52, o balela ka bonngwe go fitlha 72. • Simolola ka 88 le go balela morago ka bonngwe go fitlha go 70. • Simolola go 38 le go balele ka bopedi go fitlha go 50. • Simolola go 45 le go balele ka botlhano go fitlha go 100. • Simolola go 10 le go balele ka bosome go fitlha go 100. Barutwana ba tshwanetse go diragatsa bokgoni jwa bone mo ditirwaneng tse di kwadilweng: Sekao: • Gatisa le go atolosa tatelano e e bonolo ya dipalo ka bonnye 100. Leba karolo ka dipaterone ta dipalo.	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.3 **Letshwaopalo le paloina**	**Itse le go bala dipalo** • Itse le go bala matshwaopalo 0 go fitlha go 100 • Kwala letshwaopalo 0 go fitlha go 20 • Itse le go bala leinapalo 1 go fitlha go 10 • Kwala leinapalo 1 go fitlha go10	**Itse le go bala dipalo** • Itse le go bala matshwaopalo 0 go fitlha go 100 • Kwala letshwaopalo 0 go fitlha go 20 • Itse le go bala leinapalo 1 go fitlha go 10 • Kwala leinapalo 1 go fitlha go10 • Itse le go bala matshwaopalo 0 go fitlha go 100 • Kwala letshwaopalo 0 go fitlha go 20 • Itse le go bala leinapalo 1 go fitlha go 10 • Kwala leinapalo 1 go fitlha go10	***Ke eng se se farologaneng mo kgweditharong 3?*** Mo kgweditharong ya 4, tlhatlhamano ya dipalo e oketsegile go 100. Go kwala letshwaopalo le leinapalo go a akaretswa mo kgweditharong e. Ga go kitso e ntšhwa e e ithutilweng. Go botlhokwa go itse gore go bala go ikaegile segolobogolo mo tirisong ya mainapalo. Barutwana ba tlhoka go dirisa, go boela le go kwala maina ka diteng tse di farologanong fa go tlhokogala. Mo bokhutlong jwa kgweditharo ba tshwanetse go dira ditirwana tde di latelang: Go bapisa matshwaofoko, ditshwantsho tsa didiriswa Karata e , e raya 6 karata e e raya eng? 6 11 Bapisa mafoko mo didirisweng Nngwe Pedi ✱ ✱ ✱ ✱ Tharo ✱✱ Nne ✶✶✶✶✶✶ Tlhano ✖✖✖✖✖✖✖✖✖ Thataro ❁❁❁ Supa ✷✷✷✷✷✷✷ Robedi ※ ※ ※ ※ ※ Lesome ✦✦✦✦✦✦✦✦	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.4 **Tlhalosa, Bapisa, Rulaganya dipalo**	**Rulaganya le go bapisa didiriswa go fitlha go 20.** • **Bapisa kgobokanyo** ya didiriswa go ya ka bontsi, bonnye, bontsi go feta, bonnye go feta, go tshwana, go farologana. • **Rulaganya kgobokanyo ya didiriswa go tsweng go bontsi go ya bonnyeng, go fitlha go bontsintsi.** • **Tekanyo go ya ka didiriswa go fitlha go** 20 • Rulaganya le go bapisa didiriswa • **Rulaganya dipalo** - Go simolola go tse dinnye go fitlha go tse dikgolo go fitlha go tse dinnye. - Pele, morago mo bogareng/ le mo gare - O dirisa molapalo 0-20 • **Bapisa go fitlha go bonnye go feta, bogolo go feta, bonnye go, go lekana le.** • Tsamaelano ya bonngwe le bongwe. • **Tlhatlhamano ya palo go fitlha go 20.**		Ka go rulaganya le go bapisa didiriswa le dipalo barutwana ba ithutile gore: • Ntlha ya lebalapalo le diriswa go tlhalosa palo mo seteng ya dipalo. **Ke eng se se farologaneng kgweditharong ya 3?** Barutwana ba rutwa bolengkemeditatelano. Mo bofelong jwa kgweditharo le ngwaga, Barutwana ba tshwanetse ba bob a itse go dirisa puo ya go rulaganya le go bapisa ka mekgwa e e latelang e: Bongwe, bobedi, boraro, bone, botlhano, borataro..... Ke bokae…… Bontsi jaaka, palo e e tshwanang jaaka…..... Go lekana le, bontsi jaaka bonnye go feta, bontsi go feta, bonnye go feta, bogolo go feta..... Thulaganyo, Bontlha, Bofelo, pele, morago, e e latelang, magareng Dipalo Bonngwe, bobedi, boraro, bone, botlhano, borataro…….. Ke bokae …… Bontsi jaaka, palo e e tshwanang jaaka…..... Go lekana le, bontsi jaaka bonnye go feta, bontsi go feta, bonnye go feta, bogolo go feta..... Thulaganyo, Bontlha, Bofelo, pele, morago, e e latelang, magareng ◯◯◯◯◯◯◯◯◯◯◯◯◯◯◯◯◯◯ Neela kgolokwe ya botlhano ya mmala o mosorolwana. Neela kgolokwe ya ntlha yam mala o mohibidu Neela kgolokwe ya borobedi yam mala o motala wa legodimo.. Barutwana ba tshwanetse go araba dipotso tse di jaaka: Ke mang wa ntlha mo moleng? Ke mang wa bobedi mo moleng? Mmalethabo o na le diphensele tsa mebala di le 5. Lebogang o na le diphensele tsa mebaladi le 8.Tebogo o na le dikerayone tse 5. Ke mang yo o nang le diphensele tsa mmala di le mmalwa? Neela palo magareng ga 15 le 17? Kwala dipalo magareng ga 4 le 10 1, 2, 3, 4, _, _, _, _, _, 10	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.5 **Kemopalo**	**Lemoga kemapalo ya bonnye ya jwa palo ya dinomoro di le pedi go fitlha go 20** • Arologantsha palo ya dinomoro di le pedi ka bolesome le bonngwe sekao 12 ke 10 le 2		**Ke eng se se farologaneng mo kgweditharong 3?** **Mo kgweditharong e** Mo kotareng e barutwana ba tswelelapele ka go aga le go tsosolosa dikakanyo tsa boleng jwa boemo jwa nomoro. Mo katareng ya 4, barutwana ba dira ka boleng jwa boemo jwa nomoro ba tswelela ka go: • Go bala le go dira ditlhopha tsa bolesome le tse ditlhopha tse di sa kgokanang/ kopanang; • kwala18 = lesome le le lengwe le 8 tse di sa kgobokanang; le • Jaanong rekota 14 = 10 le 4. Barutwana bo tshwanetse go tswelelapele go tshwara didiriswa tse di bopegileng ba dira ditlhopha go bopa masome le metso le go nonofisa go tlhaloganya gore 10 ke setlhopha sa lesome le le sa kgobokanang.  O dirisa kgatlatalama, barutwana ba tshwanetse go supa; Lesome; Lesome le le lengwe le metso e 5 Lesome le le lengwe le metso e 6 Barutwana ba tshwanetse go tswelela ka go bala ka bongwe go dira ditlhopha tsa bolesome.Mo go ba bantsi e tla nna yona tsela ya go tlhagisa dinomoro kgotsa go bua gore ke tse kae. **Dikarata tsa kemapalo** Kemapalo e tshwanetse go diriswa ka kotare e go bontsha gore dinomoro di dirilwe jang. Dikarata tsa kemapalo di ka bontshiwa di bapisitswe le ditlhopha tsa dididriswa. 	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.5 **Kemopalo**	**Lemoga kemapalo ya bonnye ya jwa palo ya dinomoro di le pedi go fitlha go 20** • Arologantsha palo ya dinomoro di le pedi ka bolesome le bonngwe sekao 12 ke 10 le 2		**Didiriswa** Didiriswa tse di ka dirwang ditlhopha: • Dikotana tsa go buisa • Dibadi tse di tsenngwang tlhale • Dikotana tsa mokgwaro • Dikotana tsa bebetsididi • Dikhubiki tse di golagantsweng • Karata tsa kemapalo • Tšhelete ya motshameko Go botlhokwa go nna le ditlhopha tse di dirilweng ke barutwana ka gale tsa lesome tse di tla nnang ka ditshelong.	
1.6 **Ditogamaano tsa go rarabolola dipalo**	Dirisa ditogamaano tse di latelang go rarabolola dipalo le go tlhalosa ditharabololo tsa dipalo: • Didiriswa tse di ka kgonngwng sekao babadi • Ditshwantsho tsa go thala dipalo • Go aga le go kgaoganya dipalo • building up and breaking down numbers • Go aroganya gabedi le go oketsa gabedi • Melapalo		**Ke eng se se farologaneng mo kgweditharong 3?** Kwa bofelong jwa kgweditharo e barutwana ba simolola go rarabolola polelopalo ka tiriso ya togamaano e. • Go taka kgotsa go dirisa didiriswa tse di ka tshwarwang • Go aga le go kgaoganya dipalo • Go aroganya gabedi le go oketsa gabedi • Melapalo Leba dintlha tsa kgweditharo 2.	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.7 **Go tlhakanya le go tlosa**	Tharabololo ya dipolelopalo mo tirisong mmetlhalose ditharabololo tsa gago o akaretsa go tlhakanya le go ntsha go fitlha go 20.		Kwa bofelong jwa kgweditharo barutwana ba simolola go rarabolola polelopalo ka tiriso ya dipalo tse di tlhagisitsweng fa tlase. **Fetola** Mauki o na le diapolo di le 5. SiloRebone o mo neela di le 8. Ke diapole di le kae tse a di tshwereng jaanong? Mauki o na le apole di le 13O neile Lebogang di le 5. O tshwere di le kae jaanong? **Kopanya** Theresa o tshwere dimmabole di le 5 tse tala le 8 ya dimmabole tse botala ba legodimo. O tshwere dimmabole di le kae? Theresa o tshwere dimmabole di le 13. Tse 5 ake tse tala mme tse dingwe ke tsa botala jwa legodimo. Theresa o tshwere dimabole di le kae tsa botala jwa legodimo.re green and the rest are blue. **Bapisa** Omphemetse o na le dipanana di le 13. Thato o na le tse 5 Ke dipanana tse kae tseo Omphemetse a nang le tsona go feta Thato?	
1.8 **Tlhakanyo e e boeleditsweng e e isang go katiso.**	Rarabolola poalofoko mo tirisong o tlhalose tharabololo ya gago o akaretsa tlhakanyo e e boeleditsweng ka dikrabo go fitlha go 20.		Mo bokhutlong jwa kgweditharo e barutwana ba tshwanetse go dira dipalo jaaka tse di fa tlase. **Tlhakanyo e e boeleditsweng** Dibaesekele tse nne di na le maotwana a le kae? **Kelo** Basetsana o nwa dikopi di le pedi tsa maši letsatsi le letsatsi.Ka letsatsi. O nwa dikopi di le kae tsa maši mo bekeng? **Dikiriti** Ntate Khumalo o jala mela e le meraro ya dikhabetšhe .Go na le dijalo di le 5 mo moleng. Ke dikhabetšhe di le kae mo moleng. Go na le dijalo di le kae tsotlhe?	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.9 **Kgobokanyo le kgaoganyo e e isang kwa katisong.**	Rarabolola le go tlhalosa ditshweeetso tse di akaretsang kgaoganyo le kgobokanyo e e lekanang le go tlhalosa tharabololo e e ka diragatswang ka di palotlalo go fitlha go 20 le dikarabo tse di akaretsang tse di setseng.		Kwa bofelong jwa kgweditharo e barutwana ba tshwanetse ba bob a kgona go rararbolola dipalo jaaka tse dif a tlase. **Kgobokanyo** Kgobokanyo, o tlogela se se setseng. Masego o rekisa diapole ka dikgetsana di le 3 nngwe le nngwe. O na le diapole di le 14.A ka dira dikgetsana tsa diapole di le 3 tse kae? Kgobokanyo, e e tsenyeletsang se se setseng mo karabong. Kesaobaka o batla go isa mae a le 15 kwa go nkokoagwe. Ke mabokoso a le makae ao a ka tsholang dipakete di le 6 tsa mae? **Karoganyo** Karoganyo, o tlogela se se setseng. Go kgaoganya dimonamone di le 14 go ditsala di le 3 mme mongwe le mongwe a bona ka go lekana. Kgaogano e e isang go palophatlho. Kgaoganya ditšhokolete magareng ga ditsala di le 3 gore mongwe le mongwe a bone senathwana se se lekanang mme go se se se salang. (ga go tlhokege gore barutwana ba neele maina a dipalophatlho jaaka nngwe tharong. Ba ka tlhalosa dikarolo tsa dipalopatlho jaaka “bonnye fela” Kgobokanyo ya palogotlhe	
1.11 **Tšhelete**	• Lemoga le go tlhaola madi a Aforika Borwa e leng dis-ente di 5, di le 10, di le20, di le 50, R1, R2, R5, le, R10 le R20. • Rrabololola dipalo tse di akaretsang palogotlhe le Tšhentshi go fitlha R20 le disente go fitlha go 20		Mo bofelong jwa kgweditharo barutwana ba tshwanetse go rarabolola dipalo jaaka tse dif a tlase: Lebogang o rikile senkgwe ka R8 . O duetse ka tshelete ya pampiri e kana ka R10.O bone tšhentšhi ya bo kae? Mmagwe Shankey o rekile sekhafo ka R17.O duetse ka tshelete ya dipampiri e e ka na ka masome a 2 a diranta o bone tšhentšhi ya bokae? Ka Latshipi e ne e le letsatsi la Keamogetswe la botsalo. O amogetse R5 go tswa go kgaitsadie ,go morwarragwe R2 le go ntsalagwe R10.Tšhelete yotlhe e a e neilweng ke bokae?	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
DIPALELO				
1.12 **Ditogamaano**	Dirisa ditogamaano tse di latelang fa o dira dipalelo: • Didiriswa tse di ka kgonng-wng sekao babadi • Ditshwantsho tsa go thala dipalo • Go aga le go kgaoganya dipalo • Go aroganya gabedi le go oketsa gabedi • Melapalo		**Pharologanyo ke eng mo kgweditharong 3?** Go solofetswe mo barutwaneng go dirisa dithekeniki tsa go rarabolola palelo e e sa laolweng. Ditshwantsho tsa barutwana di tshwanetse go simolola go lebega di na le thulaganyo e bile di kgona go tlhalosa dipalelo tseo di ikaegileng mo ditshwantshong.. • Go aga le go kgaoganya dipalo • Karoganyo gabedi le go arola • Melapalo Leba dintlha tsa KGWEDITHARO bobedi	
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha 20 • Go ntsha go tswa go 20 • Dirisa matshwao a a maleba • (+, -, =, □) • Katiso ya dinomorotlamo go fitlha go 10		Go tlhakanya le go tlosa mo tatelanong ya dipalo tsa go tloga go 0 go fitlha go 20,o tlhalosa gore barutwana bat la; • Simolola go tlhabolola bolengkemedi kakanyo ya bo lesome le ya bo nngwe; • Tswelela go bala ka ditlhopha; le • Simolola go lemoga gore go bala ka bo nngwe ga se togamano e e mosola. Barutwana batla tswelela : • Go bala dibadisi; • Lemoga ,buisa le go kwala dipalo; le • Rulaganya dipalo le go dibapisa. Gore o kgone go dira ka matshwao a go tlhakanya le a go tlosa,Barutwana ba bo ban a le kutlwisiso e e tseneletseng : • Go bala gotlhe l; • Go bala go simologa mo palong e kgolo; • Go tlhaloganya le go dirisa puo ya go tlhakaya le ya go tlosa ; le • Go bapisa le go rulaganya dipalo .	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha 20 • Go ntsha go tswa go 20 • Dirisa matshwao a a maleba • (+, -, =, □) • Katiso ya dinomorotlamo go fitlha go 10		Barutwana ba tswelela go aga go tlhaloganya ga bona ga go tlhakanya le go tlosa. Fa ngwaga o ya bokhutlong barutwana ba tshwanetse go: • Dirisa tlotlofoko e e tsamaelanang le go tlhakanya le go tlosa le matshwao go tlhalosa le go rekota gotlhakanya le gotlosa polelopalo; • Dirisa mokgwa wa go diragatsa le o e seng wa tlwelo wa go kwala go dira tlhakanyo le tloso ; • Rarabolola palelo ya go tlhakanya le ya go tlosa le go rekota dikarabo tsa bona mo polelopalong ; • Tlhaloganya gore go tlosa ke pusetso morago fitlha go tlhakanya le go dirisa se go rekota le go kokwanya palelo. Go tlhaloganya go tlhakanya le go tlosa barutwana ba tshwanetse go: • Go dirisa le go itse gore tatelano ya go tlhakanya ga e botlhokwa ; • Dirisa matshwao + a, – le =; • Itse gore □ e emetse palo e e sa itsiweng ; • Tlhaloganya tloso jaaka” go tsaya”le go bona pharologanyo magareng ga “le • go kwala le go bua dipalo tsa nnete le tse di tsamaelanang le tsa go tlhakanya tsa nnete le tse di neilweng tsa tlhakanyo le tlhanolelo: **Sekao:** 8 + 6 = 14 e ra gore 14 – 6 = 8. Rekota ditshwantshiso tsa go tlhakanya le go tlosa : Fa bangwe ba barutwana bas a ntse ba batla go bala le go rekota ka bo nngwe, ba batla tshegetso go simolola go rekota le go bala ka ditlhopha. Ba tshwanetse go : Rala ditshwantsho le go dirisa dipalo ,bogolosegolo ba bontsha ditlhopha.	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha 20 • Go ntsha go tswa go 20 • Dirisa matshwao a a maleba • (+, -, =, □) • Katiso ya dinomorotlamo go fitlha go 10		**Go kgaoganya palo ka di karolo tse di nnye go dira palelo bonolo** Barutwana ba tla kgaoganya palo ka dikarolo tse di farologaneng .ba tla kgaoganya palo ka dikarolo tse ba tla dikgonang .Baurtwana kwa tshimologong bat la kgaoganya supa ka bo nngwe.Fa go le jalo gangwe fela fa dintlhapalo go 10 di rutiwa le barutwana ba kgona dira ka dipalo ka maemo tshoboloko ba ka dirisa metsu le dipalo go bontsha go tlhaloganya. 11 + 7 = □ 11 + 4 + 3 11 + 4 □ 15 + 3 = 18 11 + 7 = □ 11 + 5 + 2 11 + 5 □ 16 + 2 = 18 17 – 9 = □ 17 – (7 + 2) 17 – 7 □ 10 – 2 = 8 **Dipalotlamo** Gore o kgone go ithuta dipalotlamo Barutwana ba tshwanetswe go newa ditirwana tse di farologaneng go di dira. Se se ka direga sentle ka nako ya go dira ka nosi. Molapalo le ona o ka dirisiwa go ithuta dipalotlamo go fitlha go 10. **Go dirisa le go diragatsa bothegeniki jwa kitso e e fitileng.** Bothegeniki jo bo bontshiwang fa tlase letla barutwana go rulaganya le go bala le kitso e e tseneletseng ya dipalo. Go ithuta bothegeniki fa tlase go tla rotloetsa barutwana go supa tshwano mo godimo ga go rata dipalo go ba tle ba rute barutwana ba bas a itseng go dirisa le go diragatsa kitso go ba thusa go balela. **Baya dipalo tse kgolo pele gore o balale kwa pele kgotsa kwa morago .** Rulaganya jaaka le go bala go ya pele go tloga go	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha 20 • Go ntsha go tswa go 20 • Dirisa matshwao a a maleba • (+, -, =, □) • Katiso ya dinomorotlamo go fitlha go 10		**Balela kwa pele go simolola go palo e kgolo .** Barutwana ba tshwanetse go balela pele go simolola mo palong e kgolo Se ke togamano e e botoka ya go kgontsha go gaisa go bala ka bo nngwe go fitlha go 14 le go bala gape thano go fitisa. 14 + 5 = □ Barutwana ba bala go tloga go , morago **Tlhaola gaufi le koketsogabedi n** 8 + 7 Barutwana ba ka tlhalosa gore palo e ka kwalwa jana 8 + 8 – 1(8 gabedi tlhakanya le 1) kgotsa 7 + 7 + 1 (7gabedi tlhakanya le 1). Barutwana ba ka rekota togamano tsa bona ba dirisa metsu: 8 + 8 □ 16 - 1 = 15 **Fetolela palo go lesome morago o tlose kgotsa o tlhakanye bonngwe.** Togamano e, e ka rutwa ka tatelano ya dipalo tse di nnye go di diragatsa mo go tse dikgolo. 9 + 6 = □ Barutwana batla ipolelela: “ba re ke tla tlosa nngwe go tswa go 6 le go tlhakanya le 9 go dira 10.” 9 + 6 a ka kwalwa jaaka 10 + 5 = 15 8 + 5 = □ Barutwana batla ipolelela: “ba re ke tla tlosa pedi go tswa go 5 le go tlhakanya le 8 go dira 10.” 8 + 5 a ka kwalwa jaaka 10 + 3 = 13 **Dirisa kitso ya kabelano ya kamano magareng ga tlhakanyo le tloso.** 15 - 9 = □ Barutwana ba itse gore palo e ka kwalololwa jaaka palotlhakanyo: “Ke itse gore 9 + □= 15.” Morutwana a ka dirisa go balela kwa pele gore a tle a dire palelo. **Melapalo** Barutwana ba tshwanetse ba bob a kgona go dirisa melapalo go tshegetsa palelo tsa bone. **Sekao:** 13 + 6	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.14 **Poeletso ya go tlhakanya e e isang kwa katisong**	• Tlhakanya palo e e tshwanang o boeletsa go fitlha go 20 • Dirisa matshwao a a maleba (+, =, □)		**Pharoganyo ke eng mo kgweditharong 3?** Mo kgweditharong e ya bone, barutwana ba tswelela ka go aga puo ya poeletso ya go tlhakanya. Sekao • Bontsi jwa pedi gararo Ditlhopha tse nne tsa pedi. Barutwana ba tswelela ka go kwala dipolelopalo go ruta ka ditshwantsho.Go bala o tlola go tshwanetse go tswelela go thusa barutwana go bala didiriswa tsa ka ditlhopha.Fa ditshwntsho kgotsa didiriswa di kgobokantswe ka ditlhopha tsa bobedi barutwana ba tshwanetse go bala ka bobedi e seng ka bonngwe go bona palogotlhe ya di diriswa. Mo bofelong jwa kgweditharo e barutwana ba tshwanetse go itse go: • Tlhaloganya go tlhakanya go go boeleditsweng go dira ditlhopha tse di lekanang; • Kwala tlhakanyo e e boeleditsweng ka go dirisa didiriswa tse di tshwarwang le di diriswa. • Rekota dipolelopalo kgotsa dithalo, le • Dirisa melapalo go fitlha mo karabong.	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.16 **Dipalo tsa tlhaloganyo**	**Kgopolopalo tlhatlhamano ya palo ya 20** • Neela palo leina pele mme morago o neele e o e neetsweng.Rulaganya sete e o e neetsweng ya dipalo tse di tlhopilweng. • Bapisa dipalo go fitlha go 20 mme o bolele gore ke dife tse di leng kwa tlase. • Itse gore ke dipalo tse dif eng tse di leng kwa godimo ga1 kwa tlase ga 1 . • Itse gore ke nomoro e feng e e leng kgolo mo go 2-Di le dinnye mo go 2 **Ka bonako gakologelwa:** • Dintlha ka tlhakanya le go ntsha. **Ditogamaano tsa dipalelo** Dirisa ditogamaano tsa dipalelo tsa go tlhakanya le go ntsha ka manontlhotlho. • Baya palo e ekwa godimo lwa ntlha gore o kgone go balela kwa pele kgotsa go balela kwa morago. • Molapalo • Go aga le go kgaoganya dipalo • Go aroganya gabedi le go oketsa gabedi		**Pharologanyo ke eng mo kgweditharong 3?** Mo kgweditharong ya 4. Tlhatlhamano ya palo e oketsega go tloga go 15 go fitlha 20. **Dikao tsa ditirwana le dipotso tse di ka botswang le go dirwa.** • Simolola ka 3 mme o bale go fitlha go bonngwe go fitlha go 10 • Barutwana ba dira mola go botsolotsa; ke mang wa ntlha, wa bobedi, wa boraro kgotsa wa bofelo? • Ke efe e e Kwa tlase14 kgotsa 8? • Ke efe e kgolo 8 kgotsa 4? • Ke eng 2 monnye go 13? • Ke eng 2 montsi go 8? • Neela palo e e magareng ga1 le 3. • Neela palo magareng ga10 le 14. A ke palo e le nngwe fela? • Baya dikarata tsa dipalo ka tatelano go tloga ka e nnye go fitlha ka palo e kgolo. **Ka bonako gakologelwa** Mpontshe palo go tlhakanya go dira 10 (Go kwala kgotsa go go dirisa boleng jwa dipalo mo dikarateng • 1 • 2 • 3 • 4 • 5 Mpontshe palo e e setseng fa ---------- e tsewa go 10(o kwala kgotsa o dirisa dirisa boleng jwa dinomoro mo dikarateng • 1 • 2 • 3 • 4 • 6 + 4 = 10 4 + 6 ke eng?A karabo e a tshwana? • 5 + 2 = 4 2 + 5 ke eng? A karabo e a tshwana?	

Ditlhogo	Ditlhokego tsa dikgopolo le bokgoni kwa bokhutlong jwa ngwaga.	Tsepamiso tsa bokgoni le dikakanyo mo kgweditharong 1	Ditlhaloso dingwe kgotsa dintlha kaelo mo thutong ya serutwa.	Nako
1.16 **Dipalo tsa tlhaloganyo**	**Kgopolopalo tlhatlhamano ya palo ya 20** • Neela palo leina pele mme morago o neele e o e neetsweng.Rulaganya sete e o e neetsweng ya dipalo tse di tlhopilweng. • Bapisa dipalo go fitlha go 20 mme o bolele gore ke dife tse di leng kwa tlase. • Itse gore ke dipalo tse dif eng tse di leng kwa godimo ga1 kwa tlase ga 1 . • Itse gore ke nomoro e feng e e leng kgolo mo go 2-Di le dinnye mo go 2 **Ka bonako gakologelwa:** • Dintlha ka tlhakanya le go ntsha. **Ditogamaano tsa dipalelo** Dirisa ditogamaano tsa dipalelo tsa go tlhakanya le go ntsha ka manontlhotlho. • Baya palo e ekwa godimo lwa ntlha gore o kgone go balela kwa pele kgotsa go balela kwa morago. • Molapalo • Go aga le go kgaoganya dipalo • Go aroganya gabedi le go oketsa gabedi		**Ditogamaano tsa dipalelo:** Dirisa dipalelo go tlhakanya le go ntsha ka manontlhotlho. Tlhakanya tse di latelang ka go baya palo e kgolo pele mme o tswelele ka go bala: 1 + 9 2 + 6 1 + 4 • Bala gabedi 1 Bopedi ba babedi ke eng? Halofo ya 4 ke eng? • Dirisa molapalo O tlolla gakae go tloga go 3 go fitlha go 5? O tlola ga le kae go ya kwa morago go tloga go 5 go fitlha go 2?	

Mophato 1 Kgweditharo 4 2-Dipaterone,Tiriso le Alejebera				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshellono boswa jwa letsatsi ka letsatsi • Go tswa mo ngwaoboswa ya rona	**Dipaterone tse di re dikanyeditsweng** Go tlhaola ,go tlhalosa ka mafoko le go kopoplola dipaterone geometiri: • mo tlhagong • go tloga mobotshelong jwa sešweng jwa letsatsi le le tsatsi • Go tswa mo ngwaoboswa ya rona Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang Ka go thala mela,dipopego kgotsa didiriswa	Barutwana ba dira ka dipaterone go tloga ka tsa tlhago,tsa botshelo jwa sešwa jwa letsatsi le letsatsi le go tswa mo ngwao boswa ya rona go tloga ka mophato wa 1 go fitlha ka 6.se se raya gore ga o tlhoke go tsaya nako ele ntsi mo setlhogong se.O tlhoka gape go tlhopha ditiro le dipaterone tse di maleba go ya ka mophato. Mo mophatong wa 1 barutwana ba ka nne ba tshasa dipaterone Dikao tse di mosola ke tsa dipaterone tsa matlhare,makwati a ditlhare,dipaterone mo di soling tsa ditlhako,dipaterone tsa dithaere,dikhurumelo tsa moselo,thulaganyo ya ditena tselana ya maoto(mokwakwa) jalo le jalo. Mokgwa mongwe wa dipaterone o barutwana ba ka o lebelelang ke wa tekatekanyo sekao bontsi jwa matlhare bo a lekana Barutwana ba ka lebelela gape dipaterone mo: • Legora/terata(bothale,legong) • Tiro ya ditena le thaele ya bodilo • Diaparo le materiale • Sejana/poleiti/boroto,kopi le porinki • Kgwele ya dinao • Diphologo jaaka kgomo,mmoto le serurubele ,pitse ya naga,thutlwa,lengau, dinonyane,digagabi malomo le matlhare • Tiro ya dibaga tsa setso le ya sešweng • Dipitsa tsa setso tsa letsopa kgotsa seroto se selogilweng Go na le mefuta e e farologaneng ya go tlhalosa dipaterone tse re dibonang mo go rona.Bontsi jwa dipoterone tse di mo go rona di dirilwe ka mela,popego kgotsa di diriswa.Dipopego kgotsa di diriswa ga di tlhoke go golagangwa lele geometiri ya popego ya tlhakore pedi le di diriswa tsa tlhakoretharo e barutwana ba mophato wa 1 ba ka dirang ka yona.Barutwana ba ka lebelela le go tlhalosa se se boelediwang sekao selabe.mola, mofuta mongwe wa popego le mokgwa o se boelediwang ka sona sekao thala mela e e fapaanang ka bo yona,a dilabe tsotlhe di a lekalekanaa di phatlaladitswe ka go lekalekana , adi popego tsotlhe ke tsa bogolo bo le bongwe,mmala o le mongwe ,a di lebeletse go lo go le gongwe sekao fa o sega namune ka bogare dikaroloana di ngotlwa mo gare le di gole ka kwa ntle.	Dithuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 100 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Kopolola ,go atolosa le go tlhalosa** Kopolola,Katoloso le go tlhalosa dipalo tse di bonolo ka tatelano ya bonnye go fitlha ka 100 Tatelano e tshwanetse go bontsha go bala go ya kwa pele le kwa morago mo: Balela kwa pele mo: • Bolesome go tswa go palong nngwe le nngwe ya katiso ya ga 10 e e mo magareng ga 0 le 100. • Botlhano go tswa go palong nngwe le nngwe ya katiso ya ga 5 magareng ga 0 le 100 • Bobedi go tswa go palong nngwe le nngwe ya katiso ya ga 2 e e mo magareng ga 0 le 100 Tlhama dipaterone ka bowena Tlhama dipaterone tsa dipalo ka bowena	Tatelano ya dipalo e ka golagangwa le go bala.Jaaka bokgoni le kgono ya go bala ya barutwana e fetoga, mefuta ya tatelano ya palo e barutwana ba dirang ka yona e ka gola. Tatelano e tshwanetse go bontsha go balela kwa pele le kwa morago: • Bongwe go tswa mo palong nngwe le nngwe e e mo gare ga 1 le 100 • Bolesome go tswa mo katisong nngwe le nngwe ya 10 go ya magareng go 0 le 100 • Botlhano go tswa mo katiso nngwe le nngwe ya 5 magareng go 0 le 100 • Bobedi go tswa go katiso nngwe le nngwe ya 2 magareng go 0 le 100 Barutwana b aka supa dipalo mo molapalong, dikerete tsa dipalo, ditirwana tse di latelanang fa ba ntse ba buisa. Barutwana ba ka khurumetsa/tshasa mebala/sekeletsa dipalo mo molapalong kgotsa mo papetlaneng kgotsa mo tatelanong ya dipalo tse dikwadilweng jaaka di badiwa. Barutwana baka tlatsa dipalo tse ditlhaelang tsedikwadilweng ka tatelano mo molapalo kgotsa mo papetlaneng ya dipalo go ikatisa go bala.gopola barutwana ba kwala go fitlha ka 20.Lebelela dintlha tsa KGWEDITHARO 3 gore barutwana b aka dira ka tatelano ya dipalo tse di fetang 20.	Dithuto 3

MOPHATO 1 KWEDITHARO 4 BOALO LE DIPOPEGO(DIPALO-POPEGO)				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** Mo pakathutong y aura le metsotso e le 24
3.1 **Kemo, Kitsiso le dikakanyo**	**Kemo ya puo** Tlhalosa kemo ya sediriswa ka kamano ya sona le se sengwe.Sekao kwa godimo,fa pele ga,fa morago ga,moja,molema,kwa godimo ga,fa thoko ga. **Kemo le pono** Tswantshanya dikakanyo tse di farologanengf tse di farologaneng tsa sediriswa sa ka metlha. **Kemo le dikaelo** • Sala dikaelo tsa go tsa-maya mo phaposingborute-long morago. • Sala ditaelo morago tsa go baya selo se le sengwe go amana le se sengwe,sekao,baya pensile mo gare ga bokoso	**Kemo ya puo** Tlhalosa kemo ya sediriswa ka kamano ya sona le se sengwe.Sekao kwa godimo,fa pele ga,fa morago ga,moja,molema,kwa godimo ga,fa thoko ga. **Kemo le pono** Tswantshanya dikakanyo tse di farologanengf tse di farologaneng tsa sediriswa sa ka metlha **Kemo le dikaelo** • Sala dikaelo tsa go tsamaya mo phaposing-borutelong morago. • Sala ditaelo morago tsa go baya selo se le sengwe go amana le se sengwe,sekao,baya pen-sile mo gare ga bokoso	**Kemo le dikaelo** Leba dintlha thuto tsa kgweditharo Puo ya boikemedi e tshwanetse go itsisewe ka mokgwa wa tiriso ya didiriswa tse di akaretsang barutwana mo mminong le metshameko e e tsamaisang mmele. Se ka dirwa fa go rutwa phaposi yotlhe kgotsa go rutwa ga ditlhopa tse di tsepameseditsweng morutwana ka nosi Ditaetso/ditaelo di rutwa ka mokgwa wa tiriso mo barutwana ba itsamaisang kgotsa ba dipopego go ya ka dikaelo. Se ka dirwa fa go rutwa phaposi yotlhe kgotsa go rutwa ga ditlhopa tse di tsepameseditsweng morutwana ka nosi Tiro e kopanngwa/tiisiwa ka tiro kwalo jaaka go thala,go tshasa mmala kgotsa go bapisa setshwantsho le mafoko.Se se ka dirwa ka nako e e tsepameseditsweng morutwana ka nosi **Kemo le pono** Barutwana ba kgato ya motheo ba tshwanetse go tlhaloganya gore dipopego di lebega ka mekgwa e e farologaneng fa di beilwe ka maemo a a fafologaneng,ba tshwanetse go itse gore dipopego jaaka koloi di bonala di le dinnye fa di le kgakala.Ba tshwanetse go tlhaloganya gore goreng setshwantsho se se mopele mobukeng se bonala sentle go feta ses se kwa morago.Mo ditlhopeng tse di totobetseng,barutwana ba ka itemogela ka go baya diatla tsa bona mo sefatlhegong go thibela pono ya dilo tse di kgakala. Mo mophatong wa 1,barutwana ba ka neelwa ditiro tse bapisang dipono tse di farologaneng le dipopego.Se se tla thusa barutwana go go ranola ditshwantsho tsa geometeri di lebilwe ka diponalo tse di farologaneng	Thuto 1

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo pakathutong y aura le metsotso e le 24
3.2 **Didiriswa tsa Dipopego-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go naya didiriswa tsa popegotlhakoretharo mo phaposiborutelong le mo ditshwantshong • Dipopego tsa bolo • Dipopego tsa dibokoso(matlhakoremabapitekano) **Dipopego tsa didiriswa** Tlhalosa,tlhaola le go tshwantsha sediriswa sa popegotlhakoretharo go ikaegilwe ka: • bogolo • mmala • Didiriswa tse dikgokologang • Didiriswa tse di relelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka diboloko,didiriswa tse di kgonang go dirisiwa gape	**Tlhatlhamano ya di diriswa** Go lemoga go naya didiriswa tsa popegotlhakoretharo mo phaposiborutelong le mo ditshwantshong • Dipopego tsa bolo • Dipopego tsa dibokoso (matlhakoremabapitekano) **Dipopego tsa didiriswa** Tlhalosa,tlhaola le go tshwantsha sediriswa sa popegotlhakoretharo go ikaegilwe ka: • bogolo • mmala • Didiriswa tse dikgokolo-gang • Didiriswa tse di relelang	Tiro e e e dirilweng ka ga popegothakoretharo e ka kopanngwa/tiisiwa ka ditiro kwalo	

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo pakathutong y aura le metsotso e le 24
3.3 **Dipopego tsa tlhakorepedi**	**Tlhatlhamano ya dipopego** • Lemoga le go naya maina a dipopegotlhakorepedi • Didiko • Dikhutlotharo • Dikhutlonnetsepa • **Dipopego tsa dipopego** • **Tlhalosa,tlhaola le go bapisa dipopego tsa te-kanyetsotlhakorepedi ka dintlha tse:** • bogolo • Mmala • popego • matlhakore a tlhamaletseng • matlhakore a kgolokwe tekano	**Tlhatlhamano ya dipopego** • Lemoga le go naya maina a dipopegotlhakorepedi • Didiko • Dikhutlotharo • Dikhutlonnetsepa • **Dipopego tsa dipopego** • **Tlhalosa,tlhaola le go bapisa dipopego tsa tekanyetsotlhakorepedi ka dintlha tse:** • bogolo • Mmala • popego • matlhakore a tlhama-letseng • matlhakore a kgolokwe tekano	Leba dintlha thuto tsa kweditharo 2 Barutwana ba dira ka didiko le dikhutlonne tsa bogolo le dipepogo tse di farologaneng.Ba di tlhaola go ya ka matlhakore a a tlhamaletseng le a a kgolokwe. Barutwana ba tlhaola le go kgobokanya dipopego go ya ka gore a ke dikhutlotharo,dikhutlonne kgotsa didiko. Tiro e sobokantsweng ka ditirwana tse di kwalang	Dithuto 3
3.4 **Tekano**	• Tlhomamisa mola wa tekanyetso mo mmeleng wa gago: • Lemoga le go thala mola wa tekatekano mo dipope-gong tsa jeometeri tsa tekanyo ya tlhakorepedi kgotsa tse e seng jeometeri tsa tekanyo ya tlhakore-pedi.	**Tekano** • Tlhomamisa mola wa tekanyetso mo mmeleng wa gago**:** • Lemoga le go thala mola wa tekatekano mo dipopegong tsa jeometeri tsa tekanyo ya tlhakore-pedi kgotsa tse e seng jeometeri tsa tekanyo ya tlhakorepedi.	Barutwana ba lebelela mola wa ttekanyo mo dipopegong le ditshwantsho Ditirwana tsa go kwalwa • E se nne fela “thala halofo/seripa se se tlogetsweng” mme • Go tsenyeletswe dikai tse barutwana ba thalang mola wa tekate-kanyo.Mola wa tekanyetso ga o a tshwanela go bo o tlhama-letseng ka metlha sekao sethwantsho sa tlhapi se se bontshang gore mola o o rapaletseng.	Dithuto 1

MOPHATO 1 KGWEDITHARO 4 4. TEKANYO				
Ditlhogo	**Kgopolo le dikgono** **Di tlhokagalang kwa** **Bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako e beilweng** Mo dithutong tsa ura le metsotso e le 24
4.1 **Nako**	Tsamao ya nako Go bolela ka tsamao ya nako • Go rulaganya ditiragalo tsa ka gale go tloga go matshelo a bona • Go bapisa boleele jwa nako o dirisa puo sekao boleele , bokhutshwane , ka bonako, ka bonya • Go rulaganya ditiragalo go dirisiwa jaaka maabane , gompieno , ka moso. **Go bolela ka nako** • Go tlhalosa sengwe fa se diragala o dirisa puo sekao mo mosong,motshegare,bosigo,phakela,thari. • Go itse malatsi a beke. • Go itse dikgwedi tsa ngwaga • Go tshwaya malatsi a matsalo mo khalentareng.	Tsamao ya nako Go bolela ka tsamao ya nako • Go rulaganya ditiragalo tsa ka gale go tloga go matshelo a bona • Go bapisa boleele jwa nako go dirisa puo sekao boleele , bokhutshwane , ka bonako, ka bonya • Go rulaganya ditiragalo go dirisiwa jaaka maabane , gompieno , ka moso **Go bolela ka nako** • Go tlhalosa sengwe fa se diragala o dirisa puo sekao mo mosong,motshegare,bosigo,phakela,thari. • Go itse malatsi a beke. • Go itse dikgwedi tsa ngwaga • Go tshwaya malatsi a matsalo mo khalentareng.	Barutwana tshwanetse go ithuta gore ba bolela jang ka: • Tatelano ya ditiragalo; le • Boleele jwa nako Barutwana ba tswelela go tiisa tsela tse ba bolelang nako ka tsona ka malatsi otlhe ka nako ya dithuto mo phaposingborutelong kgotsa go tsepamisitswe mo nakong ya thuto ya setlhopha. Barutwana ba bolela ka le go araba dipotso ka dilo di diragala ba dirisa puo jaaka mosong,motshegare,bosigo,phakela le thari. Barutwana ba rulaganya ditiragalo ba dirisa puo jaaka maabane,gompieno,ka moso,malatsi a beke le dikgwedi tsa ngwaga. Barutwana ba bapisa boleele jwa nako ba dirisa puo jaaka telele go,khutshwane go , ka bonakonyana go le ka bonyanyana. Barutwana ka thulaganyo ya ditiragalo go tloga mo matshelong a bona.Ba rulaganya ditshwantsho ka tatelano jaaka: • Dikgato tsa go dira sementšhi kgotsa tee; • Ditshwantsho di supa seaparo sa ngwana mo mothong yo o godileng. • Tshekotshelo ya phologolo sekao:lee la koko,kgotsa la segwagwakgotsa la serurubele le • Ditiragalo tsa ka gale mo letsatsing(go tsoga,go nna kwa sekolong,go tshameka,go ja selalelo,go robala) Tshwelela go tshwaya malatsi a matsalo mo khalentareng ngwaga yotlhe.	dithuto 2

Ditlhogo	Kgopolo le dikgono Di tlhokagalang kwa Bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Bapisa le go rulaganya boleele,bogodimo kgotsa boatlhamo jwa didiriswa tse pedi kampo go feta ka go di baya di bapile; • Dirisa puo go bolela ka go bapisa,sekao;boleele go feta,bokhutshwane go feta,boleele go feta,bophara go feta • Fopholetsa le go lekanya,go bapisa,go rulaganya le go rekota boleele ba dirisa didiriswa tsa go lekanyetsa tse di sa tlhomamang,sekao tekanyetso ka seatla,boalo,boleele jwa phensele,dibadisi,jj.	Ditekanyetso tsotlhe mo mophatong 1 ga di a tlhomama.Ga go tekanyetso e e tlhomameng ya boleele ya diyuniti e e dirisiwang. Ka nako ya tiro e e ikemetseng go ralala kgweditharo barutwana ba kgona go ithuta le go tiisa tekanyetso ya boleele,bophara,bogodimo ka diyuniti tse di sa tlhomamang. Tiro yotlhe e tshwanetswe go rekotwa.Lebelela dintlha tsa kgweditharo 3.		
4.3 **Boima**	**Tekanyo e e sa tlhomamang** • Fopholetsa le go lekanya,go bapisa, go rulaganya le go rekota boima ba dirisa didiriswa tsa go lekanyetsa tse di sa tlhomamang le seelamaleka sekao:diboloko,ditena jj • Go dirisa puo go bolela ka papiso sekao:botlhofo le boima,botlhofo go feta, boima go feta.	**Tekanyo e e sa tlhomamang** • Fopholetsa le go lekanya,go bapisa,go rulaganya le go rekota boima ba dirisa didiriswa tsa go lekanyetsa tse di sa tlhomamang le seelamaleka sekao:diboloko,ditena jj • Go dirisa puo go bolela ka papiso sekao:botlhofo le boima,botlhofo go feta, boima go feta.	Ditekanyetso tsotlhe mo mophatong 1 ga di a tlhomama.Ga go tekanyetso e e tlhomameng ya boleele ya diyuniti e e dirisiwang. **Pharologanyo ke eng mo kgweditharong 4?** Mo kgweditharong 1 go atlenegesitswe gore barutwana ba tsepame mo : • Go lebagana bapisa boima jwa didiriswa; • Go rulaganya le go bapisa didiriswa tse tharo kgotsa go feta ka go baya para ya didiriswa di bapile mo seelamaleka/sekaleng go fitlhela didiriswa tsotlhe di kgona go latelana , le ordering • Go aga puo ka go bolela ka pharologanyo ya boima . Mo kgweditharong 4 barutwana ba kgona go tsepamisa mo tekanyetso e e sa tlhomamang ka didiriswa tse sa tlhomamang ya diyuniti tsa boima	Thuto 2

Ditlhogo	Kgopolo le dikgono Di tlhokagalang kwa Bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
4.3 **Boima**	**Tekanyo e e sa tlhomamang** • Fopholetsa le go lekanya,go bapisa, go rulaganya le go rekota boima ba dirisa didiriswa tsa go lekanyetsa tse di sa tlhomamang le seelamaleka sekao:diboloko,ditena jj • Go dirisa puo go bolela ka papiso sekao:botlhofo le boima,botlhofo go feta, boima go feta.	**Tekanyo e e sa tlhomamang** • Fopholetsa le go lekanya,go bapisa,go rulaganya le go rekota boima ba dirisa didiriswa tsa go lekanyetsa tse di sa tlhomamang le seelamaleka sekao:diboloko,ditena jj • Go dirisa puo go bolela ka papiso sekao:botlhofo le boima,botlhofo go feta, boima go feta.	**Tekanyetso e sa tlhomamang ka didiriswa tsa diyuniti tse di sa tlhmamang** Barutwana ba ka ithuta ditheo le tiriso ya tekanyo ka go dirisa didiriswa tsa diyuniti tsa tekanyo di sa tlhomamang Tekanyetso ka diyuniti tse di sa tlhomamang e se ka ya tsewa jaaka e sena mosola mo go lekanyetseng ka tsona. Go lekanyetsa boima ka metso/diyuniti tsa maemo a sa tlhomamang go tsenyeletsa go bala gore ka /metso/diyuniti tse tlhophilweng ke dife tse di naleng boima jo bo lekanang le sedirswa se se lekanyetswang sekao rula e na le boima jo bo lekanang le diboloko tse 9. Barutwana ba tshwanetse go lekanya didiriswa tse farologaneng ba dirisa tlhatlhamano didiriswa jaaka metso/diyuniti tse di sa tlhomamang. Barutwana ba tshwanetse go rutwa ka nako tsotlhe go bolela yuniti / metso fa ba neela boima sekao : buka e na le boima jo bo lekanang le boima jwa dimabole di le 34. Fela fa barutwana ba lekanyeditse ka metso /yuniti nngwe le nngwe makgetlo a mmalwa ba fopholetse gore ke metso/diyuniti tse kae tse tla nnang le boima jo bo lekanang le sediriswa se se lekanyeditsweng. Fopholetso pele ga go lekanya e botlhokwa thata ,mme e ka nna ya dirwa fela fa barutwana ba lekanyeditse ka metso/diyuniti eo/tseo. Barutwana ba tlhoka go rutwa gore o tle o bapise boima jwa didiriswa tse di farologaneng , metso/ yunite e tshwanang e tshwanetse go diriswa .Sekao : Fa rula e na le boima jwa 20 diboloko mme sekere se na le boima jwa dimabole tse 20 mongwe ga a kgone go ka re di na le boima jo lekanang kgotsa jang kgotsa ke efeng e leng boima . **Go rekota tekanyo** Lefa tekanyo e le kgono ya tiriso barutwana ba tshwanetse go rekota tekanyetso tsa bona ka metlha yotlhe. **Go lekanyetsa boima jaaka tiriso ya go rarabolola dipalo le dipalelo** Ka nako e abetsweng dipalo , tiriso le kamano barutwana ba kgona go rarabolola dipalo tse di dirisang tekanyetso ya boima e e sa tlhomamang . Sekao sephimodi se na le boima jwa 11 dimabole .Lebokose la dikerayone le na le boima jwa 8 dimabole .Tsotlhe di tla nna le boima jwa dimabole tse kae tsotlhe ? **Tseela tsia tlhatlhamano ya dipalo** tse di maleba go kgweditharo , le gape tlhatlhamano ya mefuta ya dipalo e maleba go kgweditharo.	Thuto 2

Ditlhogo	Kgopolo le dikgono Di tlhokagalang kwa Bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
4.4 Boima	**Go lekanyetsa go go sa tlhomamang** • Bapisa le go rulaganya tlhotlhwa seedi (mothamo) mo ditshelong di bapisitswe . Barutwana ba nnetefatsa ka go tshela mo setshelong sa boraro fa go tlhokega. • Bapisa le go rulaganya tlhotlhwa ya seedi seo se mo ditshelong tse pedi se di tshegetsang (mothamo) • Go dirisa puo go bua ka go bapisa sekao : gontsi go feta, gonnye go feta, tletse, lolea • Fopholetsa le go lekanyetsa , go bapisa le go rulaganya mothamo wa ditshelo ka go dirisa tekanyetso ya maemo a sa tlhomamang sekao. Dintsho le dikopi.	**Go lekanyetsa go go sa tlhomamang** • Fopholetsa , le go lekanyetsa , le go bapisa , le go rulaganya le rekota mothamo wa ditshedi ka go dirisa didiriswa tsa tekanyetso tse di sa tlhomamang sekao .dintsho,le dikopi .	Tekanyetso tsotlhe mo mophatong 1 ke ya maemo a sa tlhomamang . Ga go maemo a tlhomameng a mothamo / bolumo a metso/diyuniti e tlhomameng e dirwang **Pharologanyo ke eng mo kgweditharo 4?** Mo kgweditharo 1 go tshitshintswe gore barutwana ba tsepamise go • Go aga puo go bua ka pharologanyo mo mothamong; • Go bapisa mothamo wa ditshelo tse pedi tse di lekanang le • Go bapisa methamo go lebeletswe ditshelo tse pedi tse di farologaneng , bogolo thata ditshelo tse atlhameng le tse di tshesane. Mo kgweditharong 4 barutwana ba kgona go ytsepamisa go dira tekanyo e sa tlhomamang ka metso/ diyuniti tsa maemo a sa tlhomamang tsa mothamo. **Pharolganyo ya mothamo bolumo ke eng ?** Lebotlole le ka nna le mothamo wa dikopi tse nne mme e ka se tlale go lekana mothamo, sekao , e ka nna ya tsenyaa mothamo wa kopi le yosi ya metsi ka nako e yosi . Mothamo ke palogotlhe e sediriswa se kgonang e tshegetsa (kgotsa boleng jwa boalo mo teng ga sediriswa). Bolumo ke tlhotlhwa ya boalo e sediriswa se e tsayang. Ka nako e nngwe barutwana ba tla lekanyetsa gore ke seedi se se kae (kgotsa motlhaba kgotsa sere) se mo setshelong. Se ke go lekanya bolumo ya sere mo setshelong. Ka nako tse dingwe barutwana ba tla lekanya gore setshelo se kgona go tshegetsa go le kae fa se tladitswe ka mothamo wa botlogolo. **Go lekanyetsa boleele go go sa tlhomamang go diriswa metso/ diyuniti tse e seng tsa maemo a tlhomamang** Barutwana ba ka ithuta metheo yotlhe le go ithuta tekanyetso ba dirisa metso/diyuniti tsa maemo a sa tlhomamang. Go lekanyetsa ka metso ya maemo a sa tlhomamang go se ka ga lebelelwa jaaka selo se se senang mosola fa go lekanyetswa ka metso ya maemo a sa tlhomamang. Barutwana ba ka ithuta metheo yotlhe le go ithuta tekanyetso ba dirisa metso/diyuniti tsa maemo a sa tlhomamang. Go lekanyetsa ka metso ya maemo a sa tlhomamang go se ka ga lebelelwa jaaka selo se se senang mosola fa go lekanyetswa ka metso ya maemo a sa tlhomamang.	

Ditlhogo	Kgopolo le dikgono Di tlhokagalang kwa Bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
4.4 **Boima**	**Go lekanyetsa go go sa tlhomamang** • Bapisa le go rulaganya tlhotlhwa seedi (mothamo) mo ditshelong di bapisitswe . Barutwana ba nnetefatsa ka go tshela mo setshelong sa boraro fa go tlhokega. • Bapisa le go rulaganya tlhotlhwa ya seedi seo se mo ditshelong tse pedi se di tshegetsang (mothamo) • Go dirisa puo go bua ka go bapisa sekao : gontsi go feta, gonnye go feta, tletse, lolea • Fopholetsa le go lekanyetsa , go bapisa le go rulaganya mothamo wa ditshelo ka go dirisa tekanyetso ya maemo a sa tlhomamang sekao. Dintsho le dikopi.	**Go lekanyetsa go go sa tlhomamang** • Fopholetsa , le go lekanyetsa , le go bapisa , le go rulaganya le rekota mothamo wa ditshedi ka go dirisa didiriswa tsa tekanyetso tse di sa tlhomamang sekao .dintsho,le dikopi .	Barutwana ba tshwanetse ba bone tshono ya go lekanyetsa bolumo/ mothamo ba dirisa tlhatlhamano ya didiriswa jaaka metso e e sa tlhomamang s. k.dikopi (ga go tlhokafale dikopi tse di lekanyetsang), dintsho (ga go tlhokafale dintsho tse di lekanyetsang), dikhurumelo tsa mabotlole jaaka 2 letara dikhurumelo tsa mabotlole, meteme e mennye, mabotlole a mannye jalo-jalo . Go lekanyetsa bolumo / mothamo ka metso e sa tlhomamang go akaretsa go bala gore ke metso e kae e o e tshelang le go tshela go tloga go metso e tlhaotsweng go fitlhela mothamo / bolumo e batlegang. Barutwana ba tshwanetse go rutwa ka nako tsotlhe go bolela metso e ba e dirisang , s.k.Go 48 dintsho tse di tletseng tsa metsi mo lebotloleng kgotsa bonnye jwa kwa tlase ga kopi mo lebotloleng. Fela fa barutwana ba setse ba lekanyeditse ka metso mengwe le mengwe makgetlo a mmalwa , ba tshwanetse go fopholetsa mothamo/ bolumo ka metso e ba e dirisitseng. Phopholetso pele ga go lekanyetsa e botlhokwa thata, mme seo se ka dirwa fela fa tekanyetso e dirilwe ka metso eo . Barutwana ba tshwanetse go rutwa gore ,gore ba tle ba bapise bolumo/mothamo metso yona eo e go tlhokega gore e dirisiwe . Sekao fa gelase e tshegetsa 20 dintsho tsa metsi mme kopi e tshegetsa 10 dintsho tsa metsi, Ga o ka ke wa re gelase e tshegetsa mtsi a mantsi go feta. Barutwana ba tlhoka go lekanyetsa ka tlhatlhamano metso e e sa tlhomamang , gore ba tle ba kgone go • Go simolola go tlhaloganya gore fa metso e le mennye go tla tlhokega nako e ntsi go e tlatsa, s.k. bolumo mo lebotloleng e ka nna 20 dintsho tse kgolo gape le kopi le • Go simolola go dirisa metso e maleba go se ba se lekanyetsang, s.k. Go lekanyetsa 2 letara e tletseng ka dintsho tse di nnye ke tsenyo ya nako. **Go rekota tekanyetso** Lefa go lekanyetsa e le kgono ya go ithuta, barutwana ba tshwanetse go rekaota tekanyetso ka nako tsotlhe. **Go lekanyetsa mothamo jaaka tiriso ya go rarabolola dipalo le palelo** Ka nako e abetsweng dipalo,Tiriso le Kamano barutwana ba ka rarabolola dipalo tse di dirisang tiriso ya tekanyetso e sa tlhomamang ya mothamo/bolumo . Sekao Nkoko o dirisa 2-Dikopi tsa maswi go dira phuting .Fa a ka dira koketso-pedi ya resepe ,o tla tlhoka maswi a kae ? Tsela tsia palo tlhatlhamano e maleba go kgweditharo, le yone tlhatlhamano ya mefuta ya dipalo.	

MOPHATO 1 KGWEDI-THARO 4 5. GO RANOLA TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 4**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** **(** (Mo paka-thutong ya ura le metsotso e le 24)
Go dira ka didiriswa tse di kgobokantsweng				
5.1 **Kgobokanya le go tlhaola didiriswa**	**Kgobokanya le go rulaganya didiriswa** Kgobokanya le go tlhaola didiriswa tsa letsatsi le letsatsi		Go tlhaola didiriswa tse di kgobokantsweng ga go sa tlhole gotsepamedisetswe bogare jwa ngwaga. Le gale, e ka newa barutwana nako nngwe ka nako e ba dirang tiro ba le nosi Go atlenegedisitswe gore go tsepamesediwe go bala le go sekaseka dikerafo tse di di dirisediwang ditshwantsho mo kgwedi-tharong ya 4: lebelela ka fa tlase	
5.2 **Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng**	**Represent sorted collection of objects** Tshwantsha tlhaolo ya didiriswa tse di kgobokantsweng Thala setshwantsho sa didiriswa tse dikgobokantsweng			
5.3 **Buisa le go beg aka didiriswa tse di kgobokantsweng di tlhaotswe.**	**Discuss and report on sorted collection of** objects Bega o buisana ka ga tlhaolo ya didiriswa tse di kgobokantsweng • Neela mabaka gore kgobokanyo e tlhaotswe jang • Araba dipotso go bontsha gore - Didiriswa di tlhaotswe jang(dikgato) - Kgobokanyo e e tlhaotsweng e ntse jang(kumo) • Tlhalosa kgobokanyo le go thala • Tlhalosa kgobokanyo e tlhaotswe jang			

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 4	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako ((Mo paka-thutong ya ura le metsotso e le 24)
Go dira ka tshedimosetso				
5.4 **Kgobokanya le go rulaganya tshedimosetso**	**Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi le sekolo go araba dipotso tse di bodiwang ke morutabana.			
5.5 **Tshwantshanya tshedimosetso**	**Tshwantshanya tshedimosetso** Tshwantshanya tshedimosetso mo kerafong e e dirisediwang ditshwantsho			
5.6 **Sekaseka le go ranola tshedimosetso**	**Sekaseka le go ranola tshedimosetso** • Araba dipotso ka ga tshedimosetso mo kerafong e e dirisediwang ditshwantsho		Fa barutwana ba na le maitemogelo ka tshedimosetso yotlhe, ba ka nna ba tsepamisediwa mo go sekasekeng ditshwantshiso tse ba di neilweng Go atlenegedisitswe gore barutwana ba sekaseke (arabe dipotso) dikerafo tse di dirisediwang ditshwantsho, bonnye di le 2 mo kgwedi-tharong 4	Dithuto tse 2

3.5.2. TLHALOSO YA DITENG TSA MOPHATO WA 2

MOPHATO 2 KGWEDITHARO 1 DIPALO, MATSHWAO LE DIKGOLAGANYO				
Setlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** (Mo paka-thutong ya ura le metsotso e le 24)
Tlhabololo ya dipalo tsa kgopolo: Bala ka dipalogotlhe				
1.1 Bala didiriswa	**Bala didiriswa tse di tla kgongwang** Go fopholetsa le go bala ka bo tshepegi go fitlha go 200 mo dilong tsa letsatsi. Togamaano ya kokoano e a rotloediwa	Go bala didiriswa tsa letsatsi le letsatsi ka botsepegi go fitlha go 100 Neela tekanyetso e e dumalatsegang ya dipalo tsa didiriswa tse di tla sekasekwang ka go balwa	**Lebelela dintlha tsa Mophato 1, Kgweditharo 3 & 4** Kgwedi tharo 1 mo Mophato 2 ke popaganyo ya tiro e e dirilweng mo kgweditharo 4 ya Mophato 1. **Go bala ka ditlhopaCounting in groups** Tsepamiso mo kgweditharong e mo go baleng kwa pele le go bala ka ditlhoopa. Thusa baritwana go bala didiriswa tsa dipalo tse ditonna, ka go ba tlhotlheletsa go kgobokanya didiriswa ka palo ya 2 le 10 Dipalo tsa dikarata di tshwanetse go bontshiwa mo kgobokanong e nngwe le ngwe go bontsha palo ya didiriswa tse di badilweng.Go bala ka ditlhopha go tla baakanyetsa barutwana go tlhaloganya go atisa. Barutwana ba tshwanetse go neelwa tshono ya go go bona gore ditlhopha tsa 100 di ka tlhangwa ka ditsela tse di farologaneng sk • Ditlhopha tsa 10 • Bonngwe ba ba100 ba ikemetseng ; kgotsa • Ditlhopha tse 2 tsa bo 50 **Balela kwa pele** Barutwana ba santse ba tlhoka maitemogelo a go newa kgobokanyo ya didiriswa le go balela pele gona moo. **Didiriswa:** • Tlhokomelo e e etseneletseng e tshwanetswe ya neelwa ko mofuteng wa didiriswa tse tse di dirisitsweng go tlhotlholetsa barutwana go bala ka ditl-hopha.Mefuta e e tshwanetseng ya didiriswa e akaretsa: • Didiriswa tse di rulaganeng, jaaka mogala wa dibaga tsa go bala • Kgatlatalama to katisa go bala ka ditlhopha tsa lesome • Go dira ditlhopha tsa bo 2, ditlhopha tsa 5 le 10 le go bala gotlhe ka ditho-bana tsa go bala kgotsa mokgwaro. • Motshameko wa tshelete	

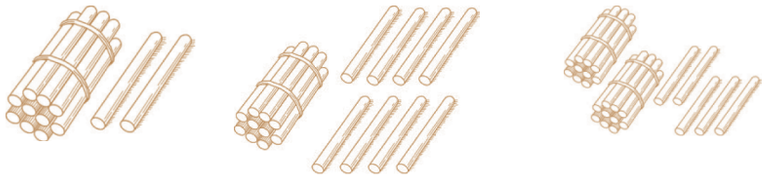
Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.1 **Bala didiriswa**	**Bala didiriswa tse di tla kgongwang** Go fopholetsa le go bala ka bo tshepegi go fitlha go 200 mo dilong tsa letsatsi. Togamaano ya kokoano e a rotloediwa	Go bala didiriswa tsa letsatsi le letsatsi ka botsepegi go fitlha go 100 Neela tekanyetso e e dumalatsegang ya dipalo tsa didiriswa tse di tla sekasekwang ka go balwa	Fa barutwana ba setse ba bone didiriswa tsa go bala tse di rulaganeng pele kgotsa kgobokantsweng pele, ba tlhotlheletse go kgobokanya didiriswa fa ba bala. Barutwana ba tlhoka go dira kgolagano magareng ga go bala bolengkemeditatelano le lebalopalo. Se se kgonagala fa ba lemoga gore go ema go bala go fitlha mo didirisweng tse 50 go raya gore ba badile didiriswa tse 50. Kwa bokhutlong jwa kgweditharo barutwana barutwana ba tshwanetse go kgona go kgona go: • Bala didiriswa tse ba kgonang go di ama le go di tshwara: • Bala dibadisi ka ditlhopha tsa botlhano(5) le lesome(10) le go • Di rulaganye gape le go di bala gape.Barutwana ba tshwanetse go kgona go araba dipotso: “A o santse o na le dipalo tse di tshwanang tsa dibadisi?” **Didiriswa tse di tswelelang:** Barutwana ba tshwanetse go tsibogela mefuta ya ditaelo le dipotso tse dilatelang: • Go na le dibadisi tse 100. Di bale ka go dikgobokanya ka bosome. Mme jaanong netefatsa ka go di bala. Pele ga o simolola, a o nagana gore a gotlhe go tla tshwana?ka bonngwe • Go bala dibadisi tsotlhe ka 100, a o ka rata go di bala ka ditlhopha tsa 20 kgotsa 25? Goreng? • Swetsa gore ke tsela efe e e gaisang ya go bala diphensele tse di kgobo-kaneng • Fa go na le dibadisi tse 80.Fa re bala ka pedi kgotsa ka lesome, a palo gotlhe ya dibadisi e tla tshwana? • Bala dibadisi tse 46 ka go dikgobokanya ka bopedi	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.2 **Go bala kwa pele le kwa morago**	**Balela kwa pele le kwa morago ka:** • 1,go tswa mo palong nngwe le nngwe fa gare ga 0 le 200 • Lesome go tswa mo kati-song nngwe le nngwe ya 10 fa gare ga 0 le 200 • Botlhano go tswa mo kati-song nngwe le nngwe ya 5 fa gare ga 0 le 200 • Bopedi go tswa mo kati-song nngwe le nngwe ya 2 fa gare ga 0 le 200 • Botharo go tswa mo kati-song nngwe le nngwe ya 3 fa gare ga 0 le 200 • Bonne go tswa mo mo katisong nngwe le nngwe ya 4 fa gare ga 0 le 200	**Bala kwa pele le kwa morago ka:** • 1 go tswa mop along nngwe le nngwe magareng ga 0 le 100 • 10 go tswa mo go atiseng 10 magareng ga 0 le 100 • 5 go tswa mo go atiseng ga 5 magareng ga 0 le 100 • 2 go tswa mo go atiseng ga 2 magareng ga 0 le 100	Kgwedtharo 1 mo mophatong 2 ke popagano ya tiro e e dirilweng mo kgweditharong ya 4 mo mophatong wa 1 Go bala o tlola e nna e ntse e le bokgoni jo bo botlhokwa bo bo tla thusang barutwana fa ba tlhakanya.Go boka tatelano ya dipalo etla dula e ntse e lebokgoni jo bo botlhokwa jwa go bala.Go bala e tshwanetse go tswelela go tlhama karolo ya barutwana ya botshelo jwa letsatsi le letsatsi, le diraeme, dipina le dikgang di tshwanetse go tlhama karolo ya maitemogelo a go bala.. Mo mophatong wa 1 bana ba godisitse kgolo e e latelang ya go bala: • Kakanyo ya go somarela • Neela maina a kgobokanyo ya metheo ya dipalokhutlo • Phopholetso • Papiso mo tsamaelanong ya bongwe ka bongwe **Go bala o tlola** Go bala o tlola ke leina le lengwe la go bala ka ditlhopha.E thusa go godisa temogo ya dipalo tsa dipaterone. Go bala o tlola go thusa barutwana go bala le go akanya mo ditlhopeng, se eleng gore se ba dira gore ba kgone go fitisa. Se se ba thusa go godisa bokgoni jwa bona jwa go fopholetsa. Go bala ka ditlhopha go ba dira gore ba nne kelotlhoko mo kamanong magareng ga dipalo tse e seng dipalotatelano .E baya theo go dipaterone tsa dipalo le go atisa Barutwana ba tshwanetse go tswelela ka go tshegetso ya ditshwantsho go thusa go bala o tlola. Sekao: 2, 4, 6, 8, 10 12, 14, 16, 18, 20 22, 24, 26, 8, 30 32, 34, 36, 38, 40 42, 44, 46, 48, 50 52, 54, 56, 58, 60 62, 64, 66, 68, 70 72, 74, 76, 78, 80 82, 84, 86, 88, 90 92, 94, 96, 98, 100	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.2 **Go bala kwa pele le kwa morago**	**Balela kwa pele le kwa morago ka:** • 1,go tswa mo palong nngwe le nngwe fa gare ga 0 le 200 • Lesome go tswa mo kati-song nngwe le nngwe ya 10 fa gare ga 0 le 200 • Botlhano go tswa mo kati-song nngwe le nngwe ya 5 fa gare ga 0 le 200 • Bopedi go tswa mo kati-song nngwe le nngwe ya 2 fa gare ga 0 le 200 • Botharo go tswa mo kati-song nngwe le nngwe ya 3 fa gare ga 0 le 200 • Bonne go tswa mo mo katisong nngwe le nngwe ya 4 fa gare ga 0 le 200	**Bala kwa pele le kwa morago ka:** • 1 go tswa mop along nngwe le nngwe magareng ga 0 le 100 • 10 go tswa mo go atiseng 10 magareng ga 0 le 100 • 5 go tswa mo go atiseng ga 5 magareng ga 0 le 100 • 2 go tswa mo go atiseng ga 2 magareng ga 0 le 100	**Tsweletso ya ditirwana:** 1. Go balela kwa pele le kwa morago go fitlha go 100 a dirisa ditshate tse dikgolo: (metsotso e le 5 – 7 ka letsatsi) Simolola go bala le phaposi yotlhe mmogo, ema mop along e e rileng sk 24. Barutwana ba fapanela go bala go tswa mop along ka ditlhopa/ bobedi/ bojosi jwa morutabana a kaile, go kwala dipalo mo kemong nngwe le nngwe. Botsa dipotso di tshwana le ke patrone efe e o e boning? Paterone ya ntlha e ema kae? (Sekao: Paterone ya go bala ka bo 2:2; 4; 6; 8; 10) Kwa bofelong jwa kgweditharo barutwana ba tshwanetse go itse: Go bala ka molomo le go tsibogela dipotso di tshwana le: • Simolola mo go 52, bala ka bonngwe go fitlha go 72. • Simolola mo go 88 le go balalela kwa morago ka bonngwe go fitlha go 70. • Simolola mo go 38 le go bala ka bopedi go fitlha go 50. • Simolola mo go 45 le go bala ka botlhano go fitlha go 100. • Simolola mo go 10 le go bala ka bosome go fitlha go 100. Barutwana ba tshwanetse go dirisa bokgoni jwa bona jwa go bala mo ditirwanaeng tsa go kwala. Sekao, mo tirong ka boena ba ka kgona go fetsa tatelano ya dipalo: Barutwana ba kopolola le go atolosa tatelano ya dipalo tse di farologaneng sk barutwana a) 76; 75; 74; __; 72; __; __; __; 68 (kwa morago) b) 27; 28; 29; __; __; 32; __ (ka bonngwe kwa pele) c) 8; 10; __; 14, __ (ka bopedi kgotsa dipalo tse di lekalekanang) d) 5; 10, 15; 20; 25; ____ (ka botlhano) e) 90; __; 70 60; __ (go bala kwa morago ka bosome) f) 10, 20, 30, 40, ___, 60, 70, ___ (balela kwa pele ka bosome).	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.3 **Matshwaopalo le mainapalo**	**Go itse le go bala dipalo** • Go itse le go bala mat-shwaopalo 0 - 200 • Kwala matshwaopalo 0 - 200 • Go itse le go bala maina-palo 0-100 • Kwala mainapalo	**Go itse le go bala dipalo** • Go itse le go bala mat-shwaopalo 0 - 100 • Kwala matshwaopalo 0-100 • Itse le go buisa mainapalo 0-25 • Kwala mainapalo	Ka kgweditharo e barutwana ba tswelela go • Buisa le go kwala mainapalo go 100; le • Go buisa le go kwala mainapalo go 25. Kwa bofelong jwa kgweditharo barutwana ba tshwanetse go itse go: Go kwala matshwaopalo a mainapalo a a neeilweng • somesupa • masome- a- le mabedi tharo Bapisa matshwaopalo mo mainapalo **99** — **Some a robonngwe le nngwe** **8** — **Some a matlhano le boraro** **172** — **Some a mane** **109** — **Some a mararo le robedi** **66** — **Lekgolo some a supa le bobedi** **40** — **Some a marataro thataro** **53** — **Some a robonngwe le nngwe** **38** — **Lekgolo le robonngwe** **53** — **Some a robonngwe le nngwe** **38** — **Lekgolo le robonngwe** Buisetsa dipalo tse di mo dikarateng kwa godimo **83** **47**	

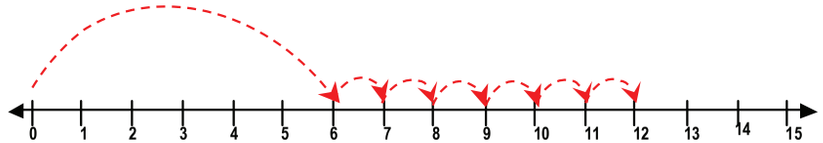
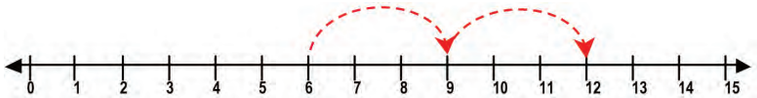
Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.4 Tlhalosa, tshwantshanya, thulaganyo ya dipalo	**Rulaganya le go tshwantshanya dipalo go 99** • Rulanya dipalotlalo go fitlha mo go 99 go tswa mo go e nnye go fitlha go e kgolo le go tswa mo go e kgolo go fitlha go e nnyeOrder whole numbers up to 99 from smallest to biggest, and biggest to smallest. • Rulaganya dipalotlalo go fitlha go 99 o dirisa nnye go , kgolo go, go feta mo, nnye go le go lekana le **Dirisa mabaditatelano go bontsha lefelo kgotsa maemo** Maemo a sediriswa mo moleng ke go tloga ya ntlha go fitlha ya bofelo s.k. ya ntlha , ya bobedi, ya boraro … ya bomasome a mabedi. Baya didiriswa mo moleng go tswa mo go ya ntlha go ya bolesome kgotsa ya ntlha go ya bofelo sk ya ntlha , ya bobedi , ya boraro…bosome a mabedi	**Rulaganya le go tshwantshanya dipalo go 25** • Rulaganya dipapatlo go tswa kwa go e nnye go fitlha go e kgolo, le e kgolo go fitlha go e nnyeOrder whole numbers from small-est to biggest, and biggest to smallest. • Tshwantshanya palophatlo o dirisa nnye go, kgolo go, go feta mo go, nnye go le lekana le **Dirisa bolengkemeditatelano go bontsha thulaganyo, felo kgotsa maemo.** Baya didiriswa mo moleng go tswa mo go nngwe go lesome kgotsa ya ntlha go ya bofelo sk nngwe, pedi, tharo… lesome.	Tlhatlhamano ya dipalo ya tatelano le tshwantshanyo ya go bapisa tlhakanyo ya tlhatlhamano ya dipalo. Se se raya gore fa o batla go tlhakanya go fitlha ko 99, maikutlo a dinomore a tatelano le tshwantshanyo papiso ya tlhakano ya tlhatlhamano ya dipalo e tshwanetse go godisiwa sentleb go fitlha kwa karabong. Fa barutwana ba ka kgona tatelano le tshwantshanyo ka go itshepa go feta ditlhokego, se se tla godisa maikutlo a tirisi ya dipalo. Barutwana ba tshwanetse go tswelela ka go dirisa puo ka ga tatelano le go tshwantshanya: Santlha,sabobedi, sa boraro, sabone, sabotlhano, saborataro …….. Ga kae? …… Ka bontsi, dinomore tse di tshwanang Lekana l , go feta mo, nnye go, kgolo go, nnnye go Latelanya, santlha, sabofelo pele morago , latelang Ka ga tatelano le tshwantshanyo ya didiriswa le dinomore tse barutwana ba ithutile gore: • Dipalo tsa dintlha tsa lebalopalo di dirisiwa go tlhalosa palo mo setlho-phengthe • Dipalo tsa dintlha tsa bolengkemeditatelano di kaya maemo a palo mo setl-hopheng sk: Tshasa mmala o motala mo sedikong sa boraro. **Tsweletso ya ditirwana** • Bolengkemeditatelano: Buisana ka pharologano magareng ga mafoko ‘nngwe’ le santlha; ‘pedi’ le ‘sabobedi’ jj. Botsa dipotsa jaaka: O ka dirisa leng mafoko ‘tharo ‘le ‘gaboraro ‘? • Kgaoganya phaposi ka ditlhopha tse nne tse di lekalekana.Morutwana mongwe le mongwe a newa karata go kwala leina la gagwe. Ditlhopha di tlhomaganya maina a bona go ya ka dialefabete. Morutabana le ban aba ka nna ba botsa dipotso, sk ke mang wa bone mo setlhopheng? **Pharologano ke eng go tswa ko mophatong 1** Mo kgweditharo 1, barutwana ba dira ka thatlhamano ya dipalo tse di kwa godimo le go tswelela ka: • Bala ditlhopha go dira ditlhopha tsa bolesome le tse di ikemetseng; le count and group to make a group of tens and loose ones; and • kwala18 = some a le1 le bonngwe ba le 8 ba ba phatlhaletseng 13 = 10 le 3. Mo kgweditharong e barutwana ba tshwanetse go tswelela ka go nna le karolo mo maitemogelong a mantsi a go tlhoma lesome jaaka selekanyetso le motso. Lesome ke some a le momngwe	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.5 Bolengpalo	**Lemoga bolengpalo ya bonnyedipalo tse pedi go 99** • Go itse gore palo e nngwe e emela eng . • Kgaoganya dipalo tse di nang le dinomore tse pedi ka katiso ya bolesome le nngwe • Tlhaola le go nnela boleng jwa palo nngwew le nngwe.	**Lemoga bolengpalo ya bonnye dipalo tse pedi go 25** • Itse gore palo nngwe le nngwe e emeleng • Kgaoganya dipalo tse di nang le dinomore tse pedi ka katiso ya bolesome le nngwe • Tlhaola le go nnela bo-leng jwa palo nngwew le nngwe.	**Go dira ka didiriswa tse di kgongwang** • **Go bala dithobanyane/matlhokwana** Go bala dithobanyane kgotsa matlhokwana e ka kgobokanngwa go bontsha ditlhopha tsa bolesome le tse di ikemetseng **Sekao:** **Go bontsha 12** **Go bontsha 18** **Go bontsha 25**  • **Abakhase** Barutwana ba tshwanetse go tswelela ka go tshwara didiriswa tse di kgongwang ka go kgobokanya g tlhama bosome le go tlhaloganya gore some ke setlhopha se le sengwe sa lesome le le ikemetseng. Go dirisa abakhase, barutwana ba tshwanetse go kgona go bontsha: - Lesome le lengwe; - Lesome le lengwe le bonngwe ba le 5 ; - Lesome le lengwe le bonngwe ba le 6 - Lesome le lengwe le bonngwe ba le 7 - Lesome le lengwe le bonngwe ba le 8 - Lesome le lengwe le bonngwe ba le 9 • **Diboloko tsa Dienes** Mo kgweditharong e didiriswa tse di rutang bolengpalo di ka godisiwa .Diboloko tsa bolesome (diboloko tsa Dienes)di ka itsisewe go godisa dikakanyo tsa lesome jaaka palo e le nngwe le gore: - Bonngwe ba le 10 ba dira lesome a le 1 ; - Bonngwe ba le somamabedi ba dira bosome ba le 2 ; le - Bonngwe ba le 16 ba dira lesome le lengwe le bonngwe ba le 6 ba ba ikemetseng Le fa barutwana ba santse ba tlhoka go bala le go kgobokanya ka bosome,da ka kgona go bontsha 18 ka go baya diboloko tsa bolesome le diboloko tse robedi tse di ikemetseng go bontsha dipalo. Barutwana ba tshwanetse go kgobokana go bontsha 20.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.5 Bolengpalo	**Lemoga bolengpalo ya bonnyedipalo tse pedi go 99** • Go itse gore palo e nngwe e emela eng . • Kgaoganya dipalo tse di nang le dinomore tse pedi ka katiso ya bolesome le nngwe • Tlhaola le go nnela boleng jwa palo nngwew le nngwe.	**Lemoga bolengpalo ya bonnye dipalo tse pedi go 25** • Itse gore palo nngwe le nngwe e emeleng • Kgaoganya dipalo tse di nang le dinomore tse pedi ka katiso ya bolesome le nngwe • Tlhaola le go nnela bo-leng jwa palo nngwew le nngwe.	• **Kemedi tse di lekalekanang** Mo kgweditharo e tsepamiso e bontsha kemedi e e lekalekanang ya palo e e tshwanang. Somaamabedi e tshwanetse go tlhalosa e le bosome ba ba 2 (go dirisa dithobanyane kgotsa setlhopha sa didiriswa) kgotsa ditlhopha tse pedi tsa bosome Go botlhokwa go bontsha barutwana gore 20 e ka lebega e farologane. Jaanong bontsha didiriswa tse 20 tse di ikemetseng, setlhopha se le sengwe sa bosome le 10 o ikemetseng le ditlhopha tse pedi tsa bosome.Barutwana ba tshwanetse go fiwa tshono ya go tlhalosa thulaganyo, ba bua gore ke eng se se farologaneng le se se tshwanang • **Dikarata tsa bolengpalo/ Ditsekedima** Dikarata tsa bolengpalo di ka itsisewe le go dirisiwa mo kgweditharong e go bontsha ka moo dipalo di agiwang ka teng.Dikarata tsa bolengpalo di tla bontshiwa mo letlhakoreng. la ditlhopha kgotsa didiriswa tsa ditlhopha • **Boleng jwa dipalo** Barutwana ba tshwanetse go simolola go bua gore palo nngwe le nngwe e emelang. Botsa barutwana: - Boleng jwa ga 7 ke eng mo go 27? - Boleng jwa ga 2 ke eng mo go 29? Barutwana ba tshwanetse go dirisa dikarata tsa bolengpalo go netefatsa dikarabo tsa bona. • **Go ya kwa ditlhangweng tse di kwadilweng** Ka nako ya go ikemela barutwana ba tshwanetse go tsaya karalo mo ditirwaneng tsa go kwala tse di aging le go tiisa - Kakanyo ya ditlhopho tsa bolesome le bonngwe ba ba ikemetseng /metso le; - Boleng jwa palothe **Sekao** Tshasa dibaga tse 12 Tshasa dibaga tse 16 Tlatsa dipalo tse di tlhaelang (se se ka diriwa kgotsa sa tlhalosiwa ka go dirisa didiriswa tse di kgongwangthis can be done or 18 = some a le 1 le ____ bonngwe 23 = __ lesome le nngwe ba le 3	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.5 Bolengpalo	**Lemoga bolengpalo ya bonnyedipalo tse pedi go 99** • Go itse gore palo e nngwe e emela eng . • Kgaoganya dipalo tse di nang le dinomore tse pedi ka katiso ya bolesome le nngwe • Tlhaola le go nnela boleng jwa palo nngwew le nngwe.	**Lemoga bolengpalo ya bonnye dipalo tse pedi go 25** • Itse gore palo nngwe le nngwe e emeleng • Kgaoganya dipalo tse di nang le dinomore tse pedi ka katiso ya bolesome le nngwe • Tlhaola le go nnela bo-leng jwa palo nngwew le nngwe.	**Didiriswa tse atlanegisitseng** Didiriswa tse di tla kgobokanngwang • Dithobanyane tsa go bala • Dibadisi tse ditse di kgonang go kopana • Matlhokwana • Dithobanyane tsa bebetsididi • Khubuse tse di golaganeng	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.6 Ditogamaano tsa go rarabolola dipalo	• Dirisa ditogammano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgongwang,sekao:dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le go thuba dipalo • Koketsopedi le kgaoganyo ka bogare • melapalo	• Dirisa ditogammano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgongwang,sekao:dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le go thuba dipalo • Koketsopedi le kgaoganyo ka bogare • melapalo	Go solofetse gore barutwana ba rarabolole dipalofoko ba dirisa maano a a latelang • Go aga le go tlhatlhamolola dinomoro • Koketsogabedi le karoganogabedi **Ditshwantsho kgotsa didiriswa tse di kgongwang** Barutwana ba tla tswelela ka go tshwantsha ditshwantsho le go dirisa didiriswa tse di kgongwang go rarabolola dipalo. Go botlhokwa gore ditshwantsho di nne le dipalo ga mmogo le dipolelo tsa dipalo **Go aga le go tlhatlhamolola** Se ke nngwe ya maano a a botlhokwa mo kgato motheo.Go dirisa maano go letlelela barutwana go kgaoganya le go kopanya gape dinomore go thusa go tlhanya go go bonolo. Ba tla bob a dira maano a le kwa thutong ya bogare. **Koketso gabedi le karogano gabedi** Leano le le kopakopane mme le batla maikutlo a dipalotemosi tse di thata. Barutwana ba ba kgonang go t;lhopha leano le ba laolega go dirisa maano a . **Sekao:** Dipalofoko : Ka letsatsi le lengwe kwa tlililiking ban aba ba 17 ba ne ba tlhabiwa lemao. Letsatsi le le latelang b aba 16 ba tlhabiwa.Ke bana ba ba kae ba ba kae ba ba tlhabilweng? Palo e ka dirisiwa ka go koketso gabedi. Morutwana a kare koketsogabedi ya 16 tlhakanya le 1 kgotsa koketsogabedi ya 17 ntsha 1 **Molapalo** Go dirisa molapalo go kgona go thusa go tlhakanya go go tla letlangbarutwana go rekota go nagana ga bona le go e sala morago.E letla barutwana go nna le rekoto ya setshwantsho se batla se dirisng go tlhalosa ka moo ba rarabololang dipaloa Barutwana ba ntse ba dirisa molapalo go tswa ko mophatong wa 1. Ka sebaka se ba tshwanetse go kgona go itirela molapalo o o senang dinomore mo e leng gore ba baya palo e e simololang le go bona gore ba fitlha jang go tswa ko go o mongwe. Mo kgweditharong e go tla nna le tsweletso mo go bopeng molapalo. Sekao sa ka moo barutwana ba ka dirisang molapalo go rekota maano a go tlhaloganya: Dimpho o na le ditshamikisi tse 6. Oleboheng o na le tse 6 go feta tsa ga Dimpho. Dimpho o na le didiriswa tse kae?	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.6 Ditogamaano tsa go rarabolola dipalo	• Dirisa ditogammano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgongwang,sekao:dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le go thuba dipalo • Koketsopedi le kgaoganyo ka bogare • melapalo	• Dirisa ditogammano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgongwang,sekao:dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le go thuba dipalo • Koketsopedi le kgaoganyo ka bogare • melapalo	Barutwana bat la aga molapalo o o latelang go thusa go fitlha kwa karabong  Barutwana ba kgona gape go kgaoganya 6 ka ditlhopha tse 2. Jaanong molapalo o tla bontsha metlolo e le 2 go tswa mo go **Sekao:** Fa barutwana ba setse ba itshepa mo go baleng go tswa mo nomoreng , molapalo o tshwanetse go simolola ka 6. Ka moo molapalo o agegileng ka teng o tshwanela kakanyo ya go bala. Go botlhokwa gore barutwana ba bone molapalo o o simololang mo dinomoreng tse di farologaneng fa o dirisa go badisa tatelano ya dinomore. Mongwe a ka kgona go kgaoganya 6 ka ditlhopha tsa bo 2 le go tlhakanya go tswa go 6 **Sekao:** 6 a ka arogangwa gabedi mme metlolo e 2 e tla rekotiwa **Sekao:**  Barutwana ba tshwanelwa ke go neelwa ditshono tse dintsi tsa go bua gore ka moo dipalo di ka fitlhelelwang go dirisiwa molapalo. Mongwe a ka botsa: Ke metlolo e fe e e farologaneng e re ka e dirang go fitlha kwa go 15? Go kgontsha barutwana go tlolela mo dipalong ba tshwanelwa ke go itse kgolagano go 15 kgotsa go kgona go dirisa molapalo go fitlha kwa karabong. Go botlhokwa gore barutwana ba bua ka moo motlolo o leng motona ka teng. Go katisetsa mofuta wa tirwana e baakanyetsa barutwana go dira mo meleng e e senang sepe.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.6 Ditogamaano tsa go rarabolola dipalo	• Dirisa ditogammano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgongwang,sekao:dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le go thuba dipalo • Koketsopedi le kgaoganyo ka bogare • melapalo	• Dirisa ditogammano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Didiriswa tse di kgongwang,sekao:dibadisi • Thala ditshwantsho tsa kgannyana ya dipalo • Go aga le go thuba dipalo • Koketsopedi le kgaoganyo ka bogare • melapalo	Fa o dira ka molapalo, bangwe ba barutwana ba ka tlhoka go tshwara mogala wa dibaga kwa godimo kgotsa kwa tlase ga molapalo go ba thusa go bala Letla barutwana go tlhopha maano a a ba siametseng. Le gale, fa e le gore barutwana ba dirisa maano a ba a sa kgoneng, ba tshwanelwa ke go kaelwa go dirisa maano a a ba a kgonang..Barutwana ba ikatisetsa ditogamaano tse. Ga ba tlhoke go relela mo tirisong. Itse gore gantsi barutwana ba dirisa ditsela tse di farologaneng tsa go rarabolola dipalo tse e leng gore morutabana ga a di solofela.Sekao,palo ya go arola e ka rarabolola ka go ntsha go go boelediwang, go tlhakanya, kgotsa go atisa. Mekgwa ya barutwana e tla fetoga mo gare ga ngwaga fa go tlhaloganya go tlwaelesega ka mefuta ya dipalo, le jaaka kgolo ya kakanyopalo.	
1.7 Go tlhakanya le go tlosa	Rarabolola dipalofoko tse di mo tirisong le go tlhalosa tharabololo ya dipalo go akaretsa go tlhakanya, go ntsha ka dikarabo tsa go fitlha go 99	Rarabolola dipalo tsa mafoko mo tirisong le go tlhalosa tharabololo ya palo go akaretsa go tlhaloganya, go ntsha ka karabo ya go fitlha go 20	**Pharologano ke eng mo mophatong 1** Mo kgweditharong e barutwana ba ikatisa go dira dipalo tsa mafoko le go dira ka go itshepa a dirisa maano a a latelang go rarabolola dipalo: • Ditshwantsho tsa didiriswa tsa dikgongwa. • Go aga le go tlhatlhamolola • Koketsogabedi le karoganogabedi • Molapalo Mo kgweditharong e neela barutwana tshegetso e e ntsi mo maitekong a go rekota le go emisetsa dipalelo tsa bona.Barutwana ba tshwanetse go kwala polelo tsa palo jaaka rekoto e e kwadilweng ya palo e e rarabolotseng. Go botlhokwa go lebelela barutwana ba ba nang le bothata jwa go kwala dipolelo tsa mafoko go supa mathata a a rileng.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.7 **Go tlhakanya le go tlosa**	Rarabolola dipalofoko tse di mo tirisong le go tlhalosa tharabololo ya dipalo go akaretsa go tlhakanya, go ntsha ka dikarabo tsa go fitlha go 99	Rarabolola dipalo tsa mafoko mo tirisong le go tlhalosa tharabololo ya palo go akaretsa go tlhaloganya, go ntsha ka karabo ya go fitlha go 20		

Mofuta wa palo1: Phetogo

	Gokaganya	Kgaoganya
Dipholo tse di sa itsagaleng	Thulo o na le dimonamone tse 6. Lebo o mo neela di le 9 go feta. Thulo o na le dimonamone di le kae gotlhe?	Go na le dimonamone tse 15. Lebo o ja tse 6. Thulo o saletswe ke tse kae?
Phetogo e e sa itsagaleng	Thulo o na le dimonamone di le 6.O tlhoka tse kae go feta go nna le tse15?	Thulo o na le dimonamone tse 15. Lebo o ja tse dingwe. Go sala tse 9. Thulo o jele tse kae?
Simolola se se sa itseweng	Thulo o ne a na le dimonamone. Lebo o neela tse 9 go feta. Jaanong o na le tse 15. Thulo o simolotse a na le tse kae?	Thulo o ja dimonamone dingwe. O file Lebo tse 6. Jaanong o na le dimonamone tse 8 tse di setseng .O simolotse ka tse kae?

Mofuta wa palo 2: Tshwantshanya

	Gokaganya	Kgaoganya
Dipholo tse di sa itsagaleng	Thulo o na le dimonamone tse 6.	Dimpho o na le dimona-mone tse 15
Phetogo e e sa itsagaleng	Thulo o na le dimonamone tse 9. Thulo o na le dimonamone tse kae go feta tsa ga Dimpho	
Simolola se se sa itseweng	Thulo o na le dimonamone tse 15 O na le dimonamone tse 9 go feta tsa ga Dimpho. Di mpho o na le dimonamone tsec kae?	Dimpho o na le dimona-mone tse 16. Thulo o na le dimonamone tse di nnye ka 9 mo go tsa Dimpho. Dimpho o na le dimona-mone tse kae?

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.7 **Go tlhakanya le go tlosa**	Rarabolola dipalofoko tse di mo tirisong le go tlhalosa tharabololo ya dipalo go akaretsa go tlhakanya, go ntsha ka dikarabo tsa go fitlha go 99	Rarabolola dipalo tsa mafoko mo tirisong le go tlhalosa tharabololo ya palo go akaretsa go tlhaloganya, go ntsha ka karabo ya go fitlha go 20		

Mofuta wa palo 3: GO LEKALEKANYA

	Gokaganya	Kgaoganyo
Dipholo tse di sa itsagaleng	Thulo o na le dimonamune tse 15. Lebo o na le dimonamone tse 6. Thulo o tshwanetse go nna le dimonamone di le kae gore di lekane le tsa ga Lebo.	Dimpho o na le dimonamune tse16. . Lebo o na le dimonamone tse 6. Lebo o tshwanetse go ja dimonamone tse kae go feta tsa ga Dimpho go nna le palo e e tshwanang le ya ga Lebo
Phetogo e e sa itsagaleng	Kabelo o na le dimonamone tse 6. Fa a reka dimonamone tse 9 o tla nna le tse dintsi jaaka tsa ga Pulane? Pulane o na le tse kae?	Thulo o na le dimonamone tse 6. Fa Remo a ja dimonamone tse 9 o tla nna le palo e e tshwanang le ya dimonamone tsa ga Thulo. Thulo o na le dimonamone tse kae?
Simolola se se sa itseweng	Tshepang o na le dimonamone tse 15. Fa Reo a reka dimonamone tse 9 go feta o tla nna le dimonamone tse di tshwanang le tsa gaTshepang. Reo o na le dimonamone tse kae? I	Khumo o na le dimonamone tse 16. Fa a ja dimonamone tse 9 o tla nna le palo e e tshwanang le ya ga Reso. Khumo o na le dimonamone tse kae?

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.8 **Poeletso ya go tlhakanyo e e isng kwa katisong**	Rarabolola dipalofoko tse di mo tirisong mme o tlhalosa tharabololo ya bona ya dipalo ba dirisa poeltso ya tlhakanyo kgotsa go atisa ka dikarabo go fitlha go 50	Rarabolola dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe go akaretsa poeletso ya go tlhakanya go ya kwa karabong go ya kwa go 20.	Katiso Tshimologo fitlha go tlhaloganya katiso mo mophatong o ke ditlhopha.Go dira ditlhopha go ka thusa barutwana go emela mo maemong a katiso. Go na le maemo magolo a le mararo a a akaretsang katiso ya dipalotlalo: • Ditlhopha tse di lekanang(sk.ditafole tse tharo,nngwe le nngwe ka ban aba le bane): tse e leng gore di emelwa ke ditlhopha • Papiso ya katiso (sk palo ya basimane e e leng gararo go feta ya baset-sana)e e emetsweng ke tsamaisano ya bontsi jwa bongwe • Tatelano ya khutlonnetsepa (sk. Mela e meraro ya ban aba le bane):tse eleng gore di emelwa ke mela kgotsa dikolomo Maemo mangwe le mangwe a ka lebaganngwa le ditsela tse di riling tsa go botsa potso. Maemo a palo ya katiso a a akaretsa dipallo tse tharo tse di latelang mo kamanong ya dipalo: • Palo ya didiriswa mo ditlhopheng dingwe le dingwe • Palo ya ditlhopha • Palo gotlhe **Sekao sa dipalo tse di ka dirwang mo kgweditharong e** Go solofetswe gore fa o rarabolola dipalo tse di fat lase, barutwana ba tla dirisa ditshwantsho kgotsa didiriswa tse di kgongwang go thusa go tlhakanya. Fa e le gore barutwana ba dirisa ditshwantsho go ba thusa go tlhakanya, ditshwantsho di tshwanetse go tlhagisa maemo a ditlhopha. Barutwana ba tshwanetse go tlhotlhelediwa go kwala dipolelopalo tsa dipolelo tsa mafoko tsotlhe. Solofela gore barutwana bat la dirisa go tlhakanya go goboelediwang gga dipolelopalo go bontsha karabo. Dikao tsa dipalo tse di ka dirwang	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.8 **Poeletso ya go tlhakanyo e e isng kwa katisong**	Rarabolola dipalofoko tse di mo tirisong mme o tlhalosa tharabololo ya bona ya dipalo ba dirisa poeltso ya tlhakanyo kgotsa go atisa ka dikarabo go fitlha go 50	Rarabolola dipalofoko di le mo tirisong le go tlhalosa tharabololo ya gagwe go akaretsa poeletso ya go tlhakanya go ya kwa karabong go ya kwa go 20.	**Poeletso ya go tlhakanya** • Dibaesekele tse 4 di na le maotwana a le kae? • Bana ba supa ba na le matlho a makae? Bana ba kanna ba rarabolola palo ka tsela e e latelang; • Ditshwantsho di tshwanetse go bontsha ditlhopha. Barutwana ba tshwanetse go tlhotlhelediwa go bala ka 2 go bona karabo. Ba tshwanetse gape go tlhotlhelediwa go emela go bala ka palopolel **2 + 2 + 2 + 2 + 2 + 2 + 2 = 14** **Tekanyetso** Khumo o nwa dikopi tse 3 tsa maswi letsatsi le letsatsi. O nwa dikopi tsa maswi tse kae mo bekeng? **Tatelano** Rre Mojaki o jala mela e3 ya dikhabetshe. Go na le dijalo tse 5 mo moleng. Go na le dijalo tse kae tsa khabetshe How many cabbage plants are there altogether? • Tshimo ya merogo e na le mela e 5 ya dijalo. Mela mongwe le mongwe o na le palo e e tshwanang ya dijalo. Fa go na le dijalo tse 15 gotlhe, go na le dijalo tse kae mo moleng mongwe le mongwe? • Tshimo ya merogo e na le dijalo tse 18 tse di jetsweng mo meleng. Go na le dijalo tse 6 mo moleng mongwe le mongwe. Go na le mela e mekae?	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.9 Kgobokanyo le kgaoganyo e e isang kwa karoganyong	Rarabolola le go tlhalosa dipalo tse di mo tirisong tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotlalo tse di fitlhang go 99 ka dikarabo tse di tla akaretsang sesala	Rarabolola le go tlhalosa dipalo tse di mo tirisong tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ya go fitlha go 20 ka dikarabo tse di tla akaretsang sesala	Jaaka katiso, tshimologo fitlha go tlhaloganya go aroganya mo mophatong o , ke kgaoganyo e e lekanang le kgobokanyo • Kgobokanyo (sk bana ba le somepedi mo ditafoleng tse nne, ditafole di kae?) • kgaoganyo (sk bana ba le somepedi mo ditafoleng tse nne, ba bakae? Barutwana bangwe ba fitlha kwa sekolong ba kgona go bopa go kgobokanya le go kgaoganya palo ka didiriswa tse di kgongwang. Maemo palo ya katiso le kgaoganyo e e akaretsa dipalo tsa tharo tse di latelang mo kamanong ya dipalo: • Palo ya didiriswa mo setlhopheng sengwe le sengwe • Palo ya ditlhopha • Palogotlhethe **Dikao tsa dipalo tse di tla dirwang mo kgweditharong e** **Kgaoganyo** • Ken a le diphensele tse 12 tse ke di kgaoganyang ka go lekana mo go ba bararo mo go lona, le tlile go bona tse kae mongwe le mongwe wa lona? • Go na le dikoloi tsa motshameko tse 18; a le ka di kgaoganya ka go lekana magareng a lona? • Go na le dipolama tse 16 mme bana ba ba 8 ba di kgaoganya ka go lekana. Ngwana mongwe le mongwe o bona tse kae? • Arona o na le mabolomo a le 20. O a tsenya mo pitseng tse pedi tsa mabolomo. Go na le mabolomo a le makae mo pitseng e nngwe le e nngwe? • Remo o baka dikuku tse 8 . O na le dimonamone tse 40 .A ka baya dimonamone tse kae mo kukung e nngwe le e nngwe? **Kgobokanyo** • O ka dira dikoloi tse kae fa o na le maotwana a le 8? dikutara tse kae? • Go na le diapole tse 18 mo lebokosong. Dikgetsi tse 3-Di ka tlatswa ke diapole di le kae • Lesedi o baka dibanse tse 30. O tsenya dibanse tse 6 mo bokosong e nngwe le e nngwe. Go ka tladiwa dibokoso tse kae? • Go na le bana ba le 16 gompieno. Re ka dira ditlhopha tse 4 tse kae tsa bana? **Tatelano** • Tshepang o paka dibadi tse 20 mo meleng e e 10. Go na le dibadi tse kae mo meleng?	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.11 **Tshelete**	• Lemoga le go tlhaola tshelete ya dipapetlana le a pampiri mo Aforika Borwa, (10c, 20c, 50c, R1, R2, R5) a (R10, R20, R50) • Rarabolola dipalo tsa tshelete tse di akaretsang dipalogotlhe le tshentshe go fitlha go disente di le 90 le go fitlha go diranta di le 99	• Lemoga le go tlhaola a tshelete ya dipapetlana. tsa a Aferika Borwa (5c, 10c, 20c, 50c, R1, R2, R5, le a pampiri. R10, R20, R50 • Rarabolola dipalo tsa tshelete tse di akaretsang dipalogotlhe le tshentshe ya disente go 50c kgotsa diranta go fitlha go R20	**Pharologano ke eng mo mophatong wa 1** Mo kgweditharong e, barutwana ba ikatisa go lemoga madi le kgaogano ya madi ka dikarolwana tse dinnye. **Dikai tsa dipalo tse di ka dirwang** • A o ka kgaoganya 50c ka go lekalekana mo baneng ba le bane? Tlhalosa gore jang? • Tshapisi ke 10c e nngwe le nngwe. Dimpho o dirisa 50c. O rekile ditshapisi tse kae? • Lebo o duela R5 go tsamaya ka thekesi mo mosong. O duel aka R20. O bona tshentshi ya bokae? O tla be a saletswe ke bokae fa a boela gae? Fizzpop ke R2, 50. Thulo o batla go reka difizzpops tse 4. O na le R8, 00. A o na le madi a a lekaneng? Fa a sena, o tlhoka madi bontsi bokae?	

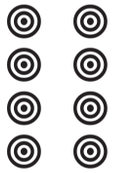
Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.12 **Ditogamaano** **(Mekgwa kgotsa ditogamaano)**	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go tshwantsha kgotsa didioriswa tse di kgong-wang sk,dibadisi • Go aga le go tlhatlhamo-lola dipalo • Koketsogabedi le go arog-anya ka bogare • molapalo	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go tshwantsha kgotsa didioriswa tse di kgong-wang sk,dibadisi • Go aga le go tlhatlhamo-lola dipalo • Koketsogabedi le go aro-ganya ka bogaredoubling and halving • molapalo	**Se se farologaneng go tswa mo mophatong wa 1** Barutwana ba solofetse go rarabolola tiriso e e lokologileng ya dipalelo ba dirisa ditogamaano tse di latelang: • Go tshwantsha kgotsa didioriswa tse di kgongwang • Go aga le go tlhatlhamolola dipalo • Koketsogabedi le go aroganya ka bogare • Molapalo **Ditshwantsho kgotsa didiriswa tse di kgongwang** Barutwana bat la tswelela ka go taka ditshwantsho le go dirisa didiriswa tse di kgongwang go rarabolola palo. Go botlhokwa gore ditshwantsho tse di nang le dinomore ga mmogo le palopolelo . **Go aga le go tlhatlhamolola dipalo** Seno ke togamaano e e botlhokwa thata mom Kgatong Motheo. (barutwana ba tla dirisa go kgaoganya kgapetsakgapetsa mo mophatong o o magareng). Go dirisa togamaano a go letla barutwana go kgaoganya le go kopanya dipalo go thusa go dira dipalelo bonolo Mo kgweditharong e barutwana bat la: • Tlhatlhamolola dipalo a dirisa bolengkemedi • Tlhatlhamolola dipalo a dirisa katiso ya 10 le • Tlhatlhamolola dipalo mo bobeding sk e e dirang 20	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.12 **Ditogamaano** **(Mekgwa kgotsa ditogamaano)**	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go tshwantsha kgotsa didioriswa tse di kgong-wang sk,dibadisi • Go aga le go tlhatlhamo-lola dipalo • Koketsogabedi le go arog-anya ka bogare • molapalo	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go tshwantsha kgotsa didioriswa tse di kgong-wang sk,dibadisi • Go aga le go tlhatlhamo-lola dipalo • Koketsogabedi le go aro-ganya ka bogaredoubling and halving • molapalo	**Go oketsa gape le aroganya ka bogare** Barutwana ba tswelela ba dirisa go oketsa gape le go aroganya ka bogare jaaka maano a dipalelo **Molapalo** Lebelela dintlha mo dikaing tse di tswelelang tsa go dira molapalo mo karolong ya tharabololong ya dipalo • Tlhakanya le go tlosa Barutwana ba tshwanetse go ipopela melapalo ya bona le go tlhatlhamolola dipalo karolo tse di laolegang. **Sekao** 8 + 12 Molapalo o tahwanetse go simolola ka 8 mme barutwana b aka tlhama: • Metlolo e 2 ya ga 6 • Metlolo e 4 ya ga 3 • Metlolo e 3 ya ga 6 • Motlolo o le mongwe wa 10 le motlolo wa 2 • Katiso Molapalo o tshwanetse go tswelela go tshegetsa tlhakanyo gabedi. Metlolo e e lekaneng e rekotiwa mo molapalong mme dipolelo tse di tshegetsang le tsona di ka nna tsa rekotiwa. Sekao: 5 + 5 + 5 + 5 + 5 = 25 Metlolo e 5 ya bo 5 e dira 25 5 Ditlhopha tsa 5 tse 5 = 25 5 5 x 5 = 25 Mo katisong e e neetsweng, barutwana ba tshwanetse go kgona go tlhalosa ka moo metlolo e ka dirwang mo molapalong Letla barutwana go tlhopha maano a a ba siametseng. Lefa go ntse jalo , fa barutwana ba dirisa maano a a sa nonofang ba tlhoka go kaelwa go dirisa a a nonofileng. Itse gore barutwana mo gongwe bat la dirisa ditsela tse di dingwe tse morutabana a sa di solofelang. Sekao, palo ya go arola e ka rarabololwa ka go ntsha go go boelediwang, poeletso tlhakanyo, kgotsa katiso. Mekgwa ya barutwana e tla fetoga mo tsamong ya ngwaga fa go tlhaloganya ga bona le go tlwaela mefuta ya kgolo ya dipalo, le fa kakanyo ya dipalo e tlhabologa.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.13 Tlhakanya le go tlosa	• Tlhakanya go 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise kgolagano ya dipalo go fitlha go 10	• Tlhakanya go 20 • Ntsha go tswa go 20 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise kgolagano ya dipalo go fitlha go 10	**Pharologano ke eng mo mophatong 1?** Gona le tsepamiso e kgolo mo kgodisong ya maano mo kgweditharong e . Go tlhatlhamolola dipalo gore o kgone go balela e nna maano a a botlhokwa a e leng gore barutwana ba tla ikatisetsa . **Kgweditharo e e tsepamisa mo :** Go dira ditirwana tsa go aga le go tlhatlhamolola tse di tla thusang go godisa go tlhaloganya go tlhakanya le go ntsha Barutwana ba ikatisetsa go tlhakanya le go ntsha go fitlha go 20. Ke ka ga tlhatlhamano ya dipalol moe leng gore barutwana bat la godisang kakanyo ya bolengkemedi ya lesome le metso.Go bala ka ditlhopha go dula go ntse go le botlhokwa, mme barutwana ba tshwanetse go lemoga gore go bala ka bonngwe ga e se maano a a nonofileng. Mo magareng ga tlhatlhamano ya dipalo barutwana ba tshwanetse ba nagane thata ka ditogamaano tse bat la di dirisang, Go tlhopha maano a a maleba a palelo go thusa barutwana go nna le nonofo mo go baleleng. Go ka kgona go balela mo tlhatlhamanong ya dipalo tsa 0-20 maitemogelo a barutwana a tshwanetse go akaretsa: • Didiriswa tsa go bala • Go lemoga, go buisa le go kwala dipalo • Tshwantshanya le go rulaganya dipalo • Go aga le go thuba dipalo • Go ikatisa go dira go tlhakanya le go ntsha go fitlha go 20 • Go oketsa gabedi le go kgaoganya ka legare; le • Go tshwara ka tlhogo dingwe tsa dipalo **Bothekeniki jwa palelo a a kgonagalang mo go tlhakanyeng le go ntsha** Bo thekeniki jo bo dirisitsweng fa tlase fa jo letla barutwana go rulaganya go bala, ba dire tlhaloganyo ka dipalo .Go ithuta maano fa tlase fa , go tla rotloetsa barutwana go supa tshwano ya go rata dipalo le go ruta barutwana ka bona gore ba kgona go dirisa le go diragatsa kitso ya bona ya go balela ..	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.13 Tlhakanya le go tlosa	• Tlhakanya go 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise kgolagano ya dipalo go fitlha go 10	• Tlhakanya go 20 • Ntsha go tswa go 20 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise kgolagano ya dipalo go fitlha go 10	**Baya palo e kgolo pele go ya ka tatelano gore go balela kwa pele kgotsa le kwa morago** 4 + 12 = □ Rulaganya sešwa 4 + 12 as 12 + 2 le go bala go tloga go 12. **Tlhopha koketso gabedi e gaufi** 8 + 7 Morutwana a ka tlhalosa gore palo e ka kwalwa jaaka 8 + 8 -1 (koketso gabedi 8 o tlosa 1) kgotsa 7 + 7 + 1 (koketso gabedi 7 o tlhakanya le 1). Barutwana ba tla rekota ditogamaano tsa bona ba dirisa metsu 8 + 8 □ 16 + 1 = 15 **Fetolela palo go bolesome le go tlosa kgotsa go tlhakanya bonngwe** Togamaano e ka rutwa ka tatelano ya dipalo tse di kwa tlase le go di diragatsa go dipalo tse kgolwane 9 + 6 = □ Barutwana ba ka ipolelela : “ ke tla tlosa nngwe go tloga go 6 le go e tlhakanya le 9 go dira 10 .” Ka jalo 9 + 6 e ka kwalwa jaaka 10 + 5 = 15. 8 + 5 = □ Barutwana ba ka ipolelela : “Ke tla tlosa pedi gotloga go 5 le go e tlhakanya le 8 go dira 10.” Ka jalo 8 + 5 e ka kwalwa jaaka 10 + 3 = 13.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.13 Tlhakanya le go tlosa	• Tlhakanya go 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise kgolagano ya dipalo go fitlha go 10	• Tlhakanya go 20 • Ntsha go tswa go 20 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise kgolagano ya dipalo go fitlha go 10	**Go aga dipalo ka dikarolo tse di nnye go dira dipalo bonolo** Barutwana bat la aga dipalo ka dikarolo tse di farologaneng tse ba tla di kgonang ka bobona .. Go bala ka go kgaoganya ka palo e nngwe 11 + 7 = □ 11 + 4 + 3 11 + 4 □ 15 + 3 = 18 11 + 7 = □ 11 + 5 + 2 11 + 5 □ 16 + 2 = 18 17 – 9 = □ 17 - (7 + 2) 17 – 7 □ 10 - 2 = 8 12 + 7 = □ 10 + 2 + 7 7 + 2 □ 9 + 10 = 19 **Dirisa kitso ya kabelano ya go rata dipalo magareng ga tlhakanyo le tloso.** 15 – 9 = □ Morutwana o itse fa palo e ka kwalwa sešwa jaaka palo e e tlhakangwang , “Ke itse gore 9 + □ = 15.” Morutwana a ka dirisa go balela kwa pele go dira dipalo **Dipalotlamo** Gore go ithuta dipalotlamo ditrwana tse di farolganeng di tshwanetse go neelwa bartwana. Se se dirwa sentle ka nako e ikemetseng. Molapalo le one o ka dirisiwa go ithuta go dipalotlamo go 10.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.14 **Poeltso ya tlhakanyo e tsamaelang kwa katissong**	• Tlhakanya dipalo tse tshwanang o di boeletsa go fitlha go 50 • Atisa dipalo go tloga 1 go fitlha go 10 ka 1, 2, 5, 3 le 4 • Dirisa matshwao a maleba (+, x, =, □)	• Tlhakanya dipalo tse di tshwanang o di boeletsa go fitlha go 20 • Atisa dipalo go tloga go 1 go fitlha 10 ka , 2, • Dirisa matshwao a maleba (+, x, =, □)	**Pharologanyo keng mo mophatong 1** Barutwana ba dira kgabaganyetso go tloga go poeletso ya go tlhakanya go ya go katiso. Ba tla simolola go tlhaloganya tiriso ya go atisa. Ba tla tshwaragana le ditirwana tseo di ba kgontshang go bona kamano mo gareng ga dipalo: • Palo ya sete ya didiriswa/ setlhopha • Palo ya disete kgotsa ditlhopha • Palogotlhe Ka nako e barutwana ba goroga mo mophato 2 ba tlhaloganya poeletso ya tlhakanyo. Kwa bofelong jwa kgweditharo ba tla be ba kgona go : • Go amanya go bala o tlodisa le go boeletsa go tlhakanya go tlhaloganya go atisa ; • Dirisa , bala le go kwala matshwao a go atisa ; • Kwala katiso ya polelopalo ; le go • Atisa dipalo go tloga go1 go fitlha go 10 ka 2. Fa go rarabolololwa dipalofoko barutwana ba ka rata go dirisa tlhakanyo e boeletswang , kwa ntle ga dipalofoko tseo tse di akaretsang ditshwano tsa metsu .Ka ka tiriso ya maemo a lokogileng gore ditshwano tse dingwe di ka dirisetswa go atisa . **Go latelana ga dipalo** Jaaka barutwana lo iponela maitemogelo ka katiso e farologanyeng ya dipalofoko, go rulaganya ditlhopha ka tatelano go ka neela ka popego e bontshang tlholego ya thefosano ya go atisa s.k. 2 x 4 e tshwana fela ka 4 x 2.  4 + 4 = 8 2 + 2 + 2 + 2 = 8	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.14 **Poeltso ya tlhakanyo e tsamaelang kwa katissong**	• Tlhakanya dipalo tse tshwanang o di boeletsa go fitlha go 50 • Atisa dipalo go tloga 1 go fitlha go 10 ka 1, 2, 5, 3 le 4 • Dirisa matshwao a maleba (+, x, =, □)	• Tlhakanya dipalo tse di tshwanang o di boeletsa go fitlha go 20 • Atisa dipalo go tloga go 1 go fitlha 10 ka , 2, • Dirisa matshwao a maleba (+, x, =, □)	Go dirisa tatelano ya dipalo go lettlelela go: • aga le go aroganya dipalo; • go gokaganya katiso le poeletso ya tlhakanyo; • Go akanya katiso jaaka go latelana le • Go baya motheo wa molao wa thefosano thefosano. Tsepamisa theetso mo tatalanong ya dipalo le mabadi a dipalo mo ka tatamalong. 2 + 2 + 2 + 2 = 8 Go tlhatlhamisa 2 ga 4 , ke 8 gotlhe. Barutwana le bone ba rekote ka tsela e latelang: 2 + 2 + 2 + 2 = 8 Go tlhatlhamisa 2 ga 4, ke 8 gotlhe.. Lefoko “ga kana” le ka itsisiwe: 2 ga 2 ke 8. Gangwe fela fa barutwana ba iponetse maitemogelo a lekaneng, letshwao lwa go atisa le ka tsenngwa tirisong gammogo le puo e e agilweng : • 4 ditlhopha tse, tsa 2 • 4 bopedi ba • 2 + 2 + 2 + 2 = 8 • 4 ditlhopha tse , tsa pedi kgotsa 4 ga 2 ke 8 Lefa letshwao le tsentswe tirisong ,mafoko , ditshwantsho le ditshwano tse di farologaneng go tshegetsa tlhaloganyo ya tiro e sala e le botlhokwa .	

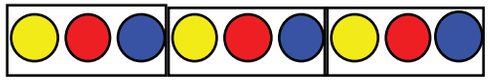
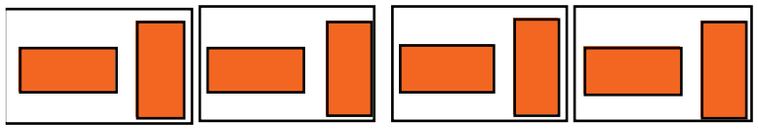
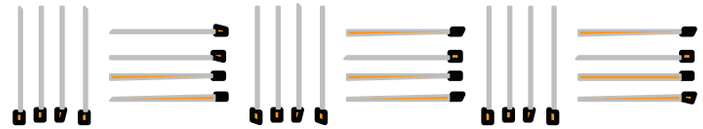
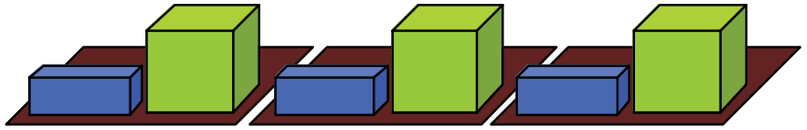
Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.14 **Poeltso ya tlhakanyo e tsamaelang kwa katissong**	• Tlhakanya dipalo tse tshwanang o di boeletsa go fitlha go 50 • Atisa dipalo go tloga 1 go fitlha go 10 ka 1, 2, 5, 3 le 4 • Dirisa matshwao a maleba (+, x, =, □)	• Tlhakanya dipalo tse di tshwanang o di boeletsa go fitlha go 20 • Atisa dipalo go tloga go 1 go fitlha 10 ka 2 • Dirisa matshwao a maleba (+, x, =, □)	Ditshwano go tlhaloganya go atisa : • Dikhube tse di tlhomagantsweng di ka nna tsa tlhomagangwa jaaka dipilara tse 4 tsa dikhube mme mo pilareng nngwe le nngwe go ka nna le dikhube tse 2. Se se letlelela barutwana go bolela ba re: Go tlhatlhagano tse tlhano mme go dikhube tse 3 go e nngwe le e nngwet. E ba lettlelela go go rekota 2 +2 + 2 + 2 + 2 le 4 ditlhopha tse, tsa 2 ke 4 x 2. • Molapalo o ka dirisetswa go bontsha poeletso ya go tlhakanya kgotsa ditlhopha tsa dipalo. E ke kgokaganyo e maatla ya go bala o tlola. Barutwana ba tshwanetse go kgona go rekota tse di latelang : 1 setlhopha sa 2 ke 2 kgotsa 1 ga 2 ke 2 kgotsa 1 x 2 = 4 2 setlhopha sa 2 ke 4 kgotsa 2 ga 2 ke 4 kgotsa 2 x 2 = 4 3 setlhopha sa 2 ke 6 kgotsa 3 ga 2 ke 6 kgotsa 3 x 2 = 6	

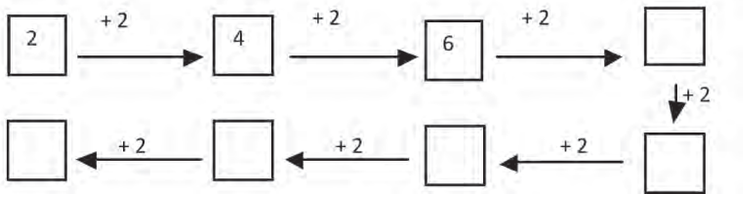
Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.16 **Dipalo tsa tlhogo**	**Tlhaloganyo ya dipalo:Tlhatlhamaano go 99** • Rulaganya sete ya dipalo tse di neetsweng tse ditl-haotsweng • Bapisa dipalo go fitlha 99 mme o bolele gore kefe e kgolo kgotsa nnye • Itse gore ke palo efe e kgolo go feta ka 1 kgotsa e nnye go feta ka 1 • Itse gore ke palo efe e kgolo go feta ka 2 kgotsa e nnye go feta ka 2 • Itse gore ke palo efe e kgolo go feta ka 3 kgotsa e nnye go feta ka 3 • Itse gore ke palo efe e kgolo go feta ka 4 kgotsa e nnye go feta ka 4 • Itse gore ke palo efe e kgolo go feta ka 5 kgotsa e nnye go feta ka 5. • Itse gore ke palo efe e kgolo go feta ka 10 kgotsa e nnye go feta.	**Tlhaloganyo ya dipalo:Tlhatlhamaano go25** • Rulaganya sete ya dipalo tse di neetsweng tse ditlha-otsweng • Bapisa dipalo go fitlha 99 mme o bolele gore kefe e kgolo kgotsa nnye • Itse gore ke palo efe e kgolo go feta ka 1 kgotsa e nnye go feta ka 1 • Itse gore ke palo efe e kgolo go feta ka 2 kgotsa e nnye go feta ka 2 • Itse gore ke palo efe e kgolo go feta ka 10 kgotsa e nnye go feta ka 10 **Gopola ka bonako:** • Gopola tlhakanyo le tloso ka dintlha tsa 10	**Pharologanyo ke eng go tloga mophato1?** **kgweditharo e tsepame mo:** Lenaneo la dipalo tsa tlhogo le tshwanetse go agwa ka thulaganyo mo tsamaong ya ngwaga. Barutwana ba se ka ba kopiwa go balela kwa kwa ntle le thulaganyo. Jaaka barutwana ba akaretsa le go aga ditogamaano mo bogolong jwa thuto, dintlha tse di ntseng jaana di ka tlhakangwa mo lenaneong la dipalo tsa tlhogo :Ditlhaloganyo le bokgoni di agwa mo gare ga thuto e kgolo, le gone go ithuta , le ka nako e nngwe ka tlhatlhamano ya dipalo tse di nnye, mo lenaneong la dipalo tsa tlhogo. O ka tshegetsa tlhatlhamano e kwa tlase ya dipalo mo kgweditharong 1 le go oketsa mo tsamaong ya ngwaga. Mo tshimologong ya ngwaga , tlhatlhamaano ya le dipalo le palelo ya ditogamaano e ka ikaega mo tseo di agilweng mo mophato 1. **Tlhaloganyo ya dipalo:** **Dipotso tse di kgonang go bodiwang:** **Dipaloina le matshwao** Thwarela karata kwa godimo kgotsa kwala paloina. Tlhopha morutwana go kwala dipalo tse di nyalanang.	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.16 **Dipalo tsa tlhogo**	**Ditogamaano tsa dipalo** Dirisa ditogamaano go tlhakanya le tlosa ka bokgoni: • Baya palo e kgolo pele gore o tle balele pele le go balela morago • Molapalo • Koketso gabedi le go hafola • Aga le go aroganya • Dirisa kamano gare ga tlhakanyo le tloso	**Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano tsa paleleo go tlhakanya le go tlosa ka bokgoni: Baya palo e kgolo pele gore o tle o balele kwa pele le kwa morago • Molapalo wa dipalo tsa tlhogo • Go oketsa ka pedi le go hafola • Go aga le go aroganya • Dirisa kamano gare ga tlhakanyo le tloso	**Kgolo go feta kgotsa gonnye go feta** Ke eng • 1 nnye go feta 15 • 1 kgolo go feta 9 • kgolo go feta 18 • nnye go feta 22 • kgolo go feta 17 • nnye go feta 24 • kgolo go feta 16 • nnye go feta l 12 • kgolo go feta 19 • nnye go feta 15 • 10 kgolo go feta 15 • 10 nnye go feta 16 Tlhaka ya botlhano ya alefabete ke efe ? Kgwedi ya borobongwe mo ngwageng ke efe ? **Go rulaganya le go bapisa** Ke efe e ntsi: 12 le 21? Neela palo gare ga 17 le 19. **Tlhakanyo le dintlha tsa tloso:** • Itse ka pelo tlhakanyo le dipalo tsa tloso tse di kopaneng go 10 □ + △ = 10 □ + △ = 8	

Setlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako (Mo paka-thutong ya ura le metsotso e le 24)
1.16 **Dipalo tsa tlhogo**	**Ditogamaano tsa dipalo** Dirisa ditogamaano go tlhakanya le tlosa ka bokgoni: • Baya palo e kgolo pele gore o tle balele pele le go balela morago • Molapalo • Koketso gabedi le go hafola • Aga le go aroganya • Dirisa kamano gare ga tlhakanyo le tloso	**Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano tsa paleleo go tlhakanya le go tlosa ka bokgoni: Baya palo e kgolo pele gore o tle o balele kwa pele le kwa morago • Molapalo wa dipalo tsa tlhogo • Go oketsa ka pedi le go hafola • Go aga le go aroganya • Dirisa kamano gare ga tlhakanyo le tloso	Tlhakanya le dintlha tloso mo dipalong tsotlhe go fitlha le tsenyeletsa 10 1 + 9 = 10 9 + 1 = 10 2 + 8 = 10 8 + 2 = 10 3 + 7 = 10 7 + 3 = 10 8 – 4 = 4 18 – 4 = 4 8 – 5 = 3 18 – 3 = 5 8 – 6 = 2 18 – 2 = 6 Ka bonako gopola tlhakanyo ka koketsogabedi 10. se se itepanye le dintlha tsa tloso.. • 1 + 1 = 2 • 2 + 2 = 4 • 3 + 3 = 6 • 4 + 4 = 8 • 5 + 5 = 10 Bontsha palo e tla tlhakanyang le ..... go dira 10 (kwala fatshe kgotsa dirisa boalo boelng kgotsa dikarata) • 8 • 2 • 9 • 5 • 3 Bontsha palo e setseng.....erile o tlosa go tloga go 10(kwala fatshe kgotsa dirisa boalo boelng kgotsa dikarata) • 5 • 3 • 6 • 1 • 7 Dipalo tsa tlhogo di ka dirwa kwa ntle le dithusathuto mme fela go mosola go di dira dipalo tsa tlhogo ka dithusathuto le go rekota se se dirilweng. **Dithusathuto tse di tshintshintsweng** • Molapalo (o bopegileng le o lolea) • gerete ya dipalo • baya dikarata tsa boleng • Bala dibaga	

Mophato 2 Kgweditharo1 2-Dipaterone,Tiriso le Alejebera				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshellono boswa jwa letsatsi ka letsatsi • Go tswa mo ngwaoboswa ya rona	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didi-riswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa.	**Go kopolola paterone go thusa barutwana go bona lemoga /tatelano ya gore paterone e dirwa jang.** **Go atolosa paterone go thusa barutwana go netefatsa gore ba tlhalogantse sentle tatelano ya paterone.** **Go tlhalosa paterone go thusa barutwana ka kgolo ya bo kgoni jwa puo le go bua. E thusa gape go bona le gore morutwana o kgona go ranola dipaterone jang.** Go tlwaelegile gore go bonolo gore barutwana ba bue ka paterone morago ga go di dira.Barutabana ba tlhoka go katisiwa gore ba tshwanetse go lebelela eng le gore batshwanetse go tlhalosa dipaterone jang.O ka kaetsa se mo barutwaneng ka go botsisa dipotso tse di latelang: “O bona popego efeng mo pateroneng e?” “A di tshwana tsotlhe ka mmala?” “A o bona e lenngwe kgotsa tse di fetang bongwe tsa dipopego mo di pateroneng?” “A dipopego di lebeletse go lo gongwe?” “A go na le dipalo tse di tshwanang tsa di diriswa mo setlhopheng sengwe le sengwe?” “Ke di diriswa di le kae mo setlhopheng sengwe le sengwe?” “A dipopego tsotlhe di tshwana ka bogolo?” jalo le jalo?” Akaretsa popego tlhokorepedi ya geometiri le tlhakore tharo ya geometiriya di diriswa e barutwana b a ithutileng yona mo KGWEDITHARO 1.Barutwana b aka dira popego ya tlhokorepedi ka go sega pampiri kgotsa karata kgotsa ba di thala. Barutwana b aka dira dipaterone ka popego ya lebokoso le dikgwele silennere tse ba di dirileng kaletsopa/mmopa/tege.	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshellono boswa jwa letsatsi ka letsatsi • Go tswa mo ngwaoboswa ya rona	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didi-riswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa.	Dipaterone di ka dirwa ka go dirisa popego ya tlhakore e lenngwe mme mmmala wa sediriswa o fetoga nako nngwe le nngwe sekao : Sekao:  Dipaterone di ka diriwa go tswa mo ditlhopheng tse di tshwanang tse di boeletsang, mo setlhopha sengwe le sengwe se nang le mofuta mongwe wa sediriswa mme maemo a se diriswa tsa ditlhopha a fetoga.Ditlhopha tse di tshwanang di a boelediwa sekao: Sekao:   Mo dipateroneng dingwe di diriswa tse di fapaaneng di diriswa go bopa/go aga mme ditlhopha tsa di diriswa di boeletswa ka mokgwa o o tshwanang sekao: Mo dipateroneng dingwe bogolo jwa di diriswa mo ditlhopheng bo a refosana, mme ditlhopha di boeletswa ka mokgwa o o tshwanang.  Barutwana b aka dira dipaterone ka go dira dibaga/ditalama.Dipaterone di ka dirwa gape mo thutong ya Dikgono tsa Botshelo	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 100 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 1 le 100 • Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 100 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-100 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 100	Tatelano ya dipalo e ka golagangwa le go bala.Jaaka bokgoni le kgono yago bala ya barutwana e fetoga,mefuta ya tatelano ya palo e barutwana ba dirang ka yona e ka gola. Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago: • Ya ntlha gotloga ka palo nngwe le nngwe magareng ga 1 le 100 • Nngwe –someng go tloga ka katiso ya 10 magareng ga 0 le 100 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-100 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 1000 Mo mophatong wa 2 barutwana ba bala go ya kwa morago mo katisong ya 10,5 le 2 mo tshimologong Barutwana b aka sup a dipalo fa ba bala.Go botlhokwa go neela barutwana tatelano ya dipalo mo tlhagisong e e farologaneng.Sekao • Tatelano ya dipalo e e kwadilweng 100,99,98,97,96….. • Mola pola • Papetlana ya dipalo. • Kgolagano ya dipalo Barutwana ba khurumetsa, tshasa mmala kgotsa ba sekeletsa dipalo jaaka fa ba bala mo mola palong le papetlana ya dipalong tse . Barutwana b aka nne ba tlatsa dipalo mo mola palong ,papetlana ya dipalo,mo go kwaleng tatelano ya dipalo le kgolagano ya dipalo sekao:  Kwa bokhutlong jwa kgweditharo barutwana ba tshwanetse go di ra tiro ya go bala ka tatelano go tloga go le go fitlha ka 100.	Dithuto 3

MOPHATO 2 KWEDITHARO 1 3. BOALO LE DIPOPEGO(DIPALO-POPEGO)				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** Mo pakathutong ya ura le metsotso e le 24
3.2 **3-D objects** **Didiriswa tsa dipopego-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go naya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dibolo(dikgolokwe • Diselennere **Dipopego tsa sedirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didiriswa tse di kgonang go kgokologa • Didiriswa tse di ralelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa geometeri	**Tlhatlhamano ya di diriswa** Go lemoga go naya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dibolo(dikgolokwe **Dipopego tsa sedirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didiriswa tse di kgonang go kgokologa. Didiriswa tse di kgonang go relela. **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa geometeri	**Ke eng se se farologaneng go tswa mo mophatong wa1?** • Diselennere di dintshwa mo mophatong wa 2 mme di ka itsisiwe mo kgwed-itharong 3 Mo kgwedithoro 1, barutwana ba ka dira poeletso le popaganyo ya se ba se dirileng mo mophatong wa 1.Barutwana ba ka tsepamisa maikutlo mo diselennere mo kgwedithoro 3. Bontsi jwa tiro jwa popegotlhakoretharo mo mophatong wa 2-Di tshwanetse tsa di rwa ka mokgwa wa tiriso go dirisiwa didiriswa tse di bonalang.Re itemogela lefatshe mo ditekanyong tse tharo,go simolola ka didiriswa tse di bonalang go thusa barutwana go aga kitso mo go e ba setseng ban a le yona fa bat la sekolong. Bontsi jwa barutwana ba kgaratlhago go ranola dipopegotlhakoretharo tsa giometeri tse di mo ditshwantshong. Go dira ka didiriswa tse di bonalang go thusa barutwana go ranola ditshwantsho tsa dipopegotlhakoretharo.Barutwana ba ka tshola dipopego mme ba di sekaseke gore e lebega jang go tswa mo matlhakoreng a a farologaneng jaaka kwa tlase,kwa godimo j.j Fa o nale setshwantsho fela,o tshwanetse go ikakanyetsa matlhakore a a sa bonaleng,se ga se bonolo mo barutwaneng ba ba nnye.Fa ba neetswe tlhaloso fela ntle le go tshwara kgotsa go bona sebopego,go nna thata go tlhaloganyasebopego/dipopego tsa tsa sediriswa seo **G aga/bopa ka dipopego tsa tlhakoretharo** Barutwana ba ka bopa sekao sa sebopego se morutabana a se ba neelang sekao torio,terena,tekesi,roboto j.jSekao sa sebopego se ka dirwa ka diboloko,didiriswa tse di ka dirisiwang gape,ditshwantsho segilweng tsa popegotlhakoretharo j.j.Se se ka dirwa ka nako e e totobaleditsweng morutwana.Go botlhokwa gore barutwana ba bue ka dikao tsa dipopego tse ba di didirileng sekao fa torio e agilwe ka,barutwana ba ka bodiwa dipotso jaaka:A o ka aga torio ka bolo e le nngwe?Ba tshwanetse ba tlhalosa dikarabo tsa bona.	Thuto tse 3

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo pakathutong ya ura le metsotso e le 24
3.2 **3-D objects** **Didiriswa tsa dipopego-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go naya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dibolo(dikgolokwe • Diselennere **Dipopego tsa sedirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didiriswa tse di kgonang go kgokologa • Didiriswa tse di ralelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa geometeri	**Tlhatlhamano ya di diriswa** Go lemoga go naya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dibolo(dikgolokwe **Dipopego tsa sedirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didiriswa tse di kgonang go kgokologa. Didiriswa tse di kgonang go relela. **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa geometeri	**Go tshwantsha le tlhalosa popegotlhakoretharo:Bogolo** Barutwana ba tshwantsha bogolo jwa dipopego tse di tshwanang sekao: • Rulaganya dibolo go ya ka bogolo le • Dirisa puo ya bogolo go tshwantsha dipopego,"Lebokose le letonna mo bolong gonne ke kgona go tsenya bolo moteng ga lebokose" **Go tlhalosa popegotlhakoretharo:mmala** Barutwana ba bua ka mmala wa dipopego mme ba di tlhaole go ya ka mmala Go tlhaola le go naya dipopego maina le mmalawa tsona,go tlhaola ka bogolo go ka dirwa ka nako ya go dira ka dipaterone. **Dipopegotlhakoretharo mo mophatong wa 2** Barutwana ba dira ka Dibolo le dipopego tse di bopegileng jaaka bolo • Mabokoso a a farologaneng le dipopego tse di bopegileng jaaka khutlonne kgotsa khutlonnetsepa.Barutwana ba batlisisa gore ke popego efe e e ka kgokologang,ke efe e e ka relelang **Tsepamo mo dipopegong tsa popegotlhakoretharo** Barutwana ba ka dira bofologelo ka go baya lebokoso mo tlase ga le lengwe mme ba batlisisi gore a dipopego di kgona go kgokologa kgotsa go kgoromediwa. Se ke tsweletso ya tiro e e dirilweng ko mophatong wa1 mme jaanong go tsenyeleditswe diselennere Barutwana ba batlisisa gore a ba kgona go paka kgotsa go dira torio ka dibolo fela **Go lemoga le go naya dibolo le mabokoso maina** Barutwana ba tshwanetse ba neelwa dipopego tse difarologaneng go dira ka tsona: • Dipopega tse di kgolokwe,sekao dibolo tsa mefuta e e farologaneng,dinamone,dimabole j.j. • Dipopego tsa porisime jaaka diboloko,ditena,mabokoso a bogolo jo bo farologaneng	Thuto tse 3

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo pakathutong ya ura le metsotso e le 24
3.2 **3-D objects** **Didiriswa tsa dipopego-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go naya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dibolo(dikgolokwe • Diselennere **Dipopego tsa sedirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didiriswa tse di kgonang go kgokologa • Didiriswa tse di ralelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa geometeri	**Tlhatlhamano ya di diriswa** Go lemoga go naya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe • Dibolo(dikgolokwe **Dipopego tsa sedirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didiriswa tse di kgonang go kgokologa. Didiriswa tse di kgonang go relela. **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa geometeri	Barutwana ba ka bona dipopego tse di tshwanang le bolo(kgolokwe)kgotsa lebokoso(porisime)fa ba neilwe kgobokanyo ya dipopego. Barutwana ba ka supa dipopego tse di bopegileng jaaka mabokoso mo phaposing.Sekao:setene se,se bopegile jaaka lebokoso kgotsa namone e,e bopegile jaaka bolo Ka nako e e kobiseditsweng barutwana ka nosi ba ka: • tlhaola didiriswa go ya ka bogolo • tlhaola didiriswa go ya ka mmala • aga/bopa ka didiriswa le • Dira dibolo le mabokoso ka tege ya motshameko **Tiro ya kwala** Le fa tiro e ntsi e dirwa ka mokgwa wa tiriso,tiro e tshwanetse go tiisiwa/kopangwa ka tiro kwalo **Puo** Go botlhokwa go godisa bokgoni jwa barutwana go bua ka dipopegotlhakoretharo 2.1 /Pou ka bogolo:Tonna,tonnayana,kgolo,nnye,nyenyane,nnyennye 2.2 Mmala 2.3 Puo ka dipopego ka bo tsona:mabokoso,dibolo(ga go a solofela gore barutwana ba itse lereo bolo),/Puo ya boemo go tlhalosa kago sekao fa godimo,fa tlase • morago,fa pele • go bapa,fa thoko • fa tlase,go feta • gaufi,magareng Puo ka ga bogolo le mmala e ka godisiwa ka nako ya thuta puo kgotsa dikgono tsa botshelo mme di tsenngwe tirisong ka nako ya dipalo. Puo ka ga boemo e ka godisiwa ka nako ya dikgono tsa botshelo.E ka dirisiwa ka nako e barutwana ba dirang ka maemo mme e dirisiwe fa go dirwa ka dipopegotlhakoretharo	Thuto tse 3

MOPHATO 2 KGWEDITHARO 1 4. TEKANYO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Nako** Mo thutong ya ura le metsotso e le 24
4.1 **Nako**	**Go buisa nako** • Go itse malatsi beke • Go itse dikgwedi tsa ngwaga • Go baya malatsi a botsalo,meletlo ya sekeresete,malatsi a boikhutso a botlhe,ditiragalo tsa hisitori,ditiragalo tsa se-kolo mo alemanakeng • Go bua nako ya diura di le 12 ka diura,halofo ya ura,kotare ya ura. **Balela boleele jwa nako jwa nako le Neeletsano ya nako** Go dirisa alemanaka go balela le go tlhalosa boleele jwa nako mo malatsing kgotsa dibekeng Go dirisa tshupanako go balela boleele jwa nako ka diura,halofo kgotsa kotare ya ura	**Go buisa nako** • Go itse malatsi beke • Go itse dikgwedi tsa ngwaga • Go baya malatsi a botssalo,meletlo ya sekeresete,malatsi a boikhutso a botlhe,ditiragalo tsa hisitori,ditiragalo tsa se-kolo mo alemanakeng • Go bua nako ya diura di le 12 tshupanako ya manaka	Mo mophatong wa 1barutwana ba buile ka • Tatelano ya ditiragalo le • Boleele jwa nako Ba ithutile malatsi a beke le dikgwedi tsa ngwaga mme ba di dirisitse le puo le bua ka tatelano ya ditiragalo go tswa mo matshelong a bona.babuile ka gore dilo tsaya nako e kae ba dirisa puo jaaka telelnyana kgotsa khutsanyane le bonako le bonya barutwana ba bua ka go rulaganya ditiragalo tsa gale gotswa mo matshelong a bone.Ba rulaganya ditshwantsho jaaka • Dikgato tsa go dira sametshise kgatsa kopi ya tee • senepe se sesupang lesea le gola go nna motho yo mogolo • Dikgato tsa go dira sametshise kgatsa kopi ya tee • ditiragalo tsa galo tsa letsatsi(go tsoga,go nna kwa sekolong,go tshameka go ja dijo tsa maitsibowa,go robala) • Go baya malatsi a botsalo mo alemanakeng go ralala ngwaga yotlhe Mo mophatong wa 2 barutwana ba tswelela go tiisa go ka go bua boleele jwa nako le tatelano ya nako.Ka nako ya go ruta phaposi yotlhe le go ruta ditlhopha,barutwana ba tswelela go bua ka malatsi a beke,dikgwedi tsa ngwaga letlha la gompijeno,malatsi a afitileng le a a tlang.Barutwana ba tlwaela alemanaka ka go tswela go baya: • Malatsi a botsalo; • meletlo ya sekeresete • ditiragalo tsa hisitori • ditiragalo tsa sekolo • malatsi a boikhutso a botlhe mo alemanakeng Ka nako ya boikemed barutwana ba tswelela go tiisa go rulaganya ditiragalo go tswa mo matshelong a bona le go rulaganya ditshwantsho tsa ditiragalo sentle	thutong tse 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Nako Mo thutong ya ura le metsotso e le 24
4.1 **Nako**	**Go buisa nako** • Go itse malatsi beke • Go itse dikgwedi tsa ngwaga • Go baya malatsi a botsalo,meletlo ya sekeresete,malatsi a boikhutso a botlhe,ditiragalo tsa hisitori,ditiragalo tsa se-kolo mo alemanakeng • Go bua nako ya diura di le 12 ka diura,halofo ya ura,kotare ya ura. **Balela boleele jwa nako jwa nako le Neeletsano ya nako** Go dirisa alemanaka go balela le go tlhalosa boleele jwa nako mo malatsing kgotsa dibekeng Go dirisa tshupanako go balela boleele jwa nako ka diura,halofo kgotsa kotare ya ura	**Go buisa nako** • Go itse malatsi beke • Go itse dikgwedi tsa ngwaga • Go baya malatsi a botssalo,meletlo ya sekeresete,malatsi a boikhutso a botlhe,ditiragalo tsa hisitori,ditiragalo tsa se-kolo mo alemanakeng • Go bua nako ya diura di le 12 tshupanako ya manaka	**Ke eng se se farologaneng le mophatong 1** Tsepamo mo mophatong wa 2 ke go bua nako,segolo bogolo go bala tshupa nako.mo kgweditharo 1 tsepamo e mo go bueng nako ka diura go dirisiwa tshupanako ya manaka.Gontse jalobarutwana ba tshwanetse go bua nako ya ditiragalo tsa gale tsa letsatsi ka go tswelela sekao barutwana ba ka bodiwa gore sekolo se tshimoloa nako mang ,nako ya go tshameka, le nako ya go ga sekolo kgotsa ba fetola dipakathuto leng.ba tlhope nako e tshupanako e supang ura ka botlalo.Go mosola go nna le tshupanako e tona e edirang sentle e bontshitswe mo leboteng,gore barutwana ba e lebelele.Barutwana ba ka dira ditshwantsho tsa ditshupanako,le gore ba supe dinako tse di farologaneng le go tsenyeletsa dipalelo sekao :bontsha ura 10,bontsha gore nako e tla bo le mang ura tse pedi morago g aura ya 10	thutong tse 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go di-risiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/kelo ka mokgwa o o sa tlwaelese-gang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Go itsise tekanyo e e tlhamaletseng** Go fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go dirisiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/ kelo ka mokgwa o o sa tlwaelesegang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Go itsise tekanyo e e tlhamaletseng** Go fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele	**Ke eng se se farologaneng le mophatong 1** Mo kgweditharo 1 tsepamo e mo • go baya didiriswa go bapa le enngwe go bapisa boleele,bogodimo le bo-phara le • Go lekanyetsa go go satlhomamang ka dikelo tse di tlhomameng tsa boleele Mo kgweditharo 1 ya mophato 2 barutwana ba tswelela go tsepama mo go lekanyetseng go dikelo tse di sa tlhomamang mme ba ka itsisewe ka mitara jaaka kelo ya go lekanyetsa **Go lekanyetsa go go sa tlhomamang go dirisiwametso e e seng boemo ya boleele** Barutwana ba ithuta methoe yotlhe le gotiisa tekanyo go dirisiwa kelo e e sa tlhomamang.Go lekanya go dirisiwa kelo e e sa tlhomamang go tshwanetse go ga go a tshwanela go bona tshiamelo e ntsi go feta go lekanya go dirisiwa kelo e e tlhomameng. Tekanyo ka kelo ya boemo josa tlhomamang e tsenyeletsa go bala gore ke kelo efe e e nang le boleele jo bo tshwanang jaaka sediswa se lekanngwa. Sekao boleele jwa tafole ke diatla di le 8.Barutwana ba lekanya didiriswa tse di farologang ba dirirsa didiriswa jaaka metso e esa tlhomamang. Go na le mefuta ele meraro ya go lekanya go go sa tlhomamang: boleele, sekgala, bogodimo • Paka ka mola go ralala didiriswa tse di ntseng di lekanngwa tsa boleele jo bo lekanang jaaka lebokoso la mokgwaro,dibotlolo tse di tswanang,dipesele tse di dintshwa j.j.Sekao go lekanya bophara jwa tafele,dipensile dintshwa di ka dirisiwa go ralala tafole go itsi bophara jwa jona Fa go botlhokwa gore • didiriswa tsotlhe e nne tsa boleele jo tshwanang.o ka re boleele jwa buka bo lekanale boleele jwa dikhurumelo tsa mabotlolo di le 12 fa dikhurumelo di sa lekane.Sekao dikhurumelo tsa maswi tsa 2L,dikhurumelo tsa seno tsididi,dingongopi j.j • Ga go tlogelwe sephatlha fag are ga dikhurumelo,di tshwanetse tsa kgoma-na • Go dirisa dilo tse pedi tse di tshwanang jaaka kelo ya boemo jo sa tlwael-egang.Di bapise mme o be o sutisetsa ya • bobedi mo letlhakoreng la ya ntlha.Se se dirwa fa go lekanyediwa ka diatla,maoto, j.j • Dirisa selose le nosi fela jaaka kemo ya boemo e esa tlhomamang,o se pitikolola kgotsa kgorometsa.	Thuto tse 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go di-risiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/kelo ka mokgwa o o sa tlwaelese-gang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Go itsise tekanyo e e tlhamaletseng** Go fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go dirisiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/ kelo ka mokgwa o o sa tlwaelesegang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Go itsise tekanyo e e tlhamaletseng** Go fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele	Ruta barutwana go bontsha metso ya tekanyo sekao buka e bophara jwa dikhurumelo di le 12,phaposi e boleele jwa dikgato di le 38 Fa barutwwana ba setse ba lekantse ka metso makgetlonyana,ba tshwanetse ba fopholetsa gore selo se ba tshwanetseng go se lekanya se boleele jo bo kae Ruta barutwana go bapisa ka tatelano boleele,bogodimo,kgotsa bophara,metso e e tshwanang e dirisiwe.Sekao, fa bophara jwa kgoro e le diatla di le 20,mme bophara jwa tafole e le dipesele di le 8,o ka se lemoge gore a bophara jwa kgoro bo bo tonna mo go jwa tafole Barutwana ba tshwanetse go lekanya ka metso e e sa tlhomamang e efarologaneng gore ba • ba simolole go nna kitso ya gore fa metso e le mennye,ya go dirisiwa kga-petsa sekaobophara jwa phaposi e ka nna dikgato 20 ya nna maoto a le 48 le • Ba simolole go dirisa metso e emaleba fa lekanya,sekao go lekanya bophara jwa phaposi ka dikhurumelo ke tshenyo ya nako **Tlhagisa go lekanya ka tlwaelo** Bontsi jwa nako e e dirisitsweng mo tekanyong mo molhato wa 2 e tshwanetse go nna mo go lekanyeng eseng ka tlwaelo.Gontse jalo o ka neela barutwana tshono ya go nagana gore mitara o ka nna boleele jo bo kae.Se se nna motlhofu fa ba lekanya ka selekanyimetara.Go bona selekanyimitara go thusa barutwana go bopa setshwantsho sa gore mitara o le 1 e ka nna boleele jo bo kae. Barutwana ba ka leba dilo tse di leng metara o le mongwe.go botkhokwa go nna dilo tse di ka lebelelwa tsatsi leletsarsi gore go nne le papiso sekao boleele jwa kgoro bophara jwa letlhaba-phefo ke mitara ole 1.Se se thusa barutwana go dirisa boleele le bophara jo go fopholetsa boleele jwa dilo tse dingwe tse ba di lekanyang. Fa barutwana ba setse ab na le maitemogelo a go lekanya ka selekanyomitara,ba tshwanetse go fopholetsa pele ba lekanya Barutwana ba ka leba dilo tse eleng mitara o le1kgotsa go feta.Kwa bokhutlong ba ka lekanya dilo tsa sekgala kgotsa boleele jo bo farologaneng ka dimetara. **Go rekota tekanyo** Lemororo go lekanya e le tiro ya bokgoni jwa tiriso, barutwana ba tshwanetse rekota ditekanyo tsa bona(ka tlwaelo kgotsa ese ka tlwaelo)ka dinako tsotlhe.	Thuto tse 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go di-risiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/kelo ka mokgwa o o sa tlwaelese-gang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Go itsise tekanyo e e tlhamaletseng** Go fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go dirisiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/ kelo ka mokgwa o o sa tlwaelesegang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Go itsise tekanyo e e tlhamaletseng** Go fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele	**Go lekanya boleele jaaka tiriso go rarabolola dipalole dipalelo** Kabo ya nako ya dipalo,dioperaisene le kamano,barutwana ba ka rarabolola dipalo tse didirisa tiriso ya: • Tekanyo e sa tlhomamang ya bolele,sekao tafole ya ga Maretela e boleele jwa diatla di le 11.Tafole ya ga Boitumelo e boleele jwa diatla di le 19. Tafole ya Boitumelo e feta ya ga Maretela ka bokae? • tekanyo ya boleele ka dimitara Tsaya tsia palotlhat;hamano e e maleba ya kgweditharo, le tlhatlhamano ya mefuta ya dipalo tsa kgweditharo.	Thuto tse 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Nako Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya boima go di-risiwa sekalatekanyo le te-kanyo e e sa thomamang jaaka diboloko,setena j.j - Tiriso ya puo go bua ka le papiso sekao: bofefo,thata, bofefon-yana, thatanyana **Go itsise tekanyo e e tlhamaletseng** • Go bapisa rulaganya, rekota bioma jwa di-phuthelwana tsa kgwebo tse di nang le boima jo bo kailweng ka dikilokeramo. Sekao dikilokeramo tse 2 tsa reise le kilokeramo e le 1 ya bopi • Ba lekanya boima jwa bona ka dikilokeramo ba dirisa sekalatekanyo sa phaposi botlhapelo	Mo mophatong wa 1go ne go atlenegisitswe gore barutwana ba tsepame mo go direng ka sekalatekanyo go: • go bapisa boima dilo ka tlhamalalo • Go rulaganya le gobapisa boima jwa dilo tse tharo kgotsa go feta ,ka go pega dile ka bobedi mo sekalatekanyo go fitlhelela didiriswa tsotlhe di latelangwa le • go batla boima jwa dilo o dirisa tekanyo e sa tlhomamang. Barutwana ba tsepame mo go nneng le kgolo ya puo go bua ka boima Ka nako ya boikemedi barutwana ba ikatisa go fopholetsa,lekanya, bapisa, rulaganya, le go rekota boima go dorisiwa sekalatekanyo le tekanyo e e sa tlhomamang ya boima **Go lekanya boleele jaaka tiriso go rarabolola dipalole dipalelo** Tharabololo ya dipalo le palelo e ka tshwelela go dirisa tiriso ya boima Kabo ya nako ya dipalo,dioperaisene le kamano,barutwana ba ka rarabolola dipalo tse didirisa tiriso ya tekanyo ya boima e e sa tlhomamang sekao:Sephimodi se na le boima jwa Tsaya tsia palotlhathamano e e maleba ya kgwedi tharo, le tlhatlhamano ya mefuta ya dipalo tsa kgwdi tharo.		

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Nako Mo thutong ya ura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Go lekanya e seng ka tlwaelo** • Go fopholetsa lego lekanya,go tshwantsha,go rulaganya le go kwala mothamo wa ditshodi ka go dirisa go dirisiwa sekalatekanyo e sa thomamang sekao, leswana,dikopi j.j • Go tlhalosa mothamo wa ditshodi ka go bala le go supa gore ke metso e kae e ka dirisiwang go tlatsa setshodi sekao :lebotlolo le na le mothamo wa dikopi di le nne. **Go itsise tekanyo e e tlhamaletseng** • Go fopholetsa, lekanya, bapisa, rulaganya, le go rekota mothamo wa dilo ka go lekanya ka dilitara • Go bapisa , rulaganyale rekota moyhamo wa diphuthelwana tsa kgwebo tse mothamo wa tsona o kaiwang ka dilitara sekao dilitara tse pedi tsa maswi. Litara e le nngwe ya seno-tsididi, dilitara di le tlhano tsa pente	Mo mophatong wa 1go ne go atlenegisitswe gore barutwana ba tsepame mo • go nna le kgolo ya puo go bua ka dipharologano mo bolumung • go bapisa dibolumu mo ditshoding tse pedi tse di tshwanang • go bapisa bolumu mo ditshoding tse pedi tse di sa tshwaneng segolo jang tse di bulegileng le di sesanyane le • Go lakanya bolumu le mothamo ka sediriswa sa metso e e sa tlhomamang **Mothamo ke eng? Bolumu ke eng?** Lebotlolo le ka nna le mothamo wa dikopi di le nne di tletse,mme le ka se tlale gotlhelele, sekao le tshola fela bolmu ya kopi e le nngwe ya metsi ka nako e e rileng Mothamo ke palogotlhe e selo se kgonang go e tshola(kgotsa boleleng jwa sebaka mo teng ga selo seo) Bolumu ke boleng jwa sebaka/sephatlha se selo se kgonanggo se tsaya. Ka nako dingwe barutwana ba ka lekanya gore setshodi se na le seeledi se se kana kang mo sona (e ka nna santa,kgotsa seeledi sengwe fela)Se ke go lekanya bolumu ya seeledi mo setshoding seo.Ka dinako dingwe barutwana bat la bob a lekanya gore setshodi se ka tsenya seeledi se se kana kang fa se tladiwa gotlhelele. Ka nako ya boikemedi barutwana ba ikatisa go fopholetsa,lekanya, bapisa, rulaganya, le go rekota bolumu le mothamo go dorisiwa sekalatekanyo le tekanyo e e sa tlhomamang ya le e e tlhomameng ya mothamo.Go apaya le go baka ke mekgwe tiriso e e ka dirisiwang go tiisa go lekanya mothamo.Tlhopharesepe e tekanyo e dirilweng ka dikopi ,ditisepune le metso e e sa ttlhomamang **Go lekanya boleele jaaka tiriso go rarabolola dipalole dipalelo** Kabo ya nako ya dipalo,dioperaisene le kamano,barutwana ba ka rarabolola dipalo tse didirisa tiriso ya tekanyo e e sa tlhomamang ya tekanyo motlhamo kgotsa bolumu, sekao Gogo o dirisitse dukopi di le pedi tsa maswi go dira pudding.Fa a menaganya metswako, wa go tlhoka maswi a kae? Tsaya tsia palotlhathamano e e maleba ya kgwedithero, le tlhatlhamano ya mefuta ya dipalo tsa kgwdithero.	

MOPHATO WA 2 KGWEDITHAR YA 1 5.TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 1**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele jwa Nako** -Thutong ya ura le metsotso e le 24)
5.4 **Kgobokanya le go rulaganya tshedimosetso**	**Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimo-setso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana	**Kgobokanya le go rulaganya tshedimosetso** Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana **Tshwantshisa tshedimosetso** Tshwantshanya tshedimosetso mo kerafong e e dirisediwang ditshwantsho **Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisediwang ditshwantsho	**Pharologanyo ke eng go mophato wa 1** • Barutwana ga ba tlhole ba dira ka go kgobokanya didiriswa • Barutwana ba tswelela ka go dira ka dikerafo tse di dirisediwang ditshwantsho, ba di aga mmogo jaaka karolo ya tshedimosetso le go ranola dikerafo tse di dirisediwang ditshwantsho tse ba di neilweng **Feleletsa tikologo ya dipalo tsa tshedimosetso** Mo tikologong ya dipalo tsa tshedimosetso • Barutwana ba kgobokanya tshedimosetso go araba dipotso.Mo motheong tlase le motheo-gare dipotso tse ka gale di tlhagiswa ke morutabana • Barutwana ba tlhaola le go tshwantshisa tshedimosetso ka ditsela tse di dirang gore din ne bofefo go ka di sekaseka. Tsela ya tshwantshiso e barutwana ba mophato wa 2 ba e dirisang go ikatisa ke kerafo e e dirisediwang ditshwantsho,. • Barutwana ba sekaseka tshedimosetso mo kerafong e e dirisediwang ditshwantsho ka go araba dipotso tse di bodiwang ke morutabana Kerafo e e dirisediwang ditshwantsho ya phaposi Go atlenegedisitswe gore barutwana mo mophatong 2 ba feleletse tikologo ya tshedimosetso go dira kerafo e e dirisediwang ditshwantsho ya phaposi bonnye gabedi mo ngwageng (gangwe mo kgwedi-tharo 1 le gangwe mo kgwedi-tharo 3).Go dira mmogo jaaka setlhopa mo phaosing a thusa barutwana go tsaya karolo mo dikgatong tsotlhe kwa ntle ga go latlhegelwa ke kgato ka botlalo sekao go thala ditshwatsho tsotlhe. Go dira kerafo ya phaposi go naya barutwana tšhono ya go tsepamisa kelotlhoko ya barutwana mo dintlhakgolo tsa dipalo tsa tshedimosetso le mo go se ba tlhokang go se itse ka ga dikarolo tse di botlhokwa tsa kerafo e e dirisediwang ditshwantsho. Dikarolo tsa kerafo e e dirisediwang ditshwantsho tse barutwana ba tlhokang go ka di rutiwa • O tšhwaya kae kerafo le jang (setlhogo sa kerafo) • O tšhwaya kae ditlhopa le • Kerafo e e dirisediwang ditshwantsho e tlhoka go nna le ntlhakgolo e e tlhalosang bokao jwa setshwantsho . • Ditshwantsho kgotsa bogolo jwa diphatlha mo ditshwantshong bo tlhokega go nna jo bo lekanang • Gore o baya jang ditshwantsho ka go lekalekana mo ditsela • O buisa jang kerafo	Dithuto di le tharo
5.5 **Tshwantshisa tshedimosetso**	**Tshwantshisa tshedimosetso** Tshwantshanya tshedimosetso mo kerafong e e dirisediwang ditshwantsho			
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosets** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisediwang ditshwantsho			

5.6 **Sekaseka le go ranolola tshedimosetso**	**Analyse and interpret Sekaseka le go ranolola tshedimosets** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisediwang ditshwantsho	**Kgobokanya le go rulaganya tshedimosetso** Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana **Tshwantshisa tshedimosetso** Tshwantshanya tshedimosetso mo kerafong e e dirisediwang ditshwantsho **Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisediwang ditshwantsho	Barutwana ba tshwanetse go itse gore go botlhokwa go buisa pele setlhogo sa kerafo, gore ba kgone go itse gore tshedimosetso ke ka ga eng. Go tlhokagala gape gore ba buise ditlhogo tse di mo moleng yo o rapameng le molatsepamo. Ga go tlhokege gore barutwana ba itse mareo a setegeniki a a dirisiwang go tlhalosa dikarolo tsa kerafo, ke fela fa ba tshwanetse go buisa kwa tlase le mo letlhakoreng go bona se kerafo e leng ka ga sone. Ka tlwaelo re buisa go tswa mo molemeng go ya kwa mojeng le fa go le jalo fa barutwana ba buisa kerafo ba tlhoka go e buisa go tswa mo molemeng go ya kwa mojeng le go tswa kwa tlase go ya kwa godimo.Go tlhokagala gore se, se tlhalosediwe barutwana. Go tlhokagala gore ba ikatisetse dikgono tse. **Go tlhopha setlhogo le go botsa dipotso go kgobokanya tshedimosetso** Mo mophatong wa 2 o tshwanetse go botsa dipotso sekao “Ke mananeo afe a thelebišhene a a ba a ratang mo phaposing?”Barutabana mo kgatong ba tshwanetse go netefatsa gore ba tlhopa ditlhogo tse di farologaneng tsa go kgobokanya tshedimosetso le go e sekaseka mo mophatong o mongwe le o mongwe. Ditlhogo tse di maleba tse re di ratang di akaretsa metshameko, dinotsididi tse re di ratang, mebala e re e ratang dijo tse re di ratang, ke mananeo afe a thelebišhene ba a ratang jalo jalo. **Thaya ditlhopha go kgobokanya tshedimosetso** Neela barutwana tlhatlhamano ya ditlhopha tse di farologaneng go tlhopha go tswa mo go tsone **Go tshwantshisa tshedimosetso** Mongwe le mongwe wa barutwana a ka newa letlhare la pampiri ya bogolo jo bo lekanang go thala dikarabo tsa bone. Methalo ya bone e a rulaganngwa ka ditsela go dira kerafo e e dirisediwang ditswhantsho Ditlhogo di akarediwa mo matlhakoreng a kerafo. **Sekaseka le go ranola tshedimosetso** Barutwana ba araba dipotso tse o di botsang ka ga kerafo e e dirisediwang ditshwantsho sekao ”Ke porogerama efe ya thelebišhene e e itsegeng thata mo phaposing ya rona” “Ke len efe e e ratiwang ke barutwana ba le mmalwa mo phaposing” ”A barutwana ba le bantsi ba rata .....kgotsa.....?” Ke barutwana ba le ba kae ba bantsi ba ba itlhopelang..... go.....?	

MOPHATO WA 2 KGWEDITHARO 2 1. DIPALO, MATSHWAO LE DIKGOLAGANO				
Setlogo	**Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedithаro 2**	**Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta**	
1.1 **Balela didiriswa**	**Balela didiriswa tsa sekgongwa.** Lekanyetsa o balele go fitlha go 200 ka letsatsi a dirisiwa tse di kgonnwang. Togamano ya setlhopha e rotloeditswe.	Balela bonnye 150 Ka letsatsi didiriswa tse di kgonwang Neela phopholetso e e dumelesegang ya palo ya didiriswa tse di ka netefatswang ka go bala.	**Ke eng se se farologaneng mo kgwedithаrong 1?** Mo kgwedithаrong e 2 tlhatlhamano ya dipalo e oketsegile barutabana ba balela didiriswa tse 150. Ka gonne tse ke dipalokgolo go balelwa ga didiriswat,tsepamo e mo go baling ka ditlhopha. Se ke togamano e barutwana ba tshwanetseng go e boeletsa go simolola mophato wa 1. Jaanong e dirisiwa ka tlhatlhamano ya palo e e kwa godimo. Ba tshwanetse go tlhokomela go fa kgwedithаro e fela ba bone kakanyo ya didiriswa tse150 e bile b aka tsitsinya mokgwa thelelo wa go balela. Go balela didiriswa mo kgwedithаrong e e tshegetsA: • Togamano palelo go tlhaloganya kemapalo; • Go balela ka poeletso; • Go bua mainapalo; • Temogo ya matshwaopalo ;le • Togamano ya palelo e siametse go balela. **Didiriswa:** Tlhokomela mosola wa go neelwa mefuta ya didiriswa. • Didiriswa tse di agegileng jaaka mogala wa go balela wa balela wa ditalama, • Dirisa katlatalama go ithuta go balela ka ditlhopha tsa lesome • Itlhopha tsa 2, ditlhopha tsa 5 le 10tse di baletsweng. • Diboloko tsa Dienes, tse di totileng boalo jwa lesome • Madi a motshameko	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.2 **Balela kwa pele le kwa morago**	Balela kwa pele le kwa morago go: • Ke go tswa go palo nngwe le e nngwe magareng a 0 le 200 • 10s go tswa oketsa magareng a 0 le 200 • 5s go tswa go oketsa 5 bmagareng 0 le 200 • 2s go tswa go enngwe oketsa ka 2magareng ga 0 le 200 • 3s go tswa go enngwe le enngwe oketsa 3 magareng ga 0 le 200 • 4s go tswa go ka 4 magareng 0 le 200	Balela kwa pele le kwa morago go: • Ke go tswa go palo nngwe le e nngwe magareng a 0 le 200 • 10s go tswa oketsa magareng a 0 le 200 • 5s go tswa go oketsa 5 bmagareng 0 le 200 • 2s go tswa go enngwe oketsa ka 2 magareng ga 0 le 200 • 3s go tswa go enngwe le enngwe oketsa 3 magareng ga 0 le 200 • 4s go tswa go ka 4 magareng 0 le 200	**Ke eng se se farologaneng go tswa go 1** Mo kgweditharong 2palelo ya tlhatlhamano ya dipalo e oketsegile (godile). Barutwana ba simolola go balela mo ditharong (3s) le mo dinneng (4s) kgeto la ntlha, Se se ka simololwa fa ba balela ntle le didiriswa tsa sebopego, go balela mo mogaleng wa ditalamapalo, ba dirisa lekgolo le keriti le molaplo. Mo bokutlong jwa kgweditharo e, bithuti ba tshwanetse go araba le botsa jaana: • Simolola ka 132,balela pele ka bongwe go 150. • Simolola ka 120 balela kwa morago ka bongwe 98. • Simolola ka 60 balela ka pedi go 100. • Simolola ka 100 balela ka pedi go 138. • Simolola ka 3 balela ka tharo go 30. • Simolola ka 60,balela morago ka ditlhano 42. • Simolola ka 4 balela k abo nne go 40. • Simolola ka 84 balela kwa morago kabo nne go 68. • Simolola ka 45 balela ka tlhano go 100. • Simolola ka 100 balelal morago ka lesome go 10. Barutwana ba tshwanetse go balela morago go tloga go katinesetso nngwe le nngwe e ba e filweng.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithero 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.3 **Letshwaopalo le leina palo**	**Tlhaola lemoga le go bala dipalo** • Tlhaola, lemoga le go bala matshwao a palo 0 - 200. • Kwala matshwaopalo 0 -200 • Tlhaola, lemoga le go bala 0 - 100. • Kwala mainapalo 0 – 100	**Tlhaola, lemoga le go bala dipalo** • Tlhaola, lemoga le go bala matshwao a palo 0 - 150. • Kwala letshwao palo 0 - 150. • Tlhaola, lemoga l e go bala mainapalo 0 – 50. • Kwala mainapalo 0 – 50.	**Ke eng se se farologaneng go tswa mo kgwedithero 1?** Barutwana ba tswelela go bala le go kwala matshwaopalo mainapalo go oketsega mo tlhatlhaganong ya dipalo. Barutwana bat la tlhaola, bala le go kwala matshwao morago ga lekgolo le go kwala mainapalo go fitlha 50. Tlhokomelo etshwanetse go tsewa fa ba bua ka palo ya dinomoro, sekao, otshwanetse gore “ makgolo a mararo, someamabedi le boraro” go na le gore “ nngwe, pedi, tharo”. Fa o kwala dinomoro tse tharo dipalo tse di ga 100le 110, palo e e mo maemong a lesome ke lefela. Barutwana ba bangwe ba fitlhelela go le boima go kwala dipalo tse ka matshwao fa ba neilwe palo ka mafoko. Sekao,KwalaGo nna boima mo barutwanang bangwe go kwal lekgolo le pedis. Ba ka kwala 1002. Dikarata tsa bolengkemedi di dirisiwa bogolo segolo go thusa barutwana go tlhaloganya gore dipalo tse di emelwa jang sentle. Barutwana gape, ba tshwanetse go newa nako entsi ya go ikatisa ka go kwal ka dipalo tse. Sekao sa direkoto tse di kwadilweng: • Kwala matshwaopalo. Lekgolo le someamararo Lekgolo le someamane supa • Nyalanya leinaplo go matshwaopalo • Feleletsa tatelano ya dipalo • Feleltsa molapalo le tlhomamisopalo	

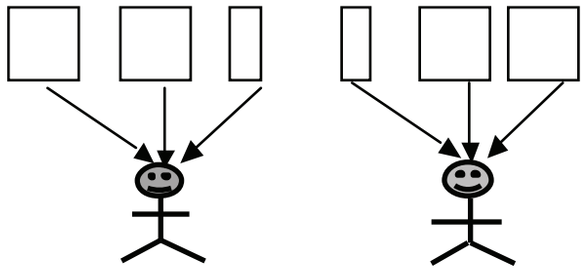
Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.4 **Tlhalosa go tshwanthsa le go rulaganya dipalo**	**Tlhalosa, go tshwantsha le go rulaganya dipalo tsa go fitlha ka 99** • Tlhalosa le go tswhantsha dipalotlalo tse di fitlhang go 99 o dirisa e nnye le e kgolo go na le e e lekanang le. • Tlhalosa le go rulaganya palotlalo go fitlha 99 go tswa go e nnye le e kgolo, le e golo go fitlha go e nnye. **Dirisa dibolengkemedi tatelano go bontsha thulaganyo , lefelo kgatsa maemo.** Maemo a dirisiwa mo moleng go tswa go ya sekao,. Ya ntlhat, bobedi, boraro … tsomaamabedi.	**Tlhalosa, go tshwantsha le go rulaganya dipalo tsa go fitlha go 50** • Tlhalosa le go tshwantsha **dipalotlalo ka go tswa mo go nnye go fitlha go e kgolo go na le e lekanang le** • **Tlhalosa le go rulaganya** palotlalo go tswa go nnye go fitlha go e kgolo, le go tswa go tswa go kgolo go fitlha go e nnye. **Dirisa dipalo kemotatelano go bontsha thulaganyo, leflo kgotsa maemo** Maemo a dirisiwa mo moleng go tswa go ya ntlha go fitlha sometlhano,kgotsa ya ntlha go fitlha ya bofelo	**Ke eng se se farologaneng go tswa mo kgweditharo 1** Mo kgweditharong e, barutwana ba tswelela go rulaganya le go tshwantsha dipalo. Molapalo o sala o le botlhokwa mo go thuseng le go lekanyetsa fa maemo anomore go lekantshwa le dinomore tse dinnye. Dikakanyo tsa molaplo di tla tshegetsa barutwana mo ditogamanong tsa thulaganyo mo go baleng. **Ditirwana tse dingwe tsa nosi:** Ikatisa go kwal bongwe go fitlha go bolesome. Rekoto tse di latelang mo bukeng ya dithutiso: • Ke nomore efe e etlang pele ga 46? • Ke nomore efe e etlang morago ga 48? • Ke nomore efe e eleng mo gare ga 47? • Dirisa molapalo o o neetsweng o tlatse dinomore tse di setseng. • Kwalolola fela nomore nngwe le nnwge: - 1 bontsi go feta 23 ke ___ - 1 bontsi go feta 29ke ___ - 1 bontsi go feta 42 ke ____ • Kwala 1 bonnye go feta dinomore tse: - 1 bonnye go feta 20 ke___ - 1 bonnye go feta 31 ke ___ - 1 bonnye go feta 42 ke ___ • Kwala 10 bontsi go eta dinomore tse: - 10 bontsi go feta 20 ke___ - 10 bontsi go fela 30 ke___ • Kwala 10 bonnye go feta dinomore tse. - 10 bonnye go feta 50 ke____ - 10 bonnye go feta 40 ke____ • Kwala dinomore ka thulaganyo go tswa e kgolo go fitlha go e nnye. (130, 133, 123, 143, 103, 113) • Feleletsa dipolelo. Tlatsa bontsi kgotsa bonnye: - 24 ke _____ go 24 - 36 ke _____go 19	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.5 **Kemo palo**	**Lemoga kemopalo jwa dipalo tse di nang le dinomoro di le pedi go fitlha ka 99** • Lemoga se palo nngwe le nngwe e se emetseng • Kgaoganya dipalo tsa dinomore di le pedi ka katisanetso ya bolesome (TU) • Tlhaola le go neela boleng jwa palo nngwe le nngwe.	**Lemogakemopalo jwa dipalo tse di fitlhang go 50** • Lemoga se palo nngwe le nngwe e se emet-seng • Kgaoganya dipalo tsa dinomore di le pedi ka kati sanetso ya bole-some le bongwe (TU) • Tlhaola le go neela boleng jwa palo nngwe le nngwe.	**Ke eng se se farologaneng go tswa mo kgweditharo 1** Mokgweditharong e, tlhatlhamano ya dipalo e oketsega go tswa go 25 go fitlha go 50. Barutwana ba dirisa kitso ya bona ya dikakanyo tsa kemopalo go fitlha go tlhatlhamno ya dipalo tse dikgolo. Mokgweditharong e, barutwanaba tswelela go: • Go balela le go dira ditlhopha go bontsha bolesome le bongwe ka ditsela tse di farologaneng; • Balela ditlhopha tsa pele\dibopego tsa pele; • Dirisa dikarata tsa kemopalo goo bontsha dinomore tsa ditlhopha le go buela; • Bontsha dithulaganyo tse di farologaneng tsa dinomore, sekao, 35 go tlogela bongwe 35 bonngwe ba bas a tshwaraganang, 3 lesome tse 5 bonngwe b aba sa tswaraganang le 2-Ditlhophatsa bolesome le tsa bo 15 bonngwe ba ba sa tshwaraganang; le • Neela boleng jwa palo nngwe le nngwe. Tiro e e fa godimo e dirwa o tsepamisitse mo ditlhopheng le ka bongwe ka nako ya barutwana e ka rekota tse: 48 = 4 ditlhopha tsa lesome le 8 bonngwe b aba sa tshwaraganang 48 = 40 le 8 Se se ka tshegetswa ka go dirisa dikarata tsed I tsekedima le dikarata tse kemopalo. **Boleng jwa palo nngwe le nngwe** Barutwana ba tla simolola ba bua gore nomore nngwe le nngwe e emela. Botsa morutwana: • Ke nomore efe e 7 e emetseng mo go27? • Ke nomore efe e 4 e emetseng mo go 49? Barutwana ba tshwanetse go dirisa dikarata tsa kemopalo go netefatsa se.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
THARABOLOLO YA DIPOLELO DI LE MO TIRISONG				
1.6 **Ditogamano tsa go rarabolola dipalo**	Dirisa ditogamano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo.: • Dithalo le didiriswa tse di tshwanang . sekao, babadiisi • Go aga le go aroganya dinomore ka bogare. • Koketsobedi le dihalofo • Molapalo	Dirisa ditogamano tse di latelang fa ba rarabolola mathata: • Dithalo kgotsa didi-riswa tse di tshwanang, sekao: babadisi • Go aga le go aroganya dinomore ka bogare • Koketsobedi le dihalofo • Molapalo	Barutwana ba solofetswe go rarabolola dipalofok ba dirisa ditogamaano : • Dithalo kgotsa didiriswa tse dikgongwang. sekao. dibadisi • Go aga le go thuba\tlhatlhamolola dipalo • Go oketsa gabedi le go kgaoganya gabedi • Molapalo **Go thala dithalo kgotsa didiriswa tse di kgongwang** Barutwana ba tla tswelela go thala ditshwantsho le go dirisa didiriswa tse di kgongwang go rarabolola mathata. Dithalo tsa go fitlha 30 kgotsa 50 didiriswa tsa bongwe ga di kgonege go se ba rotloetsa. Ba rotloetse go tsenya ltshwopalo mo go rekoteng,tsenya ditshwantsho mo tlhagisong. Barutwana ba rotloetswe go kwala polelopalo. Leba diteng tsa kgweditharo 1.	
1.7 **Go tlhakanya le go ntsha**	Rarabolola dipalofoko di le mo tirisong mme o tlhalose tharabololo ya dipalo, tse di akaretsang go tlhakanya, go ntsha ka dikarabo go fitlha 99.	Rarabolola dipalofoko di le mo tirisong mme o tlhalose tharabololo ya dipalo, tse di akaretsang go tlhakanya, go ntsha ka dikarabo go fitlha 50.	**Ke neg se se farologaneng mo KGWEDITHARO 1** Mo kgweditharo e, Barutwana ba tswelela go gatelela dipalofoko le go dirisa togamaano e mo go rarabololeng mathata.: • Dithalo kgotsa didiriswa tse dikgongwang • Go aga le go thuba\tlhatlhamolola dipalo • Go oketsa gabedi le go kgaoganya gabedi • Molapalo Barutwana ba tla tswelela go thala ditshwantsho le go dirisa didiriswa tse di kgongwang go rarabolola mathata. Dithalo tsa go fitlha 30 kgotsa 50 didiriswa tsa bongwe ga di kgonege go se ba rotloetsa. Ba rotloetse go tsenya ltshwopalo mo go rekoteng,tsenya ditshwantsho mo tlhagisong. Barutwana ba rotloetswe go kwala polelopalo. Sekao: sa bothata bo bo ka diriwang mo kgweditharong e, leba ditengtsa KGWEDITHARO 2.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.8 **Poeletso ya go tlhakanya e e isang kwa go atiseng.**	Rarabolola dipalofoko di le mo tirisong mme o tlhalose tharabololo ya dipalo, tse di akaretsang go katisoa, go tlhakanya ka dikarabo go fitlha 50.	Rarabolola dipalofoko di le mo tirisong mme o tlhalose tharabololo ya dipalo, tse di akaretsang go katisoa, go tlhakanya ka dikarabo go fitlha 30.	**Ke neg se se farologaneng mo kgwditharo 1** Tlhatlhagano ya dipalo mo kgwditharo e e oketsegileng go 30. Barutwana ba tshwanetse go rotloetsa go kwala dipolelopalo go dipalofoko tsotlhe. O ka solofela go poelletso ya go tlhakanya ka polelopalo go ntsha tharabololo. Barutwana mo kgwditharo e ba tshwanetse go kwala dipolelopalo tsa go atisa go rarabolola. Ba simolola ka go atisa mo kgwditharo. Ba dirisa maitemogelo go rarabolola dipalofoko ka go atisa, boeletsa go tlhakanya le dipalo tsa kiriti go bontsha polelopalo ya go atisa. Ba tla lemoswa ka matshwao a katiso mo kgwditharo le go dirisa maitemogelo a fa ba rarabolola mathata a dipalo tsa katiso. Repeated addition and grid/array type problems should show a multiplication number sentence. Go tla nna le barutwana b aba tla itshepang mo go rekoteng mathata a bona ba dirisa poeletso ya go tlhakanya e seng ya go atisa **Dikao tsa dipalo tse di ka dirwangmo kgwditharong** Poeletso ya go tlhakanya a) Dibaesekele tse 8 di na le maotwana a makae? b) Ban aba ba 9 ba na le matlho a makae? **Kelo** Thami o nwa digalase tse 6 tsa metsi ka letsatsi lengwe le lengwe. O nwa digalase tse kae tsa metsi ka beke e le nngwe? **Kiriti/** Rre Khumaloo jala mela e le 6 ya dikhabetšhe tse tlhano (5) mo moleng. Ke dikhabetšhe tse kae tsotlhe?	

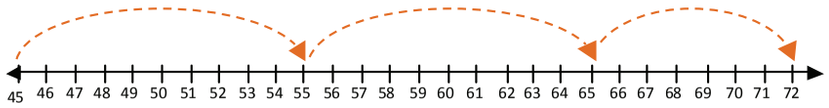
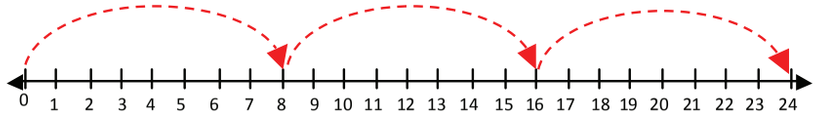
Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.9 **Kgobokanyo le kgaoganyo e e isang kwa karoganyong**	Rarabolola dipalo tse di mo tirisong tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotllalo tse di fitlhang ka go 99 ka dikarabo tse di akaretsang disala.	Rarabolola dipalo tse di mo tirisong tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotllalo tse di fitlhang ka go 50 ka dikarabo tse di akaretsang disala.	**Dikao tsa dipalo tse di ka dirwang mo kgweditharo e** Mokgweditharo e, letlelela barutwana go dirisa dithalo le didiriswa tse di kgongwang go botsa ditharabololo tsa bona. Polelopalo di diriswa barutwana b aba dirisang poeletso ya go ntsha go bontsha gore ba fitlhile jang mo karabong.. **Kiriti** Mangezi o rulaganya dibadisi tse 20 mo moleng wa 10 metsu . Ke dibadisi tsee kae mo moleng? **Kgobokanyo\ditlhopha** *Kgobokanyo, tlosa tse di setseng* Setela o rekisa diapole mo dikgetseng tse 6 enngwe le enngwe. O na le diapole tse 40. Ke dikgetsana tse kae tsa diapole tse a ka di dirang ka diapole tse 6? *Kgobokanya, tsenyeletsa\tsenya tse di salang* Ben o isa mae a 35 kwa go nkokoagwe. Go batlega mabokoso a a tsayang 6 a makae, o paka mae otlhe? **Go kgaoganya** *Kgaoganya, tlosa tse di salang* Kgaoganya dimonamone tse 45 magareng a ditsala tse 4 gore botlhe ba bane ba bone dimonamone tse di lekanang. Sue le Greg ba dira tirwana mmogo. Sue o dira diura tse 3 Greg ene o dira ura e le nngwe. Ba duelwa R40. Ba tshwanetse go kgaoganya madi jang?	
1.10 **Kgaoganyo e e isang go dipalophatlo**	Go rarabolola le go le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekanyo go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang . Sekao. $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{5}$ le tse dingwe.	Go rarabolola le go le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekanyo go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang . Sekao. $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{5}$ le tse dingwe.	**Ke neg se se farologaneng mo KGWEDITHARO 1** Maikaelelo mo kgweditharo e ke go godisa go dira ka palotlalo go dira barutwana go bopa dipalophatlo le tse di tletseng, tse di tswang fa palogotlhe kgo palo e kgaogantswe ka dikarolwana tse di lekanang di kgaogantswe sentle Barutwa ba tlhaloganye maikaelelo a go kgaoganya bontsi ka bobedi le dikarolo tse dintsi go di aroganya ka go lekana mo ditsleng. Ba golaganya maikaelelo a go aroganya le dipalophatlo. Go aroganya ditirwana go siametse\go siame go simolola ka diaplophatlo. Karikulamo e simolola dikakanyo tsa go aroganya dipoelo tsa dipalophatla.Go aroganya go beilwe fela mo mokgweng wa dipalofoko. Kwa tshimologong fa barutwana fa barutwana ba dira ditirwana tsa go aroganya, ba arogana le go arola matlhare le tse di salang gape. Puo ya dipalophatlo e ka simolola ka molomo o mongwe a ka kwala dipalophatlo foko, sekao.nngwe. halofo, nngwe.kotara, nngweborarong. Fa o kwala ka dipalophatlosekao. Dihalofo tse tharo, 3-Dikotara tse tharo, Kwala ka dipalo le ka mafoko. Maikutlo ke gore 3 godimo ga 2 kgotsa 3 godimo ga 4 go botoka go tlogela sekao go kgato ya bogare.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.10 **Kgaoganyo e e isang go dipalophatlo**	Go rarabolola le go le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekanyo go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang . Sekao. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe.	Go rarabolola le go le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekanyo go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang . Sekao. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe.	**Kgaoganya** Mo sekao se se fa tlase kgaoganyo e e lekalekanang le tse di salang di ka dirisiwa gape le go kgaogangwa. Bana ba babedi ba kgaogana ditšhokolete tsa khrantšhi tse5 gore mongwe le mongwe wa bona o amogela madi a lekaneng. Ngwana mongwe le mongwe o tshwanetse go amogela bokae? Morutwana o tla neela ngwana mongwe le mongwe 2 le halofo ya khrantšhi e e setseng.  **Tse di salang** Go botlhokwa gore barutwana ba thale\tshwantshe. Kwa tshimologong a barutwa ba tlhalose ka mafoko a bona, karolo e ba e arogantseng. Solofela gore fa barutwanan ba sego kgaoganya karolo e e setseng, dikaralo di ka nna tse di lekalekaneng. Sse se ka se tlhotlheletse gore ba tlhalosa jang tirego fitlha go kgaoganya \ arogana. Morutwana a ka kgaogana ka go lekalekana dipalophatlo. Go tswa mo mathateng a go kgaoganya ka tharabololo e e salang mo tharabololong ya palogotlhe le dipalophatlose se tlwaelegileng mo palophatlo rona le dinomore tse ditlhakatlhakaneng \ ditwakilweng. Barutwana ga ba tshwanela go itse kgotsa le go dirisa mareo a. Sekao: 2 le halofo e kwala jaana 2 ½,mme e le nomore e e tlhakatlhakaneng \ tswakilweng. **Go kgaoganya didiriswa le puo ya palophatlo** Puisano ya barutwana, le tharabololo ke nako e e simololang tlotlofoko ya dipalophatlo. Fa tšhokolete e kgaogantswe go lekalekana, ra re se ke ,bone. Bisikiti yotlhe e kgaotswe ka dikarolo tse nne. Dikarolo di a lekalekana. Barutwana ba tshwanetse go itse ka dintlha tse pedi tsa dipalophatlo: • Nomore ya karolo;le • Tekatekanyetso ya karolo.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithero 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.10 **Kgaoganyo e e isang go dipalophatlo**	Go rarabolola le go le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekanyo go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang . Sekao. g. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe.	Go rarabolola le go le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekanyo go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang . Sekao. g. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe.	Kgaoganyo ya ditirwana di thuta barutwana go godisa dikakanyo tse di latelang: • Fa re arola sengwe go 2-Dikarolo tse di lekanang, re bitsa dikarolo tse dihalofo. • Fa re arola sengwe go 3-Dikarolo tse di lekanang re bitsa dikarolo tse nngwe -tharo, • Fa re arola sengwe go 4 dikarolo tse di lekanang, re bitsa dikarolo tse dik-watara. • Fas re arola sengwe go 5 dikarolo tse di lekanang, re bitsa dikarolo tse botlhano. Tsepamo mo palophatlofoko mo kgwedithero e e letla barutwana: • Go kgaoganya le go kgobokanya dilo ka go lekana; • Naya palophatlo ya didiriswa; • Batla dipalophatlo tsa didiriswa tse di feletseng; le go • Lemoga gore palophatlo ke karolo fa gotlhe. **Sekao** sa dipalo tse di maleba go kgwedithero 2 • Erin, Tawfiq le Thami ba tshwanetse go aroganya di tšhokolete di le 4 ka go lekana. Ke tšhokolete e kanang kae e e bonwang ke morutwana mongwe le mongwe? Thala setshwantsho go bontsha karabo ya gago. • Miles, Hannah, Mathew le Ndaweni ba kgaogana maungo a le 5. Ba ka di arogana ka go lekana jang? Thala setshwantso go ntsha karabo ya gago. • Serebolo le Jamie ba kgaogana1 ba kgaogana ldimonamone. Jamie a re mongwe le mongwe o tshwanetse go bona halofo. A o nepile? Thala setshw-antsho go bontsha karabo ya gago. Go botlhokwa gore fa barutwana ba rarabolola dipalo, ba tshwanetse go kgona go tlhalosa gore ba arogantse jang. Kwa tshimologong dirisa puo e e sa tlhomamang ya barutwana go tlhalosa dipalophatlofoko, sekao, nngwe halofo nngwe-nne, nngwe tharo. Palophatlo letshwao ga ya simolola fa tlhagisa maikutlo e le nngwe (1) godisa gabedi (2). Jaanong mongwe a ka kwala palophatlo foko, sekao. nngwe-halofo,nngwe-nneng, nngwe- tharo. Letshwao la palophatlo ga le a simololwa,fa tlhagoso maikutloe le 1nngwe godimo ga 2 ga ena bokao go botoka go tlogela setshwantsho go fitlha nako e e tlang. (mophato o o latelang)	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.11 **Tšhelete**	• Lemoga le go tlhaola tšhelete ya tshipi a Aferika Borwa (disente tse tlhano, 1disente di le lesome, disente di le someama-bedi, 50c, R1, R2, R5, le tšhelete ya dipampiri a banka. R10, R20, R50 • Rarabolola dipalo tsa tšhelete tse di akaretsang palogotlhe le tšhentšhi \ madia a salang go R99 le disente go fitlha 90c	• Lemoga le go tlhaola tšhelete ya ditshipi le a dipampiri a Aferika Bor-wa (5c, 10c, 20c, 50c, R1, R2, R5, tšhelete ya banka a dipampiri. R10, R20, R50 • Rarabolola dipalo tsa tšhelete tse di aka-retsang palogotlhe le tšhentšhi \ madia a salang go 50c le dis-ente go fitlha go R50	**Ke eng se se farologaneng mo kgweditharong e 1** Mo kgweditharong e, barutwana ba tswelela go lemoga go ikatisa go dirisa tšhelete le go kgaoganya madi ka dikarolwana. **Sekao sa dipalo tse di dirang mo kgweditharo e** • O ka aroganya disete di le someamatlhano ka go lekana magareng a ban aba le nne/ Tlhalosa. • Joe o reka dimonamone tsa tšhepisi di le 10 ka 50c, o rekile dimonamone tse kae? • Thenje o duela diranta di le tlhano (R5) go tsaa loeto ka tekisi go ya sekolong phakela. O duela ka R20 ya dipampiri. O bone tšhentšhi ya bokae? Ke madi a a kanang kang a setseng ka ona fa a boela gae? • Madi a go duela tekisi ke Zurina's R5, 50. O boelwa ke madi a a bokae mo go diranta di le lesome (R10)? Mia o dirisa R38. O ne a tshotse R50. O setse ka madi a a kanang kang?	
TIRISO E E LOKOLOGILENG YA GO BALELA				
1.12 **Ditogamano** (**mekgwa kgotsa ditogamano**)	Dirisa ditogamano tse dilatelang fa ba diragatsa dipalelo: • Dithalo kgotsa didiriswa tse di kgongwang. sekao. dibadisi • Go aga le go aroganya diapalo\dinomore • Koketsopedi le halofo • Molapalo	Dirisa ditogamano tse di latelang fa o rarabolola mathata le go tlhalosa tharabololo mo dipalong: • Dithalo kgotsa didiriswa tse di ka kgongwang. Sekao: dibadisi • Go aga le go arogan-ya diapalo\dinomore • Koketsopedi le halofo • Molapalo	**Ke eng se se farologaneeng 1** Berutwana ba solofetswe gore ba rarabolole palelo e e seng mo tirisong ka go dirsa ditogamano: • Go aga le go aroganya dipalo • Koketsobedi le halofo • Molapalo **Dithalo \ ditshwantsho le didiriswa tse dikgongwang.** Barutwana bat la tswelela go thal ditshwantsho ba dirisa didiriswa tse di kgongwang go rarabolola diaplo. Go mosola gore ditshwantsho kgotsa dithalo di nne le dinomore le dipolelopala. **Go aga le go aroganya** Se ke togamano e e botlhokwa thata mo kgatong ya motheo (e dirisiwa gantsi ka nako tsotlhe mo motheo wa bogareng. Tiriso ya togamano e, e letlelela barutwana go kgaoganya le go kopanya dipalo gape go ba thusa go dira dipalelo bonolo.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.12 **Ditogamano** (**mekgwa kgotsa ditogamano**)	Dirisa ditogamano tse dilatelang fa ba diragatsa dipalelo: • Dithalo kgotsa didiriswa tse di kgongwang. sekao. dibadisi • Go aga le go aroganya diapalo\dinomore • Koketsopedi le halofo • Molapalo	Dirisa ditogamano tse di latelang fa o rarabolola mathata le go tlhalosa tharabololo mo dipalong: • Dithalo kgotsa didiriswa tse di ka kgongwang. Sekao: dibadisi • Go aga le go arogan-ya diapalo\dinomore • Koketsopedi le halofo • Molapalo	Go botlhokwa gore barutwana ba dirise kitso e ba e itsing fa ba aroganya dipalo. sekao • Go aroganya \ thuba o dirisa kemopalo; • Go aroganya o dirisa katisano ya 10; le • Go aroganya dipalo ka sebedi. Sekao.sebedi sa 20 se a itsege ka jalo 20 e ka aroganngwa ka mekgwa e e farologaneng. **Koketsopedi le halofo** Barutwana ba fitlhela koketsopedi e le bonolo, ka jalo go mosola go katisa barutanbana go godisa kitso ya bona ya koketsopedi. • Dirisa go lemoga ga koketsopedi go bona gaufi **Kokotsopedi** **Gaufi la koketsopedi** 12 + 12 12 + 13 25 + 25 25 + 24 • Dirisa go lemoga ga koketsopedi go bona gaufi le koketsopedi,sekao. 13 + 14 = koketsopedi 13tlhakanya 1 Togamano e thata (tlhakatlhakano) e batla dipalo e e thata. Barutwana ba kgona go tlhopha se jaaka togamano ba laolega mo togamanong e ba e dirisang.. Sekao: Ka letsatsi le lelengwe kwa kliliniking ban aba ba 24 ba tlhabetswe bolwetse jwa mokgotlhwane\ sehuba ba tlhabetswe mokgotlhwane. Mo letsatsi le le latelang bana ba le 25 ba tlhabetswe mokgotlhwane. Ke bana ba ba kae b aba tlhabetsweng mokgotlhwane? Dipalo di ka ranolola ka go dirisa koketsopedi.Morutwana a ka re koketsobedi 24 tlhakanya 1 kgotsa koketsopedi 25 ntsha 1. **Molapalo** Tririso ya molapalo go ba thusa go balela go tla neela barutwana tsela ya go rekota go nagana le go bat shola mo tselelng. Ke thusa barutwana go nna le dikkanyo tsa kgatiso ba thusa go ranola dipalo. Barutwana ga ba bolo go dirisa molapalo go simolola mophato wa 1. Jaanong ba tshwanetse go bopa \ aga molapalo o bat la boning nomore ya go simolola le go tlhomamisa go tswa mo go nnye go fitlha mo go e nngwe.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.12 **Ditogamano** (**mekgwa kgotsa ditogamano**)	Dirisa ditogamano tse dilatelang fa ba diragatsa dipalelo: • Dithalo kgotsa didiriswa tse di kgongwang. sekao. dibadisi • Go aga le go aroganya diapalo\dinomore • Koketsopedi le halofo • Molapalo	Dirisa ditogamano tse di latelang fa o rarabolola mathata le go tlhalosa tharabololo mo dipalong: • Dithalo kgotsa didiriswa tse di ka kgongwang. Sekao: dibadisi • Go aga le go arogan-ya diapalo\dinomore • Koketsopedi le halofo • Molapalo	Sekao. Barutwana ba dirisa molapalo jang: • Go tlhakanya le go ntsha. Barutwana bat la tswelela go aga melapalo ya bona le go kgaoganya dipalo ka dikarolo tse di kgonagalang. sekao: 45 + 27  **Katiso** Molapalo o tshwanetse go tswelela go dirisiwa go tshegetsa go boeletsa go tlhakanya. Motlolo o o lekaneng o rekotiwa mo molapalo dipolelo tsa tshegetso di ka rekotiwa. Sekao:  metlamof e dira Ditlhopha di le tsa Mo polelopalong ya katiso e e neetsweng, barutwana ba tshwanetse go tlhalosa gore motlolo o ka dirwa jang mo molapalong.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa mo go 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 20	• Tlhakanya go fitlha go 50 • Ntsha go tswa mo go 50 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 15	**Ke eng se se farologaneng mo kgweditharo 1?** Barutwana mo mophatong wa 2 ba tswelela go dirisa didiriswa tse di kgongwang le dikakanyo go thusa go dira bokaopalo le go balela. Tiriso ya dikakanyo e simolola go thatafalagangwe le gape fa nako e tsamaya. Fa ngwaga o fela mo mophatong wa 3 Barutwana ba tshwanetse go balela go fitlha go dipalo tsa dinomore tse tharo kwa ntle ga go dirisa didiriswa tse di kgongwang. Barutwana mo mophatong wa 2 ba tshwanetse go dirisa togamano ya bona ya go balela. Ba tshwanetse ke go tshegetsa gore go netefatsa rekoting ya bona mo lenaneong, gore ban ne ba siame.Mophato wa 2 o tla dirisa mefuta ya go rekota ba nne le go itshepa ka go dirisa dinomore le matshwao jaaka mokgwa wa go rekota. Barutwana ba tshwanetse go nagana ka potso e ba e botswang ba lebelele tlhatlhamano ya dipalo go setse ka togamano e e botoka. K tharabololo barutwana ba simolotse go godisa togamano ya bona ya go balela le mokgwa wa bona wa go rekota (gatisa). Mo mophatong wa 2ba tla phepafatsa se. Mo kgweditharo e ba tshwanetse go itshepaa mo go baling mekgwa ya go rekota (gatisa) ba tlhalose gore ba fitlhile jang mo karabong. Barutwana ba tshwanetse go dira tse di latelang ka tlhakanya le go ntsha: Lefa barutwana ba dirisa didiriswa tse di kgongwang le dikakanyo go tshegetsa palelo fa ba dira ka dinomore ba tshwanetse go kgona go balela ka kgopolo e e kwa godimo. Mo kgweditharong e barutwana ba tshwnetse go tswelela ka go balela dipotso tse di okeditsweng bgabedi ka ditsela tsa mefuta e e farologaneng gore re ka dirisa koketsopedi jaaka togamano ya go balela **Sekao:** Koketsopedi 20kwala se jaaka go tlhakanya togamano go balela. Kopolola le go feleletsa : a) 12 + 12 = □ b) 14 + 14 = □ c) 15 + □ = 30 d) 16 + □ = 32 e) 17 + 17 = □ f) 36 = 18 + □ g) 38 = □ + 19 Mekgwa e e ka bontshang go tlhakanya le go ntsha mo palelong.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa mo go 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 20	• Tlhakanya go fitlha go 50 • Ntsha go tswa mo go 50 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 15	**Go aroganya dipalo go nna dikarolo tse dinnye go dira dipalelo bonolo** **Go dirisa kitso ya bollengpalo go kgaoganya dipalo mo bolesomeng le bonngweng.** *Go tlhakanya palo ya dinomore tse pedi ka go aroganya palo e le nngwe.* 23 + 36 = □ 23 + 36 = (20 + 3) + (30 + 6) = (20 + 30) + (3 + 6) = 50 + 9 = 59 **Go tlhakanya ka go aroganya palo e le nngwe** *Go tlhakanya palo ya dinomore di le pedi ka go aroganya palo e le nngwe.* 23 + 36 = □ 23 + (30 + 6) 23 + 30 □ 53 + 6 = 59 Barutwana ba tla aroganya dinomore ka mokgwa o o ka kgonagalang mo go bona. Se se bontsha gore ba tshwanetse go dira mo ditsheng tse di farologaneng: 23 + 36 = □ 23 + (10 + 10 + 10 + 6) 23 + 10 □ 33 + 10 □ 43 + 10 □ 53 + 6 = 59 **Go ntsha** • Go aroganya dinomore tsotlhe 47 – 26 = □ 47 – 26 = (40 + 7) – (20 + 6) = (40 – 20) + (7 -6) = 20 + 1 = 21	

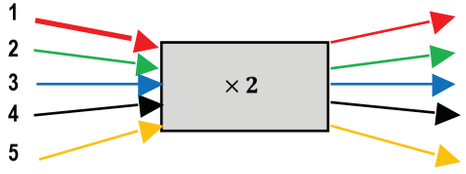
Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa mo go 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 20	• Tlhakanya go fitlha go 50 • Ntsha go tswa mo go 50 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 15	42 – 26 = □ 42 – 26 (30 + 12) – (20 + 6) 30 – 20 = 10 12 – 6 = 6 10 + 6 = 16 • Go ntsha ka go aroganya nomore e le nngwe 47 – 26 = □ 47 – (20 + 6) 47 – 20 = 27 27 - 6 = 21 42 – 26 = □ (30 + 12) – 26 30 – 26 = 4 12 + 4 = 16 • Solofela gora barutwana b aka kgaoganya dinomore ka ditsela tse di farologaneng gore go nne bonolo mo go bona go balela 47 – 26 = □ 47 – (10 + 10 + 6) 47 – 10 □ 37 – 10 □ 27 – 6 = 21 **Go dirisa kitso e e fetileng jaaka ditogamano** Ditogamano tse di fa tlase di letla barutwana go rulaganya go balela ga bona le dipalo bokao (bokaopalo). Go katisa togamano e e fat lase e tla rotloetsa barutwana go supatshwano mo kamanong magareng ga dinomore le go ruta barutwana gore ba ka go dira le gore kitso ya bona mo go baleleng. **Balela kwa peele le kwa morago** 48 – 39 = □ Go bala o ya kwa godimo ka bongwe go tswa mo go 39 ke togamano e e maleba ka ntlha ya fa dipalo di le gaufi le tse dingwe..	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa mo go 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 20	• Tlhakanya go fitlha go 50 • Ntsha go tswa mo go 50 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka to 15	**Tlhalosa \ supa tse di gaufi le tse di okeditsweng gabedi** 24 + 25 go tlhalosa gore 24 tlhakanya 1 e okeditswe gabedi 25 ntsha 1. 24 + 24 + 1 Barutwana b aka dirisa togamano ya bona ya go gatisa ba dirisa metsu 24 + (20 + 4) + 1 24 + 20 □ 44 + 4 □ 48 + 1 = 49 **Go dirisa halofo go aroganya dinomore** 29 + 12 29 + (6 + 6) 29 + 6 □ 35 + 6 = 41 **Fetolela dinomore go atisa ka lesome (10) le go ntsha kgotsa go tlhakanya gangwe.** Balela godimo kgotsa tlase gaufi le lesome(10) 28 + 19 = □ Fano barutwana ba tshwanetse go ipolelela gore ban a le tditlhopho tse tse pedi..Fetola \ fetolela28kgotsa19 gaufi le 10. Go balela ka nepagalo. Palo e ka kwalwa jaaka: 28 + 19 = 28 + 20 - 1 28 + 20 □ 48 - 1 = 47 Barutwana ba bangwe baka kgaoganya20 go 2 ka ditlhopa 10 go balela ka nepagalo. E thusa barutwana go itshepa le go ema ka bobona, fa ban a le togamano • Ba tlhola ditharabololo k abo bone; le • Go netefatsa tharabololo ya bone.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.14 **Poeletso ya tlhakanyo e e isang kwa go katisong**	• Katiso ya dipalo 1 go fitlha ka 10 ka 1, 2, 5, 3 le 4 • Dirisa mattshwao a a maleba (+, x, =, □)	• Katiso ya dipalo 1 go fitlha ka 10 ka 2, 5 • Dirisa mattshwao a a maleba (+, x, =, □)	**Ke eng se se farologaneng mo KGWEDITHARO 2?** Mo KGWEDITHARO bobesdi barutwana ba katissitse tlhaloganyo ya bona go ya katisa. Katiso dipalo 1 go fitlha 10ka 5 e simolotswe. Go simolola katiso ka 5,bona dintlha tsa go atisa ka 2 mo kgweditharo 1 Kwa bofelong ba kgweditharo barutwa ba tshwanetse go tse go rekota (atisa) tse di latelang: 1 setlhopha sa 5 ke 5 kgotsa 1 atisa 2 ke 2 kgotsa 1 x 2 = 4 2 setlhopha sa 2 ke4 kgotsa 2 atisa 2 ke 4 kgotsa 2 x 2 = 4 3 setlhopha sa 2 ke 6 kgotsa 3 atisa 2 ke 6 kgotsa 3 x 2 = 6 Tsepamo ga se mo goerng ba ithute ka tlhogo ditafole kgotsa ba aga dikakanyo tsa go atisa. Barutwana ba ithuta go bala le go tlhaloganya go atisa dipolelopalo. Dikakanyo tsa go atisa ka katiso di tshwanetse go neelwa bontsi jwa go rekota e e dirwang mo bukeng ya tiro ya phaposi. Sekao sa buka ya tiro phaposi. Go rekota ka tafole:	

Palo ya bana	1	2	3	4	5	6	7	8	9
Palo ya maoto									

Papetla kaelo

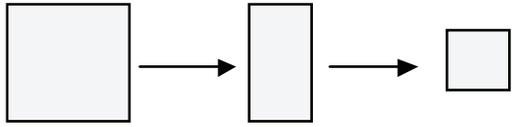
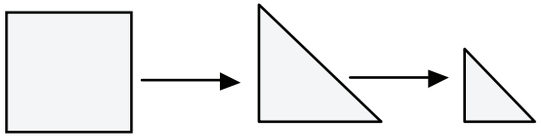


Fa o dira ka diphethene tsa dipalo, go atisa go ka golaganngwa le go bala o tlola, ka diphethene tsa go tlhotlhomisa tsa go atisa mo dinomore tsa keriti.

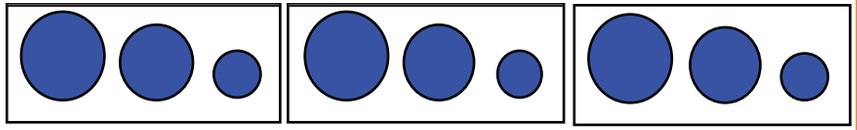
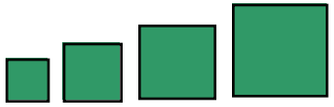
Sekao:Barutwana ba ka rekota (gatisa) 2s (sebedi) le 5s (setlhano) mo dipalong tsa keriti. Ba ka bua ka gore ke dinomore (dipalo) dife tse di tlhagelelang mo tafoleng ya sebedi le ya setlhano.

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.16 **Dipalo tsa tlhogo**	**Tlhatlhamano ya dipalofoko go 99** • Thulaganyo \ tatelano ya sete ya dinomore tse di tlhaotsweng • Bapisa dinomore go 99 bua gore efe ke1, 2, 3, 4, 5, le 10 bontsi le bonnye **Ka bonako gopola :** • Dintlha tsa go tlhakanya le go ntsha mo go 20 (someamabedi) • Tlhakanya le go ntsha go atisa ka 10 go twswa go 0 go fitlha go 100 **Togamano ya go balela** Dirisa ditogamano tsa go balela go tlhakanya le go ntsha ka kgono. • Baa palokgolo pele gore o balele pele kgotsa go balela morago. • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa ka kamano magareng a go tlhakanya le go ntsha	**Tlhatlhamano ya dipalofoko go 50** • Tatelano ya sete ya dinomore tse di tlhaol-wang. • Bapisa dinomore go 100 ke efee leng 1, 2, 3, 4, 5, and 10 bontsi kgotsa bonnye **Ka bonako gopola:** Gopola dintlha tsa go tlhakanya le go ntsha 10 **Togamano ya tlhogo** Dirisa ditogamano tsa go balela go tlhakanya le go ntsha ka kgono. • Baa palokgolo pele gore o balele pele kgotsa go balela morago. • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa ka kamano magareng a go tlha-kanya le go ntsha	**Dipalo tsa tlhaloganyo:** Ditogamano tsa palelo, dipalo tsa tlhaloganyo, kitso le dintlha tse di itsegeng tsa dipalo di godisiwa ka tharabolol ya dipalo le polelo.Tseno go ikatisiwa ka tsona ka nako ya dipalo tsa tlhogo. Seno se thusa barutabana go di tlwaela le go kgona go di diribonolo fa ba rarabolola le go balela dipalo di le mo tirisong. **Sekao sa dipotso tse di ka botswang**: **Leinapalo le matshwao** Tshwarela karata kwa godimo kgotsa kwala leinapalo. Tlhopha morutwana go kwala le go nyalanya dinomore. **Bontsi kgotsa bonnye** Ke eng se? • 1 e nnye ka 50 • 1 bontsi ka 39 • 3 nnye ka 27 • 10 bontsi ka 20 Alefabete ya botlhano ke efe (5th)? Kgwedi ya borobonwe mo ngwageng ke ef(9th)? **Pele le morago** Ke nomore efe e e tlang pele ga 37? Ke nomore efe e e tlang morago ga 39? **Tatelano le papiso** K efe e ntsi: 21 kgotsa 41? Neela nomore magareng ga 37 le 39. **Dintlha tsa go tlhakanya le go ntsha:** Bona dintlha tsa kgweditharo 1.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.16 **Dipalo tsa tlhogo**	**Tlhatlhamano ya dipalofoko go 99** • Thulaganyo \ tatelano ya sete ya dinomore tse di tlhaotsweng • Bapisa dinomore go 99 bua gore efe ke1, 2, 3, 4, 5, le 10 bontsi le bonnye **Ka bonako gopola :** • Dintlha tsa go tlhakanya le go ntsha mo go 20 (someamabedi) • Tlhakanya le go ntsha go atisa ka 10 go twswa go 0 go fitlha go 100 **Togamano ya go balela** Dirisa ditogamano tsa go balela go tlhakanya le go ntsha ka kgono. • Baa palokgolo pele gore o balele pele kgotsa go balela morago. • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa ka kamano magareng a go tlhakanya le go ntsha	**Tlhatlhamano ya dipalofoko go 50** • Tatelano ya sete ya dinomore tse di tlhaol-wang. • Bapisa dinomore go 100 ke efee leng 1, 2, 3, 4, 5, and 10 bontsi kgotsa bonnye **Ka bonako gopola:** Gopola dintlha tsa go tlhakanya le go ntsha 10 **Togamano ya tlhogo** Dirisa ditogamano tsa go balela go tlhakanya le go ntsha ka kgono. • Baa palokgolo pele gore o balele pele kgotsa go balela morago. • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa ka kamano magareng a go tlha-kanya le go ntsha	**Togamana a go balela:** Dirisa ditogamano tsa go balela go go tlhakanya ka kgono. Tlhakanya: • Batla bobedi ba dinomore go dira 10 dirisa pele 2 + 7 + 8 2 + 8 e dira 10 gape tlhakanya le 7 Baa palokgolo pele gore o balele pele kgotsa o balele morago • Simolola ka palokgolo 3 + 6 O boeletsa palofoko: 6 + 3 le go balela pele go fitlha go 9 • Dirisa koketsopedi jaaka togamano ya palotlhogo. Tlhaola gaufi le koketsopedi. **Sekao:** 5 + 4 = 9 tlhalosa gore ke gabedi (koketsopedi) 4 le 1 kgotsa gabedi 5 e ntsha 1 Lemoga gore fa dinomore tse pedi di le gaufi ka bogolo e nngwe go bonolo go bona pharologano ka go balela kwa godimo go na le go balela kwa morago. 8 – 6 = 2 tlhalosa gore go balela kwa godimo go tswa go 6 go fitlha go 8 e go neela 2 Dipalo tse dingwe tsa tlhogo di ka dirwa kwa ntle ga didiriswa. Go botoka go dira dipalo tsa tlhogo ka didiriswa **Didiriswa tse di atlenegesitsweng** • Molapalo (popego le go san ne sepe) • Nomore ya keriti • Dinomore tsa kemopalo • Ditalema tsa go balela	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.17 **Palophatlo**	• Dirisa le maina a dipalophatlo mo tirisong e e tlwaelegileng o tsenyeletsa halofo kotare, seraro le setlhano • Lemoga dipalophatlo mo kgweng wa ditshwantsho. • Kwala dipalophatlo jaana 1 halofo, 2 seraro.	Dirisa le maina a dipalophatlo mo tirisong e e tlwaelegileng o tsenyeletsa halofo kotare, seraro le setlhano • Lemoga dipalophatlo mo kgweng wa ditshwantsho. • Kwala dipalophatlo jaana 1 halofo, 2 seraro.	**Kgweditharo e e tsepame mo:** Mo kgweditharo barutwana ba simolola dipalophatlo. Baritwana bat la simolola ka dipalophatlo ka go aroganya dipalofoko le ditirwana. Le fa go le jalor,dikakanyo tsa dikarolo tsa dipalophatlo tse di babalesegileng di tshwanetse go godiswa e dirisa ditirwana tsa go tlhakanya. • Go dira dihalofo le dikotara ka popego e e menwang le e e segiwang. Barutwana b aka mena pampiri ka halofo le go neela leina la karolwana nngwe le nngwe dikarolwana tse pedi go tswa mogo sele sengwe o bitsa karolwana eo halofo. B ka mena karolwana ya pan=mpiri go halofo gape. Botlhokwa fa ke go mena pampiri (tsebe) ka mekgwa e e farologaneng, go bona halofo e e farologaneng.  kgotsa  Ka nako tse dintsi botsa barutwana go bonela pele gore ke dikarolwana tse kae tse bat la di boning, ba leke go itse go phutolola tsebe le go tlhola. Ba bapisa dipolelo tsa dihalofo tse pedi tse di farologaneng, kgotsa dipopego tsa dikotara tse pedi tse di farologaneng tse di isang go puisano e e itumedisang ya dipolepego le selekanyo.	

Setlogo	Dikgolo la dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta	
1.17 **Palophatlo**	• Dirisa le maina a dipalophatlo mo tirisong e e tlwaelegileng o tsenyeletsa halofo kotare, seraro le setlhano • Lemoga dipalophatlo mo kgweng wa ditshwantsho. • Kwala dipalophatlo jaana 1 halofo, 2 seraro.	Dirisa le maina a dipalophatlo mo tirisong e e tlwaelegileng o tsenyeletsa halofo kotare, seraro le setlhano • Lemoga dipalophatlo mo kgweng wa ditshwantsho. • Kwala dipalophatlo jaana 1 halofo, 2 seraro.	O ka botsa morutwana: O ka botsa dipopego tse pedi ka leinapalo le le lengwe, le halofo le le nngwe? Bontsha mo go rona gore o ka kgona go bitsa dipopego tse pedi tse, le halofo e le nngwe. Barutwana ba tshwanetse go neela leina la karolwana nngwe le nngwe se se ka dirw ka go kwalwa dipalophatlo. sekao: • Kopanya o dira palogotlhe A marutwana ba dirise palophatlo tshekeletsa kgotsa ba kgaole tshekeletsa go tswa mo pampering ya bona gore popego ya dihalofo le dikotara di ka kopangwa go dira selo se le sengwe gape. • Go dirisa mebala kgotsa fifatsa dipalophatlo Ditirwana tse di rotloetsa barutwana go: • Go itse gore dipalophatlo ke dikarolwana tse di lekalekanang; • Tlhalosa dikarolwana tsa dipalophatlo,neela leina la dikarolwana tsa dipalophatlo. **Go kwala maina a palophatlo** Ga re bolele barutwana go kwala matshwao a palophatlo. Barutwana ba ithuta go tlhagisa dikarolo tsa tsa palophatlo ka go kwala halofo kgotsa kotare e le nngwe..	

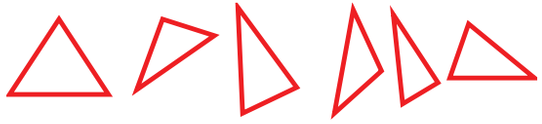
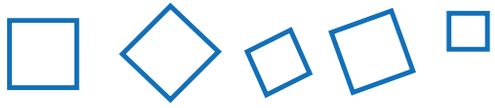
Mophato 2 Kgweditharo2 2-Dipaterone,Tiriso le Alejebora/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola, go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshellono boswa jwa letsatsi ka letsatsi Go tswa mo ngwaoboswa ya rona	**Go kopolola, go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dik-gongwang • Ka go thala mela,dipopego kgotsa didiriswa.	Mo mophatong wa 1 KGWEDITHARO 1 le mophato wa2 go ne ga atlenegiswa gore barutwana ba dire ka dipaterone tsa elememte (tsa dipopego ,mela kgotsa di idriswa) di a boeletswa ka mokgwa o o tshwanang.Mo kgweditharong ya 2 mophato wa 2 barutwana b aka simolola ka go dira ka dipaterone tse bogolo jwa popego kgotsa popego ya palo e fetogang ka mokgwa wa go bonela pele. Dipaterone tse dinngwe di na le ditlhopha tse ditshwanang ka popego kgotsa di diriswa tse di boeletswang,mo bogolo jwa dipopegobo fetogang mo ditlhopheng ka metlha,ka tsela ta go bonela pele sekaopopego e nna e nnye.  Dipaterone tse dingwe di dirilwe go tswa mo mofuteng o le monngwe wa popego,mme sekao sengwe sa popego se a oketsega kgotsa se a fokotsega sekao:  Dipaterone tse dinngwe di dirilwe go tswa mo ditlhopheng tse e leng gore dipopego tse ditshwanang tsa di diriswa di a diragala.mme palo ya popego kgotsa se diriswa sa mofuta mongwe le mongwe o a oketsega kgotsa o a fokotsega ka tsela e e tlwaelegileng sekao: **Go kopolola paterone go thusa barutwana go bona lemoga /tatelano ya gore paterone e dirwa jang.** **Go atolosa paterone go thusa barutwana go netefatsa gore ba tlhalogantse sentle tatelano ya paterone.** **Go tlhalosa paterone go thusa barutwana ka kgolo ya bo kgoni jwa puo le go bua. E thusa gape go bona le gore morutwana o kgona go ranola dipaterone jang.** Go tlwaelegile gore go bonolo gore barutwana ba bue ka paterone morago ga go di dira.Jaanong barutwana ba tshwanetse go tlhalosa dipaterone kwantle ga thuso ya kaedi ya dipotso.tsweletsa go tsepama mo kgolong ya puoe ba e tlhokang go tlholosa dipaterone.	Thuto e le 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 150 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 150 Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 150 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-150 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 150 • Nngwe-tharong le ya bone go tloga mo katisong ya 3 le 4 magareng ga 0 le 150	Lebelela dintlha tsa KGWEDITHARO 1 mme o atolose papetlana ya dipalo go 150	Dithuto di le 3

MOPHATO wa 2 KWEDITHARO ya 2 3 BOALO LE DIPOPEGO(Jeometeri)				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo ya 2**	**Dintlha tsa tshedimosetso kgotsa methalokaelo ya go ruta**	**Boleele jwa nako e beilweng** Mo dithutong tsa ura le metsotso e le 24
3.1 **Maemo kitsiso le dikakanyo**	**Maemo a Puo** . Tlhalosa maemo le kamano ya sediriswa mo go se sengwe sekao: fa godimo ga,mo pele ga,mo morago ga, molema,moja,godimo,tlase, gaufi le **Maemo a dikakanyo** • Nyalana dikakanyo tse di farologaneng tsa sedirswa se se tshwanang letsatsi le letsatsi. **Maemo le dikaelo** Sala morago ditaelo go tsamatsamaya mo phaposing	**Maemo a Puo** Tlhalosa ya kemo le kamano ya sediriswa mo go se sengwe sekao fa go dimo ga,mo pele ga,mo morago ga,molema,moja, godimo,tlase,gaufi le **Maemo le dikaelo**. • Sala morago dikaelo go tsamatsamaya mo phaposing .	**Katlenegiso e e totobetseng ya KGWEDITHARO 2: Maemo a Puo , o sala morago dikaelo** Tsepamo mo kgweditharong 2 e ka nna ka ga maemo le kitsiso.Mo kgweditharong 3,barutwana ba ka dira ka dikakanyo. ka go tlhatlhoba se barutwana ba se itseng le gore a ba se gopola.. **Pharologanyo ke eng mo mophatong wa 1?** Mo mophatong wa 2, barutwana ba sobokanye se ba se dirileng maemo, kitsiso, le dikakanyo mo mophatong wa 1 **Maemo wa Puo** Maemo a puo a tshwanetse ya itsisewe le go diragatswa ka dithusa thuto tse di akaretsang tsamaiso ya mmele, mmino le raeme le go tsikinyega le metshameko ya tshikinyo ya mafoko.Se ka dirwa ka nako e e kobiseditsweng mo nakong ya go ruta kgotsa tsepamiso mo nakong ya go ruta setlhophaGo tshitshintswe gore go tsewe dithuto tse pedi ka ditirwana tsa maemo ka sebaka sa KGWEDITHARO 2.,mme go tswelelwe Ketapele ya le go diragatsa mafoko ka maemo ka dikarolwana tse di khutshwane mo phaposing.Puo ya boemo e ka diragatswa ka nako ya thuta puo kgotsa dikgono tsa botshelo. Maemo a Puo a ka tiisiwa ka tiro kwalo e e tsenyeletsang go rekota ka go kwala,jaaka go tshasa mmala go bapisa setshwantsho le mafoko,go thala sediriswa kgotsa popego fa ba boleletswe maemo a sona go amana le sediriswa kgotsa sebopego , mmala , kgotsa go nyalana ditshwano ka mafoko. **Maemo le dikaelo** Go ruta barutwana go sala dikaelo morago go ka dirwa ka ditirwana tse di diragatswang barutwana ba diragatsa go ya ka ditaelo .Mo mophatong wa 2,barutwana ba ka neelwa ditaelo ka molomo kgotsa tse di kwadilweng go diragatsa mo phaposing.Sekao “tla mo pele ga phaposi,ema fa thoko ga setulo sa g ago,tlola kgamelo ya matlakala”	Dithuto di le 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo ya 2	Dintlha tsa tshedimosetso kgotsa methalokaelo ya go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
3.2 **Didiriswa Popego-tlhakoretharo**	**Tlhatlhamano ya di diriswa** Go lemoga le neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa bolo(dikgolokwe • Dipopego tsa lebokoso(lebokoso) • Diselen **Dipharologantsho t tsa sedirwa/didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Dipopegogo tse di ka me-naganang/kgokologang • Didiriswa tse di relelang. **Ditiro tse di tsepameng**. Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gapele dipopego tse dingwe tsa thutatekano.		Ga gona tiro e e totobaditsweng ya popegotlhakoretharo mo kgweditharong 2 e e atleneganesitweng .Le ga le tiro ka dipopegotlhakoretharo e ka sobokangwa e tiisiwa ka ditirwana tsa go kwalwa Barutwana ba a tswelela go aga didiriswa tsa tekanyo-tlhakoretharo ka materiale o boeletswang dilwana tsa go betla ka nako e e ikemetseng.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo ya 2	Dintlha tsa tshedimosetso kgotsa methalokaelo ya go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
3.3 **popegotlha-korepedi**	**Tlhatlhamano ya dipopego** Go lemoga le go neela maina a popegotlhakorepedi • sediko • khutlotharo • khutlonne • khutlonnetsepa **Dipharologantsho tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • popego • matlhakore a a tlhama-letseng • round sides /matlhakore a a kgolokwe	**Tlhatlhamano ya dipopego** Go lemoga le go neela maina a popegotlhakorepedi • sediko • khutlotharo • /khutlonne • khutlonnetsepa **Dipharologantsho tsa tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • dipopego • matlhakore a a • e a a kgolokwetlhama-letseng • matlhakor	**Ke eng se sešwa mo mophatong wa2** • khutlonne Tiro e e ntsi ka dipopego mo mophatong 2 e dirwa ka didiriswa tse di bonagalang.Tiro e ka tiisiwa ka go dira tiro kwalo Barutwana ba simolola ka metshameko ya boikgethelo ka dipopego tse di farologaneng,ba dira setshwantsho ka dipopegotlhakore tsa thutotekano tse di segilweng. Se se dirwa ka nako ya thuta puo kgotsa dikgono tsa botshelo ka nako e e ikemetseng. Barutwana ba kopolola ditshwantsho tsa dipopego tsa thutatekano.Ditshwantsho di ka neelwa ke dikwalo-kgatiso/kgotsa morutabana. Se se thusa morutabana go tlhaola • Sediko le dikhutlonne tsa mefuta e e farologaneng • khutlonne,khutlonnetsepa,khutlotharo mo maemong a a farologaneng. • Khutlotharo le khutlonnetsepa tsa dipopego tse di farologaneng. Se se dirwa ka nako e ikemetseng .Se se ka dirwa ka dithuto tsa bokgoni jwa botshelo. **Go tshwantsha le tlhalosa popegotlhakorepedi:** **Bogolo** Barutwana ba tshwantsha bogolo jwa dipopego jo botshwanang sekao:, • go rulaganya didiko go ya ka bonnye go fitlha go se segolo • baya dikhutlonne tsotlhe tsa bogolo jo bo tshwanang mmogo Dirisa puo ya bogolo go tshwantsha di[popego tse di farologaneng sekao “ke thadile khutlotharo moteng ga khutlonne,ka jalo khutlotharo e nnye mo khutlonnen **Tlhalosa popegotlhakorepedi:mmala** Barutwana ba bua ka mmala wa dipopego mme ba di tlhaola dipopego go ya ka mmala. Go tlhaola le neela maina a dipopego le mmala wa tsona,go tshwantsha bogolo jwa dipopego go ka dirwa ka nako ya fa go dirwa dipateron	Dithuto di le 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo ya 2	Dintlha tsa tshedimosetso kgotsa methalokaelo ya go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
3.3 **popegotlha-korepedi**	**Tlhatlhamano ya dipopego** Go lemoga le go neela maina a popegotlhakorepedi • sediko • khutlotharo • khutlonne • khutlonnetsepa **Dipharologantsho tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • popego • matlhakore a a tlhama-letseng • round sides /matlhakore a a kgolokwe	**Tlhatlhamano ya dipopego** Go lemoga le go neela maina a popegotlhakorepedi • sediko • khutlotharo • /khutlonne • khutlonnetsepa **Dipharologantsho tsa tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • dipopego • matlhakore a a • e a a kgolokwetlhama-letseng • matlhakor	**Go lemoga le go neela maina a didiko, dikhutlotharo, khutlonne le dikhutlonnetsepa** Barutwana ba tshwanetse go dira ka tira ka didiko,dikhutlotharo le dikhutlonne tsa bogolo jo farologaneng.Go botlhokwa gore barutwana ba bone dipopego tse dintsi tsa sebopego sengwe le sengwe.Dingwe tsa sete ya dipopego tse di rekisiwang di neela fela sekao se le sengwe sa khutlotharo. Barutwana ba tlhoka go kgona go di lemoga. - Dikhutlotharo tse di nnang le popego e farologaneng le go bewa ka maemo a a farologaneng.tse ke dingwe tsa tsa dikao:  - Dikhutlonne tse bopilweng ka bogolo le maemo a farologaneng di beilwe mo maemong a a farolganeng . - Tse ke dingwe tsa dikhutlonne.  - Dikhutlonnetsepa tsa sebopego se se farologaneng di beilwe mo mae-mong a farologaneng. Tse ke dingwe tsa dikhutlonnetsepa. 	Dithuto di le 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo ya 2	Dintlha tsa tshedimosetso kgotsa methalokaelo ya go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
3.3 **popegotlha-korepedi**	**Tlhatlhamano ya dipopego** Go lemoga le go neela maina a popegotlhakorepedi • sediko • khutlotharo • khutlonne • khutlonnetsepa **Dipharologantsho tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • popego • matlhakore a a tlhama-letseng • round sides /matlhakore a a kgolokwe	**Tlhatlhamano ya dipopego** Go lemoga le go neela maina a popegotlhakorepedi • sediko • khutlotharo • /khutlonne • khutlonnetsepa **Dipharologantsho tsa tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • dipopego • matlhakore a a • e a a kgolokwetlhama-letseng • matlhakor	- Didiko ka bogolo jo farolganeng. Tse ke dikao tsa didiko: Go botlhokwa gore barutwana ba dire ka ditshwantsho tsa dipopego tse di segilweng.Se se kgontsha barutwana go bona dipopego tse di farologaneng tsa khutlotharo,khutlonne le khutlonnetsepa di beilwe mo maemong a a farolo-ganeng. Barutwana ba tlhaola dipopego go ya ka popego ya matlhakore gore a tlhamaletse,kgolokwe j.j Barutwana ba tlhaola le go kgobokanya dipopego go ya ka gore a ke khutlotharo,khutlonne kgotsa sediko. Tiro e ka kgobokanngwa ka go dira tiro kwalo,e e ka akaretsanggo tshasa mmala, go bapisa maina le dipopego	Dithuto di le 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo ya 2	Dintlha tsa tshedimosetso kgotsa methalokaelo ya go ruta	Boleele jwa nako e beilweng Mo dithutong tsa ura le metsotso e le 24
3.4 **Tekano**	**Tekano** • Go lemoga le go thala mola wa tekatekanyo mo sebopegotlhakorepedi le tse e seng popegotlha-koretharo	**Tekano** • Go lemoga le go thala mola wa tekatekanyo mo sebopegotlha-korepedi le tse e seng popegotlhakoretharo	Barutwana ba lebelela mola wa tekatekanyo mo didirisweng tse di bonalang le ditshwantsho. Tiro ya go kwala; - E se nne fela"thala halofo e e tlogetsweng" - E tsenyeletse dikai tse ba thalang mola wa tekatekanyo.Mola wwa tekatekanyo o se nne fela oo tsepameng.Sekao mola wa tekatekanyo mo mmeleng wa noga o ka nna o o rapaletseng. - E ka akaretsa mola o le mongwe wa tekatekanyo Fa barutwana ba sena bonnete jwa gore a sebopego kgotsa setshwantsho se na le mola wa tekatekanyo,ba ka mena papetlana ya pampiri mme ba itemogele gore a dihalofo tse pedi di lekalekana sentle.Fa di lekalekana,mola o o fa gare ke mola wa tekatekanyo.	Thuto 1

MOPHATO 2 KGWEDI-THARO 2 TEKANYO				
Ditlhogo	**Tlhaloganyo le bokgoni** **Ditlhokego kwa bokhutlong jwa ngwaga**	**Tlhaloganyo le bokgoni** **Tsepamiso go kgwedithar o 2**	**Dintlhatlhaloso dingwe kgotsa thuto ya dintlha-kaediso**	**Boleele jwa nako** (Mo dithutong tsa 1 ura le 24 metsotso)
4.1 **Nako**	**Polelo ya nako** • Go itse malatsi a beke • Go itse dikgwedi tsa ngwaga. • Baya malatsi a matsalo, meletlo ya bodumedi, Malatsi a boikhutso a botlhe , ditiragalo tsa hesitori, Malatsi a ditiragalo a kalentara. • Bolela diura tse 12 mo diureng .halofo ya diura le kwatara ya diura **Bala boleele jwa nako le e fetang** Dirisa kalentara go balela le go tlhalosa boleele jwa nako ya letsatsi kgotsa dibeke . Dirisa tshupanako go bala boleele jwa nako mo diureng halofo ya diura kgotsa kwatara ya diura.	**Polelo ya nako** • Go itse malatsi a beke • Go itse dikgwedi tsa ngwaga. • Baya malatsi a matsalo, meletlo ya bodumedi , Malatsi a boikhutso a botlhe , ditiragalo tsa hesitori , Malatsi a diti-ragalo a kalentara. • Bolela diura tse 12 mo diureng .halofo ya diura le kwatara ya diura mo tshupanako ya dinaka. **Bala boleele jwa nako le e fetang.** Dirisa tshupanako go balela boleele jwa nako mo diureng kgotsa halofo ya diura.	Barutwana ba tswelela go ikatisa go bua ka tsamao ya nako le thulaganyo ya nako. Mo tsamaong ya nako go ruta mo phaposing le tsepamiso mo nakong ya setlhopha barutwana ba tswelela go bua ka malatsi a beke le kgwedi tsa ngwaga le letlha la letsatsi leo le one malatsi a fetileng le a tlang. Barutwana ba tlwaela kalantara ka go tswelela go baya • Matsalo; • Meletlo ya bodumedi; • Ditiragalo tsa hesitori; • Ditiragalo tsa sekolo; le • Malatsi a boikhutso a botlhe Mo kalentareng. Ka nako ya tiro e ikemetseng barutwana ba tswelela go latedisa ditiragalo go tloga matshelong a bone a ka metlha le tatelano ya ditshwantsho tsa ditiragalo. Barutwana le bone ba dira ka ditirwana tse di maleba le go bolela nako ka diura. **Pharologanyo ke eng go tswa go KGWEDITHARO 1?** Tsepamisa ya KGWEDITHARO 2 e ba bolela nako mo diureng le halofo go diriswa tshupanako ya dinaka .Se se tshwanetse e nne se tsepamisiwangmo thutong. E tshwanetse go tsenyeletsa puo ka go dirisa (mosong a.m. thapama pm.) ka nako 12-Diura . Go bolela nako, go tshwanetse go dirwa nako ya kgwedithar o ka nako ya maemo a tsweledisiwang.Sekao , barutwana ba ka kopiwa go bolela nako fa sekolo se tsena , le ka nako ya khutso le nako ya kwa gae , kgotsa fa ba fetola thuto go tswa go e nngwe go fitlha go e nngwe . Tlhopha nako e ka yone tshupanako e supang nako ya ura mo tlhogong kgotsa halofo ya ura. Go botlhokwa go baya tshupanako ka mo phaposing, gore barutwana ba kgone go e lebelela . Barutwana ba ka itirela dikao tsa ditshupanako. Jaanong o kgona go ba kopa go bontsha dinako tse di farologaneng le go akaretsa dipalelo tse di rileng s.k “Npontsha ura ya 10. “ Npontshe gore nako e tla bo e le nako mang morago ga halofo ya ura.”	thuto e le 1

Ditlhogo	Tlhaloganyo le bokgoni Ditlhokego kwa bokhutlong jwa ngwaga	Tlhaloganyo le bokgoni Tsepamiso go kgweditharo 2	Dintlhatlhaloso dingwe kgotsa thuto ya dintlha-kaediso	Boleele jwa nako (Mo dithutong tsa 1 ura le 24 metsotso)
4.2 **boleele**	**Tekanyo e sa tlhomameng** • Lekanya le lekanyetsa ,bapisa, rulaganya ,le go rekota boleele go dirisiwa maemo tekanyo a sa tlwaelegang s.k.e. let-sogo dikgato, boleele jwa phensele dibadi, jalo-jalo. • Tlhalosa boleele jwa dilo ka go bala le go bolela gore go dikelo di sa tl-waelegang di boleele jo bokae. • Dirisa puo go bua ka papiso ya s. k. Boleele bokhutshwane, bogolo , bophara **Ketapele ya bolekanyo e tlhomameng** Go lekanyetsa , le go lekana, bapisa thulaganyo le go rekota boleele go dirisiwa dimetara (kgotsa sediriswa sa tekanyo sa dimetara kgotsa thapo ya boleele jwa metara) jaaka kelo ya maemo a boleele	Mo tsamaong ya kgweditharo go tshitsintswe gore barutabana ba tsepamise mo go lekanyeng ,tekanyetsong, bapisang le rekotang boleele , bophara ,le bogodimo le dikelo tse sa tlwaelegang gape le gone dira tekanyetso le tekano, le papiso le go rekota ditekanyetso ka dimetara .. Yona mekgwa eo ya go lekanyetsa boleele e ka dirisiwa ka nako ya tiro ya ikemelogo ralala kgweditharo.Tiro yotlhe e tshwanetse go rekotiwa. Ka tsamao ya nako ya dipalo tse di rebotsweng mediriso le botsalano barutwana ba kgona rabolola mathata a go dirisiwang mo tirisong ya : • Boleele jwa tekanyetso e sa tlwaelegang; le • Go lekanyetsa boleele ka dimetara. Tlhokomela tlhatlhamano ya dipalo e nepagetseng ya kgweditharo, le tlhatlhamano ya mefuta ya mathata a maleba a kgweditharo.		

Ditlhogo	Tlhaloganyo le bokgoni Ditlhokego kwa bokhutlong jwa ngwaga	Tlhaloganyo le bokgoni Tsepamiso go kgweditharo 2	Dintlhatlhaloso dingwe kgotsa thuto ya dintlha-kaediso	Boleele jwa nako (Mo dithutong tsa 1 ura le 24 metsotso)
4.3 **Mmese/boima**	**Tekanyo e tlhomameng** • Go lekanyetsa , le go lekanya le go bapisa , le go rulaganya le go rekota mmese go dirisiwa tekanyetso e seng ya maemo le selekanyo s.k.maparego ditena jalo-jalo • Dirisa puo go bolela ka papiso s. k. Bofefo boima , bofeonnyana , boimana. **Ketapele ya bolekanyo jo bo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sphuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka dikilo-geramo s. k. 2 kilogeramo tsa reise le 1 kilogeramo ya bupi jwa borotho • Dirisa sekale sa bata go lekanya mmese wa bona mo dikilogeramong.	**Tekanyo e sa tlhaomameng** • Go lekanyetsa , le go lekanya le go bapisa , le go rulaganya le go re-kota mmese go dirisiwa tekanyetso e seng ya maemo le selekanyo s.k.maparego ditena jalo-jalo • Dirisa puo go bolela ka papiso s. k. Bofefo boima , bofefonyana , boimana. **Ketapele ya bolekanyo jo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sphuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka dikilogeramo s. k. 2 kilogeramo tsa reise le 1 kilogeramo ya bupi jwa borotho • Dirisa sekale sa bata go lekanya mmese wa bona mo dikilogera-mong • Fa sekale sa kamore ya botlhapelo se le gone, barutwana ba ka lekanyetsa mmese wa bona ka dilkilometara. Se lebeletsweng fela ke gore barutwana ba buise fela dikilogeramo tse di sobokantsweng .	**Pharologanyo ke eng mo mophatong wa 2?** Mo mophatong wa 1 go tshitsintswe gore barutwana ba tsepame mo go direng ka go lekanyetsa ka selekano go • Bapiso ya mmese wa dilwana e tlhameletseng , • Rulaganya le go bapisa mmese ya dilwana tse 3 kgotsa go feta , go baya para ya dilwana mo selekanong , go fitlhela dilwana tsotlhe di tlhomagantswe. • Batla mmese wa dilwana o dirisa dikelo tsa mmese tse di sa tlwaelegeng.. Barutwana le bona ba tsepamisitse mo go godiseng puo go bua ka mmese. Barutwana ba tshwanetse go simolola ka go gatelela seo se ba se itseng ka go dirisa selekano le dikelo tse di sa tlwaelegang go lekanyetsa mmese. Ke gone ba ka dirang mmese ka dikilogeramo. **Tekanyetso ya mmese e sa tlhomamang go dirisiwa selekano le dikelo tse di sa tlwaelegang** Barutwana ba kgona go ithuta melwana le ditiragatso tsa selekanyetso mo go diriseng dikelo tse sa tlwaelesegang. Go lekanyetsa ka dikelo tse di sa tlwaelegang ga di tshwanela go tsaya tsia go nnyennyefatswa go lekanyetsa ka dielo tse tlwaelegileng. Dilekano tsa papatso ya mmese di ka dirisiwa. Fa sena selekano sa papatso ,o ka dira e le nngwe ka go dira hangera ,kopi ya yoghurt letlase la lebotlole la 2dilitara , letlase la lebotlole litara ya maswi kgotsa lebokose la senotsididi (ditshelo tse i di tshwanang di patagantswe ka matlhakore a hangera). Go lekanyetsa ka mmese ka dikelo tse di sa tlwaelegang go akaretsa go bala gore ke dikelo tse kae tsa dikelo tse tlhophilweng di nnang le mmese o lekanang le wa dilwana tse di lekanyeditsweng. Sekao rulara e na le mmese o tshwanang le wa maparego a 9. Barutwana ba lekanyetse dilwana tse di farologaneng ba dirisa tatelano ya dilwana jaaka dikelo tse di sa tlwaelegang . Barutwana ba tshwanetse go rutwa ka nako tsotlhe go kwala diyuniti fa o neela mmese s.k.buka e na le mmese o lekanang le 34 dimabole. Fa barutwana ba sena go lekanyetsa ka yuniti ka nako e se kae.Ba lekanyetse gore ke yuniti tse kae tse di tla nnang le mmese o tshwanang le wa dilwana tse di lekanyeditsweng. Tekanyetso pele o lekanya go botlhokwa, seo se ka dirwa fela fa barutwana ba lekanyeditse ka yuniti eo.	3 Thuto

Ditlhogo	Tlhaloganyo le bokgoni Ditlhokego kwa bokhutlong jwa ngwaga	Tlhaloganyo le bokgoni Tsepamiso go kgweditharo 2	Dintlhatlhaloso dingwe kgotsa thuto ya dintlha-kaediso	Boleele jwa nako (Mo dithutong tsa 1 ura le 24 metsotso)
4.3 **Mmese/boima**	**Tekanyo e tlhomameng** • Go lekanyetsa , le go lekanya le go bapisa , le go rulaganya le go rekota mmese go dirisiwa tekanyetso e seng ya maemo le selekanyo s.k.maparego ditena jalo-jalo • Dirisa puo go bolela ka papiso s. k. Bofefo boima , bofeonnyana , boimana. **Ketapele ya bolekanyo jo bo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sphuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka dikilo-geramo s. k. 2 kilogeramo tsa reise le 1 kilogeramo ya bupi jwa borotho • Dirisa sekale sa bata go lekanya mmese wa bona mo dikilogeramong.	**Tekanyo e sa tlhaomameng** • Go lekanyetsa , le go lekanya le go bapisa , le go rulaganya le go re-kota mmese go dirisiwa tekanyetso e seng ya maemo le selekanyo s.k.maparego ditena jalo-jalo • Dirisa puo go bolela ka papiso s. k. Bofefo boima , bofefonyana , boimana. **Ketapele ya bolekanyo jo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sphuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka dikilogeramo s. k. 2 kilogeramo tsa reise le 1 kilogeramo ya bupi jwa borotho • Dirisa sekale sa bata go lekanya mmese wa bona mo dikilogera-mong • Fa sekale sa kamore ya botlhapelo se le gone, barutwana ba ka lekanyetsa mmese wa bona ka dilkilometara. Se lebeletsweng fela ke gore barutwana ba buise fela dikilogeramo tse di sobokantsweng .	Barutwana ba tshwanetse go rutwa gore ba tle ba itse go lekanyetsa mmese wa dilwana tse di farologaneng yuniti e tshwanang e tshwanetse go dirisiwa.Sekao fa rulae na le mmese /boima jwa 20 diboloko le sekeredi na le boima jwa 20 dimabole, Ga o kgone gore di na le boima jo bo lekanang kgotsa nyaa ke efe e boimana . **Rekota tekanyetso** Le fa tekanyetso e le tiriso ya bokgoni barutwana ba tshwanetse go rekota tekanyetso tsa bona ka nako tsotlhe. **Tiriso ya dikilogeramo** Barutwana ba ka diriswa dikilogeramo ka go dira ka dikorousari di rekisiwang ka dikilogeramo, fa dipalo tsa dilogeramo di kwadilweng mo diphuthelwaneng. Sekao barutwana ba ka bapisa boima jwa diphuthelwana ka diteng tse di farologaneng (jaaka reise, sukiri, boupi, boupi jwa lerole la sesepa se tlhatswang) tse di rekisiwang ka tlhwatlhwa ya 1kg. Ba ka di baya mo selekanong go bona gore lefa bogolo jwa diphuthelwana bo ka farologana kampo di feta, kampo di le bonnye jo bo lekang ka boima . Barutwana ba ka nna ba di newa ka tlhatlhamano ya diphuthelwana tsa dithoto tse di farologaneng d i rulagantswe go tloga go e boimanya go fitlha go e bofefonyana, Mo di latelanang go ya ka boima jo bo boletsweng mo diphuthelwaneng 2kg reise ,1kg sukiri, 5kg boupi 10kg setampo. **Puiso dikale tsa phaposi ya botlhapelo** Fa dikale tsa phaposi ya botlhapelo di le teng, barutwana ba dirisa tse go bala mmese wa bona . Go mefuta ya dimitara tsa mmese: nakopalo le tshupanako ya dinaka. Dikale tsa nakopalo di bonolo go di buisa gonne mmese o kwadilwe ka dipalo. Fa o na le sekale sa nakotshupo tsa phaposi lemoga gore mmese wa tsona o kwadilwe fela ka dikilogeramo tse di feletseng. Dikale dingwe di ka seta gore di bontshe fela dikilogeramo. Fa o sa kgone go seta gape gore e bontshe dikilogeramogo ruta barutwana go se tseye dikarolo dikilogeramo tsia ka nako eo.. Bontsi jwa dikale tsa ditshupanako tsa phaposi ya botlhapelo di na lenomoro ya 10kg ka motlhala o bontshang boemo jwa 5kg. Ka metlha metlhala 1kg ga e a nomorwa. Se ke ka mokgwa metlhala ya le dipalo di le ka teng mo ruleng. A barutwana ba simolole go bala ba bona gore go dikgato tse 10 pele go letshwao la 10kg, gore kgato e nngwe le nngwe e emetse 1kilogeramo , motlhalo o moleele o emetse 5kg. Barutwana ba itse go buisa dikale sa selekanyo sa phaposi ya botlhapelo le ditshwantsho tsa dikale tsa phaposi ya botlhapelo. Go bonolo go buisa mmese wa setshwantsho sa sekale sa phaposi ya botlhapelo go na le sekale sa boruri.	3 Thuto

Ditlhogo	Tlhaloganyo le bokgoni Ditlhokego kwa bokhutlong jwa ngwaga	Tlhaloganyo le bokgoni Tsepamiso go kgweditharo 2	Dintlhatlhaloso dingwe kgotsa thuto ya dintlha-kaediso	Boleele jwa nako (Mo dithutong tsa 1 ura le 24 metsotso)
4.3 **Mmese/boima**	**Tekanyo e tlhomameng** • Go lekanyetsa , le go lekanya le go bapisa , le go rulaganya le go rekota mmese go dirisiwa tekanyetso e seng ya maemo le selekanyo s.k.maparego ditena jalo-jalo • Dirisa puo go bolela ka papiso s. k. Bofefo boima , bofeonnyana , boimana. **Ketapele ya bolekanyo jo bo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sphuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka dikilo-geramo s. k. 2 kilogeramo tsa reise le 1 kilogeramo ya bupi jwa borotho • Dirisa sekale sa bata go lekanya mmese wa bona mo dikilogeramong.	**Tekanyo e sa tlhaomameng** • Go lekanyetsa , le go lekanya le go bapisa , le go rulaganya le go re-kota mmese go dirisiwa tekanyetso e seng ya maemo le selekanyo s.k.maparego ditena jalo-jalo • Dirisa puo go bolela ka papiso s. k. Bofefo boima , bofefonyana , boimana. **Ketapele ya bolekanyo jo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sphuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka dikilogeramo s. k. 2 kilogeramo tsa reise le 1 kilogeramo ya bupi jwa borotho • Dirisa sekale sa bata go lekanya mmese wa bona mo dikilogera-mong • Fa sekale sa kamore ya botlhapelo se le gone, barutwana ba ka lekanyetsa mmese wa bona ka dilkilometara. Se lebeletsweng fela ke gore barutwana ba buise fela dikilogeramo tse di sobokantsweng .	**Tekano e rekotiwang** Le fa tekanyetso e se bokgoni jwa tiriso , morutwana o tshwanetsa go rekota ditekanyetso tsa bona ka nako tsotlhe. . **Tekanyyetso ya mmese jaaka sediriso go rarabolola mararaane le dibalaledi** Ka nako ya nako e reboletsweng go dipalo, ditiriso le kamano le barutwana go rarabolola mararaane a dirisang tiriso ya tekanyetso e sa tlwaelegang ya mmese. • Tekanyetso e sa tlwaelegang ya mmese **Sekao:** Sephemodi se na le mmese wa 11dimabole. Lebokoso la dikerayone le na le mmese wa 8 dimabole .dimabole tse tsotlhe di na le mmese wa dikilogeramo o kae? • **Sekao:** Pule o rekile 12 kg ya bupi jwa bogobe , 5 kg ya sukiri le 2kg ya reise. Theko ya gagwe yotlhe e na le boima jo kae ?. Elatlhoko tlhomagano ya dipalo tse di maleba go kgweditharo.	3 Thuto

Ditlhogo	Tlhaloganyo le bokgoni Ditlhokego kwa bokhutlong jwa ngwaga	Tlhaloganyo le bokgoni Tsepamiso go kgweditharo 2	Dintlhatlhaloso dingwe kgotsa thuto ya dintlha-kaediso	Boleele jwa nako (Mo dithutong tsa 1 ura le 24 metsotso)
4.4 **Mothamo/ bolumu**	**Tekanyetso e sa tlhomamang** • Lekanyetsa , lekanya , bapisa le go rulaganya mothamo wa ditshelo (tse eleng gore palo ya ditshelo di kgonag go di tshegetsa fa di tladitswe) Ka go dirisa tekanyetso ya maemo a sa tlwaelegang s. k. Dintsho le dikopi . • Thadisa mothamo wa dit-shelo go bala le go bolela gore go tsaya diyuniti dikelo tse di sa tlwael-egang tse kae go tlatsa ditshelo s. k. Lebotlolele na le mothamo wa dikopi tse nne. **Ketisopele ya tekanyetso e tlhomameng** • Lekanyetsa , lekanya , bapisa le go rulaganya mothamo wa dilwana ka go lekanyetsa ka dilitara • Bapisa , rulaganya le go rekota mothamo wa sephuthelwana sa dilwana jaaka o kwadilwe ka 1lita-ra s. k. 2-Dilitara ya maswi , 1 litara ya senotsididi o, 5 litara ya pente	Diresepe tse latelang, tsenyeletso ya go baka, ke tiriso ya botlhokwa e barutwana ba ka e dirisang go lekanyetsa . Tlhopha diresepe tse metswako di neelwa ka dikopi, teeseponi kgotsa dikelo tse di sa tlwaelegang. Mo ngwageng o go ile ga tshitsingwa gore barutwana ba tsepame: • go godisa puo go bua ka methamo/dibolumu tse di farologaneng . • go bapisa mothamo/bolumu mo ditshelo tse pedi tse tshwanang , • go bapisa mothamo/bolumu mo ditshelong tse pedi tse di sa tshwaneng bogolo mo bophara le bosesane jwa ditshelo. • Go lekanyetsa methamo/dibolumu le boteng jwa didiriswa le diyuniti . Ka nako ya nako ya tiro e ikemtseng barutwana ba ka lekanyetsa , lekanya , rulaganya le go rekota methamo/bolumu le boteng ka didiriswa tse eseng tsa maemo a a tlhomamameng le diyuniti tse di sa tlwaelegang ka boteng .Go apaya le go baka ke tiriso e botlhokwa e barutwana ba ka dirisang go lekanyetsa boteng. Tlhopha diresepe tse ditekanyetso tse di neetsweng ka dikopi , teeseponi le diyuniti tse di sa tlhomamang . **Lekanyetsa boteng jaaka tiriso ya go rarabolola mararaane le dibalaledi** Boleele jwa nako e reboletsweng dipalo, tiriso ,kamano barutwana ba rarabolola mararaane a dirisang tiriso ya tekanyetso ya boteng jwa mothamo/bolumu e sa s.k.Koko o dirisa 2-Dikopi tsa maswi go dira puthing. Fa o boeletsa resepe ,o tla tlhoka maswi a kae? Ela-tlhoko tlhatlhamano e maleba go kgweditharo, le yone tlhatlhamano ya mararaane a farologaneng .	

MOPHATO YA 2 KGWEDI-THARO YA 2 5. TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 1**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Nako** (Mo paka-thutong ya ura le metsotso e le 24)
5.4 **Kgobokanya le go rualganya tshedimosetso**	**Kgobokanya le go rualganya tshedimosetso** • Kgobokanya tshedimo-setso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana • Rulaganya tshedimosetso e e nyalanang			
5.5 **Tshwanthsnya tshedimosetso**	**Tshwanthsnya tshedimosetso** • Tshwantshanya tshedi-mosetso mo kerafong e e dirisediwang ditshwantsho			
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranola** • Araba dipotso ka ga tshedimosetso ya kerafo e e dirisediwang ditshw-antsho.	Sekaseka tshedimosetso go tswa mo ditshwantshisong tse di neetsweng	Barutwana ba tshwanetse go nna le maitemogelo mo sekeleng yotlhe ya tshedimosetso mo kgwedi-tharong 1, ba ka nna ba tsepamisediwa mo go sekasekeng ditshwantshiso tse ba di neilweng. I. Go atlegenedisitswe gore mo kgwedi-tharo ya 2 barutwana ba sekaseke (arabe dipotso ka ga)bonnye temana e le nngwe Barutwana ba araba dipotso tse o di botsang ka ga kerafo e e dirisediwang ditshwantsho - ” Ke lenaneo lefe la thelebeshene e e itsegeng thata mo phaposing ya rona” - “Ke leaneo lefe e e ratiwang ke barutwana ba le mmalwa mo .”A barut-wana ba bantsi ba rata.....kgotsa.....?” • “ Ke barutwana ba le ba kae ba bantsi ba ba itlhophelang..... go.....?	1 lesson

Mophato 2 Kgweditharo 3 1. DIPALO, MATSHWAO LE DIKGOLAGANO			
Setlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2**	**Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta**
1.1 **Bala didiriswa**	**Balela didiriswa tsa sekgongwa** Lekanyetsa o balele go fitlha go 200 lbogolo 200 ka letsatsi didiriswa tse di kgonnwang. Togamano ya go dira ditlhopha e a rotloetsaThe strategy of grouping is encouraged.	Balela bonnye 180 ka letsatsi didiriswa tse di kgonwang. Neela phopholetso e e dumelesegang ya palo ya didiriswa tse di ka netefatswang ka go bala	**Ke eng se se farologaneng mo kgweditharo 2?** Mo kgweditharo e, tlhatlhamano ya dipalo e okeditsegile barutwana ba balela didiriswa tse 180. Go bala didiriswa mo kgweditharong e tswelela go tshegetsa: • Dikgono tsa go bala di botlhokwa go tlhaloganya boleng; • Go balela kwa godimo; • Go bua ka maina a dinomorethe; • Go lemoga matshwao a dinomore; le • Dikgono tsa palelo di siametse go balela. Tsepamo e santse e le mo baling ka setlhopa go dirisiwa dithulaganyo tse di farologaneng kgotsa didiriswa tse di kgobokantsweng pele. Go botlhokwa go dirisa dingwe tsa didiriswa tse di tshwanang fa go diriwa boleng felo. Sekao: Barutwana ba dirisa letlase la semika sa kgapetla di le lesome (10) go bala ka bolesome o bontsha setlhopha sa lesome (10). Dipotso tse dibotlhokwa tse di botswang morutwana fa go balela didiriswa ke tse: • O itse jang gore o badile nomore ele? • O ka netefatsa jang karabo ya gago?

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.2 **Balela kwa pele le kwa morago**	Balela kwa pele le kwa morago: • Ka Bonngwe , go tswa go palo nngwe le e nngwe magareng a 0 le 200 • Ka bolesome, go tswa go nngwe le e nngwe magareng a 0 le 200 • Ka botlhano, go tswa go nngwe le e nngwe magareng a 0 le 200 • Ka bopedi go tswa go nngwe ya katiso ya 2 magareng a 0 le 200 • Ka botharo go tswa go nngwe ya katiso ya 3 magareng a 0 le 200 • Ka bonne gotswa go nngwe ya katiso f 4 magareng 0 le 200	Balela kwa pele le kwa morago: • Ka Bonngwe , go tswa go palo nngwe le e nngwe magareng a 0 le 180 • Ka bolesome, go tswa go nngwe le e nngwe magareng a 0 le 180 • Ka botlhano, go tswa go nngwe le e nngwe magareng a 0 le 180 • Ka bopedi go tswa go nngwe ya katiso ya 2 magareng a 0 le 180 • Ka botharo go tswa go nngwe ya katiso ya 3 magareng a 0 le 180 • Ka bonne gotswa go nngwe ya katiso f 4 magareng 0 le 180	**Ke eng se se farologaneng le sa kgwedithoro 3?** Mo kgwedithoro 3 palelo ya tlhatlhamano ya dipalo e oketsegile \ godile go simolola go 150 go fitlha go 180. F o dira go bala ka poeletso kgotsa motlotlo wa palelo go botlhokwa go tsepamisa theetso ya barutwaana mo dinomoreng tse ba di balang. Sekao, botsa: fa re bala ka bopedi go simolola go 120go fitlha go 140 a re tla balela nomore 121? Greng re sa e bale? Go sa ntse go le botlhokwa gore molapalo le bo kiriti ya lekgolo e diriswe go bona gore mokgwa o ba o buang o gokaganya le le tsamaiso le sebopego sa. Barutwana ba tshwanetse go nna le kiriti ya dinomore go simolola 100 go fitlha go 200 go e dirisa go supa le go balela. Lebelela dintlha tsa kgwedithoro 2.

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
KEMEDI YA PAOLTLALO			
1.3 **Letshwao palo le leina palo**	**Tlhaola, lemoga le go bala dipalo** • Tlhaola le go bala matshwao a palo 0 - 200 • Kwalal matshwaopalo 0 - 200 • Tlhaola lemoga le go bala 0 -100 • Kwalal mainapalo 0 -100	**Itse le go bala dipalo** • Tlhaola le go bala mat-shwao a palo 0 - 180 • Kwalal matshwaopalo 0-180 • Tlhaola lemoga le go bala 0-75 • Kwalal mainapalo 0-75	**Ke eng se se farologanene go tswa kgweditharo 2?** Tlhatlhamano ya dinomore go: • tlhaola, go bala le go kwala letshwao la nomore le oketsega go fitlha go; le • tlhaola, go bala le go kwala go fitlha go 75. Barutwa ba tshwaanetse go kgona go tlhaola dinomore ba simolole go tlhalosa pharologanyo mo mafokong a bona. Sekao:Ba tshwanetse go lebelela dinomore tsa dikarata tse di latelang ba kgone go bua pharologanyo gareng ga nngwe ya dinomore tse pedi: **16** **11** **16** **13** **16** Le dintlha go kgweditharo 2

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.4 **Tlhalosa, tshwantsha le go rulaganya dipalo**	**Tlhalosa go tshwantsha le go rulaganya dipalo tsa go fitlha ka 99** • **Tlhalosa le tshwantsha dipalotlalo tse di futlhang go** 99 go simolola go ennye go , le e kgolo go e nnye • **Tlhalosa le go rulaganya palotlalo go fitlha go** 99 o dirisa e nnye go, e kgolo go, kgolo goe nnye go le e lekana le. **Dirisa bolengkemedi tatelano go bontsha thulaganyo, lefelo kgotsa maemo** Maemo a didiriswa mo moleng go tswa go ya ntlha go fitlha ya lesome, Kgotsa ya ntlha go fitlha ya bofelo . sekao . ntlha, bobedi, boraro… somaamabedi	**Tlhalosa go tshwantsha le go rulaganya dipalo tsa go fitlha ka 75** • Tlhalosa le tshwantsha dipalotlalo go simo-lola go e nnye go , le e kgolo go Bapisa palotlalo o dirisa o dirisa e nnye go, e kgolo go, kgolo goe nnye go le e lekana le. **Dirisa bolengkemedi tatelano go bontsha thulaganyo, lefelo kgotsa maemo** Maemo a didiriswa mo moleng go tswa go ya ntlha go fitlha go ya someamabedi kgotsa ntlhago fitlha go ya bofelo .sekao. ntlhat, bobedi, boraro … bolesome.	**Ke eng se se farologaneng mo kgwedithato ya 2?** **Pharologanyo ke eng mo kgweditharong ya 2** Mo kgweditharong e barutwana ba tshwanetse go rulaganya le go tshwantsha dipalo go fitlha go 75. Go fitlha fa barutwana ba ntse ba tshwantshanya le go rulaganya dinomore gore go godisa maikutlo go bogolo jwa dinomore mo kamanong ya bona. Dipotsa mo dinomoreng di tshwanetswe go tlhophiwa ka kelotlhoko go thusa barutwana go godisa thulaganyo e e kwa godimo ya go dikgono tsa go nagana ka boleng jwa dinomore. Barutwana ba tlhoka kgwetlho ke mofuta wa dipotso tse di botswang. Thusa barutwa le go godisa puo go tlhalosa dikakanyo tsa bona. Sekao sa dipotso di ka akaretsa: • Neela dinomore tse di magareng ga 0 le 60. A dinomore di gaufi le 50 kgotsa 60? Tlhalosa karabo ya gago o dirisa mola palo. • Barutwana ba tshwanetse go rutwa go nagana ka go rulaganya ga dinimore. Barutwana ba tshwanetse go tlhalosa gore go reng 15 e le nnye go 50. Ditlhaloso di ka tshegetswa ka go dirisa didiriswa tsa popota. Mo bofelong jwa kgweditharo e, ba tshwanetse go, sekao: • Itse dinomore tsa hitši tse dinnye go know hich 50, kgolo go 50; le • Kgona go bontsha boemo jwa dinomore tse tsotlhe ka bosomeamararo; masomeamenejalo, jalo,o dirisa kiriki ya dinomore. Go na le gore o nne o ntse o neela barutwana dinomore polelo go feleletsa, nako nngwe ba botse go dira go dira dipolelo tsa bona, go bontsha bogolo jwa reletifi jwa dinomore. Sekao: Dira dipolelo tse nnete: • □ ke 1 bontsi go feta□ • □ ke 1 bonnye go feta□ • □ ke 10 bontsi go feta□ • □ ke 10 bonnye go feta□ Lebelela le dintlha go kgweditharo 2.

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.5 **Mosola wa felo**	**Lemoga boleng felo ba bonnye palo pedi go fitlha go 99** • Itse gore palo nngwe le nngwe e emetse eng. • Tlhamolola palo-pedi go fitlha go 99 go katiso y abo lesome le bonngwe (TU) • Lemoga le go leelamosola wa palo nngwe le nngwe	**Lemoga mosola wa palopedi ya bonnye 2-palo nomore go 75** • Itse gore palo nngwe le nngwe e emetse eng. • Tlhamolola palo-pedi go fitlha go 99 go katiso y abo lesome le bonngwe (TU) • Lemoga le go leelamo-sola wa palo nngwe le nngwe	**Pharologanyo ke eng mo kgweditharong ya 2 ?** Mo kwgeditharo e barutwana ba tswelela ka kgodiso ya go tlhaloganya ya mosola wa felo go fitlha 75. Mo kgweditharo e barutwana ba tswelelela go: • Go balela le go dira ditlhopha go bontsa bolesome le bongwe ka ditsela tse di farologaneng; • Balela ditlhopha tsa pelel \ dibopego tsa pele; • Dirisa dikarata tsa kemopalo go bontsha dinomore tsa ditlhopha le go balela ;le • Bontsha dithulaganyo tse di farologaneng tsa dinomore.Sekao: 35 go tlogela bongwe 35 go tlogela bongwe, 3 lesometse 5 bonngwe ba ba tlhatlhamolotsweng leditlhopha tse pedi tsa bo lesomelebonngwe b aba tlhatlhamolotsweng ba ba somelebotlhano15. Tiro e efa godimo e ka dirwa ka setlhopha se se tsepameng mo nakong e ya bong barutwa ba ka rekota tse di latelang: 68 = 6 ditlhopha di le masome le robedi a tlhatlhamolotse 68 = 60 le 8 Se se rotloetswa ke go diriswa dikarata tsa Flard kgotsa bdikarata tsa boleng felo. Barutwaa ba tshwanetse go kgona go araba dipotso le melawana jaaka: • Ke nomore efe e e tshwanang le 50 le 7? • Mpontshe 75 o dirisa dikarata tsa boleng felo. • Mpontshe 75 mo godimo ga kgatlatalama.. • Mpontshe 75 o dirisa letlase la diboloko di le lesome. • Mpontshe 75 o dirisapopegotaese e e sa lokisiwang. • Mpontshe 75 o dirisa mogala wa dibaga. • Balela go tswa go 70 matlhokwana a molelo o dirisa ditlhopha tsa bolesome.Ke ditlhopha tse kae tsa bolesome tse o di amogetseng? Go rekota ka mo bukatiro phaposing le bukatiro e ne etla tswelela mo nakong ya bong
GO RARABOLOLA MATHATA MO TIRISONG			

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.6 **Ditogamano tsa go rarabolola dipaloditogamano**	Dirisa ditogamano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Ditshwantsho kgotsa didiriswa tsa kgongwang seekao. dibadisi • Go aga le go thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo	Dirisa ditogamano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo : • Ditshwantsho kgotsa didiriswa tsa kgong-wang seekao. dibadisi • Go aga le go thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo	Barutwana ba solofetswe go rarabolola dipalofoko ba dirisa ditogamano tse di latelang: • Ditshwantsho kgotsa didiriswa tsa kgongwang seekao. dibadisi • Go aga le go thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo Bona dintlha tsa kgwedithoro 2.
1.7 **Tlhakanya le go ntsha**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 99.	arabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 75.	**Ke eng se se farologaneng go tswa go kgwedithoro 2?** Barutwana ba tswelela go dira ka mofuta wa tharabololo ya mafoko a a latelang a a thadisitsweng mo kgaolong 2 fela tlhatlhamano ya dipalo e okeditswe go 75. Lebelela dintlha go kgwedithoro 2.
1.8 **Poeletso ya tlhakanyo e e isang kwa katisong**	arabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go katiso ka dikarabo tse di fitlhang go 50.	arabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go katiso ka dikarabo tse di fitlhang go 40.	**Ke eng se se farologaneng go tswa go kgwedithoro 2?** Barutwana ba tswelela go dira ka mofuta wa tharabololo ya mafoko a a latelang a a thadisitsweng mo kgaolong 2 fela tlhatlhamano ya dipalo e okeditswe go 40. Lebelela dintlha go kgwedithoro 2
1.9 **Kgobokanyo le kgaoganyo e e isang kwa karoganyong**	Rarabolola dipalo tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotlalo tse di fitlhang ko go 99 ka dikarabo tse di akaretsang disaala.	Rarabolola dipalo tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotlalo tse di fitlhang ko go 75 ka dikarabo tse di akaretsang disaala.	Mo kgwedithorong e barutwana ba tswelela pele go dirisa ditshwantsho le kgongwana ya didiriswa go bontsha tharabolo ya bona. Nomore ya polelo e tshwanetse go diriswa. Barutwana bat la poeletso ya ntsha go bontsha gore ba fitlhile jang mo karabong. Lebelela dintlha go kgwedithoro 2

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.10 **Karoganyo e e isang go palophatlo.**	Rarabolola le go tlhalosa dithaaraano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekano go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang, sekao. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ jalo, jalo.	Rarabolola le go tlhalosa dithaaraano tse di mo tirisong tsa dipalo tse di akaretsang go aroganya ka tekano go go isang kwa ditharabololong tse di akaretsang tse di kopaneng le tse di sa kopanang, sekao $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$ jalo, jalo.	Tsepamo ya bothata mafoko palophatlo mo kgwditharo e atswelela go dumelela barutwa go: • Go aroganya le go kgobokanya dilo ka go lekana; • Tlhalosadikarolo tsa palophatlo; • Fitlhela palophatlo ya didiriswa ka botlalo; • Lemoga gore palophatlo ke karolo ya botlalo; le • Kwala palophatlo jaaka nnge tharong. Mokgwditharong e, barutwana ba tlhalosa boraro le botlhano.Go botlhokwa gore barutwana ba itsisiwe go di palophatlo go na le halofo ya nngwe le kotare ya nngwe. **Dikao tsa mathata a a ka diriwang mo kgwditharo e e**: • Ditsala di le thataro di aroganya dikotana tsa dimonamone di le supa (7) ka go lekalekana. Thala setswhantsho go bontsha karabo ya gago. Tshwantshanya karabo ya gago le ele ya tsala. • Ditsala di le robedi ba aroganya dikotana tsa dimonamone di le robongwe ka go lekalekana. Thala setshantsho go bontsha karabo ya gago. Tshwantshanya karabo ya gago le ele ya tsala. • Kotara e le nngwe1 Lebelela dintlha go kgwditharo 2
1.11 **Madi**	• Lemoga le go tlhaola madi a tshipi a Aferika Borwa (5c, 10c, 20c, 50c, R1, R2, R5, le madi a dipampiri. R10, R20, R50 • Rarabolola dipalo tsa madi tse di akaretsang palogotlhe le madi a po-elo R99 le disentego fitlha go 90c	• Lemoga le go tlhaola madi a tshipi a Aferika Borwa (5c, 10c, 20c, 50c, R1, R2, R5,. le madi a dipampiri R10, R20, R50 • Solve money problems involving totals and change in cents up to 75c kgotsa diranta go R75	**Dikao tsa mathata a a ka diriwang:** • Barutwana ba le 35 le morutabana a le mongwe ba tsaya loeto la sekolo go ya kwa go rasefe wa tlhago. Sekolo se duela R1.20 go morutwana mongwe le mongwe go tse rasefe wa tlhago. Go tshwanetswe go duelwa bokae? Ma Hewu o rekela lelapa la gagwe marotho (dinkgwe) a le pedi(2) tsatsi lengwe le lengwe. Tlhotlhwa ya senkgwe le sengwe ke R4, 99. O dirisitse madi a makae mo matsatsing a matlhano 5? Lebelela dintlha go kgwditharo 2.
TIRISO YA DI PALELO E E LOKOLOGILENG			

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.12 **Ditogamano** **(Mekgwa ya ditogamano)**	Dirisa ditogamano tse di latelang fa o dira palelo : • Ditshwantsho kgotsa kgotsa didiriswa tsa e.g. dibadisi • Go aga le go kgaoganya dinomore • Koketsobedi le halofo • Molapalo	Dirisa ditogamano tse di latelang fa o dira palelo : • Ditshwantsho kgotsa kgotsa didiriswa tsa e.g. dibadisi • Go aga le go kgaog-anya dinomore • Koketsobedi le halofo • Molapalo	Go solofetswe gore barutwana ba rarabolole tiriso ya palelo ba lokologile ba dirisa ditogamano tse di latelang: • Go aga le go kgaoganya dinomore • Koketsobedi le halofo • Molapalo *Lebelela dintlha go kgwedithoro 2*
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatisetse palotlhamo 20	• Tlhakanya go fitlha go 75 • Ntsha go tswa go 75 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatisetse palotlhamo 20	Lebelela dintlha go kgwedithoro 2 Barutwa ba tswelela go kgaoganya dinomore ba boelwa ke boitshepi mo togamano ya bona ya go rekota.. Kgonego ya tsela go bbontsha tlhakanya le ntshapalelo: **Go roba dinomore dikarolo tse dinnye go nolofatsa palelo.** **Go dirisa kitso ya boleng felo go roba dinomore go masome le bonngwe.** Go tlhakanya palo ya dinomore tse pedi ka go roba dinomore. 33 + 36 = □ 33 + 36 = (30 + 3) + (30 + 6) = (30 + 30) + (3 + 6) = 60 + 9 = 69 **Go tlhakanya ka go roba nomore e le nngwe.** 33 + 36 = □ 33 + (30 + 6) 33 + 30 □ 63 + 6 = 69

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatisetse palotlhamo 20	• Tlhakanya go fitlha go 75 • Ntsha go tswa go 75 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatisetse palotlhamo 20	Barutwana b aka roba dinomora ka mokgwa o o ka laolwang ke bona. Se se raya gore bat la di dira ka mekgwa e e farologaneng. 33 + 36 = □ 33 + (10 + 10 + 10 + 6) 33 + 10 □ 43 + 10 □ 53 + 10 □ 63 + 6 = 69 **Ntsha** • Go roba dinomore ka bobedi 75 – 54 = □ 75 – 54 = (70 + 7) – (50 + 4) = (70 – 50) + (7 -4) = 20 + 3 = 23 • Go ntsha ka go roba nomore e le nngwe 75 – 54 = □ 75 – (50 + 4) 75 – 50 □ 27 - 4 = 23 Solofela gore barutwana bangwe b aka roba dinomore ka mekgwa e e farologaneng go nolofatsa: 75 – 54 = □ 75 – (20 + 20 + 10 + 6) 75 – 20 □ 57 -20 □ 37 - 10 = 27 - 4 = 23 **O dirisa karogano gabedi go roba dinomore .** 59 + 12 59 + (6 + 6) 59 + 6 □ 65 + 6 = 71 **O dira le go diragatsa kitso jaaka togamano** Togamano e e bontshitsweng fat lase e letlelela a barutwanan go tisa balela ya bona le bokao jwa dinomore.Go katisa togamano e e fa tlase e tla rotloetsa barutwana go tlhagisa mo godimo ga botsalano gare ga dinomore le go ruta barutwana gora ba ka dirisa le go dirafatsa kotso ya bona go ba thusa go bala.

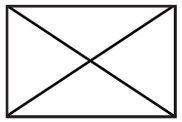
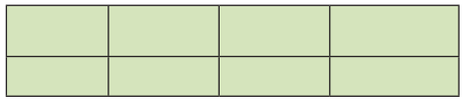
Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.13 **Go tlhakanya le go ntsha**	• Tlhakanya go fitlha go 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatisetse palotlhamo 20	• Tlhakanya go fitlha go 75 • Ntsha go tswa go 75 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatisetse palotlhamo 20	**Go bala go le go balela kwa morago.** 68 – 59 = □ Go balela kwa godimo ka bonngwe go simolola go 59 ke togamano e e maleba gonne dinomore di atamelane thata. **Lemoga dibedi tse di gautshwane** 34 + 35 tlhalosa gore ke dibedi 34 tlhakanya 1 kgotsa dibedi 35 ntsha 1 34 + 34 + 1 Barutwana ba kanna ba bega togamano ya bona ba dirisa togamano ya bona ba dirisa metsu: 34 + (30 + 4) + 1 34 + 30 □ 64 + 4 □ 68 + 1 = 69 **Fetola dipalo go atisa ka lesome o tlosa kgotsa tlhakanya bonngwe** Bala godimo kgotsa tlase gaufi le lesome le C 58 + 19 = □ Mo barutwana ba tlhoka go iplolela gore ba na le ditlhopho tse pedi. Fetola 58 kgotsa 19 gaufi le katiso ya to lesome (10). Ba tshwanetse go itlhophela. Tlhakanyo e ka kwadiwa jaana: 58 + 19 = 58 + 20 - 1 58 + 20 □ 78 - 1 = 77 Barutwana bangwe b aka roba 20go 2 setlhopha 10 go bala ka nepagaloto.

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.14 **Poeletso ya tlhakanyo e e isang kwa go atiseng**	• Katiso ya dipalo 1 go 10 ka 1, 2, 5, 3 le 4 • Dirisa matshwao a a maleba (+, x, =, □)	• Katiso ka dipalo 1 go10 by 2, 5, 4 • Dirisa matshwao a a maleba (+, x, =, □)	**Ke eng se se farologaneng mo kgweditharo 2?** Mo kgweditharong ya boraro, barutwana ba tswelela ka go ikatisa go tlhaloganya ga bona ka katiso le go dirisa keriti la ntlha. Ba tswelela go: • Go kwala ka mokgwa o o latelang: 1 setlhopha sa 2 ke 2 Kgotsa 1 atisa ka 2 ke 2 kgotsa 1 x 2 = 2 2 setlhopha sa 2 ke 4 Kgotsa 2 atisa ka 2 ke 4 kgotsa 2 x 2 = 4 3 setlhopha sa 2 ke 6 Kgotsa 3 atisa ka 2 ke 6 kgotsa 3 x 2 = 6 Mo kgwedi tharong e barutwana ba simolola ka go atisa ka 4. Go atisa ka 2 le 5 ikatiso e a tswelelae tswelela. Katiso ya ditshwantsho go atisa e tshwanetse go tswelela go neelwa le bontsi jwa go kwala bo tshanetse go dirwa ka mo bukeng ya tiro. Go tlhaloganya go ka nna ga tsenyeletswa le ka mo gare ga buka ya tiro Understanding. Molapalo, papetlakaelo le lenanekatisole ka dirisiwa go aga kutlisiso ya kgato. Barutwana ba tshwanetse go neelwa dipalo tsa dipolelo go feleletsa. Jaaka: 6 x 2 = □ 5 x 7 = □ 4 x 6 = □ Barutwana ba tshwanetse go dirisa keriti atisa go batla dikarabo. Se se tla ba thusa go buisa le go utlwisisa lenanekatiso le go bokgoni ba dintlha tsa go atisa.

×	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
4	4	8	12	14	20	24	28	32	26	40
5	5	10	15	20	25	30	35	40	45	50

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.16 **Dipalo tsa tlhogo**	**Kgopolopalo: Tekanyo 99** • Thulaganyo ya setlhopha sa dipalo tse di tlhophilweng • Faroganya dipalo go fitlha go 99 le o bolele gore ke gore 1,2,3,4,5 le 10 kgolo kgotsa nnye **Kabonako gopola:** • Go tlhakanya le go dintlha tsa go ntsha mo go 20 • Tlhakanya le go ntsha go atisa ka 10 go tswa go 0 go fitlha go 100 **Ditogamano tsa balela** Dirisa ditogamano tsa go balela go tlhakanya le go ntsha ka bokgoni: • Baa palo kgolo pele gore o balelepele kgotsa go balela morago • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa kamano magareng a go tlhakanya le go ntsha.	**Kgopolopalo: Tekanyo 75** • Thulaganyo ya setlhopha sa dipalo tse di tlhophilweng • Faroganya dipalo go fitlha go 99 le o bolele gore ke gore 1,2,3,4,5 le 10 kgolo kgotsa nnye : • Go tlhakanya le go dintlha tsa go ntsha mo go 15 • Tlhakanya le go ntsha go atisa ka 10 go tswa go 0 go fitlha go 50 **Ditogamano tsa tlhaloganyo** Dirisa ditogamaano tsa go balela, go tlhakanya le go ntsha ka nonofo • Baa palo kgolo pele gore o balelepele kgotsa go balela morago • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa kamano magareng a go tlhakanya le go ntsha	**Dikao tsa dipotso tse di ka botsiwang:** **Kgopolopalo:** **Paloina le letshwao** Tshwara karata kgotsa kwala leina la palo. Tlhopha morutwana go kwala palo e e nylalanyang. **Bontsi kgotsa bonnye** Ke eng se? • 1 e nnye ka 45 • 1 e ntsi ka 69 • 5 e nnye ka 36 • 10 e ntsi ka 30 Ke lekwalo le lefe la botlhano la alefabete? Ke kgwedi efe ya borobongwe ya ngwaga? **Thulaganyo le tshwantshanyo** Ke efe e ntsi: 21 le171? Neela nomore magareng ga 154 le 159. **Dintlha tsa go tlhakanya le go tlosa:** • Itse ka pelo go tlhakanya le go ntsha tlamo ya dipalo go fitlha ka 20 □ + △ = 20 □ + △ = 16 18 = □ - △ Tlhakanya le go ntsha dintlha go dipalo tse tsotlhe go fitlha go 15. Sekao 1 + 14 = 15 14 + 1 = 15 2 + 13 = 12 13 + 2 = 15 3 + 12 = 15 3 + 12 = 15 15 – 4 = 11 15 – 11 = 4 15 – 5 = 10 15 – 10 = 5 15 – 6 = 9 15 – 9 = 6

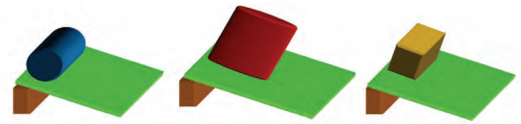
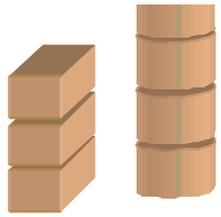
Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.16 **Dipalo tsa tlhogo**	**Kgopolopalo: Tekanyo 99** • Thulaganyo ya setlhopha sa dipalo tse di tlhophilweng • Faroganya dipalo go fitlha go 99 le o bolele gore ke gore 1,2,3,4,5 le 10 kgolo kgotsa nnye **Kabonako gopola:** • Go tlhakanya le go dintlha tsa go ntsha mo go 20 • Tlhakanya le go ntsha go atisa ka 10 go tswa go 0 go fitlha go 100 **Ditogamano tsa balela** Dirisa ditogamano tsa go balela go tlhakanya le go ntsha ka bokgoni: • Baa palo kgolo pele gore o balelepele kgotsa go balela morago • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa kamano magareng a go tlhakanya le go ntsha.	**Kgopolopalo: Tekanyo 75** • Thulaganyo ya setlhopha sa dipalo tse di tlhophilweng • Faroganya dipalo go fitlha go 99 le o bolele gore ke gore 1,2,3,4,5 le 10 kgolo kgotsa nnye : • Go tlhakanya le go dintlha tsa go ntsha mo go 15 • Tlhakanya le go ntsha go atisa ka 10 go tswa go 0 go fitlha go 50 **Ditogamano tsa tlhaloganyo** Use calculation strategies to add and subtract efficiently: • Baa palo kgolo pele gore o balelepele kgotsa go balela morago • Molapalo • Koketsopedi le halofo • Go aga le go aroganya • Dirisa kamano magareng a go tlhakanya le go ntsha	Kabonako gopola tlhakanya gabedi go fitlha go 15. Se se tshwanetse go akaretsa tsamaisano ya dintlha tsa gontsha. • 1 + 1 = 2 • 2 + 2 = 4 • 3 + 3 = 6 • 4 + 4 = 8 • 5 + 5 = 10 • 6 + 6 = 12 • 7 + 7 + 14 Mpontshe dipalo go tlhakantsha go dira 15 (Go kwala kgotsa o dirisa bolengkemedi kgotsa karata e e dirisetswang boleng jwa dipalo) • 8 • 2 • 9 • 11 • 3 Mpotse palo e e mo moleng ge …. E tlositswe go 15 (Go kwala kgotsa o dirisa bolengkemedi kgotsa karata e e dirisetswang boleng jwa dinomore) • 5 • 13 • 0 **Ditogamaano tsa palelo:** Leba dintlha go KGWEDITHARO 2.

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha dingwe tsa tshedimosetso kgotsa tsa go ruta
1.17 **Palophatlo**	• Dirisa le maina a dipalophatlo mo tirisong e e tlwaelegileng o tsenyeletsa halofo, kotare, seraro le setlhano. • Lemoga dipalophatlo mo mokgweng wa ditshwantsho. • Kwala palophatlo jaana halofo, 2 seraro	• Dirisa le maina a dipalophatlo mo tirisong e e tlwaelegileng o tsenyeletsa halofo, kotare, seraro le setlhano. • Lemoga dipalophatlo mo mokgweng wa ditshwantsho. • Kwala palophatlo jaana halofo, 2 seraro	**Ke eng se se farologaneng mo kgweditharo 2?** Mo kgweditharo theetso ya barutwana e tsepame mo goreng leina la palophatlo e golagane go dinomore tsa dikarolo tse di lekanang gore palotlalo e arogantswe. Mefuta ya tlhagiso e ka diriswa go agakwitlisiso e nngwe. Sekao:  **Mefuta e e lateng ya dipotso e ka botsisiwa:** Ke dikarolo di le kae mo tse di lekanang? Karolo nngwe le nngwe re e bitsa eng? Ke dikarolo di le kae mot se di lekanang? Karolonngwe le nngwe re e bitsa eng?  Ke dikarolo di le kae mot se di lekanang? Karolonngwe le nngwe re e bitsa eng? Mefuta e ya ditiro e rotloetsa: • Go itse gore dipaloohatlo ke dikarolo tse di lekanang; • Lemoga goredikarolo tsa palophatlo; le • Kwala dikarolo tsa palophatlo. **Go kwala** Ga re eteletse barutwana pele go kwala matshwao a dipalophatlo. Barutwana ba ithuta go tshwaya palophatlo kotara e le nngwe, botlhano bo le bongwe.

Mophato 2 Kgweditharo3 2-Dipaterone,Tiriso le Alejebora/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela, dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi Go tswa mo ngwaoboswa ya rona	**Kopololo, go katoloso le go tlhalosa kopolola** Kopololo, katoloso le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didi-riswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela, dipopego kgotsa didiriswa.	Tswelela go fa barutwana tlhatlhamano e e tshwanang ya dipaterone mo kgweditharong ya 2. Lebelela dintlha mo kgeditharong ya 2. Letlelela barutwana go kopolola ,go atolosa le go tlhalosa dipaterone. mo nakong e barutwana ba tshwanetse go ba be ba kgona go tlhalosa dipaterone kwa ntle go thuso ya kaedi ya dipotso Tswelela go tsepama mo kgolong ya puo e barutwana ba e tlhokang go tlhalosa dipaterone.	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 180 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 180 • Pele mo • Nngwe-someng go tloga ka katiso nngwe le nngwe ya10 magareng ga 0 le 180 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-180 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 180 • Nngwe-tharong le ya bone go tloga mo katisong ya 3 le 4 magareng ga 0 le 180	Lebelela dintlha mo kgweditharong ya 1 mme o atolose tlhatlhamano ya dipalo go fitlha ka 180	Dithuto 3

MOPHATO 2 KWEDITHARO 3 BOALO LE DIPOPEGO(DIPALO-POPEGO)				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3**	**Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta**	**Nako** (I) Thutong ya ura le metsotso e le 24
3.1 **Maemo, dikaelo le pono**	**Maemo a puo**. Tlhalosa ya kemo le kamano ya sediriswa mo go se sengwe sekao fa go dimo ga,mo pele ga,mo morago ga, molema, moja, godimo, tlase, go gaufi le **Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengw **Maemo le dikaelo** Sala morago ditaelodikaelo go tsamaya mo phaposing	**Maemo le pono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe **Maemo le dikaelo** • Sala morago di-taelodikaelo go tsa-maya mo phaposing	**Katlenegiso e e totobetseng ya kgwedi tharo 3:** **Maemo le pono** **Pharologanyo ke eng mo mophato wa 1?**. Mo mophatong wa 2, barutwana ba kopanya/tiisa tiro e ba e dirileng ka ga go bapisa dipono tse di farologaneng tsa didiriswa. **Maemo le pono** Barutwana ba kgato ya motheo ba tshwanetse go tlhaloganya gore dipopego di lebega ka mekgwa e efarologaneng fa di beilwe ka maemo a a fafologaneng,ba tshwanetse go itse gore dipopego jaaka koloi di bonala di le dinnye fa di le kgakala.Ba tshwanetse go tlhaloganya gore goreng setshwantsho se se mopele mo bukeng se bonala sentle go feta ses se kwa morago.Mo ditlhopeng tse di totobetseng,barutwana ba ka itemogela ka go baya diatla tsa bona mo sefatlhegong go thibela pono ya dilo tse di kgakala. Mo mophatong wa 2,barutwana ba ka neelwa ditiro tse bapisang dipono tse di farologaneng le dipopego.Se se tla thusa barutwana go go ranola ditshwantsho tsa geometeri di lebilwe ka diponalo tse di farologaneng	Thuto 1

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Nako (I) Thutong ya ura le metsotso e le 24
3.2 **Popegotlhako-retharo**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantsho • Dibolo(dikgolokwe • Popego ya lebokoso (porisime) • Selennere **Dipharologantsho tsa didirwa**: Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • /Dipopegogo tse di ka kgokologang • Didiriswa tse relelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa ga pele le tse di agang dipopego tse dingwe tsa tekanyotlhakore tharo dididriswa tsa tekano .	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Popego ya bolo, (kgolokwe) • Popego ya bolo (porisime) • Selennere **Dipharologantsho tsa didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didriswa kgokolo-gang • Didiriswa tse di relelang	**Ke eng se sešwa mo kgweditharong 3** Diselennere di tsenyeleditswe **Dipopegotlhakoretharo mo mophatong wa 2** Barutwana ba dira ka • dibolo le dipopego tse di bopegileng jaaka dibolo • Diselennere le dipopego tse di bopegileng jaaka selenner • Mabokoso a a farologaneng le dipopego tse di bopegileng jaaka porisime kgotsa popegotaese **Tsepamo mo dipopegong tsa popegotlhakoretharo**:Go kgokologa le go relela Se ke tshweletse ya se ba sedirileng mo mophatong wa 1 kgweditharo 1,mme jaanong diselennere di akareditswe  Barutwana ba batlisisa gore a ba ka paka kgotsa go dira terio ka dibolo fela kgotsa diselennere 	Thuto tse 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Nako (I) Thutong ya ura le metsotso e le 24
3.2 **Popegotlhako-retharo**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantsho • Dibolo(dikgolokwe • Popego ya lebokoso (porisime) • Selennere **Dipharologantsho tsa didirwa**: Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Dipopegogo tse di ka kgokologang • Didiriswa tse relelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo o dirisa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa ga pele le tse di agang dipopego tse dingwe tsa tekanyotlhakore tharo dididriswa tsa tekano .	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Popego ya bolo, (kgolokwe) • Popego ya bolo (porisime) • Selennere **Dipharologantsho tsa didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • bogolo • Didriswa kgokolo-gang • Didiriswa tse di relelang	**Go lemoga le go neeela maina a dibolo(dikgolokwe) le mabokoso(diporisime) le diselennere**: Barutwana ba tshwelela go neela maina,go tlhaola,le go kgobokanya mme diselennere di akareditswe. Barutwana ba tshwanetse ba neelwa dipopego tse di farologaneng go dira ka tsona jaaka:.; • Dikgolokwe sekao dibolo tsa bogolo jo farologaneng dimabole,dinamone j.j • Diporisime sekao diboloko,ditena,mabokoso a bogolo jo bo farologaneng • Diselennere tse di telele le diselennere tse di seporwana molongwana o monnye wa sebopego sa selennere boteng jwa lebokoso sedikolosi sa toulo sedikolosi sa pampiri ya tlelosete le selennere khutshwane le bophara jaaka moteme wa politšhe,motsoko, jj. Barutwana ba ka bona dipopego tse di bopegileng jaaka bolo(dikgolokwe),kgotsa mabokoso,diselennere fa neetswe kgobokanyo ya didiriswa ,mme barutwana ba kgona go bona kgotsa go supa dipopego tse di bopegileng jaaka mabokoso mo phaposing. Ka nako e e ikemetseng ya morutwana ka nosi ba tswelela • aga ka didiriswa le go • dira dibolo, diselennere le dipopego tsa mabokoso go tswa mo teging e e tshamekang. **Ditiro tsa kwala** Le fa tiro e ntsi ya didiriswa tekanyotlhakore e dirwa ka diatla tiro e tshwanetse ya sobokangwa ya tiisiwa ka dithutiso tse di kwalwang. **Puo** Tshwelela go godisa bokgoni jwa barutwana ka go bua ka dipopegotlhakoretharo:Leba dintlha kaelo tsa kgwedi tharo 1	Thuto tse 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Nako (I) Thutong ya ura le metsotso e le 24
3.3 **popegotlhako-repedi**	**Tlhatlhamano ya dipopego** Go lemoga go neela maina a popegotlhakorepedi. • Sediko • khutlotharo • Khutlonne • Khutlonnetsepa • rectangles/ khutlonnet-sepa **Dipharologantsho tsa dipopeg**: Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe	Ga gona tiro e e totobetseng ya popegotlhakoretharo mo kgweditharong 2. ,tiro e tshwanetse go tiisiwa/kopangwa ka tiro kwalo.Barutwana ba tshwelela go aga/bopa dipopegotlhakoretharo ka didiriswa tse di ka disiwang gape,diboloko ka nako e e kobiseditsweng morutwana ka nako ngwao boswa		

MOPHATO 2 KWEDITHARO 3 TEKANYO				
Ditlhogo	**Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.**	**Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3**	**Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta**	**Boleele jwa nako** (Mo thutong tsa ura le 24 metsotso
4.1 **Nako**	**Bolela nako** • Bolela o bo o rulaganye malatsi a beke • Bolela o bo o rulaganye dikgwedi tsa ngwaga. • Kwala malatsi a matsalo le meletlo ya sedumedi, malatsi a botlhe a boikhutso, ditiragalo tsa hesetiri, ditiragalo tsa sekolo mo khalentareng. • Bolela diura tse 12 tsa nako ka halofo le kwatara ya diura. **Balela boleele jwa nako le tsamao ya nako** Dirisa dikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi a beke. Dirisa ditshupanako go balela boleele jwa nako ka diura, dihalofo tsa ura kgotsa dikwatara tsa diura.	**Bolela nako** • Bolela o bo o rulaganye malatsi a beke • Bolela o bo o rulaganye dikgwedi tsa ngwaga. • Kwala malatsi a matsalo le meletlo ya sedumedi, malatsi a botlhe a boikhutso, ditiragalo tsa hesetiri, ditiragalo tsa sekolo mo khalentareng. • Bolela diura tse 12 ka diura, halofo ya diura le kwatara ya diura mo ditshupanako tsa manaka. **Balela boleele jwa nako le tsamao ya nako** Dirisa dikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi a beke. • Dirisa ditshupanako go baleal boleele jwa nako ka diura kgotsa dihalofo tsa diura.	Barutwana ba tswelela go ikatisetsa go bua ka boleng jwa nako le tatelano ya nako. Ka nako ya go ruta botlhe mo phaposing le ka ditlhopa, barutwana ba tswelela go bua ka ga malatsi a beke, dikgwedi tsa ngwaga le letlha la letsatsi la gono, le malatsi pele le malatsi a a tlang. Barutwana ba simolola go tlwaela tiriso ya khalentara ka go tswelela go kwala • Malatsi a matsalo • Meletlo ya sedumedi • Ditiragalo tsa hisetori • Ditiragalo tsa sekolo le • Malatsi a botlhe a boikhutso mo khalentareng. Ka nako ya tiro ka bonngwe barutwana ba simolola go latelanya ditiragalo go tswa go ditiragalo tsa matselo a bone a ka metlha le go rulaganya tatelano yaditshwantso. Barutwana gape ba dira ditirwana tsa go bolela nako ka diura le halofo ya diura. **Pharologanyo ke eng go tswa mo kgweditharo 2?** • Bolela nako ka diura, halofo ya diura le kwatara ya diura. Tsepamo ya KGWEDITHARO 3 ke go bolela nako ka diura le halofo ya diura le kwatara ya diura o dirisa tshupanako ya manaka. Se e ka nna tsepamo ya dithutiso tse pedi.	Dithuto tse 3

Ditlhogo	Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.	Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3	Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta	Boleele jwa nako (Mo thutong tsa ura le 24 metsotso
4.1 **Nako**	**Bolela nako** • Bolela o bo o rulaganye malatsi a beke • Bolela o bo o rulaganye dikgwedi tsa ngwaga. • Kwala malatsi a matsalo le meletlo ya sedumedi, malatsi a botlhe a boikhutso, ditiragalo tsa hesetiri, ditiragalo tsa sekolo mo khalentareng. • Bolela diura tse 12 tsa nako ka halofo le kwatara ya diura. **Balela boleele jwa nako le tsamao ya nako** Dirisa dikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi a beke. Dirisa ditshupanako go balela boleele jwa nako ka diura, dihalofo tsa ura kgotsa dikwatara tsa diura.	**Bolela nako** • Bolela o bo o rulaganye malatsi a beke • Bolela o bo o rulaganye dikgwedi tsa ngwaga. • Kwala malatsi a matsalo le meletlo ya sedumedi, malatsi a botlhe a boikhutso, ditiragalo tsa hesetiri, ditiragalo tsa sekolo mo khalentareng. • Bolela diura tse 12 ka diura, halofo ya diura le kwatara ya diura mo ditshupanako tsa manaka. **Balela boleele jwa nako le tsamao ya nako** Dirisa dikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi a beke. • Dirisa ditshupanako go baleal boleele jwa nako ka diura kgotsa dihalofo tsa diura.	Nako e e bolelewang ,, le fa go ntse jalo go tshwanetse go ka ikatisetswa ka kgweditharo ka nako tsotlhe. Sekao barutwana ba ka kopiwa go bolela nako ya fa sekolo se tsena / simolola, ka nako ya boikhutso le kwa gae, kgotsa fa ba fetola diphaposi borutelo. Tlhopa dinako mo lonaka lo bontshang ura, kgotsa halofo ya ura, kgotsa kwatara ya ura. Go ka thusa go nna le tshupanako e kgolo mo phaposing , e barutwana ba ka lebelela mo go yone. Barutwana ba ka itirela ditshupanako dibokoso. Ka jalo o ka ba kopa go bontsha nako tse di farologaneng mo go tsona jaaka ; bontsha 10 o, clock. Bontsha gore (e ne e le nako mang) lonaka le ne le eme fa kae kwatara y aura pele. Barutwanan ba ka dira dipalelo ba dirisa tshupanako jaaka ba bontsha fa nako e le 12 o, clock thapama, botsa gore e tla nna nako mang mo diura tse 3 tse di latelang. Ba tsamaise lonaka la tshupanako ya bone ya maitirelo (ba ka lebelela tshupanako e e mo phaposing kgotsa ya setshwantso mo phaposing) go balela dikarabo tsa bone. Barutwana ga ba lebelelwa go balela boleele jwa nako ya diura kgotsa halofo ya ura ba sa lebelela mo tshupanakong. • Dirisa dikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi a beke. Barutwana ba tsepama mo go buiseng khalaentara. Ba ithuta go fitlhela le go neelana ka matlha a a rileng. Barutwanan ba balela boleele jwa nako ka malatsi kgotsa dibeke, ba lebeletse mo khalentareng. **Barutwana ga ba a lebelelwa go fetolela dibeke le malatsi.** **Barutwana ga ba a lebelelwa go dira dipalelo tse di tsenyeletsang go balela nako gare ga matlha fa ba se ke tla ba nna le khalentara.**	Dithuto tse 3

Ditlhogo	Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.	Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3	Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta	Boleele jwa nako (Mo thutong tsa ura le 24 metsotso
4.2 **Boleele**	**Go lekanya go go sa tlhomamang** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirise ditekanyetso tse di sa tlwaelegang jaaka bophara jwa mabogo, dikgato, boleele jwa dipensele, dibadisa jalo jalo • Tlhalosa boleele jwa dilwana ka go balela le go bolela gore ke boleele jwa diyuniti tse kae tse di sa tlwaelegang. • Dirisa puo go bua ka ga papiso ya boleele jaaka; telele, khutsane, teletsana, bophara **Ketisopele ya tekanyetso e e tlhomameng** Fopholetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirisa dimetara (gongwe kotana ya metara kgotsa mogala thapo wa metara)	Ka kgweditharo 1 go atlenegisiwa gore barutwana ba tsepame mo tekanyetso, tekanyo, papiso le go rekota boleele, bophara le bogodimo ka diyuniti tse di sa tlwaelesegang mme o dira le tekanyetso nngwe, tekanyo, papiso le rekoting ya ditekanyo ka dimitara. Mekgwa e ya go lekanya boleele e ka ikatisetswa ka nako ya go dira ka bonngwe kgweditharo yotlhe. Tiro yotlhe e rekotiwa. **Go lekanyetsa boleele mo tirisong ya go rarabolola dipalo le dipalelo** **Ka nako e e beetsweng Dipalo, tiriso le kamano barutwana ba rarabolole dipalo tse di dirisiwang mo tirisong ya** • Tekanyo e e sa tlhomamang ya boleele sekao; ke dikgato tse 27 go tsena mo kantoro ya bo tsamaise. Ke dikgato tse 36 go fitlha kwa hekeng. • boleele ka dimetara Elatlhoko seelo sa palo e e maleba ya kgweditharo eo, gape le seelo sa mefuta ya dipalo tsa kgweditharo eo.		

Ditlhogo	Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.	Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3	Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta	Boleele jwa nako (Mo thutong tsa ura le 24 metsotso
4.3 **Boima / Mmese**	**Tekanyo e e sa tlhomamang** • Fopholetsa , lekanya, bapisa rulaganya le go rekota boimao dirise seemo sa tekanyetso e e sa tlwaelesegang le go lekalekanya sekao diboloko, ditene jalo jalo • Dirisa puo go bua ka ga papiso; sekao bofefo, boima,bofefonyana, boimana **Ketisopele ga tekanyo e e tlhomameng** • Bapisa, rulaganya le go rekota boima jwa dilwna phutelwana tsa papatso tsa boima jo bo kwadilweng ka dikilogorama jaaka,2 kilogorama ya reise, le 1 kilogorama ya folouro. • Lekanya boima jwa tsona ka dikilogeramo o dirise sekale sa phaposi botlhapelo.	Barutwana ba ka simolola go ikatisetsa go lekanyetsa, lekanya, bapisa, le go rekota boima ba dirisa ditekanyo tse di sa tlhomamang le go lekalekanya tekanyetso ka nako ya tiro ka bonngwe. **Tekanyo ya boima mo tirisong ya go rarabolola dipalo le dipalelo** Ka nako e e beetsweng Dipalo, tiriso le kamano barutwana ba ka rarabolola dipalo tse di ka dirisiwang mo tirisong ya • tekanyo ya boima jo bo sa tlhomamang; le • Go lekanya boima ka dikilogeramo. Elatlhoko seelo sa palo e e maleba ya kgweditharo eo, gape le seelo sa mefuta ya dipalo tsa kgweditharo eo.		

Ditlhogo	Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.	Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3	Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta	Boleele jwa nako (Mo thutong tsa ura le 24 metsotso
4.4 **Mothamo / Bolulo**	**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanya, bapisa rulaganya le go re-kota mothamo wa ditshelo (boleng bo setshelo se ka bo tsayang fa e tletse) o dirise seemo sa tekany-etso e e sa tlwaelesegang le go lekalekanya sekao dintsho le dikopi, • Tlhalosa mothamo wa dilwana ka go balela le go bolela gore ke tse kae tsa diyuniti tse di sa tlwael-egang tse di ka tlatsang setshelo jaaka botlolo e na le mothamo wa dikopi tse 4.	**Tekanyo e e sa tlhomamang** • Lekanyetsa, lekanya, bapisa rulaganya le go rekota mothamo wa ditshelo(boleng bo setshelo se ka bo tsay-ang fa e tletse) o dirise seemo sa tekanyetso e e sa tlwaelesegang le go lekalekanya sekao mashwana le dikopi, • Tlhalosa mothamo wa dilwana ka go balela le go bolela gore ke boleele jwa diyuniti tse kae tse di sa tlwael-egang tse di ka tlatsang setshelo jaaka botlolo e na le mothamo wa dikopi tse 4.	**Pharologanyo ke eng mo mophatong wa 1?** Go atlenegisiwa gore mo mophato 1 barutwana ba tsepame mo • tlhabolola puo ya go bua ka dipharologano tsa bolumo; • Bapisa bolumo mo ditshelo tse pedi tse di tshwanang • Bapisa bolumo mo ditshelo tse pedi tse di farologaneng ka popego bogolo jang setshedi se se sephara le se se kima; • Tekanyo e e sa tlhomamang ka diyuniti tsa seemo se se sa tlwaelesegang Mo mophato 2 barutwana ba tswelela go tsepama mo tekanyo e e sa tlhomamang ka diyuniti tse di sa tlwaelesegang ya bolumo. Barutwana le bona ba simolola go lemoga gore 1 Letara ke boleng jo bo kae. **Mothamo ke eng? Bolumo ke eng?** Mothamo ke boleng jo bo ka tshegetswang ke setshegetsi sengwe Bolumo ke boleng jwa sebaka se se ka tsewang ke sengwe. Ka jalo botlolo e ka nna le mothamo wa Letara, mme ka nako nngwe e ka se e tlatse go fitlhela mothamo; go ka diragala gore ka nako nngwe e tsentse bolumo ya kopi e le nngwe ya setshedi. **Tekanyo e e sa tlhamalalang ya mothamo o dirisa diyuniti tse eseng tsaseemo se se tlwaelsegileng** Barutwana ba ka ithuta melawana le ditiriso tsa tekanyo o dirisa diyuniti tsa seemo se se sa tlwaelesegang. Go lekanya ka diyuniti tse di sa tlwaelesegang go se tsewe jaaka tekanyo e e kemo tlase go ya diyuniti tsa seemo se se tlwaelesegileng. Barutwana ba tshwanetse go neelwa sebaka sa go lekanya bolumo le mothamo ba dirisa mefuta e e farologaneng ya dilwana tsa diyuniti tse sa tlwaelesegang sekao dikopi 9 eseng tsa tekanyo), mashwana (eseng mashwana a tekanyo a mannye), dikhurumelo tsa dibotlolo tsa 2 Letara ya maświ, ditini tse di nnye, le dibotlolo tse nnye jalo jalo. Go lekanya bolumo / mothamo ka diyuniti tse seemo se se sa tlwaelesegangngo tsenyeletsa le go balela gore ke ga kae o ka tlatsa le go tsholola go tswa mo yuniting e e tlhopilweng go fitlhela mothamo / bolumo e e tlhokegang.	Dithuto di le 3

Ditlhogo	Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.	Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3	Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta	Boleele jwa nako (Mo thutong tsa ura le 24 metsotso
4.4 **Mothamo / Bolulo**	**Ketisopele ya tekanyetso e e tlhomameng** • Fopholetsa, lekanya, bapisa, rulaganya le go rekota mothamo wa dilwana tse di lekanyang diletara. • Fopholetsa, rulaganya le go rekota mothamo wa dilwan tsa diphuthelwana tsa thekiso sta mothamo wa tsona o kwadilweng ka diletara jaaka 2 Letara ya mshi, 1 Letara ya senotsididi, 5 Letara ya pente	**Ketisopele ya tekanyetso e e tlhomameng** • Fopholetsa, lekanya, bapisa, rulaganya le go rekota mothamo wa dilwana tse di lekanyang diletara o dirisa • dibotlolo tsa mothamo wa 1 Letara. • jeke e e lekanyang e e nang le ditselana tsa go lekenya tsa Letara. • Fopholetsa, rulaganya le go rekota mothamo wa dilwan tsa diphuthelwana tsa thekiso tse mothamo wa tsona o kwadilweng ka diletara jaaka 2 Letara ya mshi, 1 Letara ya senotsididi, 5 Letara ya pente	Barutwanan ba tshwanetse go rutwa go bolela yuniti ka nako tsotlhe jaaka go na mashwana a 48 a metsi mo botlolong kgotsa a kana ka halofo ya kopi mo botlolong. Fa ba sena go lekanya ka yuniti nngwe le nngwe gantsinyana, bat la kgona go lekanyetsa mothamo / bolumo ba dirisa yuniti eo. Go lekanyetsa pele ba lekanya go botlhokwa, mme go ka dirwa fela fa ba setse ba lekantse ka yuniti eo pele. Barutwana ba tshwanetse go rutwa gore fa ba bapisa mothamo / bolumo, ba dirise fela yuniti e e tshwanang, Sekao fa galase e tsaya 20 mashwana a metsi le kopi e tswara 10 dintsho tsa metsi, o ka se re galase e tswere metsi a manti Barutwana ba tshwanetse go lekanya ka mefuta e mentsi ya diyuniti tse di sa tlwaelesegang gore ba kgone go • simolola go tlhaloganya gore fa o dirisa yuniti e nnye o tla tlhoka nako e ntsi go e tlatsa, jaaka bolumo ya botlolo e ka nna 20 mashwana a tletseng mme gape e ka nna kopi e 1. • Ba simolole go dirisa diyuniti tse di siametseng se ba se lekanyang, jaaka go lekanya Letara tse 2 tse tletseng ka leshwana ke tsenyo ya nako. **Ketisopele ya tekanyetso e e tlhomameng** • Fa o tlwaela diletara Barutwana ba bolelelwe gore diletara ke selekanyi sa seemo se se tlwaelesegileng sa go lekanya mothamo / bolumo. Ba ithute lefoko / leina le khutsafatso ya lone, ka gonne mo diphuthalwaneng tsotlhe tsa dithekiso le dijeke go diriswa khutsafatso fela. Barutwana ba simoloa go tlhaloganya gore Letara ke boleng jo bo kae ka go e tlatsa le go tshela go tswa mo go yone: • Di 1 Letara tse di farologaneng ka dipopego jaaka tsa dinotsididi, dibokoso tsa maswi, dibokoso tsa seno sa matute; le • Jeke tse di lekanyang tse di bontshang ditselana ditekanyo.	Dithuto di le 3

Ditlhogo	Dikgoplo le dikgono tse di tlhokofalang ka bofelo jwa ngwaga.	Dikgopolo le dikgono tse di tsepamisitsweng go kgweditharo 3	Dintlha dingwe tsa tlhaloso kgotsa metheokaelo ya go ruta	Boleele jwa nako (Mo thutong tsa ura le 24 metsotso
4.4 **Mothamo / Bolulo**	**Ketisopele ya tekanyetso e e tlhomameng** • Fopholetsa, lekanya, bapisa, rulaganya le go rekota mothamo wa dilwana tse di lekanyang diletara. • Fopholetsa, rulaganya le go rekota mothamo wa dilwan tsa diphuthelwana tsa thekiso sta mothamo wa tsona o kwadilweng ka diletara jaaka 2 Letara ya mshi, 1 Letara ya senotsididi, 5 Letara ya pente	**Ketisopele ya tekanyetso e e tlhomameng** • Fopholetsa, lekanya, bapisa, rulaganya le go rekota mothamo wa dilwana tse di lekanyang diletara o dirisa • dibotlolo tsa mothamo wa 1 Letara. • jeke e e lekanyang e e nang le ditselana tsa go lekenya tsa Letara. • Fopholetsa, rulaganya le go rekota mothamo wa dilwan tsa diphuthelwana tsa thekiso tse mothamo wa tsona o kwadilweng ka diletara jaaka 2 Letara ya mshi, 1 Letara ya senotsididi, 5 Letara ya pente	Barutwana ba lekanya ka diletara tsotlhe tse di kailweng fa godimo. Ba a lekanyetsa fa fetsa ba a lekanya mothamo wa ditshegetsi tse dintsi tse di farologaneng jaaka setshegetsi sa yogute, setshegetsi sa bebetsididi, lebokoso la dijo tsa motshegare, jeke e tonna, dibotlolo tse kgolo, ditopo tsa pente tse di lolea, diemere, jalo jalo. Go tlhopiwe dilwana tsa mothamo o o farologaneng . Barutwana ba tlhalosa mothamo jaaka potlana go 1 Letara, 2 Letara, fag are ga 1 le 2 Letara, 5 Letara jalo jalo. Bapisa, rulaganya le go rekota mothamo wa diphutelwana tsa dilwana tsa papatso tsa mothamo o o kwadilweng ka diletara, 2 Letara ya maswi, 1 Letara ya senotsididi, 5 Letara ya pente. **Go rekota tekanyo** Lefa tekanyo e le bokgoni jo bo tirisong, barutwana ba tshwanetse go rekota ditekanyo tsa bone ka nako tsotlhe, go akaretsa tekanyo e e tlhomameng le e e sa tlhomamang. **Go lekanya mothamo jaaka tiriso ya go rarabolola dipalo le dipalelo** Ka nako e e beetsweng thoko ya dipalo , tiriso le dikamano barutwana ba rarabolole dipalo tse o di dirisang mo tirisong ya • Tekanyo e e tlhomameng ya mothamo / bolumo, sekao mmemogolo o dirisa dikopi tse 2 tsa mashi go dira putting. Fa a menaganya motswako , o tla dirisa mashi a kae? • Diletara Elatlhoko tekanyetso ya dipalo tsa mefuta e e farologaneng ya kgwedtharo eo, gape le mefuta ya dipalo tseo.	Dithuto di le 3

MOPHATO WA 2 KGWEDITHARO 3 TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 3**	**Dintlha tsa tshedimosetso kgotsa metheo kaelo ya go ruta**	**Duration** **Nak0** (Mo paka-thutong ya ura le metsotso e le 24)
5.4 **Kgobokanya le go rulaganya tshedimosetso**	**Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimo-setso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana • Organise data in tallies • Rulaganya tshedimosetso e e nyalanang	**Kgobokanya le go rulaganya tshedimosetso** Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana **Tshwantshanya tshedimosetso** • Tshwantshanya tshedi-mosetso mo kerafong e e dirisitswang ditshw-antsho **Sekaseka le go ranolola tshedimosetso** • Araba dipotso ka ga tshedimosetso ka kerafo e e dirisediwang ditshw-antsho.	Rulaganya tshedimosetso **Go atlegenedisitswe gore barutwana ba dire sekele yotlhe ya tshedimosetso mo kgwedi-tharo1. Go atlenegedisitswe gore mo kgwedi-tharo 3 barutwana ba dire ba le nosi dikerafo tse di dirisediwang ditshwantsho go tswa mo tshedimosetsong e e neetsweng go ya popego ya setshwantsho kgotsa manaane.** **Tshwantshanya tshedimosetso** Fa barutwana bat la bob a thala ditshwantsho tse di bopang kerafo e e dirisediwang ditshwantsho, go botlhokwa go tlhopa ditlhogo tsa ditlhopa tse di bonolo tsa barutwana go thala sekao mefuta ya dinitsididi e re e ratang, ka gonne go bonolo go thala topo go tshwantshanya senotsididi sengwe le sengwe, maungo le ona a bonolo go a thala, ka ga moo go a kgonagala go thala leungo le o le ratang. Go thala ditshwantsho o bontsha motshameko o o ratang, lenaneo la thelebishene le o le ratang jalo jalo. E ka nna ya nna tiro e e boima ya barutwana ba mophato wa 2. Go bonolo fa barutwana ba thala dikerafo fa ba neilwe pampiri e e nang le diboloko. Gakolola barutwana ka ga dikarolokgolo tsa kerafo e e dirisediwang ditshwantsho (lebelela kgwedi-tharo1) **Sekaseka le go ranolola tshedimosetso.** Barutwana ba tshwanetse go araba dipotso tse o di botsang ka ga kerafo e e dirisediwang ditshwantsho.lebelela kgwedi-tharo 1	Dithuto di le 3
5.5 **Tshwantshanya tshedimosetso**	**Tshwantshanya tshedimosetso** • Tshwantshanya tshedi-mosetso mo kerafong e e dirisitswang ditshwantsho			
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosetso** • Araba dipotso ka ga tshedimosetso ka kerafo e e dirisediwang ditshw-antsho			

MOPHATO 2 KGWEDITHARO 4 1. DIPALO, MATSHWAO LE DIKGOLAGANO			
Ditlhogo	**Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le ditogamaano tsa kgwedithаro 4**	**Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta**
1.1 **Go bala didiriswa**	**Go bala didiriswa tse di kgonngwang.** Bala didiriswa tsotlhe.ka nepagalo letsatsi le letsatsi go fitlha 200. Togamaano ya ditlhopha e a rotloetswa.	**Go bala didiriswa tse di kgonngwang** Bala didiriswa tsotlhe.ka nepagalo letsatsi le letsatsi go fitlha 200. Togamaano ya ditlhopha e a rotloetswa.	**Ke eng se se farologaneng mo kgwedithаrong ya 3?** Mo kgwedithаrong e barutwana ba bala didiriswa di le 200. Kwa bofelong jwa kotare ba tshwanetse go bob a bone, ba tshwere le go tsamaisa didiriswa di le 200. Ba tshwanetse go nna le maikutlo a bontsintsi ba 200. Tswelela o tsepamisitse go dira ditlhopha tsa didiriswa. Mo bofelong jwa kgwedithаro ba tshwanetse go ikarabela mo mokgweng wa dipotso le ditaelo tse di latelang. • Bala babadi ka ditlhopha tsa botlano, bosome. Rulaganya gape le go bala gape. A o san a le palo e e tshwanang ya babadi? • Fano go babadi ba le 200.Ba bale ka ditlhopha tsa lesome. Go bala babadi ba le 200. A o tla eletsa go ba bala ka ditlhopha tsa 20 kgotsa 25? Goreng?, • Swetsa gore ke tsela e feng e o ka baling kgobokanyo ya diphensele ka yona • Babadi ba le 80 ke bao. Fa re bala ka 2 kgotsa 10 , a palogotlhe ya babadi e tla bo e tshwa-na? • Bala babadi ba le 46 ka go dira ditlhopha tsa 2. Go bonako go bala ka bobedi go na le ka bongwe? • Ke ditlhopha di le kae tsa 10 tseo o di badileng ka babdi ba le 120?

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.2 **Go balela kwa pele le kwa morago.**	**Go balela kwa pele le kwa mora** • Go bala ka bonngwe go tswa mo palo nngwe magareng ga 0 go fitlha 200 • Bolesome go tswa mo katisanetsweng magareng ga 0 le 200 • Botlhano go tswa mo katisanetsweng ya 5 magareng ga 0 le 200 • Bobedi go tswa mo katisanetsweng ya 5 magareng ga 0 le 200 • Boraro go tswa mo katisanetsweng ya 5 magareng ga 0 le 200 • Bone go tswa mo ka-tisanetsweng ya 4 magareng ga 0 le 200	**Go balela kwa pele le kwa mora** • Go bala ka bonngwe go tswa mo palo nngwe magareng ga 0 go fitlha 200 • Bolesome go tswa mo katisanetsweng magareng ga 0 le 200 • Botlhano go tswa mo katisanetsweng ya 5 magareng ga 0 le 200 • Bobedi go tswa mo katisanetsweng ya 5 magareng ga 0 le 200 • Boraro go tswa mo katisanetsweng ya 5 magareng ga 0 le 200 • Bone go tswa mo katisanetsweng ya 4magareng ga 0 le 200	**Ke eng se se farologaneng mo kgweditharong ya 3?** Mo kgweditharong e barutwana ba balela kwa pele le kwa morago go fitlha go 200. Go ya kwa bofelong jwa kgweditharo barutwana ba tshwanetse go tshwaraganya go bala ka go kopanya go bala ka go tlola go ya ka lenaane thuto. Barutwana ba tshwanetse go tlhalosa seo ba se elelwang ka lenaane thuto mmee ba kgone go elelwa seno fa ba dira go bala ka go tlolaganya. Ba tshwanetse go simolola go dirisa togamaano e go bonela ple gore ke dipalo difeng tse di tla balwang. Sekao: Botsa barutwana: Ga re bala ka bobedi, a re tla dirisa palo 20 naa? A na palo 20 e ka fa lenaane tafola la 2? Kwa bofelong jwa kgweditharo barutwana ba tshwanetse go arabela dipotso jaaka tse: • Bala ka bosome go tloga go 170 go fitlha go 200. • Bala ka bosome go tloga go 180 go fitlha go 200 • Bala ka bosome go tloga go 180 go fitlha go 140 • Bala ka botlhano go tloga go 115 go fitlha go 145 • Bala ka botlhano go tloga go 135 go fitlha go 110 • Bala ka boraro go tloga go 66 go fitlha go 81 • Balela kwa morago ka boraro go tloga go 190 go fitlha go 169 • Bala ka bone go tloga ka 120 go fitlha go140. • Balela kwa morago ka boraro go tloga go 180 go fitlha go 160 Barutwana ba ka dirisa dikiriti tsa dipalo, mela palo, dipalo tlhotlhomiso, kgatlatalama le ditalam tsa go bala go tshegetsa go bala.

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgwedithoro 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.10 **Go kgaoganya go go isang go dipalophatlo Sharing leading to fractions**	Go rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang goaroganya ka tekano go go isang kwa ditharabololong tse di akaretsangdipalophatlo tse di kopaneng . Sekao: $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{5}$ jalo le jalo		Tsepamo mo kgweditharong e, e mo dipalophatlo, dipalofoko go kgontsha barutwana go: • Arogantse le go kgobokanya dilo ka go lekana; • Ba neile dikarolo tsa dipalophatlo maina; • Go bona dipalophatlo tsa didiriswa tsotlhe. • Go lemoga gore dipalophatlo ke karolo ya bojotlhe • Go kwala dipalophatlo jaaka palo ya dinomoro di le tharo e le nngwes Sekao sa dipalo tse di ka dirwang: **Ke eng se se farologanang le sa Mophato 2?** Mo kgweditharong e, barutwana ba neela dipalophatlo lo tse dintsi maina, go na le halofo e le nngwe, nngwe tharong, kotara e le nngwe. Go aroganya go go isang kwa dipalophatlong • Aroganya ditšhokolete di le 7 magareng ga ditsala di le 3 gore botlhe ba bone bogolo jwa tšhokolete jo bo lekanang mme go sa sala sepe. • Dikuku di le tharo di aroganngwa ka go lekana magareng ga ditsala di le 4. Botlhe ba tshwanetse go bona tse kae? **Fa o aroganya sengwe go:** • Dikarolo di le pedi tse di lekanang e bitswa seripa .Karolo nngwe le nngwe e bitswa halofo. • Dikarolo di le tharo tse di lekanang, di bitswa palotharo • Dikarolo di le nne tse di lekanang, di bitswa kotara • Dikarolo di le tlhano tse di lekanang, di bitswa botlhano • Dikarolo di le thataro tse di lekanang, di bitswa borataro Dikao tsa dipalo tse barutwana ba tshwanetseng go di dira mo bofelong jwa kgweditharo e. **Kgaoganyo e e isang kwa palophatlo.** Go kgaoganya ditšhokolete di le 11 magareng ga ditsala di le 4 gore botlhe ba bone palo e elekanang mme go se sale sepe. **Dipalophatlo tse di kgobokantsweng** Koko o neela Basetsana dinamune di le 12 Basetsana ba dira matute ka nngwe-tharo ya dinamune. O dirisitse dinamune di le kae?. Mofuta o wa palo o tshwanetse go tlhagiswa fela morago ga barutwana ba rarabolole dipalo di le nne kgotsa di le tlhano tsa go kgaoganyo e e isang go dipalophatlo le go itse maina a dikarolo tsa dipalophatlo.. **Go baya diphalopatlo mmogo** Mokatisi wa bolotloa o neela halofo ya namune go motshameki mongwe le mongwe. Batshameki ke ba ba 14.Ke dinamune di le kae tseo a di tlhokang? Mofuta o wa dipalo e tshwanetse go tlhagiswa fela morago ga barutwana ba rarabolole dipalo di le nne kgotsa di le tlhano tsa go kgaoganyo e e isang go dipalophatlo le go itse maina a dikarolo tsa dipalophatlo..

<table>
<tr><th>Ditlhogo</th><th>Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga</th><th>Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4</th><th>Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta</th></tr>
<tr><td>1.11
Tšhelete</td><td>• Lemoga le go tlhopha
• tšhelete a Aforika Borwa e leng disente di 5, di le 10, di le20, di le 50, R1, R2, R5, and, R10 and R20.
• Rrabololola dipalo tse di akaretsang palogotlhe le Tšhentshi/ madi a a setseng go fitlha 99c disente go fitlha go R99 ya diranta.</td><td></td><td>Dikao tsa dipalo tse barutwana ba tshwanetseng go di dira mo bofelong jwa kgweditharo e.
Boemo jwa dipalo le tirisoya dikamano tse di farologaneng.
Lizy o rekisa marotho a dinama ka R4 nngwe le nngwe.Dirisa tafole go mo thusa go bona selekanyo se se ntsi sa dipeeletso.
<table>
<tr><td>Palo ya marotho a dinama</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr>
<tr><td>Tlhotlhwa ya R</td><td>4</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>
Dirisa tafole go bona tlhotlhwa ya marotho a dinama di le 7 le marotho a dinama di le 15.
Lerato o tlhokomela ngwana. O duedisa R20 madi a loeto , le R5 ka ura go tlhokomela ngwana. Mo thuse a feleletse tafole.
<table>
<tr><td>Palo ya diura</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>10</td></tr>
<tr><td>Tlhotlhwa R</td><td>25</td><td>30</td><td></td><td></td><td></td><td></td></tr>
</table>
Tlhokomela gore bothata jwa ga Lizy le Lerato bo a farologana..</td></tr>
<tr><td colspan="4">DIPALO TSE DI SENG MO TIRISONG</td></tr>
<tr><td>1.12
Togamaano
(mekgwa kgotsa ditogamaano)</td><td>Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo:
Ditshwantsho kgotsa didiriswa tse di kgonngwang sekao dibadisi
• Go aga le go thuba dipalo
• Go oketsa gape le go arog-anya ka bogare
• Melapalo</td><td></td><td>Barutwana ba solofetswe go rarabolola dipalo tse di seng mo tirisong o dirisa ditogamaano tse di latelang:
• Go aga le go thuba dipalo
• Go oketsa gape le go aroganya ka bogare
• Melapalo
Leba dintlha mo kgweditharong 1 le ya 2.</td></tr>
</table>

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgwedithoro 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.13 **Go tlhakanya le tloso**	• Tlhakanya go 99 • Ntsha go 99 • Dirisa matshwao a maleba (+, -, =, □) • Ikatisetse dipalo tse di golaganngweng 20		Mo kgwedithoro e barutwana ba tswelela gokgaoganya dipalo gore ba tle ba dire dipalelo. Mekgwa e e kgonagalang go bontsha tlhakanyo le go ntsha . **Aroganya palo ka dikarolo di le dinnye go dira dipalelo bonolo.** Go tlhakanya palo ya dinomoro di le pedi ka go kgaoganya dipalo tsotlhe. 43 + 36 = □ 43 + 36 = (40 + 3) + (30 + 6) = (40 + 30) + (3 + 6) = 70 + 9 = 79 **Go tlhakanya ka go aroganya palo e le nngwe.** 43 + 36 = □ 43 + (30 + 6) 43 + 30 □ 73 + 6 = 79 Barutwana ba ka aroganya palo ka mekgwa e e farologaneng e e laolegang go bona. Se se kaya gore bat la e dira ka mekgwa e e farologaneng. . 43 + 36 = □ 43 + (10 + 10 + 10 + 6) 43 + 10 □ 53 + 10 □ 63 + 10 □ 73 + 6 = 79 **Go tlosa** • Go aroganya dipalo di le pedi 87 – 56 = □ 87 – 56 = (80 + 7) – (50 + 6) = (80 – 50) + (7 -6) = 30 + 1 = 31 • Go tlosa ka go aroganya palo e le nngwe. 87 – 56 = □ 87 – (50 + 6) 87 – 50 □ 37 - 6 = 31

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.13 **Go tlhakanya le tloso**	• Tlhakanya go 99 • Ntsha go 99 • Dirisa matshwao a maleba (+, -, =, □) • Ikatisetse dipalo tse di golaganngweng 20		Solofela gore barutwana ba bangwe ba ka kgaoganya palo ka mekgwa e e farologaneng e mentsi go dira gore ba dire dipalelo bonolo. 87 – 56 = □ 87 – (20 + 20 + 10 + 6) 87 – 20 □ 67 -20 □ 47 - 10 = 37 - 6 = 31 **O dirisa go aroganya palo gabedi.** 69 + 12 69 + (6 + 6) 69 + 6 □ 75 + 6 = 81 **Go balela kwa pele le go balela kwa morago** 78 – 69 = □ Go bala ka bongwe go tloga ga 69 ke togamaano e e maleba gonne dipalo di atamelane. **Supa bobedi jo bo atamelaneng** 34 + 35 o tlhalose gore ke bobedi 34 le 1 kgotsa o oketse gabedi 35 ntsha 1. 34 + 34 + 1 Barutwana ba ka rekota ditogamaano o dirisa metsu 34 + (30 + 4) + 1 34 + 30 □ 64 + 4 □ 68 + 1 = 69 **Fetolela palo go katiso ya lesome mme o ntsha kgotsa o tlhakanya metso** Balela godimo kgotsa kwa tlase go atametsa 10 58 + 19 = □ Fa barutwana ba tshwanetse go ipolelela gore ba na le ditlhopho di le pedi. Fetolela 58 go katiso e e fa gaufi ya 10. Tlhopho key a bona.. Palo e ka kwadiwa jaaka;: 58 + 19 = 58 + 20 - 1 58 + 20 □ 78 - 1 = 77 Barutwana ba bangwe ba ka kgaogana ka ditlhopha di le 2 tsa 10 go balela ka nepagalo.

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgwedithoro 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.13 **Go tlhakanya le tloso**	• Tlhakanya go 99 • Ntsha go 99 • Dirisa matshwao a maleba (+, -, =, □) • Ikatisetse dipalo tse di golaganngweng 20		**Mo bokhutlong ba ngwaga barutwana ba tshwanetse go:** **Dirisa le go tlhaloganya puo ya tlhakanyo** Tlhaloganya gore go tlhakanya lefela go tlogela palo e sa fetoge. 75 + 0 = 75 0 + 75 = 75 75 = 75 + 0 75 = 0 + 75 Arabela dipotso tse di kwadileng tse di farologaneng jaaka; • Tlhakanya 43 le 9 • Tlhakanya lesome le 67 • 11 tlhakanya le 83 • Tlhakanya 20 go 50 • 80 = 62 + 8 + □ 30 go feta 60 ke eng? • Bona palotlalo ya 56 le14 • Tlhakanya somepedi go masome a supa le botlhano • Ke palo efe e leng lesome go feta 83 • Ke palo efe e o ka e tlhakanyang go 45 go bona 78? • Ke palo efe e o tshwanetseng go e tlhakanyang go 25 go bona 78? • Ke eng se nka se tlhakanyang go 56 go dira 70? • Bolesome ba bane tlhakanya le metso e le 3 • Bolesome ba le12 tens tlhakanya le metso e le 8 • 45 + 10 = □; 45 + 20 = □; 45 + 30 = □

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgwedithoro 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.13 **Go tlhakanya le tloso**	• Tlhakanya go 99 • Ntsha go 99 • Dirisa matshwao a maleba (+, -, =, □) • Ikatisetse dipalo tse di golaganngweng 20		**Itse gore ¨ le emetse palo e e sa itseweng** 42 + 44 = □ 5 + 7 + □ = 80 57 + □ = 95 □ + 15 = 81 Ka thuso ya didiriswa: Tlhakanya dipalo di le tharo mmogo 26 + □ + □ = 72 Tlhopha dipalo di le tharo tsa dipalo tse: 15, 19, 22, 25 Di tlhakanye. Ke dipalotlalo dife tse di farologaneng tse o kgonang go di dira? **Araba dipotso tse di kwadilweng mme o tlhalose gore o fitlhile jang mo karabong:** • Tlhakanya 6, 12 and 14. • Palotlalo ya 10, 5 le 19. Go tlhaloganya go ntsha mo bofelong jwa ngwaga **Mo bofelong jwa ngwaga barutwana ba tshwanetse go:** Tlhaloganya le go dirisa mareo a go tlosa: Go ntsha, ke bokae bo setseng, Go sala bonnye jo bokae.....go feta, pharologano magareng, bontsi jo bokae, go bala le go kwala letshwao la go ntsha (-) Tswelela go godisa go tlhaloganya go tlosa: • Go tsaya le • Go bona pharologano. Tlhaloganya gore go tlosa lefela go dira gore palo e se fetoge.: 92 – 0 = 92 □ 92 = 92 – 0 Arabela dipotso tse di kwadilweng tse di tlhagisitsweng ka mekgwa e e farologaneng jaaka: 37 tlosa 3 Tsaya 40 go tswa go 80 62 ntsha 42 Tlosa 45 go tswa go 90

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgwedithoro 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.13 **Go tlhakanya le tloso**	• Tlhakanya go 99 • Ntsha go 99 • Dirisa matshwao a maleba (+, -, =, □) • Ikatisetse dipalo tse di golaganngweng 20		Pharologano ke eng magare 38 le 57? Ke bonnye jo bokae 17 go feta ga 49 Ke palo efe e o tshwanetseng go e tlosa 56 go bona 22? Ke palo efe e o tshwanetseng go e tlosa 56 go bona 32? Ke palo efe e o tshwanetseng go e tlosa 56 go bona 42? Bona bobedi ba dipalo ka pharologantsho ya 10 Itse gore ¨ e emetse palo e e sa itseweng. 57 – 34 = □ 80 – 30 = □ 62 – □ = 48 98 – 42 = □ 87 – □ = 75 13 – 6 = 15 - □ □ – 18 = 24 Simolola go tlhaloganya gore: 25 – 10 e farologane le 10 – 25 Dirisa kamano magareng ga tlhakanyo le go ntsha Bua le go kwala ga ditlha tsa go ntsha go tlhakanyo e e neetsweng jalo le jalo.Sekao: 73 + 17 =90 e raya gore 90 – 17 = 73 17 + 73 = 90 e raya gore 90 – 73 = 17 42 – 18 = 24 e raya gore 24 + 18 = 42 42 – 24 = 18 e raya gore18 + 24 = 42 Kwa ntle ga tiriso ya didiriswa araba dipotso tse: Fa o itse gore 62 + 29 = 91. Ke eng: 29 + 62 91 – 29 91 – 62 Fa o itse gore 66 – 50 = 16

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.13 **Go tlhakanya le tloso**	• Tlhakanya go 99 • Ntsha go 99 • Dirisa matshwao a maleba (+, -, =, □) • Ikatisetse dipalo tse di golaganngweng 20		Ke eng se: 66 – 16 50 + 16 16 + 50 Kwala le go araba tse di latelang: 57 – 34 = 23 □ + 23 = 57 □ - 23 = 34 34 + 23 = □ 12 + 46 = 58 12 + □ = 58 58 - □ = 12 □ - 46 = 12 Kwala dipolelopalo tse nne tse farologanong o dirisa dipalo tse 3. Sekao: 20, 30 le 50 20 + 30 = 50 30 + 20 = 50 50 – 30 = 20 50 - 20 = 30

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.14 **Poeletso ya go tlhakanya e e isang go katiso**	• Atisa dipalo 1 go fitlha go 10 ka 1, 2, 5, 3 le 4 go fitlha go 50 • Dirisa matshwao a a maleba (+, x, =, □)		**Pharologanyo ke eng mo KGWEDITHARO 4?** Mo kgweditharong e barutwana batla bo ba atisa ka boraro lwa ntlha. Leba dintlha mo kgweditharong ya 1 Ketapele ya mareo a mašwa. **Mo bofelong jwa kgweditharo barutwana ba tshwanetse go:** **Dirisa puo ya katiso mo maemong a tiriso.** Gabedi, ga, atisa, go atisa ka, katiso ya.., bontsi jwa, ditlhopha tsa ..., gabedi bogolo (bogolo, boleele, bophara ...), Go bala le go kwala letshwao la katiso, (x) Dirisa puo e go dira katiso ya dipalelo. Tlhaloganya katiso jaaka tlhakanyo e e boleditsweng 6 tlhakanya le3 go atisa go tshwana le : 6 + 6 + 6 = 18 3 bontsi ba 6 = 18 3 atisa ka 6 = 18 6 x 3 = 18 3 x 5 = 18 Tlhaloganya katiso jaaka go tlhalosa tatelano ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ 5 x 3 =15 ◎ ◎ ◎ ◎ ◎ ◎ 3 x 5 = 15 Arabela dipotso tse di jaaka: Botlhano ba ba bane koketsopedi ya 6 6 atisa ka 5

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.14 **Poeletso ya go tlhakanya e e isang go katiso**	• Atisa dipalo 1 go fitlha go 10 ka 1, 2, 5, 3 le 4 go fitlha go 50 • Dirisa matshwao a a maleba (+, x, =, □)		Babadi ba le bararo mo moleng Go mela e mene. Ke babadi ba le bakae botlhe? 2 o e atisa ka 4 8 o e atisa ga 2 Lemoga tiriso ya seemedi □ go emela palo e e sa itsegeng Ditlhopha di le 3 tsa 2 ke 6 kgotsa3 atisa 2 ke 6 kgotsa 3 x 2 = □ Ditlhopha di le 4 tsa 3 ke 12 kgotsa 3 atisa 12 kgotsa 4 x 3 = □ Ditlhopha di le 6 tsa 3 ke18 kgotsa 6 atisa3 ke 18 kgotsa 6 x □ = 18 7 + □ = 14 Ditlhopha di le 2 tsa 7 = □ 2 + □ + □ + □ + □ + □ + □ = 14 □ x 7 = 14 1 x 2 = □ 2 x 2 = □ 3 x 2 = □ 1 x 5 = □ 2 x 5 = □ 3 x 5 = □

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.16 **Dipalo tsa tlhogo**	**Tlhatlhamano ya kgopolopalo 99** • Rulaganya sete ya dipalo tse di tlhophilweng. • Bapisa dipalo go fitlha goC99 mme o bue gore ke efe e e leng1,2,3,4,5 le 10 bontsi le bonnye **Ka bonako gakologelwa:** • Dintlha tsa go tlhakanya le go ntsha go fitlha go 20 • Tlhakanya kgotsa go ntsha dikatiso tsa 10 go tswa 0 go fitlha go 100 **Ditogamaano tsa tlhaloganyo** Dirisa ditogamaano tsa dipalelo tse di latelang. • Baya palo e e kwa godimo pele go kgona go rulaganya kwa pele le go balela kwa morago. • Dirisa kamano magareng ga tlhakanyo le go ntsha • Koketso-gabedi le karigan-yo-gabedi • Kgobokanyo le kgaoganyo • Molapalo		**Sekao sa dipotso tse di ka botswang:** **Dikakanyo tsa dipalo:** **Maina a dipalo le matshwao** Tsholeletsa karata kwa godimo kgotsa kwala leinapalo. Tlhopha morutwana go kwala palo e e nyalanang **Bontsi kgotsa bonnye** Ke eng: • 1 bonnye go 70 • 1 bontsi go 80 • Bontsi go 72 • Bonnye go 95 • Bontsi go 77 • 3 bonnye go 51 • Bontsi go 68 • 4 bonnye go 67 • Bontsi go 29 • 5 bonnye go 85 • 10 bontsi go 90 • 10 bonnye 80 Tlhaka ya botlhano ke efe mo di alefabeteng? Ke kgwedi efe ya borobonngwe mo ngwageng **Rulaganya le go bapisa** Ke efe e ntsi go: 21 kgotsa 171? Neela dipalo magareng ga 154 le 159. **Dintlha tsa go tlhakanya le go ntsha** • Itse ka tlhogo/pelo go tlhakanya le go ntsha ka dipalo tse di golaganyang go fitlha go 20. • □ + △ = 20 □ + △ = 16 16 = □ - □

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.16 **Dipalo tsa tlhogo**	**Tlhatlhamano ya kgopolopalo 99** • Rulaganya sete ya dipalo tse di tlhophilweng. • Bapisa dipalo go fitlha goC99 mme o bue gore ke efe e e leng1,2,3,4,5 le 10 bontsi le bonnye **Ka bonako gakologelwa:** • Dintlha tsa go tlhakanya le go ntsha go fitlha go 20 • Tlhakanya kgotsa go ntsha dikatiso tsa 10 go tswa 0 go fitlha go 100 **Ditogamaano tsa tlhaloganyo** Dirisa ditogamaano tsa dipalelo tse di latelang. • Baya palo e e kwa godimo pele go kgona go rulag-anya kwa pele le go balela kwa morago. • Dirisa kamano magareng ga tlhakanyo le go ntsha • Koketso-gabedi le karigan-yo-gabedi • Kgobokanyo le kgaoganyo • Molapalo		Dintlha tsa go tlhakanya le go ntsha ka dipalo tsotlhe go tsenyeletsa le go fitlha 20.Add and subtract facts for all numbers up to and including 20. 1 + 11 = 12 11 + 1 = 12 2 + 10 = 12 10 + 2 = 12 3 + 9 = 12 9 + 3 = 12 18 – 4 = 14 18 – 14 = 4 18 – 5 = 13 18 – 13 = 5 18 – 6 = 12 18 – 12 = 6 Ka bonako gopola go tlhakanya gabedi go fitlha 20. Se se tshwanetse go tseletsa dintlha tsa go tshwana ka go ntsha. • 1 + 1 = 2 • 2 + 2 = 4 • 3 + 3 = 6 • 4 + 4 = 8 • 5 + 5 = 10 • 6 + 6 = 12 • 7 + 7 = 14 • 8 + 8 = 16 • 9 + 9 = 18 • 10 + 10 = 20 Bontsha palo e o tlhakanyang go bona 20(kwala o dirisa kemopalo kgotsa dikara tsa go balaShow me the number to add to make 20 • 8 • 2 • 9 • 15 • 3 Mpontshe palo e e setseng fa e tlositswe go tswa mo go 20 (o dirisa kemopalo kgotsa karata ya go bala) • 5 • 18 • 0 • 14 • 7 **Togamaano ya dipalelo::** Lebelela dintlha tsa kgweditharo 2

Ditlhogo	Ditlhokego tsa dikgopolo le ditogamaano kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le ditogamaano tsa kgweditharo 4	Dintlha dingwe tsa go tlhalosa kgotsa dikaelo tsa go ruta
1.17 **Dipalophatlo**	• Dirisa maina a dipalophtlo mo tiriong e e tlwaeleg-ileng o tsenyeletsa le halofo, seraro le setlhano. • Lemoga palophatlho mo mokweng wa ditshwant-sho/ dithalo • Kwala dipalophatlo jaana halofo, palo ya dinomoro di le pedi. • Dirisa maina a dipalophtlo mo tiriong e e tlwaeleg-ileng o tsenyeletsa le halofo, seraro le setlhano. • Lemoga palophatlho mo mokweng wa ditshwant-sho/ dithalo • Kwala dipalophatlo jaana halofo, palo ya dinomoro di le pedi.		**Ke eng se se farologaneng mo kgweditharo** **During kgweditharo e kelotlhoko ya barutwana e tsepame mo mokgwa o dipalo tsa palogotlhe di arogantsweng ka go lekana .Mefuta e e farologaneng ya dithalo e diriswa go agelela go tlhaloganyo. Barutwana ba tswelela go neela maina a dithalo tse mo kgweditharong e. Ba neela maina a dikarolo tsa dipalophatlo tse di tlhaotsweng di kwalwa jaana. Halofo e le nngwe, kotare e lenngwe, le boraro.** Tsepamo mo kgweditharo e e tshwanetse go nna mo palogotlhe barutwana ba tshwanetse go; Feleletsa dipolelo Dihalofo tse pedi di tshwana le_____palogotlhe Boraro gararo go lekana le_____palogotlhe Dikotara tse nne di lekana le_____- palogotlhe Mo kgweditharong e barutwana ba tla bona dipalo tsa dipalophtlho tsa didiriswa Sekao: Go dirisa dibadisi tse di latelanang barutwana ba tla: Halofo e le 1 ya dibadisi di le 8. ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ Barutwana ba ka aroganya dibadisi di le 8 mo ditlhopheng di le 2 tsa 4. ◎ ◎ ◎ ◎ ◎ ◎ ◎ ◎ Letla barutwana go dirisa didiriswa tse di kgonngwang go dira jaana ke go rulaganya dibadisi ka tatelano. Mo bofelong jwa kgweditharo e barutwana ba tshwanetse go • Halofo e le nngwe ya dilo tse di golagantsweng • Kotara e le nngwe ya dilo tse di golagantsweng • Boraro bo le bongwe e le nngwe ya dilo tse di golagantsweng • Botlhano bo e bomgwe e le nngwe ya dilo tse di golagantsweng

Mophato 2 KGWEDITHARO 4 2-Dipaterone, Mediriso le Alejebera/Thutodipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 4**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**BOLEELE JWA Nako (mo dithutong tsa 1 ura le 24 metsotso**
2.1 **Dipaterone tsa Jeometeri**	**Kopololo , katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	Dipaterone tse di re dikaganyeditseng Tlhaola, le go,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshelong egompieno jwa letsatsi ka letsatsi Go tswa mo ngwaoboswa ya rona	Barutwana bat la dira ka dipaterone go tloga tlholego,go tswa mo botshelong jwa letsatsi ka letsatsi le go tswa mo ngwaoboswa ya rona go tloga ka mophato wa 1 go fitlha ka 6.Se se raya gore ga o a tshwanela go tsaya nako e ntsi mo setlhogong.O tlhoka gape go tlhopha ditiro le dipaterone tse di maleba le mophato mongwe le mongwe. Mofuta mongwe wa paterone o barutwana b aka o lebelelake wa tekatekano sekao :bontsi jwa matlhare le difatlhego tsssa dddiphologo ka takatekanyo.Fela jaaka ditshenekegi o dilebile go tloga kwa godimo le dipaterone tsa dinonyane di le dintsi fa o di le bile kwa tlatse. Barutwana b aka lebelela gape dipaterone mo: • Legora/terata • Tiro ya ditena le thaele ya bodilo • Diaparo le masela/materiale • Sejana/poleiti/boroto,kopi le piring • Kgwele ya dinao • Diphologo jaaka kgomo,mmoto le serurubele pitse ya naga,thutlwa,lengau,din onyane,digagabi malomo le matlhare • Tiro ya dibaga ya setso le ya sešwa • Dipitsa tsa setso tsa letsopa kgotsa seroto se selogilweng Barutwana ba ka tlhalosa dipaterone tse ba di bonang mo tikologong ya bona jang? Go na le mefuta e e farologaneng ya go tlhalosa dipaterone tse re di bonang mo tikologong ya rona.Bontsi jwa dipoterone tse di mo go rona di dirilwe ka mela,popego kgotsa di diriswa.Dipopego kgotsa di diriswa ga di tlhoke go golagangwa le jeometeri ya popego ya tlhakorepedi le di diriswa tsa tlhakoretharo e barutwana ba mophato wa 2 ba ka dirang ka yona. Tsotlhe tse barutwana ba lebelela ke tse di latelang: Ke eng se se boelediwang sekao khutlo/lerotho/kwaba,mela,dipopego dingwe le dingwe le E boelediwa jang? Sekao: • Mela e e tlhamaletseng e e fapaanang(jaaka lesela la dijana) mela e e thad-ilweng kwa tlase ga metiriale/lesela kgotsa go ralala hempe,mela e e thadil-weng mo maotong a borukhu • Mela e e o begileng jaaka e e tlhagelela fa go segiwa go ralala eiye.	Thuto ya 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 4	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	BOLEELE JWA Nako (mo dithutong tsa 1 ura le 24 metsotso
2.1 Dipaterone tsa Jeometeri	**Kopololo , katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	Dipaterone tse di re dikaganyeditseng Tlhaola, le go,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Go tswa mo botshelong egompieno jwa letsatsi ka letsatsi Go tswa mo ngwaoboswa ya rona	• Mela e e sa tlhamalalang jaaka methalo ya menwana le ya pitse ya naga le matsutsuba mo tloung, khudu le kgotsa motho yo mogolo. • Mela e e sa tlhamalalang e motho a e fitlhelang fa a sega go ralala khabetšhe,kgotsa e motho a e fitlhelang mo mmung wa lekhubu • Khutlo tse di lekalekanang,di khutlo tse di gasa gsaneng ka go lekana. • Dipopego tse di lekalekanang sekao dipaterone tsa ditena mo lebotaneng kgotsa tselana thoko ya maoto. • Dipopego tsa mmala o le mongwe • Dipaterone tse di dirilweng ka popego e etshwanang tse di lebisitsweng mafe-lo a afarologaneng sekao khutlotharo e e lebeletseng kwa godimo kgotsa kwa tlase mo tirong ya dibaga ya setso kgotsa ditena tsa tselana ya maoto tse di lebileng mafelo a a farologaneng. • Dipaterone tse di dirilweng ka dipopego tse di farologaneng jaaka tsa thutlwa.	Thuto ya 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 4	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	BOLEELE JWA Nako (mo dithutong tsa 1 ura le 24 metsotso
2.2 **Dipalo tsa dipaterone**	**Kopololo , katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipaterone tsa dipalo ka bowena	**Kopololo , katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 200 • Pele mo • bonngwe go tloga ka katiso nngwe le nngwe ya10 magareng ga 0 le 200 • botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0 le200 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 200 • Nngwe-tharong le ya bone go tloga mo kati-song ya 3 le 4 magareng ga 0 le 200 **Ipopele dipaterone tsa dipalo**	Lebelela dintlha mo kgweditharong ya 1 mme o atolose tlhatlhamano ya dipalo go fitlha ka 200	Dithuto 3

MOPHATO 2 KWEDITHARO 4 3. BOALO LE DIPOPEGO				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4**	**Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta**	**Duration** **Nako** (Mo dithutong tsa 1 ura le 24 metsotso)
3.2 **Popegotlha-koretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe) • Popego ya lebokoso(porisime) • Selennere **Dipharologantsho didiriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Dipopego tse di kgokolo-gang • Didiriswa tse di relelang **Ditiro tse di tsepameng** Go lemoga le go aga popegotlhakoretharo tse o di filweng go diriswa didiriswa jaaka ditshwantsho tse di segilweng tsa popegotlhakorepedi, diboloko,didiriswa tse di kgonang go dirisiwa gape le dipopego tse dingwe tsa thutatekano	**Tlhatlhamano ya di diriswa** Go lemoga go neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dibolo(dikgolokwe) • Popego ya lebokoso (porisime) • Dibolo(dikgolokwe) • Selennere **Dipharologantsho didiriswa:** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Bogolo • Dipopego tse di kgokolo-gang • Didiriswa tse di relelang	**Tshishinyo e e totobetseng ya kgwedi tharo 4** Tiro e kopanngwa/tiisiwa ka tiro kwalo	Thuto e le 1

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	Duration Nako (Mo dithutong tsa 1 ura le 24 metsotso)
3.3 **popegotlha-korepedi**	**Tlhatlhamano ya dipopego** Go lemoga go neela maina a popegotlhakorepedi • sediko • khutlotharo • Khutlonne • khutlonnetsepa **Dipharologantsho tsa dipopego**: Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe	**Tlhatlhamano ya dipopego** Go lemoga go neela maina a popegotlhakorepedi • sediko • khutlotharo • Khutlonnetsepa • khutlonnetsepa **Dipharologantsho tsa dipopego** : Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • bogolo • Mmala • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe	Leba dintlha kaelo tsa KGWEDITHARO 2 Mo kgweditharong e, go katisiwa,boelediwa le go kgobokanya tiro e e dirilweng tekanyotlhakorepedi.Go tsepamisitswe mo go lemogeng le go neela maina didiko,dikhutlonne,dikhutlonnetsepa le dokhutlotharo go boiwa ka gore matlhakore a tsona a tlhamaletse kgotsa a kgolokwe.Dira ditirwana tseo di dirilweng mo kgweditharong ya 2 mme tsepamo e le mo ditebegong tsa popego le go di naya maina.	Thuto tse 3
3.4 **Tekano**	**Tekano**. • Go lemoga le go thala mola wa tekatekanyo mo sebopego sa tlhakorepedi le tse e seng popegotlha-koretharo	**Tekano**. • Go lemoga lego thala mola wa tekatekanyo mo sebopego sa tlhakorepe-di le tse e seng popegotl-hakoretharo	Leba dintlha kaelo tsa kgweditharo 2	Thuto 1

MOPHATO WA 2 KGWEDITHARO 4 4. TEKANYO				
Ditlhogo	**Dikgopol le dikgono** **Ditlhokafalo tsa bofelo**	**Dikgopolo le dikgono** **Tshishinyo go tsepamisitswe go kgweditharo 4**	**Dintlha dingwe tsa tlhaloso kgotsa metheo kaelo ya go ruta.**	**Boleele** (Mo dithutong tsa 1 ura le 24 metsotso)
4.1 **Nako**	**Go bolela nako** • Neela maina le go rulaganya malatsi a beke ka tatelano • Neela maina le go rulaganya dikgwedi tsa ngwaga ka tatelano • Baya malatsi a matsalo, meletlo ya ditirgalo tsa sedumedi, malatsi a boikhutso a bosetšhaba, ditiragalo tsa hisetori ditiragalo tsa sekolo mo khalentareng. • Bolela nako ya 12-Diura mo diureng , halofo ya ura. **Balela boleele jwa nako le tsamao ya nako** • Dirisa khalentara go balela le go tlhalosa boleele jwa nako ka malatsi kgotsa dibeke • Dirisa tshupanako go balela boleele jwa nako mo diureng ,halofo ya ura kgotsa kwatara ya ura	**Go bolela nako** • Bolela nako ya 12-Diura ka diura le halofo ya ura le kwatara mo tshupaanakong ya digitale. **Balela boleele jwa nako mo tsamaong ya nako** • Dirisa tshupanako go balela boleele jwa nako ka diura , halof ya ura, kwatara ya diura.	Bautwana ba tswelela go ikatisa go bolela ka boleele jwa nako le tatelano ya nako. Ka nako yotlhe ya go ruta le tsepamiso mo nakong e kgobokantsweng , barutwana ba tswelela go bolela ka letsatsi la beke,kgwedi,ya ngwaga le letlha la letsatsi leo le one matsatsi kwa pele le malatsi a a tlang .Barutwana ba tswelela le go tlwaela ba baya malatsi mo khalentareng jaaka: • Malatsi a matsalo; • Ditiragalo tsa sedumedi; • Ditiragalo tsa hisitori; • Ditiragalo tsa sekolo le • Malatsi a boikhutso a botlhe mo khalentareng **Bolela nako ka diura, halofo ya diurale kwata ya diura.** Bona dintlha tsa KGWEDITHARO 3	Thuto 1

Ditlhogo	Dikgopol le dikgono Ditlhokafalo tsa bofelo	Dikgopolo le dikgono Tshishinyo go tsepamisitswe go kgweditharo 4	Dintlha dingwe tsa tlhaloso kgotsa metheo kaelo ya go ruta.	Boleele (Mo dithutong tsa 1 ura le 24 metsotso)
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Fopholetsa, lekanyetsa, bapisa rulaganya le go rekota boleele go diriswa tekanyetso ya maemo a a sa tlhomamang jaaka diatla , dikgato, boleele jwa pensele le dibadisi jj. • Tlhalosa boleele jwa didiriswa ka go bala le go bolela gore go metso/yu-niti tse di sa tlhomamang tsa boleele jo bokae • Dirisa puo go bua ka papiso sekao: telele go feta, khutshwane go feta, bophara go feta. **Kitsisopele ya tekanyo e tlhomameng** • Fopholetsa, lekanya , bapisa rulganaya le go rekota boleele go diriswa dimetara(gonnwe thupana ya metara kgotsa thapo ya boleeele jwa metara) jaaka metso/yuniti tsa maemo a boleele.	**Ketsisopele ya tekano e e tlhomameng** • Fopholetsa , lekanya ,bapisa, rekota, le go rekota boleele go diriswa thupana ya dimetara (gonnwe thupana ya metara kgotsa thapo ya boleeele jwa metara) jaaka metso/yuniti tsa maemo a boleele.	**Pharologanyo ke eng go KGWEDITHARO 1?** Ka nako ya kgweditharo 1 go tshitshintswe gore barutwana ba tsepame mo go fopholetseng , lekanya , bapisa ,le go rekota boleele , bophara , le bogodimo, ka metso/yuniti tse sa tlhomamang le gore barutwana le bone ba simolole go lekayetsa ka dimetara . Mo kgweditharo 4 tsepamo e ka nna mo phopholetsong , tekanyetsong ,papisong , le go rekota boleele bogodimo le bophara ka dimetara: Lebelela dintlha tsa kgweditharo 1. Se e ka nna tiiso mo popegong ditirwana tse di kwalwang.	Thuto e le 1

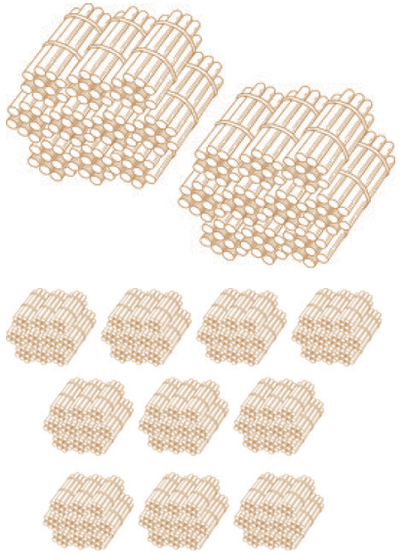
Ditlhogo	Dikgopol le dikgono Ditlhokafalo tsa bofelo	Dikgopolo le dikgono Tshishinyo go tsepamisitswe go kgweditharo 4	Dintlha dingwe tsa tlhaloso kgotsa metheo kaelo ya go ruta.	Boleele (Mo dithutong tsa 1 ura le 24 metsotso)
4.3 **Boima**	**Tekanyo e tlhomameng** • Fopholetsa , lekanyetsa, bapisa ,rulganya le go rekota boima go diriswa tekanyetso ya maemo a sa tlhomamang le go di dira maleka sekao: diboloko, ditena jalo-jalo. • Dirisa puo go bapisa s.k. bofefo, boima , bofefon-yana, boimanyana **Kitsisopele ya tekanyo e tlhomameng** Bapisa , rulaganya le go rekota boima jwa dilwana tse di gaisitsweng tsa kgwebo tse boima jwa tsona bo tlhagisitsweng ka dikilogerama s.k. 2-Dikilogerama tsa reise le 1 kilogerama ya bupi • Lekanyetsa boima jwa bona ka dikilogerama ba dirisa sekale sa phaposi ya botlhapelo	**Kitsisopele ya tekanyo e tlhomameng** Barutwana ba dira ditirwana tse di kwalwang go tiisa tse di latelang go akaretsa le go buisa ditshwantsho tsa • Dikumo tsa boima jo bo kwadilweng mo go tsona, • Ditshwantsho tsa boima mo dikaleng sa phaposi ya botlhapelo fa nnelete e supang dilogerama tsotlhe.	Mo kgweditharong 2 barutwana • Lekanyetsa boima ba dirisa tekano e sa tlhomamang; • Rulaganya dikumo go ya ka boima jo bo tlhagisitsweng mo diphuthelwaneng; le go • Buisa dikale tsa phaposi tsa botlhapelo (gammogo le dikale tsa nnete le dit-shwantsho mo dikaleng) Lebelela dintlha tsa kgweditharo 2. Mo kgweditharo 4 barutwana ba tshwanetse ba tiise bokgoni jwa bona mo go buiseng dikale tsa phaposi ya botlhapelo le ditshwantsho tsa dikale tsa phaposi ya botlhapelo gaufi le kilogerama e feletseng. Tiisetso e ka nna ya nna ka mokgwa wa go kwala dithutiso.	Thuto e le 1

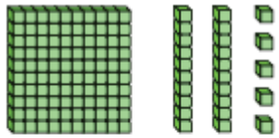
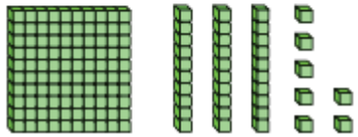
Ditlhogo	Dikgopol le dikgono Ditlhokafalo tsa bofelo	Dikgopolo le dikgono Tshishinyo go tsepamisitswe go kgweditharo 4	Dintlha dingwe tsa tlhaloso kgotsa metheo kaelo ya go ruta.	Boleele (Mo dithutong tsa 1 ura le 24 metsotso)
4.4 **Mothamo/ bolumu**	**Tekanyo e e sa tlhomamang** • Fopholetsa le go le-kanyetsa ,bapisa le go rulaganya ditshelo tsa mothamo (tseo e leng ditshelo tsa bokanakang tse di ka tshegetsang fa di tladitswe) kgotsa bolumu ya ditshelo ka go dirisa maemo sa tlhomamang a go lekanyetsa s.k. dint-shwana le dikopi • Tlhalosa mothamo wa ditshelo ka go bala le go bolela gore ditshelo di tla tshegetsa metso e sa tlhomamang go tlatsa ditshelo s.k. lebotlole le na le mothamo wa dikopi tse 4 **Tekanyo e e sa tlhomamang** • Fopholetsa , bapisa ,rulaganya le go rekota mothamo wa dilwana ka go lekanyetsa ka diletara • Bapisa , rulaganya le go rekota mothamo wa dilwana tse di gatisits-weng tsa kgwebo tse go tlhagisitsweng mothamo ka diletara s.k. 2-Diletara tsa maświ, 1 letara ya senotsididi, 5 diletara tsa peinte	**Kitsisopele ya tekanyo e tlhomameng** Barutwana ba dira ditirwana tse di kwalwang go tiisa tse di latelang, Di akaretsa go buisa ditshwantsho • Dikumo ka mothamo o kwadilwe mo go tsone go rulaganya ka tatelano • Ditshwantsho tsa dijeke fa bolumu e leng gaufi le palo ya 1 letara kgotsa 2-Diletara fa moleng o mogolo wa tekanyetso Se se lebeletsweng ke gore barutwana ba bale go fitlhelela gaufi le palo e fa moleng o mogolo wa tekanyetso. Ba tlhalosa bolumu jaaka ;batlile / gaufi le/ gontsinyanya go fetaa / gontsi kgotsa nnye go fetamore / kgotsa go lekana le palo (diletara) ba bala go tloga mo jekeng	Ka nako e ikemetseng barutwana ba tshwanetse go tswelela go • Fopholetsa le go lekanyetsa , go rulaganya le go rekota mothamo wa ditshelo kgotsa bolumu mo ditshelong tse go dirisiwang tekanyetso e e sa tlhomamang. Go latelwa diresepe , go tsenyeletswa go baka ,ke tiriso e mosola e barutwana ba ka ithutang go lekanyetsa . Tlhopha diresepe tsa metswako e neetsweng ka dikopi , dintshwana kgotsa metso/diyuniti kgotsa metso e e sa tlhomamang; • Bapisa le go rulaganya mothamo wa tlhatlhamano ya diboltlole le le dilwana tsa dikherousarii fa bolumu e tlhagisitsweng mo diphuthelwaneng le • Go dirisa gongwe lebotlole la 1 letara kgotsa jeke ya letara go fopholetsa le go lekanyetsa , bapisa rulaganya le go rekota mothamowa ditshelo kgotsa bolumu mo ditshelong ka diletara. Lebelela dintlha tsa kgweditharo 3. Barutwana ba tshwanetse go neelwa ditirwana tse di kwalwang go tiisa tse di latelang, di tsenyeletsa go buisa ditshwantsho • Dikumo ka mothamo o kwadilwe mo go tsone go rulaganya ka tatelano • Ditshwantsho tsa dijeke fa bolumu e leng gaufi le palo ya 1 letara kgotsa 2-Dil-etara fa moleng o mogolo wa tekanyetso Se se lebeletsweng ke gore barutwana ba bale go fitlhelela gaufi le palo e fa moleng o mogolo wa tekanyetso. Ba tlhalosa bolumu jaaka ;batlile / gaufi le/ gontsinyanya go fetaa / gontsi kgotsa nnye go fetamore / kgotsa go lekana le palo (diletara) ba bala go tloga mo jekeng Go lekanyetsa mothamo jaaka tiriso ya go rarabolola dipalo le dipalelo Ka nako e abetsweng dipalo , tirisano le kamano , barutwwana ba kgona go rarabolola dipalo tseo tse di dirisang tirso ya • Tekanyetso ya mothamo/ bolumu e sa tlhomamang , s.k. Gogo o dirisa 2-Dikopi tsa maświ go dira phuting . Fa a oketsa resepe gabedi ,o tla tlhoka maświ a kae ? • diletara Tsaya tsia tlhatlhamano ya dipalo tse di maleba tsa dilwana le yone tlhatlhamano e maleba ya mefuta ya dipalo.	Thuto e le 1

Mophato wa 2 KGWEDITHARO YA 4 5. TSHEDIMOSETSO YA DIPALO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 4**	**Dintlha dingwe ts dipaloa tshedimosetso kgotsa metheokaelo ya go ruta**	**Duration** **Nako** (Mo thutong ya ura le 24 metsotso)
5.4 **Kgobokanya le go rulaganya tshedimosetso**	**Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimo-setso ka ga phaposi kgotsa sekolo ba araba dipotso tse di bodiwang ke morutabana • Rulaganya tshedimosetso ka go e nyalanya			
5.5 **Tshwantshanya tshedimosetso**	**Tshwantshanya tshedimosetso** Tshwantshanya tshedimosetso mo kerafong e e dirisediwang ditshwantsho			
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso e e mo kerafong e e dirisediwang ditshwantsho.	**Sekaseka le go ranolola tshedimosetso** Sekaseka tshedimosetso go tswa mo ditshwantshisong tse o di neetsweng	**Sekaseka le go ranolola tshedimosetso e e neetsweng** Mo nakong e ya ngwaga, morutwana o tshwanetse a bo a tlwaetse dikerafo tse di dirisediwang ditshwantsho. Go atlenegiseditswe gore mo kgwedi-tharo ya 4 barutwana ba tsepamedisiwe mo go sekasekeng tshedimosetso. Naya barutwana tšhono ya go sekaseka tshedimosetso mo kerafong e e dirisediwang ditshwantsho bonnye e le nngwe. Barutwana ba tshwanetse go araba dipotso tse o di botsang ka ga kerafo le lenaane:lebelela kgwedi-tharo 1 go batla mefuta dipotso tse di maleba	Thuto e le 1

3.5.3. TLHALOSO YA DITENG MOPHATO WA 3

MOPHATO 3 KGWEDITHARO 1 1. DIPALO, MATSHWAO LE DIKGOLAGANO
Barutwana ba mopphato wa 3 jaanong ba tla sobokanya le go tiisa se ba se ithutileng mo mophatong wa 2 le go dirisa bokgoni go dira ka dipalo go tloga mogo 0 le 999 . • Buisa le kwala dipalo ka matshwao le mafoko go • Tswelela le go tlhaola le maemo a dipalo; • Dirisa kitso ya bona ya boleng jwa palo go bontsha lefelo lwa lekgolo , masome , bonngwe le go tlhalosa kamano ya tsona • Aroganya palo ya dinoko tse tharo ba t la dirisa kitso ya bona ya boleng/kemo ya palo go bapisa le go rulaganya dipalo le neela ka mabaka a gore ke eng o di tlhopile; • Tswelela ka go balela kwa pele le kwa morago ,jaanong ka kgaotso ya 20 , 25 , 50 , le 100 ba tla simolola go lemoga kamano magareng ga go bala ka 2s le 4s • Itse go bala kgobokanyo ya didiriswa tse di tonna ka kgobokanyo . Jaanong ba bala ka thulaganyo , nepagalo le go neela mokgwa wa go lekola dipholo; • Tlhakanya le go tlosa dipalo ka tlhogo go fitlha go 50 • Rarabolola mefuta e e farologaneng ya dipalo mme o tla ithuta go rulaganya dikarabo tse di kwadilweng ka ka tsela ya thulaganyo; • Tlhopha tiriso e e nepagetseng fa o rarabolola dipalo ka mokgwa o o maleba.; • O ka rekota dipalelo tsa bona ka go dirisa matshwao tlhaknya (), tlosa () le go lekana le () . ba ka tlhalosa dikarabo le thadisa mekgwa ya bona • Dira ka mekgwa e e tlhomameng ya go rekota dipalelo tsa tlhakanyo le tloso , sekao bat la kgaogana palo e le nngwe go tse pedi go tlhakanya le go tlosa le; • O tla kgona go tlhopha go tloga go tlhatlhamano ya ditogamaano go rarabolola dipalo. Sekao go tlosa : . • Kharikhulamo e lebeletse gore barutwana ba mophato wa 3 ba itse go dira ka didiriswa tse di angwang go dira kemedi ya go tlhakanya le go tlosa . Kwa bofelong jwa ngwaga barutwana ba be ba kgona go tlhakanaya le go tlosa ba dirisa pensele le letlhare la pampir. • Morutwana yo tsenang mo mophatong wa 3 a itse go tlhaloganya boleng jwa dipalo le go aroganya ka thulaganyo ya go balela . Morutwana o simolotse go tlhaloganya 78 jaaka 78 bonngwe le jaaka 7 masome le 8 e le bonngwe . Morutwana ga a tlhoke didiriswa tse di kgongwang go nthusa go tlhaloganya .Mo mophatong wa 3 barutwana bat la tswelela go tlhoka ditshono tsa go ikatisa ka go aroganya dipalo gore bat le ba rulaganye le go tlhaloganya boleng jwa dipalo le go dirisa kitso go aroganya dipalo go tlhakanya .

MOPHATO 3 KGWEDITHARO 1 1. DIPALO, MATSHWAO LE DIKGOLAGANO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1**	**Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Nako**
1.1 **Bala didiriswa**	Bala didiriswa **tse di kgongwang tsa letsatsi le letsatsi le go bala ka nepagalo go fitlhela bonnye ko go 1000.** Togamaano ya go kgobokanya e a tlhotlheletswa.	• Bala didiriswa **tse di kgongwang tsa letsatsi le letsatsi le go bala ka nepagalo go fitlhela bonnye ko go 200** • Naya phopholetso e e dumelesegang ya palo ya didiriswa tse di ka netefatswang ka go balwa	Mo Mophatong wa 3, barutwana ba tswelela go bala didiriswa tse di kgongwang tsa letsatsi le letsatsi. Tlhatlhamano ya dipalo e tla oketsega go fitlha go kwa bofelong jwa ngwaga. Seno se raya gore didiriswa tse di dirisiwang di tshwanetswe go elwatlhoko: • Diboloko • Dikarata tsa bolengkemedi Mo kgweditharong ya ntlha, barutwana ba ikatisa le go kopanya go bala didiriswa go fitlha ka Go tsepamiwa mo kgobokanyong ya didiriswa. Barutwana ba tshwanetse go nna le maikutlo a gore go botoka, go nonofile e bile go bonako go bala ka ditlhopha tsa bolesome, someamabedi, someamatlhano le lekgolo go na leka bongwe. Ba simolola go bala ka lekgolo, go ya kwa pele le kwa morago mo kgweditharong ya ntlha. Go tshegetsa poeletso ya dipalo, barutwana ba ka rulaganya didiriswa mo ditlhopheng tsa lekgolo.. **Sekao:** Setlhopha sengwe le sengwe se bontsha lekgolo. 	

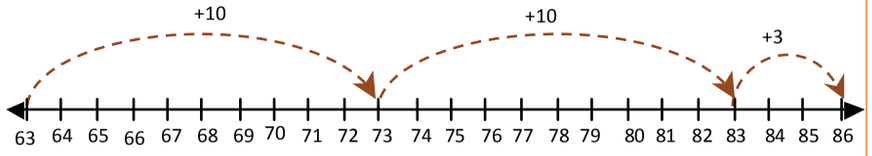
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.1 **Bala didiriswa**	Bala didiriswa **tse di kgongwang tsa letsatsi le letsatsi le go bala ka nepagalo go fitlhela bonnye ko go 1000.** Togamaano ya go kgobokanya e a tlhotlheletswa.	• Bala didiriswa **tse di kgongwang tsa letsatsi le letsatsi le go bala ka nepagalo go fitlhela bonnye ko go 200** • Naya phopholetso e e dumelesegang ya palo ya didiriswa tse di ka netefatswang ka go balwa	Mo kgweditharong e le mo ngwageng otlhe, barutwana ba tshwanetse go lemosiwa gore didiriswa tse di balwang di ka ba thusa jang mo dipalolong. Sekao**:** Go bala didiriswa ka go thuba/tlhatlhamolola didiriswa go ya ka ditlhopha tsa bolesome, someamabedi, someamatlhano kgotsa le fa e le lekgolo mme seno se tla tlhotlheletsa barutwana gore ba thube dipalo fa ba tlhakanya kgotsa go ntsha. Go tlhakanya 362 + 527, barutwana ba ka thuba/tlhatlhamolola palo ka dikarolo tsa bolengkemedi. Ke gore. 362 + 527 = (300 + 60 + 2) + (500 + 20 + 7). Barutwana ba ka bala makgolo mmogo ka ntlha ya fa ba dirile jaana fa ba ne ba bala didiriswa tse di kgobokantsweng ka makgolo. Barutwana jaanong ba bala bolesome (ba dirile jaanoa go simolola ko Mophatong 1) mme morago ka bongwe. Barutwana ba tshwanetse go tlhaloganya lebaka la gore goreng ba dirisa nako ya bona ba bala didiriswa. Kgolagano e tlhokwa go dirwa gore e bonagale. Ka kgweditharong e, barutwana ba ka tlhagisa dipalo ka go dirisa diboloko tsa Dienes kgotsa boloko ya bolesome. Barutwana ba dirisitse didiriswa tse kwa Mophatong 2.   Barutabana ba tshwanetse go kgona go feleletsa polelo e e latelang: Boleng jwa diboloko tse tsa bolesome ke_____ Barutwana ba ka dirisa dikarata tsa bolengkemedi go bontsha boleng jwa palo. Mefuta e ya ditirwana ga e a tsepama fela mo go baleng didiriswa. Go ntse fela jalo, barutwana ba: • Go tlhaloganya boleng jwa palo; • Go thuba/tlhatlhamolola le go aga dipalo; le • Bala matshwaopalo.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.2 **Go balela go ya kwa pele le kwa morago**	**Go balela go ya kwa pele le kwa morago mo:** • Dikgaotso tse di kailweng mo Mophatong 2 ka tl-hatlhamano ya dipalo e e oketsegileng go tswa mo palong nngwe le nngwe e e neilweng. • Mo bosomeamabedi, bosomeamabedtlhano, bosometlhano,bolekgolo go fitlha ka bonnye 1 000	**Go balela go ya kwa pele le kwa morago mo:** • Dikgaotso tse di kailweng mo Mophatong 2 ka tlhatlhamano ya dipalo e e oketsegileng. • Bolekgolo (100) go fitlha go bonnye 500	**Ke eng se se farologanang le sa Mophato 2?** Barutwana ba bala ka bolekgolo la ntlha. Ba dira se go fitlha go 500. Barutwana ba tlhoka tshegetso ya motheo ya didiriswa jaaka: • Dibaga tsa go bala • Diboloko tsa Dienes • Melapalo • Dipapetlana tsa dipalo Go bala ka go tlola go tlhoka go golaganngwa le lenaneo la katiso. Go bala bone go tla thusa barutwana fa ba re: • Nne e le 1 ke 4 • Bo nne ba le 2 ke 8 • Bo tharo ba le 4 ke 12 Go bala ka go tlola gape go tshegetsa go tlhaloganya katiso mme go tla thusa barutwana fa ba fetsa tatelano.	
1.3 **Matshwaopalo le mainapalo**	**Tlhaola, lemoga le go bala dipalo** • Tlhaola, lemoga le go bala matshwaopalo 0 -1 000 • Kwala matshwaopalo - • Tlhaola, lemoga le go bala mainapalo 0 -1 000 • Kwala mainapalo 0 go fitlha go	**Identify, recognise and read numbers** • Identify, recognise and read number symbols • Kwala matshwaopalo - • tlhaola, lemoga le go buisa mainapalo 0 - • kwala mainapalo -	**Ke eng se se farologaneng le sa Mophato 2?** Mo kgweditharong e barutwana ba lemoga, le go kwala matshwaopalo go fitlha ka Ba buisa mainapalo go fitlha go le kwala mainapalo go fitlha go Ikatiso ya go buisa le go kwala matshwaopalo e dirwa fa: • Go bala didiriswa; • Go bala go ya pele le kwa morago; • Feleletsa tatelano ya dipalo; le • Rulaganya le go tshwantsha dipalo. Ba tshwanetse go tlhokomelo gore ba bua dipalo ka nepagalo; ba tshwanetse go re 323 jaaka “makgoloamararo le someamabeditharo.”, mme e seng jaaka “323”. Fa o kwala palo ya dinomoro di le tharo, dipalo tse di magareng ga 100 le 110; 200 le 210; 300 le 310, 400 le 410, palo e e mo maemong a lesome ke lefela. Barutwana bangwe ba fitlhela go le boima go kwala dipalo tse ka matshwao fa ba neilwe palo ka mafoko.Sekao, go ka nna boima mo barutwaneng bangwe go kwala makgoloamararo le bone’ ka matshwao. Ba ka kwala 3004. Dikarata tsa bolengkemedi di dirisetswa bogolo go thusa barutwana go tlhaloganya gore dipalo tse di emelwa jang sentle. Barutwana gape ba tshwanetse go newa nako e ntsi ya go ikatisa ka go kwala dipalo tse.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.4 **Tlhalosa, go tshwantsha le go rulaganya dipalo**	**Tlhalosa, go tshwantsha le go rulaganya dipalo tsa go fitlha ka 999** • **Tlhalosa le go tshwantsha** • Dipalotlalo tsa go fitlha ka 999 ba dirisa nnye go na le , kgolo go na le, le lekana le. • **Tlhalosa le go rulaganya dipalotlalo go fitlha go** 999 go tswa mo go e nnye go fitlha go e kgolo, le go tswa go e nnye go fitlha go e kgolo **Dirisa dibolengkemeditatelano go bontsha thulaganyo, lefelo kgotsa maemo** Dirisa, buisa le go kwala dibolengkemeditatelano, go akaretsa mokgwa wa khutshwafatso ya go fitlha ka 31.	**Tlhalosa, go tshwantsha le go rulaganya dipalo tsa go fitlha ka 99** • **Tlhalosa le go tshwantsha dipalotlalo tse di fitlhang mo go** 99 ba dirisa nnye go na le, kgolo go na le le e lekana le. • **Tlhalosa le go rulaganya dipalotlalo tsa go fitlha ka** 99 go tswa mo go e nnye go fitlha go e kgolo, le go tswa go e kgolo go fitlha go e nnye. **Dirisa dibolengkemeditatelano go bontsha thulaganyo, lefelo kgotsa maemo** Dirisa, buisa le go kwala dibolengkemeditatelano, go akaretsa mokgwa wa khutshwafatso ya go fitlha ka 31.	**Ke eng se se farologanang le sa Mophato 2?** Mo kgweditharong e barutwana ba tiisa go rulaganya le go tshwantsha dipalo tse di flitlhang mo go mme ba tshwanetse go naya mabaka a gore goreng palo e nngwe e le kgolo go na le e nngwe.. Letla barutwana go dirisa molapalo , palopatlisiso, dipapetlana tsa dipalo, go akaretsa le kitso ya bona ya go thuba/ tlhatlhamolola dipalo ka bolesome le ka bongwe go bontsha go tlhaloganya ga bona. Fa barutwana ba rulaganya dipalo ba tshwanetse go bua gore goreng palo e le kgolo go na le e nngwe ka go dirisa boleng jwa dipalo go di tlhalosa . **Sekao:** e nnye go na le ka ntllha ya: Ke itse gore le , le le .Gape ke ditlhopha di le tharo tsa lesome le ke ditlhopha di le tlhano tsa lesome . go na le ditlhopha tse dintsi tsa lesome mo go 50go na le mo go 30. Fa o dira ka bolengkemeditatelano, alemanaka e siame thata ka e letlelelal morutwana go bua ka letsatsi la 23 kgotsa 31 la kgwedi. Barutwana ba tlhoka go ikatisa ka go buisa le go kwala ka mkwa wa go khutsafatsa.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.5 **Bolengpalo**	**Lemoga bolengpalo jwa dipalo tse di nang le dinomoro di le tharo go fitlha ka 999** • Lemoga se palo nngwe le nngwe e se emetseng • Kgaoganya dipalo tsa dinomoro di le thara tse di fitlhang go 999 ka katisanetso ya 100, katisanetso ya bosome le ya bongwe. • Tlhaola le go neela boleng jwa palo nngwe le nngwe.	**Lemoga bolengpalo jwa dipalo tse di fitlhang go 99** • Lemoga se palo nngwe le ngwe e se emelang • Kgaoganya dipalo tsa dinomoro di le pedi tse di fitlhang go 99 ka kati-kasenetso yabolesome le bongwe • Lemoga le go neela boleng jwa palo nngwe le nngwe.	**Ke eng se se farologanang le sa Mophato 2?** Kgwedithoro e ke ya go tiisa go tlhaloganya bolengpalo go tswa mo Mophatong 2. Barutwana ba tswelela go dira ditirwana tsa mefuta e e tshwanang le ya Mophato 2, Kgwedithoro 4: **Go tlhaloganya le go dirisa tlotlofoko ya bolengpalo:** Dirisa, buisa le go simolola go kwala: Bongwe kgotsa diyuniti/dikarolo,bolesome,dipalo,palo e le nngwe,dipalo di le pedi ...bolengpaol ... **Kgaoganya dipalo tse di nang le dinomoro di le pedi ka katiso ya bolesome le ya bongwe.** **Barutwana ba ka kgaoganya dipalo ka**: • Boleng jwa bolesome le jwa bongwe, sekao 73 = 70 + 3 (dikarata tsa boleng-palo di siametse go dira se) • Katiso ya bolesome le bongwe, sekao 73 = masome a le 7 + bonngwe ba le 3 **Go aga dipalo tse di nang le dinomoro di le pedi go tswa mo karolong ya bolengpalong.** **Sekao** Kwala dipalo: a) Masome a le 6 le bonngwe ba le 3 _____ b) Masome a le 2 le bonngwe ba le 5 _____ c) Masome a le 12 le bonngwe ba le 8 _____ d) Masome a le 18 le bonngwe ba le 4 _____ **Dirisa didiriswa go bontsha kgaoganyo ya dipalo:** • Abakhase a) Bontsa bolesome ba le 4 le bonngwe ba le 5 ka go dirisa abakhase. b) Bontsha masome a le 7 le bonngwe ba dirisa abakhase. 	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.5 **Bolengpalo**	**Lemoga bolengpalo jwa dipalo tse di nang le dinomoro di le tharo go fitlha ka 999** • Lemoga se palo nngwe le nngwe e se emetseng • Kgaoganya dipalo tsa dinomoro di le thara tse di fitlhang go 999 ka katisanetso ya 100, katisanetso ya bosome le ya bongwe. • Tlhaola le go neela boleng jwa palo nngwe le nngwe.	**Lemoga bolengpalo jwa dipalo tse di fitlhang go 99** • Lemoga se palo nngwe le ngwe e se emelang • Kgaoganya dipalo tsa dinomoro di le pedi tse di fitlhang go 99 ka kati-kasenetso yabolesome le bongwe • Lemoga le go neela boleng jwa palo nngwe le nngwe.	Dikarata tsa bolengpalo Barutwana gape ba dirisa dikarata tsa bolengpalo go botsha dikarolo tsa palo. **Sekao:** **Mefuta e e latelang ya dipotso e ka bodiwa:** • Bua gore palo 8 mo go 28 e emela eng? Le 2? • Bua gore ke palo efe e e lekanang kgo tsa e e tshwanang le:: a) Bolesome ba le 6 b) Bolesome ba le robongwe le bonngwe ba le bararo c) Bolesome ba le lesome le bonngwe ba le robongwe	
THARABOLOLO YA DIPALO DI LE MO TIRISONG				
1.6 **Ditogamaano tsa go rarabolola dipalo**	Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome	Dirisa ditogamaano tse di latelang fa ba rarabolola mathata: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo	**Ke eng se se farologanang le sa Mophato 2?** Barutwana ba solofetswe go rarabolola dipalofoko ba dirisa ditogamaano tse di latelang: • Go aga le go thuba/tlhatlhamolola dipalo • Go oketsa gabedi le go kgaoganya gabedi • Melapalo Go thala didiriswa tsa go fitlha ka 99 ke morutwana ka boena ga go a siama mme e bile ga go a tshwanela ga rotloetswe. Brotloetsa kakaretso ya matshwaopalo mo go rekoteng, go akaretsa le mo kemisetsong ya ditshwantsho. Barutwana gape ba ka rotloetswa go kwala dipolelo tsa dipalo. Letlelela barutwana go tlhopha togamaano e e bonolo mo go yona. Tlhatlhamano ya dipalo le mofuta wa dipalo di tla laola togamaano e e dirisiwang. Le gale fa barutwana ba dirisa togamaano e e sa siamang,/atlegeng, ba tlhoka go kaediwa go dirisa mefuta e e siameng. **Go aga le go thuba/tlhatlhamolola dipalo** Seno le togamaano e e botlhokwa mo Kgatong ya Motheo. Tiriso ya togamaano e e lrtlelela barutwana go dirisa go kgaoganya le go kopanya dipalo gape go ba thusa gore go nolofatsa go balela. Ba tla dirisa togamaano e gantsi mo Kgatong ya Magareng.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.6 **Ditogamaano tsa go rarabolola dipalo**	Dirisa ditogamaano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome	Dirisa ditogamaano tse di latelang fa ba rarabolola mathata: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo	**Oketsa gabedi le go aroganya ka bogare** Togamaano e e tlhabologile thata mme e tlhoka palotemosi e e boima. Barutwana ba ba kgonang go tlhopha togamaano e, ba kgona go laolega mo ditogamaanong tse ba di dirisang. Go itse go oketsa gabedi go tla letla barutwana go dirisa togamaano ya gaufi le go oketsa... Sekao: Palofoko: Ka tsatsi lengwe kwa tlililiking, bana ba le 45 ba ne ba newa moento wa mokgotlhwane. Mo letsatsing le le latelang bana ba le 46 ba ne ba centwa. Ke bana ba le bakae ba ba entilweng gotlhelele.. Palo e rarabololwa ka go dirisa koketsopedi. Morutwana a kare oketsa 45 gabedi tlhakanya 1 kgotsa oketsa 46 gabedi o be o ntsha 1. **Melapalo** Tiriso ya melapalo mo go thuseng barutwana go balela, go tla naya barutwana mokgwa wa go rekota se ba se naganang le go sala se morago. Gape e thusa barutwana go nna le setshwantsho sa go rekota se ba ka se dirisang go tlhalosa mokgwa o ba rarabolotseng palo ka gona. Barutwana ba ntse ba dirisa melapalo go simolola kwa Mophatong 1. Barutwana ba tshwanetse go kgoa go aga melapalo e e se nang dipalo/e e senag sepe mo ba ithutelang teng go kwala palo e e simologang mme ba tseye tshwetso ya gore ba ya go tswa jang mo palong e nngwe go fitlha go e nngwer Sekao sa go bontsha gore molapalo o dirisiwa jang: Bana ba le 23 ba tsaya loeto gompieno. Go santsane go na le bana ba le 63 mo sekolong. Go ne go na le bana ba le bakae kwa tshimologong? 	
1.7 **Go tlhakanya/ tlhakanyo le go ntsha**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 999	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarabo tse di fitlhang go 99.	**Dikao tsa dipalo tse di ka dirwang mo Kgweditharong e.** **Mo Mophatong o, barutwana ba gatelela tiro e ba e dirileng mo Mophatong 2. Lebelela dintlha tsa tharabololo ya mefuta ya dipalo mo Mophatong 2, Kgaolo 2.**	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.8 **Poeletso ya tlhakanyo e e isang kwa katisong**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang katiso ka dikarabo tse di fitlhang go 99.	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose tharabololo ya bona ya dipalo tse di akaretsang katiso ka dikarabo tse di fitlhang go 50.	**Dikao tsa dipalo tse di ka dirwang mo Kgweditharong e.** • Moagi o tlhoka go baya ditena di le 6 ka mela, ka ditena di le 8 mo moleng mongwe le mongwe. O tla tlhoka ditena di le kae? • Boitumelo o na le dikgetsana di le 4 tsa dimonamone. Kgetsana nngwe le nngwe e na le dimonamone di le 6. Ke dimonamone di le kae gotlhelele? • Mme o batla go baka dikuku di le 12. Fa kuku e le nngwe e tlhoka mae a le 2, mme o tshwanetse go reka mae a le makae? • Fa morutwana a le mongwe a buisa dibuka di le 3 ka Phatwe, ke dibuka di le kae tse di ka buisiwang ke barutwana ba le 20 mo phaposing? **Mofuta wa palo 9: Tatelano** • Tshingwana ya merogo e na le mela e le 12 ya dijalo. Mola mongwe le mongwe o o na le dijalo di le 7. Go na le dijalo di le kae mo tshingwaneng? • Tshingwana ya merogo e na le mela ya dijalo di le 12. Mola mongwe le mongwe o na le palo e e lekanang ya dijalo. Fa go na le palogotlhe ya dijalo di le 48, go na le dijalo di le kae mo moleng mongwe le mongwe? • Tshingwana ya merogo e na le dijalo di le 48 tse di jetsweng ka mela. Go na le dijalo di le 7 mo moleng mongwe le mongwe. Go na le mela e le mekae? **Go dirisa go oketsa gabedi go rarabolola dipalo** • Lesego o na le dingwaga di le 8. • Mogoloe yo mogolo o na le dingwaga di le pedi go feta tsa ga Lesego. • Rraagwe o na le dingwaga di le nne go feta tsa ga Lesego. • Rremogolo feta rraagwe Lesego gabedi. • Mongwe le mongwe o na le dingwaga di le kae? • Buka ya ga Boitumelo e boleele jwa ditsebe di le 48. O mo tsebebg ya 26; a o buisitse go feta halofo ya buka? Mo Mophatong 3 barutwana ba solofetswe go lemoga lefoko la palogotlhe la katiso. Barutwana ba tshwanetse go rotloetswa go dirisa mmogo le ditshwantsho, go na le go dirisa didiriswa kgotsa ditshwantsho ka bo bona.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.9 **Kgobokanyo le kgaoganyo e e isang kwa karoganyong**	Rarabolola dipalo tse di mo tirisong tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotlalo tse di fitlhang ko go 200 ka dikarabo tse di ka akaretsang disala.	Rarabolola dipalo tse di mo tirisong tse di akaretsang kgaoganyo e e lekanang le kgobokanyo ka dipalotlalo tse di fitlhang ko go 50 ka dikarabo tse di ka akaretsang disala.	Mo kgweditharong e, letshwao la karologanyo le a simololwa. Go botlhokwa gore barutwana ba tlhaloganye dikgopolo tse di latelang tsa go aroganya pele ga letshwao le dirisiwa: Dipalo tse di akaretsang go kgaoganya ka gale di ka ga:: • Go aroganya ka go lekana; le • Mongwe le mongwe o bona bokae?. • Dipalo tse di akaretsang go aroganya ka gale di ka ga; • Ke ditlhopha di le kae tse di bopilweng? **Dikao tsa dipalo tse di ka dirwang mo Kgweditharong e.** • Fa barutwana ba le le barutabana ba le mme batho bal le ga ba kgone go tsena mo beseng, bese e tshwanetse go tsamaya ga kae go ya le go bowa, pele bana botlhe ba kgona go tsena kwa moletlong? • Boitumelo o paka dibadisi di le ka mela e le .go na le dibadisi di le kae mo moleng? • Basetsana ba le 35 ba batla go tshameka bolotlowa. Go tla nna le ditllhopha di le kae tsa basetsana ba le 7mo setlhopheng sengwe le sengwe ? • Fopholetsa pele: • A e tla feta kgotsa e tla nna fa tlase ga 10? • A e tla feta kgotsa e tla nna fa tlase ga 20? • Magogodi o reka dimonamone di le 44. O di aroganya ka go lekana go dira diphuthelwana di le 4 go di rekisa. Go na le dimonamone di le kae mo se-phuthelwaneng? • Magogodi o reka dimonamone di le 48. O batla go di aroganya ka dimona-mone di le 6 mo kgetsaneng nngwe le nngwe. O tlhoka dikgetsana di le kae?	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.10 **Dipalopatlo**	Go rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang goaroganya ka tekano go go isang kwa ditharabololong tse di akaretsangtse di kopaneng le tse di sa kopanang Sekaok $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe	Go rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang goaroganya ka tekano go go isang kwa ditharabololong tse di akaretsangtse di kopaneng le tse di sa kopanang Sekao $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe lekanang tsa selo sotlhe	Mo Mophatong 2 barutwana ba simolotse go rutwa ka dipalophatlo ba: • Arogantse le go kgobokanya dilo ka go lekana; • Ba neile dikarolo tsa dipalophatlo maina; • Tlhaotse dipalophatlo mo tirisong e e farologaneng; • Ba kwadile maina a dipalophatlo jaaka nngwe tharong, nngwe tlhanong; • Dipalophatlo tsa gotlhe tsa didiriswa tse ; le • Dipalophatlo tsa kgobokanyo ya didiriswa **Ke eng se se farologanang le sa Mophato 2?** Mo kgwedithoro e, barutwana ba tswelela go dira ka dipalophatlo tse di kopaneng jaaka, halofo e le nngwe, nngwe tharong, kotara ya 1, nngwe tlhanong. Barutwana ba rutwa gape dipalophatlo tse di sa kopanang , sekao. Dikotara di le 3, peditharong. Ga go sololfelwe gore barutwana ba dirise mareo a: tse di kopaneng le tse di sa kopanang. **Dikao tsa dipalo tse di ka dirwang mo kgwedithoro e.** • Go aroganya go go isang kwa dipalophatlong Aroganya ditšhokolete di le 8 magareng ga ditsala di le 3 gore botlhe ba bone bogolo jwa tšhokolete jo bo lekanang mme go sa sala sepe. • Palophatlo ya kgobokanyo a) Batla kotare e le 1 ya dimonamone di le 16. b) Dimonamone di le 8 ke palophatlo efe ya dimonamone di le 24? c) Nkoko o naya Masego R12. Masego o batla go boloka nngwe-tharong ya madi . O tshwanetse go boloka madi a le makae? d) Mofuta wa palo o tshwanetse go newa fela morago ga gore barutwana ba rarabolole dipalo di le nne kgotsa tlhano tsa “go aroganya, go go isang kwa mofuteng wa dipalophatlo mme ba itse maina a dikarolo tsa dipalophatlo ” **Go kwala dipalophatlo** Ga go solofelwe gore barutwana ba kwale letshwao la palophatlo. Barutwana ba ithutile gore dikarolo tsa dipalophatlo di tshwaiwa jang jaaka, 1 botlhanong dikwatara di le 3 kgotsa 3 boratarong. Sa ntlha, seno se ba thusa pele go tlhaloganya gore maina a dipalophatlo a tlhalosa gore ke dikarolo di le kae tse di se arogantsweng ka: sekao, halofo, borarong, dikotara, jalo jalo. Sa bobedi, ke dikarolo di le kae tse di tsewang tsie, sekao, pedi tharong.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.10 **Dipalopatlo**	Go rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang goaroganya ka tekano go go isang kwa ditharabololong tse di akaretsangtse di kopaneng le tse di sa kopanang Sekaok $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe	Go rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di akaretsang goaroganya ka tekano go go isang kwa ditharabololong tse di akaretsangtse di kopaneng le tse di sa kopanang Sekao $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ le tse dingwe lekanang tsa selo sotlhe	Go emelela dipalophatlo le dipalofoko • Barutwana bat hale dikarabo tsa bona go netefatsa gore ba tlhaloganya dipalo. • Solofelwa gore barutwana bangwe ba ka thala palophatlo ka nepagalo mme ba neye leina le le fosagetseng la karolo ya palophatlo. Thusa barutwana ba go naya dipalophatlo maina ka nepagalo. (lebelela dintlha tse di golaganang le kabo ya maina ya dipalophatlo) • Barutwana ba neye dikarolo tse di arogantsweng maina jaaka, pedi tharong.	
1.11 **Tšhelete**	• Lemoga le go tlhaola papetlanai le a pampiri a Aforika Borwa • Go rarabolola dipalo tsa papetlana tse di aka-retsang dipalogotlhe le tšhentšhi mo diranteng kgotsa disente. • Go dira diphetolelo magareng ga diranta le disente	• Lemoga le go tlhaola tšhelete ya papetlana ya Aforika Borwa • Go rarabolola dipalo tsa madi tse di akaretsang dipalotlalo le tšhentšhi mo diranteng	Mo kgweditharong e, barutwana ba tswelela go rarabolola dipalo tsa tšhelete. **Sekao:** Barutwana ba Mophato wa 3 ba tlhoka R759 ya kampa ya phaposi. Ba kgobokantse R250. Ba tlhoka bokae gape gotlaleletsa? a) Kwala 325c jaaka diranta le sente. b) Ke mefuta e mekae e o ka dirang R400 ka go dirisa diranta? O itse jang gore o na le ditharabololo tsotlhe? c) Neo o na ledisente di le 50 le di le 20. Dimonamone tsa dithofi di ja R1,20. O tla bona tšhentšhi? d) Fa diaparo tsa go ikatisa di ja R150, diaparo tsa go ikatisa di le l 2di ja bokae? **Dipalo tsa go reka le go rekisa** **Sekao** a) Nkoko wa ga Tumelo o mo neile R5. A ka reka dimonamone dife di 3? tšhokolete ke R2,70; ditšhapisi ke R1,80; dimonamone tse di botlha R1,40; dimonamone tsa perekisi R1,60; dimonamone tsa minti R2,20; thofi R1,20. b) Lesego o rekile dibuka di le tharo ka R80 nngwe le nngwe, o tla bona bokae tšhentšhi go tswa mo go R300? c) Dipaki tsa diminti di le 5 minti o le mongwe o ja disente di le 44. Neo o tlhoka diminti di le 88. O tshwanetse go reka dipakete di le kae? O tla duela bokae?	

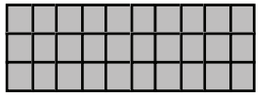
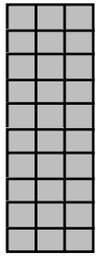
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
DIPALELO TSE DI SENG MO TIRISONG				
1.12 **Titogamaano** **(mekgwa kgotsa ditogamaano)**	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo	Ditogamaano tse di tla dirisiwa mo tharabololong ya dipalo le mo dipalelong tse di seng mo tirisong. **Go aga le go thuba dipalo** Seno ke togamaano e e botlhokwa thata mo Kgatong ya Motheo. Tiriso ya togamaano e, e letlelela barutwana go kgaoganya le go kopanya dipalo gape go ba thusa go dira dipalelo bonolo. Togamaano e, e tla dirisiwa thata gape mo Kgatong ya Bogare. Go botlhokwa gore barutwana ba dirise kitso e e ba e itseng fa ba thuba/tlhatlhamolola dipalo. Sekao. • Go thuba/tlhatlhamolola ba dirisa bolengpalo, • Go thuba/tlhatlhamolola ba dirisa katisanelo ya10; le • Go thuba/tlhatlhamola dipalo ka sebedi. **Melapalo** Barutwana ba tla tswelela go dirisa le go aga melapalo ya bona gore ba kgone go balela. Go a kgonagala gore molapalo o tla dirisiwa bogolo mo dipalelong le mo t lhakanyong. **Tlhakanyo le ntsho.** Barutwana ba tshwanetse go aga melapalo ya bona le go kgaoganya dipalo ka dikarolo tse di kgonagalang. **Sekao:** Molapalo o tshwanetse go simolola mo go 45 mme barutwana ba itlhamele metlolo e le 2 ya 10 mme morago motlolo o le mongwe o o bontshang 7. **Katiso** Melapalo e tshwanetse go tswelela go dirisiwqa go tshegetsa tlhakanyo e e boelediwang. Metlolo e e lekanang e rekotiwa mo molapalong mme le dipolelo tsa tshegetso di ka rekotiwa.	

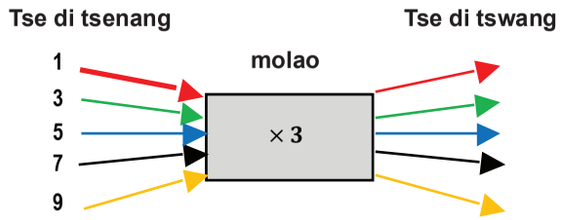
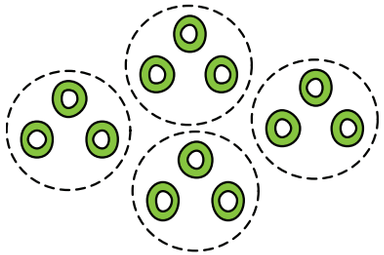
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha ka 999 • Ntsha go tswa mo go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30	• Tlhakanya go fitlha ka 99 • Subtract from 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 20	Mo kgweditharong e, barutwana ba ikatisa le go aga tiro e e dirilweng mo Mophatong 2. Fa barutwana: • Dira fela ka dibadisi tse di kgaoganeng; • Thala ditshwantsho tsa bongwe fela; le • Bala gotlhe ka bongwe Fa ba dira ka dipalotlalo tse di fetang 30, e ba dira ka bonya, mme gape ba oketsa ditshono tsa bona tsa dira palelo e diphoso. Se se botlhokwa mo go bona go godisa ditogamaano tsa bone tsa bokgoni go feta,Go aga le go aroganya dipalo e nna selo sengwe sa ditogamaano tsa botlhokwa tse barutwana bat la di di dirisang mo tsamaong ya kgweditharo. Mekgwa e e leng gona go botsha tlhakanyo le tloso ya palelo. **Go aga le go aroganya dipalo mo dikarolong tse dinnye go dira palelo bonolo** Barutwana ba ka aroganya dipalo ka ditsela tse ba kgonang ka tsona.Se se tlhalosa gore ba tla dirisa ditsela tse di farologaneng. **Go dirisa kitso ya boleng jwa boalo go aroganya dipalo ka bolesome le bonngwe** • Go tlhakanya palo-pedi ka go aroganya dipalo tsoopedi . 43 + 36 = □ 43 + 36 = (40 + 3) + (30 + 6) = (40 + 30) + (3 + 6) = 70 + 9 =79 • Go tlhakanya ka go aroganya palo e le yosi 43 + 36 = □ 43 + (30 + 6) 43 + 30 □ 73 + 6 = 79	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha ka 999 • Ntsha go tswa mo go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30	• Tlhakanya go fitlha ka 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 20	• Go aroganya ka ditlhopha tsa bolesome 43 + 36 = □ 43 + (10 + 10 + 10 + 6) 43 + 10□ 53 + 10□ 63 + 10□ 73 + 6 = 79 Tloso • Go tlosa ka go aroganya dipalo tsoopedi 87- 56 = □ 87- 56 = (80 + 7)- (50 + 6) = (80- 50) + (7-6) = 30 + 1 = 31 • Go tlosa ka go aroganaya palo e le yosi 87-56 = □ 87- (50 + 6) 87- 50 □ 37 - 6 = 1 Lebelela gore barutwana ba ka aroganya dipalo ka ditsela tse di farologaneng tse di bonolo mo go bona go balela: • Go aroganya dikatisenetswa tsa 10 87- 56 = □ 87- (20 + 20 + 10 + 6) 87- 20 □ 67-20 □ 47- 10 □ 37- 6 □ 31 **Go dirisa le go diragatsa kitso e e fetileng jaaka bothegeniki.** • Go dirisa go hafola go aroganya dipalo 69 + 12 69 + (6 + 6) 69 + 6 □ 75 + 6 = 81 • Balela pele le kwa morago 78 – 69 = □ Go bala ka bonngwe go tloga mo go 69 ke maano a maleba gonne dipalo di gaufi go tse dingwe.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha ka 999 • Ntsha go tswa mo go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30	• Tlhakanya go fitlha ka 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 20	• Tlhopha gaufi le tsa koketso gabedi 34 + 35 Tlhalosa gore koketso ya 34 gabedi o tlhakanya le 1 kgotsa koketso ya 35 gabedi o tlosa 1. 34 + 34 + 1 Barutwana ba ka rekota maano ba dirisa notation go se tshegetsa mokgwa wa go balela 34 + (30 + 4) + 1 34 + 30 □ 64 + 4 □ 68 + 1 □ 69 • Fetola palo go dikatinesetswa tsa bolesome mme morago o tlose kgotsa o tlhakanye **Balela go ya godimo le kwa tlase gaufi le 10** 58 + 19 = □ Fa barutwna ba tlhoka go ipolelela gore ban a le ditlhopho tse pedi. Fetolela 58 kgotsa 19go fitlha go dikatisenetswa tsa 10. Tlhopho ke ya bona. Palo e ka kwalwa jaaka: 58 + 19 = 58 + 20 - 1 58 + 20 □ 78 - 1 = 77 Barutwana bangwe ba ka aroganya 20 go ditlhopha tse 2 tsa 10 go balela ka nepagalo **Ithute dipalotlamo go fitlha go 20** Dipalotlamo go fitlha 20 go tshwanetse go dirwa go dirisiwa ditshwantshiso tse di farologaneng. **Go aga le go ithuta dikgono tsa tlhakanyo le tloso** Barutwana ba tshwanetse go ithuta dilo dingwe ka dikgono tsa go tlhakanya le go tlosa . • Tlhakanya kgotsa tlosa dipalo tsa palonngwe go tloga go tsa palopedi kwa ntle ga go feta10: Sekao: (a) 65 + 4 (b) 89 - 3	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha ka 999 • Ntsha go tswa mo go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha ka 30	• Tlhakanya go fitlha ka 99 • Ntsha go tswa go 99 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha ka 20	• Tlhakanya palonngwe go fitlha go dikatinesetswa tsa10 Sekao (a) 70 + 5 (b) 90 + 3 • Tlosa palonngwe go tloga go dikatinesetswa tsa 10 Sekao: (a) 80 - 6 (b) 50 - 3 • Tlhakanya kgotsa tlosa 10 go tloga go le ya go palopedi Sekao: (a) 56 + 10 (b) 68 + 10 (c) 79 - 10 (d) 57 - 10 • Tlhakanya kgotsa tlosa para ya dikatisenetswa tsa 10 kwa ntle ga go feta 100 (a) 40 + 30 (b) 80 – 50 **Go lekola dipholo tsa go balela** Go lekola sa kgonagaleng ga dikarabo Barutwana ba ithute go tsaya tsweetso ka dikarabo tse di kgonagaleng Tsela e nngwe ya go dira se ,ke go fopholetsa dikarabo pele o balela. sekao Fa o tlhakanya dipalo tse pedi tse di bapileng. 45 le 46, Barutwana ba ka dira koketso gabedi ka tsela ya go fopholetsa dikarabo tsa bona. Lekola dikarabo Barutwana ba itse gore ba kgona • Go lekola palelo ya tlhakanyo ka go tlosa . Sekao : Fa 36 + 18 = 54; mme 54- 18 = 36 • Lekola palelo ya tloso ka go tlhakanya Sekao : 84- 48 = 36, then 36 + 48 = 84 Go dirisa palelo tlhanolo go netefatsa dikarabo ke lengwe la mabaka a go ruta tlhakanyo le tloso mmogo.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.14 **Go boeletsa tlhakanyo e tsamaelang kwa katisong**	• Atisa dipalo go tloga 1 go fitlha 10 ka 2, 3, 4, 5, 10 go palogotlhe ya 99 • Dirisa matshwao a maleba (x, =, ☐)	• Atisa dipalo 1 go 10 ka 2, 5, 3, 4 • Dirisa matshwao a maleba (x, =, ☐)	Mo mophatong 2 barutwana ba atisa ka dipalo learners multiplied numbers go ka le go fitlha go 50. Ba itsisitswe pele go letshwao le go dirisa mo dipolelopalong. Barutwana mo mophatong 3 ba tswelele go ithuta le go dirisa puo ya katiso mo maemong a tiragatso ; koketso gabedi , gabedi, katiso , go atisa ka , bontsi ka, ditlhopha tsa , ga kana, gararo go kana gontsi go. Puo e tshwanetse go dirisiwa fa go dirwa dipalo tsa go atisa. Mo tsamaong ya kgweditharo barutwana ba ka bo ba atisa ka botharo kgetho la ntlha. Barutwana ba tsenang mo mophatong 3 ba tshwanetse go dira kemedi ya tlhakanyo e boelediwang ba dirisa letshwao la go atisa. Barutwana ba tshwantse go kgona go tlhalosa go atisa ka mekgwa e farologanyeng. Ba tlhaloganya gore 3 ka ditlhopha tsa bothataro ba ka kwalwa jaaka . Go na le gape tlhaloganyo gore 3 ga 6 e ka kwalwa jaaka . Kitso e ,e tsweletse go agwa mo mophatong 3 . Barutwana ba tla tswelela go dirisa dithusathuto tse di kgonngwang metsu, le molapalo go tlhaloganya le kemedi ya katiso Go tloga mophato 3 barutwana ba tshwanetse go tlhokomela gore katiso e ka dirwa ka thulaganyo nngwe le nngwe . **Dikao:** Barutwana ba tshwanetse go tlhaloganya le go kwala tse di latelang: 3 × 10 = ☐ 10 × 3 = ☐ 30 = 10 × ☐ 30 = 3 × ☐ Dintlha tse di fa godimo fa di tshwanetse go tshegetswa ka go dirisa ditshwantshi kgapetsakgapetsa tseo tse di letlang barutwana go bona gore le e go neela karabo e tshwanang **Dikao:**  **and** 	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.14 **Go boeletsa tlhakanyo e tsamaelang kwa katisong**	• Atisa dipalo go tloga 1 go fitlha 10 ka 2, 3, 4, 5, 10 go palogotlhe ya 99 • Dirisa matshwao a maleba (x, =, ☐)	• Atisa dipalo 1 go 10 ka 2, 5, 3, 4 • Dirisa matshwao a maleba (x, =, ☐)	Kwa bofelong jwa kgweditharo barutwana ba tshwanetse go simolola go kgona go tlhaloganya gore katiso e ka dirwa ka thualanyo nngwe le nngwe . Tlhaloganyo e , e tshwanetse go tswelela e ithutiwa mo tsamaong ya ngwaga . Barutwana ba kgona go dirisa kelelo ya ditshwantshi go rekota dipalo tsa go atisa. **Dikao:**  	
1.15 **Go arola**	• Arola dipalo go fitlha go ka • Dirisa matshwao a maleba (÷,=, ☐)	• Arola dipalo go fitlha go ka • Dirisa matshwao a maleba (÷,=, ☐)	Letshwao lwa go arola le itsisiwe mo mophatong 3. Mo dingwageng tse pedi tlhaloganyo ya go aroganya le tlhakanyae ntse e ithutiwa jaanong ke nako ya gore tlhaloganyo tse pedi tse di gokaganngwe . Letshwao lwa go arola le ka itsisiwe barutwana fa barutwana dir dipaloina/mafoko. Kitsisopele ya letshwao e ka tshegetswa ka ditshwantshi tse di fa tlase fa.go botlhokwa go dirisa ditshwantshi tse di tlwaelegileng. **12 a aroganngwa gare ga 3 e go fa ditlhopha di le 4**  **4 × 3 = 12** **12 a aroganngwa gare ga 4 e go fa 3** **12 a aroganngwa gare ga 4 e go fa ditlhopha di le 3** **3 × 4 = 12** **12 a aroganngwa gare ga 3 e go fa 4** **Dikao:** **12 ÷ 3 = 4 go tlhalosa:** 12 le arogantswe ka bo 3 e go fa 4 ditlhopha , 12 e arogantswe gare ga 3 e go fa 4 nngwel le nngwe.	

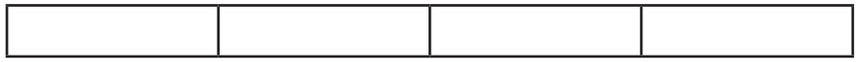
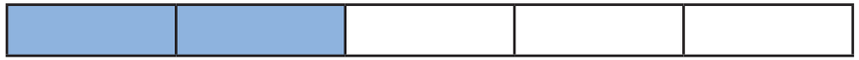
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhogo**	**Tlhaloganyo ya dipalo:Tlhatlhamano 999** • Rulaganya sete ya dipalo tse di netsweng tse di tlhaotsweng • Bapisa dipalo go fitlha go 999 le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go • Dipalo tsa go atisa le go arola tsa: • Manane a pedi go fitlha • Manene a lesome go fitlha go **Ditogamaano tsa palelo** Dirisa ditogamaano tsa go balelela tse di latelang: • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga tlhakanyo le tloso • Dirisa kamano mo gareng ga katiso le karolo	**Tlhaloganyo ya dipalo: Tlhatlhamano ya 200** • Rulaganya sete ya dipalo tse di netsweng tse di tlha-otsweng tsa tlhatlhamaano ya 200 • Bapisa dipalo go fitlha go 200le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta. **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go **Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano go balela : • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga katiso le karolo	Ditogamaano tsa dipalo , tlhaloganyo ya dipalo , kitso le dipalo tse di itseng di agwa mo tsamaong ya palelo ya tharabololo ya dipalo. Tse di ithutiwa ka nako ya thuto ya dipalo tsa tlhogo. Tse di thusa gore barutwana ba di tlwaele le go kgona go di dirisa bonolo fa ba balela dipalo le rarabolola dipalo mo tirisong . Mo tsamaong ya kgweditharo,barutwana ba tswelela go aga bokgoni dira ka dipalo ba phuthologile. Ditogamaano tsa dipalo tsa tlhogo tseo barutwana ba agang di tla ba thusa ka mokwalo wa dipalo tse di kwalwang le go thusa barutwana go fopholetsa. Dikao tsa dipotso tse di ka bodiwang: Tlhaloganyo ya dipalo: Dipaloina le matshwao Hold up a card or write down a number name. Choose a learner to write the matching numeral. **Kgolo kgotsa nnye go feta** Ke eng • 1 nnye go feta 200 • 1 kgolo go feta199 • 2 kgolo go feta 102 • 2 nnye go feta 105 • 3 kgolo go feta 77 • 3 nnye go feta 51 • 4 kgolo go feta 68 • 4 nnye go feta 167 • 5 kgolo go feta 129 • 5 nnye go feta 185 • 10 kgolo go feta 90 • 10 nnye go feta 160 Ke tlhaka efeng ya dialefabete e leng ya botlhano? Ke kgwedi efeng ya ngwaga e leng ya borobonngwe?	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhogo**	**Tlhaloganyo ya dipalo:Tlhatlhamano 999** • Rulaganya sete ya dipalo tse di netsweng tse di tlhaotsweng • Bapisa dipalo go fitlha go 999 le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go • Dipalo tsa go atisa le go arola tsa: • Manane a pedi go fitlha • Manene a lesome go fitlha go **Ditogamaano tsa palelo** Dirisa ditogamaano tsa go balelela tse di latelang: • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga tlhakanyo le tloso • Dirisa kamano mo gareng ga katiso le karolo	**Tlhaloganyo ya dipalo: Tlhatlhamano ya 200** • Rulaganya sete ya dipalo tse di netsweng tse di tlha-otsweng tsa tlhatlhamaano ya 200 • Bapisa dipalo go fitlha go 200le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta. **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go **Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano go balela : • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga katiso le karolo	**Thulaganyo le go bapisa** Ke fee e kgolo: kgotsa ? Neela palo mogare ga 1 le **Gopola ka bonako** Dipalo tsa tlhakanyo le tloso: • Itse ka pelo dipalotlamo tsotlhe tsa tlhakanyo le tloso 20 Dikao a) _____+ △ = 20 b) _____+ △ = 16 c) _____+ △ = 20 Tlhakanya le go tlosa dipalo kgotsa dipalo go fitlha go le go akaretsa 20 Dikao a) 1 + 11 = 12 b) 18 – 4 = 14 c) 11 + 1 = 12 d) 18 – 14 = 4 e) 2 + 10 = 12 f) 18 – 5 = 13 g) 10 + 2 = 12 h) 18 – 13 = 5 i) 3 + 9 = 12 j) 18 – 6 = 12 k) 9 + 3 = 12 l) 18 – 12 = 6 Gopola ka bonako tlhakanyo koketso gabedi go . Se se tshwanetse go akaretsa dipalo tsa tloso e dumalanang. Dikao: a) 1 + 1 = 2 b) 6 + 6 = 12 c) 2 + 2 = 4 d) 7 + 7 = 14 e) 3 + 3 = 6 f) 8 + 8 = 16 g) 4 + 4 = 8 h) 9 + 9 = 18 i) 5 + 5 = 10 j) 10 + 10 = 20	

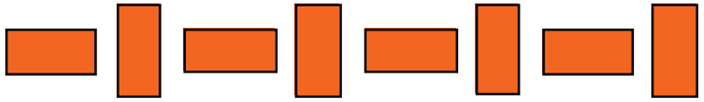
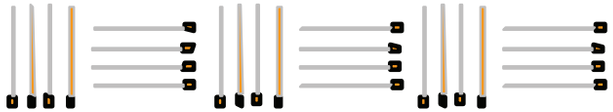
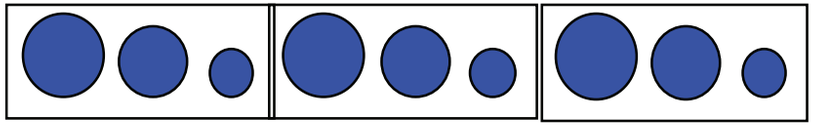
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhogo**	**Tlhaloganyo ya dipalo:Tlhatlhamano 999** • Rulaganya sete ya dipalo tse di netsweng tse di tlhaotsweng • Bapisa dipalo go fitlha go 999 le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go • Dipalo tsa go atisa le go arola tsa: • Manane a pedi go fitlha • Manene a lesome go fitlha go **Ditogamaano tsa palelo** Dirisa ditogamaano tsa go balelela tse di latelang: • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga tlhakanyo le tloso • Dirisa kamano mo gareng ga katiso le karolo	**Tlhaloganyo ya dipalo: Tlhatlhamano ya 200** • Rulaganya sete ya dipalo tse di netsweng tse di tlha-otsweng tsa tlhatlhamaano ya 200 • Bapisa dipalo go fitlha go 200le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta. **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go **Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano go balela : • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga katiso le karolo	**Dikao:** Bontsha palo e o tlhakanyang le .....go fitlhelela (kwala fatshe o dirisa maemotlhotlhwa kampo dikarata tsekedimo). a) 8 b) 2 c) 9 d) 15 e) 3 **Dikao:** Bontsha palo e setseng fa .....a tlosiwa go tloga go (kwala fatshe o dirisa maemotlhotlhwa kampo dikarata tsekedimo). a) 5 b) 18 c) 0 d) 14 e) 7 Tlhakanya kgotsa tlosa dikatisanetso tsa go Sekao: a) Bolela gore o tshwanetse go tsaya dikgato tse kae mo molapalong go tloga go 30 go ya go 100 kgotsa go tloga go 100 go fitlha go 50. b) Batla para ya dikarata go dira 100. c) Baya dipalo mo lebokoseng go dira 100 □ + 70 = 100 20 + □ = 100 100 – □ = 90 100 – 40 = □	

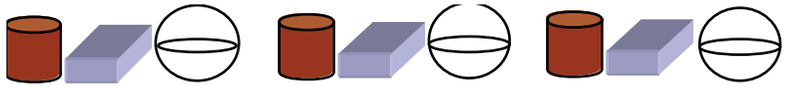
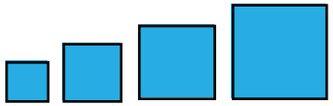
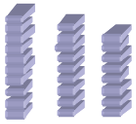
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhogo**	**Tlhaloganyo ya dipalo:Tlhatlhamano 999** • Rulaganya sete ya dipalo tse di netsweng tse di tlhaotsweng • Bapisa dipalo go fitlha go 999 le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go • Dipalo tsa go atisa le go arola tsa: • Manane a pedi go fitlha • Manene a lesome go fitlha go **Ditogamaano tsa palelo** Dirisa ditogamaano tsa go balelela tse di latelang: • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga tlhakanyo le tloso • Dirisa kamano mo gareng ga katiso le karolo	**Tlhaloganyo ya dipalo: Tlhatlhamano ya 200** • Rulaganya sete ya dipalo tse di netsweng tse di tlha-otsweng tsa tlhatlhamaano ya 200 • Bapisa dipalo go fitlha go 200le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta. **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go **Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano go balela : • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga katiso le karolo	**Ditogamaano tsa dipalo:** Dirisa ditogamaano tsa dipalo go tlhakanya le go tlosa ka kgono. Tlhakanya dipalo tse mmalwa ka go dirisa ditogamaano jaaka : • Lebelela dipalo pedi tse di dirang 10 le go dirisa tse pele 2 + 7 + 8 2 + 8 e dira10 le gape go tlhakanya 7. Baya dipalo tse kgolo pele gore o tle o balele pele kgotsa morago • Simolola ka dipalo tse di tonna thata 5 + 15 Bolela gape dipalopolelo: 15 + 5 le go balela pele go fitlha go 20 • Fetolela palo go 10 le gape go tlosa kgotsa go tlhakanya 1 Sekao : 8 + 9 = 17 e ka dira le tlhalosa gore nngwe 8 + 9 = 8 + 10 – 1 6 + 11 = 17 le go tlhalosa gore nngwe e ke dira 6 + 10 + 1 17 – 9 = 8 le go tlhalosa gore nngwe e ke dira 17 – 10 + 1 • Kgaoganya dipalo go dirarotshana le gape go tlhakanya Aga le go aroganya dipalo : Tswelela go aroganya dipalo go dikarotshana tse dinnye' 8 + 12 = 8+ (10+2) = 8 + 2 + 10 = 10 + 10 = 20 Dirisa koketso gabedi jaaka ditogamaano tsa dipalo tsa tlhogo Tlhaola tse koketso gabedi tse di gaufi	

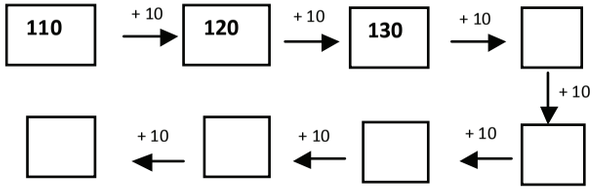
Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhogo**	**Tlhaloganyo ya dipalo:Tlhatlhamano 999** • Rulaganya sete ya dipalo tse di netsweng tse di tlhaotsweng • Bapisa dipalo go fitlha go 999 le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go • Dipalo tsa go atisa le go arola tsa: • Manane a pedi go fitlha • Manene a lesome go fitlha go **Ditogamaano tsa palelo** Dirisa ditogamaano tsa go balelela tse di latelang: • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga tlhakanyo le tloso • Dirisa kamano mo gareng ga katiso le karolo	**Tlhaloganyo ya dipalo: Tlhatlhamano ya 200** • Rulaganya sete ya dipalo tse di netsweng tse di tlha-otsweng tsa tlhatlhamaano ya 200 • Bapisa dipalo go fitlha go 200le go bolela gore ke efe go 1,2,3,4,5 le and 10 di leng kgolo go feta/ nnye go feta. **Go gopola ka bonako:** • Dipalo tsa go tlhakanya le go tlosa go fitlha go 20 • Tlhakanya kgotsa tlosa dikatisenetswa tsa go tloga go **Ditogamaano tsa dipalo tsa tlhogo** Dirisa ditogamaano go balela : • Baya palo e kgolo pele gore o tle o balele pele le kwa morago • Molapalo • Go oketsa gabedi le go hafola • Go aga le go aroganya • Dirisa kamano mo gareng ga katiso le karolo	Sekao: 5 + 6 = 11 go tlhalosa gore ke koketso ya gabedi ga 5 o tlhakanya le 1 kgotsa koketso gabedi ga 6 o tlose le 1 Lemoga fa dipalo tse pedi di bapile ka bogolo go bonolo go bona pharologanyo ka go balela kwa pele le go balela morago. 15 – 11 = 4 le tlhalosa gore go balela kwa pele go tloga go 11 go fitlha go 15 go naya 4 Dpalo dingwe tsa dipalo tsa tlhogo di ka dirwa kwa ntle le dithusathuto , mme go na le mosola go dirisa dithusathuto fa go dirwa dipalo tsa metshemetilkl wa dipalo tsa tlhogo Dithusa- thuto tse di atlenegisitsweng • Molapalo (o bopegileng o lolea) • Gerite ya dipalo • boleng boalo jwa dikarata • Go bala dibaga	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.17 **Dipalophatlo tse di tlwaelegileng**	• Dirisa o neele leina la palophatlo mo tirisong e e tlwaelegileng go akaretsa halofo, kwatara, nngwe-robedi, nngwe-tharo ,nngwe-thataro, nngwe –tlhano , • Lemoga dipalophatlo mo popegong ya sethalo • Simolola go lemoga gore halofo tse pedi a tse pedi di a lekanalekana • Kwala dipalophatlo jaaka 1 halofo , pedi - tharong	• Dirisa o neele leina la palophatlo mo tirisong e e tlwaelegileng go akaretsa halofo, kwatara, nngwe-robedi, nngwe-tharo ,nngwe-thataro, nngwe –tlhano • Lemoga dipalophatlo mo popegong ya sethalo • Simolola gore halofo tse pedi kgotsa thao-tharong ke nngwe a feletse, le gore halofo le ped- nneng di a lekana • Kwala palophatlo jaaka 1-peding 1- tharong	Mo mophatong 2-Dipalophatlo di itsisiwe barutwana . Ba: • Go kgaoganya le kgobokanya dilo ka go lekana ; • Neela maina a dipalophatlo mo palophatlong e feletseng; • Tlhopha dipalophatlo mo tirisong e farologaneng ; • Go kwala maina a dipalophatlo jaaka 1-tharong 1-tlhanong ; • Batla palophatlo ya sediiriswa se tletseng • Batla dipalophatlo ya kgobokanyo ya didirswa Mo tsamaong ya kgweditharo dipalophatlo tse di seng kompa di itsiwe go barutwana sekao : 3- nneng kgotsa 2-tharong Ba rutwana ba tswelela go dira ka diphalophatlo tse di kompa . Ba dira ka borobedi le borataro. Ikao tsa dipotso: Sebopego sengwe le sengwe se arogantswe ka dikarolo tse di lekanang tse kae ? Ke karolo tse kae tsa sebopego tse di mmalafaditsweng ? Ke karolo e kae ya palophatlo e mmalafaditsweng? Ke karolo e kae ya palophatlo e sa mmalafatswang? A. B  C  D Barutwana ba fiwa tshono ya go mmalafatsa dipopego ka bo bona.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.17 **Dipalophatlo tse di tlwaelegileng**	• Dirisa o neele leina la palophatlo mo tirisong e e tlwaelegileng go akaretsa halofo, kwatara, nngwe-robedi, nngwe-tharo ,nngwe-thataro, nngwe –tlhano , • Lemoga dipalophatlo mo popegong ya sethalo • Simolola go lemoga gore halofo tse pedi a tse pedi di a lekanalekana • Kwala dipalophatlo jaaka 1 halofo , pedi - tharong	• Dirisa o neele leina la palophatlo mo tirisong e e tlwaelegileng go akaretsa halofo, kwatara, nngwe-robedi, nngwe-tharo ,nngwe-thataro, nngwe –tlhano • Lemoga dipalophatlo mo popegong ya sethalo • Simolola gore halofo tse pedi kgotsa thao-tharong ke nngwe a feletse, le gore halofo le ped- nneng di a lekana • Kwala palophatlo jaaka 1-peding 1- tharong	Sekao: Mmalafatsa dipopego tsa 2 go tharo A. [ ] [ ] [ ] Mmalafatsa dipopego tsa 2 go nne B [ ] [ ] [ ] [ ] Mmalafatsa dipopego tsa 4 go tlhano C [ ] [ ] [ ] [ ] [ ] Mmalafatsa dipopego tsa 6 go robedi D [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	

Mophato 3 Kgweditharo 1 2. Dipaterone,Tiriso le Alejebera/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhatlhamano ya dipaterone Dipaterone tse di bonolo tse e leng gore popego kgotsa setlhopha sa dipopego se se boelediwang ka mokgwa o o tshwanang Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela, dipopego kgotsa didiriswa.	Mo mophatong wa 3 barutwana b aka dira ka dipaterone tse e leng gore: • Di elemente di boelediwa ka tsela e e tshwanang • Bogolo jwa popego bo fetoga ka tsela e e lebeletsweng • Popego le didiriswa tsa dipalo di fetoga ka tsela e e lebeletsweng Dipaterone di ka dirwa ka go dira se diriswa se le se sengwe mme go nne le mmala wa di diriswa o o fetogang ka nako tsotlhe. Sekao Dipaterone di ka dirwa ka go dirisa popego kgotsa se diriswa se le senngwe mme se na le maemo popego kgotsa sediriswa se se fetogang ka nako tsotlhe. Sekao a)  b)  Dipaterone tse dingwe di na le ditlhopha tsa popego le di diriswa tse di boelediwang.mo bogolo jwa popego mo setlhopheng sengwe le sengwe bo fetogang nako nngwe le nngwe ka tsela e e lebeletsweng. Sekao bogolo jwa popego bo nna bogolo kgotsa bonnye. Sekao: Bogolo jwa di popego bo nna bogolo **S**ekao: Bogolo jwa popego bo nna bonnye 	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela, dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhatlhamano ya dipaterone Dipaterone tse di bonolo tse e leng gore popego kgotsa setlhopha sa dipopego se se boelediwang ka mokgwa o o tshwanang Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang • Ka go thala mela, dipopego kgotsa didiriswa.	Dipaterone di ka nna tsa dirwa ka ditlhopha tse di tshwanang, mo setlhopha sengwe le sengwe se se nang le mofuta o le mongwe wa sediriswa mme maemo a sediriswa mo setlhopheng a fetoga.Ditlhopha tse di tshwanang di a boelediwa. Sekao:  Dipaterone tse dingwe di dirwa go tswa mo mofuteng wa popego e le nngwe mme sekao sengwe le sengwe sa popego se a oketsega kgotsa se a fokotsega ka bogolo. **Sekao:**  Dipaterone tse dinngwe di dirwa go tswa mo ditlhopheng tse e leng gore dipopego tsa di diriswa tse di tshwanang di a diragala mme palo ya mofuta mongwe wa popego kgotsa se diriswa e a oketsega kgotsa e a fokotsega ka tsela e e tlwaelegileng. Sekao:  **Go kopolola paterone go thusa barutwana go bona lemoga /tatelano ya gore paterone e dirwa jang.** **Go atolosa paterone go thusa barutwana go netefatsa gore ba tlhaloganya sentle tatelano ya paterone.** **Go tlhalosa paterone go thusa barutwana ka kgolo ya bo kgoni jwa puo le go bua. E thusa gape go bona le gore morutwana o kgona go ranola dipaterone jang.** Go tlwaelegile gore go bonolo gore barutwana ba bue ka paterone morago ga go di dira.Jaanong barutwana ba tshwanetse go tlhalosa dipaterone kwantle ga thuso ya kaedi ya dipotso.tsweletsa go tsepama mo kgolong ya puo e ba e tlhokang go tlhalosa dipaterone.	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Kopololo, katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 1000 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena .	**Kopololo , katoloso le go tlhalosa** Go kopolola ,le go atolosa le go tlhalosa dipalotatelano tse di bonolo go fitlha go 100. • Tatelano e tshwanetse e supe go balela kwa pele le kwa morago mo : - Bonngwe go tloga go palo nngwe le nngwe mo ga re ga 0 le 200 - Bolesome go tloga go katisanetswa nngwe le nngwe mo gare 0 le 200 - Botlhano go tloga go katisanetswa tsa 5 mo gare ga 0 le 200 - Bopedi go tloga go katisanetswa tsa 2 mo gare 0 le 200 - Botharo go tloga go katisaanetswa tsa 3 mo gare ga 0 le 200 - Bonne go tloga go katisanetswa nngwe le nngwe le tsa 4 mo gare ga 0 le 200 - 100 go fitlhlela bonnye	Tatelano ya dipalo e ka golagangwa le go bala.Jaaka bokgoni le kgono yago bala ya barutwana e fetoga,mefuta ya tatelano ya palo e barutwana ba dirang ka yona e ka gola. Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago: • Ya ntlha got log aka palo nngwe le nngwe magareng ga 1 le 200 • Nngwe –someng go tloga ka katiso ya 10 magareng ga 0 le 200 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-200 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 200 • Ya boraro go tloga ka katiso ya 3 magareng ga 0 le 200 • Ya bone go tloga ka katiso ya 4 magareng ga 0 le 200 • Ya lekgolo go tloga ka katiso ya 100 go fitlha ka bonnye 500. Barutwana b aka supa dipalo tse ba di baling.Go botlhokwa go fa barutwana tatelano ya dipalo ka mekgwa e e farologaneng ya boemedi. Sekao: • Tatelano ya dipalo e e kwadilweng 200,199,198,197,196,…….. • Mola palo Ka dipalo tse di badiwang tse di bonalang Ka karolo nngwe ya mola palo sekao 150-200 • Papetlana ya dipalo • Kgolagano ya dipalo Barutwana ba ka khurumetsa,tshasa mmala kgotsa ba dira sediko sa dipalo jaaka ba bala mo mola palo le papetlana. Barutwana ba ka tlatsa dipalo tse di tlogetsweng mo mola polang,mo papetlaneng. mo tatelanong ya palo e e kwadilweng le dipalo tse di golaganeng. Sekao: 	Thuto 3

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Kopololo, katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 1000 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena .	**Kopololo , katoloso le go tlhalosa** Go kopolola ,le go atolosa le go tlhalosa dipalotatelano tse di bonolo go fitlha go 100. • Tatelano e tshwanetse e supe go balela kwa pele le kwa morago mo : - Bonngwe go tloga go palo nngwe le nngwe mo ga re ga 0 le 200 - Bolesome go tloga go katisanetswa nngwe le nngwe mo gare 0 le 200 - Botlhano go tloga go katisanetswa tsa 5 mo gare ga 0 le 200 - Bopedi go tloga go katisanetswa tsa 2 mo gare 0 le 200 - Botharo go tloga go katisaanetswa tsa 3 mo gare ga 0 le 200 - Bonne go tloga go katisanetswa nngwe le nngwe le tsa 4 mo gare ga 0 le 200 - 100 go fitlhlela bonnye	Jaaka tatelano ya dipalo e ka tshegetsa go bala ga barutwana jaanong barutwana ba bala ka ditlhopha ,didiriswa kgotso ditshwantsho le go kwala go gape dipalo tse mo papetlaneng le mo diipapetlaneng tse di elelang jaaka tsela ya go godisa le go tshegetsa go atisa. Mo kwatareng ya 1 tsepamo e ka nna ya bobedi,ya botlhano le ya bolesome Sekao Bala ka botlhano. **R5 ya papetlana**: 1, 2, 3, 4, 5, 6, 7, 8, 9 **Tšhelete yotlhe**: R5, R10, R15, R20, R25, R30, R35, R40, R45 **Tse di tsenang** / **molao** / **Tse di tswang** 1, 3, 5, 7, 9 → × 3 Mo bokhutlong jwa kgweditharo barutwana ba dira ka go balaka tatelano go ya le go boa go tloga ka 100.	Thuto 3

MOPHATO ya 3 KWEDITHARO ya 1 3. BOALO LE POPEGO				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1**	**Dintlha tsa tshedimosetso kgotsa mtheokaelo tsa go ruta**	**Boleele jwa Nako** Mo thutong y aura le metsotso e le 24
3.3 **Popegotlha-korepedi**	**Tlhatlhamano ya dipopego** • sediko • khutlotharo • Khutlonne • khutlonnetsepa **Dipharologantsho tsa dipopego**f: Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe **Go thala dipopego** • sediko • khutlotharo • Khutlonne • khutlonnetsepa	**Tlhatlhamano ya dipopego** • sediko • khutlotharo • Khutlonne • khutlonnetsepa **Dipharologantsho tsa sebopego**: Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • sepopego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe	• Dikhutlonnetsepa tsa sebopego se se farologaneng di beilwe mo maemong a a sa tshwaneng Sekao: Go botlhokwa gore barutwana ba dire ka ditshwantsho tsa dipopego tse di segilweng.Se se kgontsha barutwana go bona dikhutlotharo, dikhutlonne le dikhutlonnetsepa di beilwe mo maemong a a farologaneng. Barutwana ba tlhaola le go kgobokanya dipopego go ya ka dikhutlotharo,dikhutlonnetsepa,dikhutlonne kgotsa Barutwana ba tlhaola le go kgobokanya dipopego go ya ka gore a ke khutlotharo,khutlonne kgotsa sediko Tiro e ka kgobokanngwa ka go dira tiro kwalo.	

MOPHATO 3 KGWEDITHARO 1 4. TEKANYO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1**	**Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta**	Mo paka-thutong ya ura le metsotso e le 24
4.1 **Nako**	**Go bolela nako** • Go bolela matlha mo alemanakeng • Go baya malatsi a botssalo,meletlo ya sekeresete,malatsi a boikhutso a botlhe,ditiragalo tsa hisitori,ditiragalo tsa se-kolo mo alemanakeng • Go bua nako ya diura di le 12 - Diura - Halofo ya ura - Kwatara ya ura - metsotso mo tshupanakopalo le tshupanako ya manaka le didiriswa tse dingwe tse di supang nako jaaka mogala wa lotheka **Balela boleele jwa nako jwa nako le Neeletsano ya nako** Go dirisa alemanaka go balela le go tlhalosa boleele jwa nako mo malatsing kgotsa dibekeng go go fetola gareng ga malatsi le dibeke • go fetola gareng ga dibeke le dikgwedi Dirisa tshupanako go balela boleele jwa nako ka diura lehalofo ya ura	• Go bolela matlha mo khalen-tareng • Go baya malatsi a botssalo,meletlo ya sekeresete,malatsi a boikhut-so a botlhe,ditiragalo tsa hisitori,ditiragalo tsa sekolo mo alemanakeng • Go bua nako ya diura di le 12 - Diura - Halofo ya ura - Kwotara ya ura - metsotso mo tshupanakopalo le tshupanako ya manaka le didiriswa tse dingwe tse di supang nako jaaka mogala wa lotheka	**Pharologanyo ke eng mo KGWEDITHARO 2** Kitsiso ya didiriswa tsa thupanakopalo Barutwana ba mophato wa 2 ba bolelaa nako ka diura, halofo ya diura le kwatara ya diura mo tshupanakong ya manaka Mo mophatong wa 3 barutwana ba dira ka di diriswa tsa nakopalo la ntlha. Ba santse ba dira fela ka popego ya diura di le 12 ba dirisa a.m le t.p fa go tlhokega Barutwana ba tswelela go tiisa go bua ka boleele jwa nako le tatelano ya nako .Ka nako ya go ruta phaposi yotlhe le go ruta ditlhopha,barutwana ba tswelela go bua ka malatsi a beke,dikgwedi tsa ngwaga letlha la gompijeno,malatsi a afitileng le a a tlang.Barutwana ba tswelela go baya tse di latelang mo alemanakeng jaaka ditiragalo di direga • Malatsi a botsalo • meletlo ya sekeresete • itiragalo tsa hisitori • ditiragalo tsa sekolo • malatsi a boikhutso a botlhe Tswelela go botsa barutwana go bua nako ka diura,halofo, le kotare y aura ba dirisa tshupanako ya manaka di dipaka tse di tshwanang tsatsi lele tsatsi. Sekao barutwana ba ka kopiwa go bua nako e sekolo se simololang ka yona,ka nako motshameko,nako ya go ya gae kgotsa nako e ba fetolang dipakathuto. ba tlhophe nako e tshupanako e supang ura ka botlalo.Go mosola go nna le tshupanako e tona e edirang sentle e bontshitswe mo leboteng,gore barutwana ba e lebelele.Barutwana ba ka dira ditshwantsho tsa ditshupanako,le gore ba supe dinako tse di farologaneng le go tsenyeletsa dipalelo sekao :bontsha ura 10 ,bontsha gore nako e tla bo le mang ura tse pedi morago g aura ya 10 Ka nako ya boikemedi barutwana ba ka tshwelela go dira ditirwana tse di bua ka nako ka diura, halofo ya diura le kotare ya ura mo tshupanako ya manaka.Barutwana ba ka dira palelo ka dibeke kgotsa malatsi fa ba neetswe dialemanaka kgotsa karolwana ya yona.Sekao :go bona matlha le dipharologano tsa palelo nako	Dithuto di le 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.1 **Nako**	**Go bolela nako** • Go bolela matlha mo alemanakeng • Go baya malatsi a botssalo,meletlo ya sekeresete,malatsi a boikhutso a botlhe,ditiragalo tsa hisitori,ditiragalo tsa se-kolo mo alemanakeng • Go bua nako ya diura di le 12 - Diura - Halofo ya ura - Kwatara ya ura - metsotso mo tshupanakopalo le tshupanako ya manaka le didiriswa tse dingwe tse di supang nako jaaka mogala wa lotheka **Balela boleele jwa nako jwa nako le Neeletsano ya nako** Go dirisa alemanaka go balela le go tlhalosa boleele jwa nako mo malatsing kgotsa dibekeng go go fetola gareng ga malatsi le dibeke • go fetola gareng ga dibeke le dikgwedi Dirisa tshupanako go balela boleele jwa nako ka diura lehalofo ya ura	• Go bolela matlha mo khalen-tareng • Go baya malatsi a botssalo,meletlo ya sekeresete,malatsi a boikhut-so a botlhe,ditiragalo tsa hisitori,ditiragalo tsa sekolo mo alemanakeng • Go bua nako ya diura di le 12 - Diura - Halofo ya ura - Kwotara ya ura - metsotso mo tshupanakopalo le tshupanako ya manaka le didiriswa tse dingwe tse di supang nako jaaka mogala wa lotheka	**Palelonako** • Nako e bontshiwa mo palelonako ya diura di le 12 mo dilwaneng tse dintsi tsa mo gae.Sekao mogala wa lotheka, sethutafatsi CD le setshamikise sa DVD j.j Barutwana ba ka tlwaela mokgwa o nako go gaisa tshupanako ya manaka.Tsaya nako ya dipakathuyo tse 3 go tlwaetsa barutwana tshupana-kopalo ya diura di le 12 • Gakolola barutwana gore .m.s le t.p di raya eng. • Supetsa barutwana gore ke dipalo dife tse di kayang metsotso le diura mo tshupanakopalo • Tlhalosa gore metsotso e le 60 e le kana le ura e le nngwe,go na le met-sotso e le 30 mo halofong y aura le metsotso e le 15 mo kotareng ya ura. Se se ka thusa barutwana go golaganya metsotso le diura fa ba buisa nako ka diura,halofo y a ura,kotare ya ura mo tshupanakopalo e leng se ba se dirileng mo mophatong wa 2 • Neela barutwana nako e ntsi ya go ikatisa go buisa nako mo tshupanakong ya tshupapalo ya diura di le 12 Nna le tshupanakopalo e e dirang e beilwe mo phaposing .Kopa barutana go neelana ka nako ka metlha ngwaga yotlhe	Dithuto di le 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Tekanyetso e seng ka tlwaelo** • Fopholetsa lego lekanya,go tshwantsha,go rulaganya le go go kwalaboleele go dirisiwa tekanyo e e sa thomamang jaaka boalo jwa seatla,dikgato, boleele jwa pensile,dipadisa j.j • Go tlhalosa boleele jwa sediriswa ka go bala le go bua boleele metso/ kelo ka mokgwa o o sa tlwaelesegang • Go dirisa puo ga bua ka tshwantshiso sekao goleelenya,go khutsan-yane, moleele, sephara **Ketapele ya tekanyetso e e tlhamaletseng** Fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele jaaka metso e e tlhomameng ya boleele Ga go tlhokege phetolelo gareng ga dimitara le disentimetara		Mo mophatong 2 go atlenegisitswe gore barutwana ba tsepame mo go fopholets eng,lekanyeng,bapiseng,le go rekota boleele,bophara le bogodimo • ka metso e e sa tlhomamang le • Go lekanya ka dimitara go dirisiwa selekanyometara kgotsa thudi e e boleele jwa metara o le mongwe Ka nako ya boikemedi barutwana ba ka tiisa bokgoni jwa go lekanya **Go lekanya boleele jaaka tiriso go rarabolola dipalole dipalelo** Kabo ya nako ya dipalo,dioperaisene le kamano,barutwana ba ka rarabolola dipalo tse didirisa tiriso ya • tekanyo e e sa tlhomamang ya boleel • Tekanyo ya boleele mo dimetareng Tsaya tsia palotlhathamano e e maleba ya kgweditharo, le tlhatlhamano ya mefuta ya dipalo tsa kgwditharo. Dipakathuto tse di tsepameng mo boleele e simolola mo kgweditharo 2	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.3 **Boima/Mmese**	**Go lekanya e seng ka tlwaelo** Fopholetsa ,lekanya go bapisa ,go rulaganya le go rekota boleele go dirisiwa metso e e sa tlhomamang ya boleele le sekalatekanyo sekao diboloko le ditene j.j • Tiriso ya puo go bua ka le papiso sekao :bofefo,thata, bofefon-yana, thatanyana **Ketapele ya tekanyo e e tlhamaletseng** • Go bapisa rulaganya, rekota bioma jwa di-phuthelwana tsa kgwebo tse di nang le boima jo bo kailweng ka dikilokerama. Sekao dikilogerama tse 2 tsa reise le kilokerama e le 1 ya bopi • Ba lekanya boima jwa bona ka dikilogerama ba dirisa sekalatekanyo sa phaposi botlhapelo Ga go tlhokege phetolelo gareng ga dimileletara le diletara	Mo mophatong wa 2 barutwana ba • lekanya boima ba dirisa metso e e sa tlhomammang ba dirisa sekalatekanyo • rulaganya dikuno go ya ka boima jo bo kailweng mo sephuthelwaneng • Buisa sekala sa phaposi botlhapelo(tsa nnete le tse eseng tsa nnete) Ka nako ya boikemedi barutwana ba ka tiisa bokgoni jwa go lekanya **Go lekanya boleele jaaka tiriso go rarabolola dipalole dipalelo** Kabo ya nako ya dipalo tiriso le kamano,barutwana ba ka rarabolola dipalo tse didiriswa tiriso ya • tekanyo e e sa tlhomamang ya boima • Tekanyo ya boleele mo dikilogerama Tsaya tsia palotlhathamano e e maleba ya kgweditharo, le tlhatlhamano ya mefuta ya dipalo tsa kgweditharo. Dipakathuto tse di tsepameng mo boleele e simolola mo kgweditharo 2		

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Tekanyo e sa tlwaelegang** • Fopholetsa, lekanya,go tshwantshanya, go rulaganya le go kwala mothamo wa ditsh-elo ka go dirisa go dirisiwa sekalatekanyo e sa thomamang sekao, leswana,dikopi j.j • Go tlhalosa mothamo wa ditshelo ka go bala le go supa gore ke metso e kae e ka dirisiwang go tlatsa setshodi sekao :lebotlolo le na le moth-amo wa dikopi di le nne.	**Tekanyo e e sa tlwaelegang** • Fopholetsa , lekanya, le go tshwantshanya,go rulag-anya le go kwala mothamo wa ditshelo ka go dirisa go dirisiwa sekalatekanyo e sa thomamang sekao, leswana,dikopi j.j • Go tlhalosa mothamo wa ditshelo ka go bala le go supa gore ke metso e kae e ka dirisiwang go tlatsa setshodi sekao :lebotlolo le na le mothamo wa dikopi di le nne	**Pharologanyo ke eng mo mophatong wa 2** Mo mophatong wa 2 barutwana ba • fopholetsa le go lekanyetsa ,bapisa,rulaganya le go rekota mothamo wa ditshelo kgotsa bolumu mo ditshelong go dirisiwa metso ya kemo e e sa tlhomamang • bapisitse le go rulaganya mothamo wa dibotlolo tse di farologaneng le dil-wana tsa kerousara mo bolumu e kailweng mo diphuthelwaneng • Dirisa lebotlolo kgotsa jeke ya letara e le nngwe fopholetsa,lekanya,bapis a,rulaganya,le go rekota mothamo wa ditshelo tsa diedi kgotsa bolumu mo ditshelong ka diletara Mo mophatong wa 3 barutwana bi itsesitswe mo dimililetara **Mothamo ke eng? Bolumu ke eng?** Lebotlolo le ka nna le mothamo wa dikopi di le nne di tletse,mme le ka se tlale gotlhelele, sekao le tshola fela bolmu ya kopi e le nngwe ya metsi ka nako e e rileng Ka nako ya boikemedi barutwana ba ikatisa fopholetsa,lekanya, bapisa, rulaganya, le go rekota bolumu le mothamo go dorisiwa sekalatekanyo le tekanyo e e sa tlhomamang ya le e e tlhomameng ya mothamo.Go apaya le go baka ke mekgwa tiriso e e ka dirisiwang go tiisa go lekanya mothamo. Tlhopharesepe e tekanyo e dirilweng ka dikopi ,dintshwana le metso e e sa tlhomamang Mothamo ke palogotlhe e selo se kgonang go e tshola(kgotsa boleleng jwa sebaka mo teng ga selo seo) Bolumu ke boleng jwa sebaka/sephatlha se selo se kgonang go se tsaya. Ka nako dingwe barutwana ba ka lekanya gore setshodi se na le seeledi se se kana kang mo sona (e ka nna santa,kgotsa seeledi sengwe fela)Se ke go lekanya bolumu ya seeledi mo setshoding seo.Ka dinako dingwe barutwana bat la bob a lekanya gore setshodi se ka tsenya seeledi se se kana kang fa se tladiwa gotlhelele. Barutwana ba tswelele go lekanya ba dirisa metso ya kemo e e sa tlhomamang ya mothamo	Dithuto di le 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Ketapele ya tekanyo e e tlhamaletseng** • Fopholetsa, lekanya, bapisa, rulaganya, le go rekota mothamo wa dilo ka go lekanya ka diletara, halofo ya letara le kotare ya letara • Go bapisa,rulaganyale rekota mothamo wa di-phuthelwana tsa kgwebo tse mothamo wa tsona o kaiwang ka diletara sekao diletara tse pedi tsa maswi. Letara e le nngwe ya senotsididi, diletara di le tlhano tsa pente kgotsa ka dimilile-tara sekao dimililetara tse 500 tsa maswi, dimilile-tara tse 340 tsa senotsididi, dimililetara tse 750 oli • Itse gore kemo ya kopi ke dimililetara di le 250 • Itse gore kemo ya leswana ke dimililetara di le 5 Ga go tlhokego phetolelo magareng a dimililetara le diletara	**Ketapele ya tekanyo e e tlhamaletseng** • Fopholetsa, lekanya, bapisa, rulaganya, le go rekota mothamo wa dilo ka go le-kanya ka diletara, halofo ya letara le kwatara ya Letara - go dirirsa dibotlolo tse di nang le mothamo wa Letara e le1 kgotsa ditshelo tse mothamo wa tsona o kailweng mo dimililetara sekao topo ya seno tsididi - Jeke ya selekanyetsi e e nang le dipalo tsa te-kanyo ya seelo,halofo ya letara,kwatara ya Letara - Jeke ya selekanyetsi e e nang le dipalo tsa tekanyo ya seelo tsa dimililetara,barutwana ga lebelelwa go buisa bolumu mo go senang mola wa tekanyetso ya seelo . - Kopi ya selekanyetsi le tisipune tse di supang mothamo	**Go lekanyetsa go go sa tlhomamang go dirisiwametso e e sa tlhomamang ya mothamo** Barutwana ba ka ithuta metheo le dikatiso tsa go lekanya go dirisiwa metso e e sa tlhomamang.Go lekanya e se ka metso e e sa tlhomameng go se tlhaeletwe matlho go feta go lekanya ka metso e e tlhomameng Barutwana ba tshwanetse go bona ditshono tsa go lekanya bolumu/mothamo ba dirisa di dilo tse di farologaneng go diriswa metso e e sa tlhomamang sekao dikopi,maswana,dikhurumelo tsa mabotlolo meteme e mennye,mabotlolo a mannye j.j Go lekanya bolumu/mothamo ka metso e e sa tlhomamang go tsenyeletsa go bala gore o tlatsa le go tshela ga kae go tswa mo bolumung e e tlhopilweng Barutwana ba tshwanetse go rutwa ka dinako tsotlhe kaya metso, sekao go na le ditisipune tse 48 tsa metsi mo lebotlolong kgotsa go na le kopi ko tlase mo botlolong Fa barutwana ba setse ba lekantse makgetlhonyana ba ka fopholetsa mothamo/bolumu ba dirisa metso eo.Fopholetsa gopele ga go lekanya go botlhokwa ,mme go ka dirwa fela fa barutwana ba kile ba dira metso eo Go tlhokega go ruta barutwana gore o kgone go bapisa bolumu kgotsa mothamo, metso e e tshwanang e tlhokega go dirisiwa.Sekao fa galase e tshola ditisipune tse 20 tsa metsi mme kopi e tshola ditisipune di le 10,o ka sere galase e tshola metsi a mantsi Barutwana ba tshwanetse golekanya ka metso e e farologaneng e esa tlhomamang,gore ba • Ba simolola go itsi gore fa metso e le e mennye ,o tlhoka go di dirisa/tlatsa kgafetsa. Sekao bolumu mo lebotlolong e ka nna ditisipune tse 20 mme gape e ka nna kopi e nngwe • Ba simolola ga dirisa metso e e maleba mo go se ba se lekanyang.Sekao: lekanya lebotlolo la diletara tse 2 tisipune ke tshenyo ya nako	Dithuto di le 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Ketapele ya tekanyo e e tlhamaletseng** • Fopholetsa, lekanya, bapisa, rulaganya, le go rekota mothamo wa dilo ka go lekanya ka diletara, halofo ya letara le kotare ya letara • Go bapisa,rulaganyale rekota mothamo wa di-phuthelwana tsa kgwebo tse mothamo wa tsona o kaiwang ka diletara sekao diletara tse pedi tsa maswi. Letara e le nngwe ya senotsididi, diletara di le tlhano tsa pente kgotsa ka dimililetara sekao dimililetara tse 500 tsa maswi, dimililetara tse 340 tsa senotsididi, dimililetara tse 750 oli • Itse gore kemo ya kopi ke dimililetara di le 250 • Itse gore kemo ya leswana ke dimililetara di le 5 Ga go tlhokego phetolelo magareng a dimililetara le diletara	• Go bapisa ,rulaganyale re-kota mothamo wa diphuthel-wana tsa kgwebo tse moth-amo wa tsona o kaiwang ka diletara sekao diletara tse pedi tsa maswi. Letara e le nngwe ya senotsididi, diletara di le tlhano tsa pente kgotsa ka dimiliLetara sekao dimililetara tse 500 tsa maswi, dimililetara tse 340 tsa senotsididi, dimililetara tse 750 oli • Itse gore kemo ya kopi ke dimiliLetara di le 250 • Itse gore kemo ya kopi ke dimiliLetara di le 250 Ga go tlhokego phetolelo magareng a dimiliLetara le diletara	**Go lekanya e seng ka tlwaelo** • Fopholetsa, lekanya, bapisa, rulaganya, le go rekota bolumu le mothamo ka diletara Gopotsa barutwana gore diletara ke metso e e tlwaelegileng ya go lekaya mothamo le bolumu.mokgwa khutsafatso (I) e dirisiwa thata mo dijekeng tsa tekanyo le diphuthelwana tsa thekisoka bolumu.leba gore a barutwana ba gakologelwa khutsafatso ya Letara(I). Barutwana ba lekanya ka diletara ba dirisa: • Ditshelo tsa diletara jaaka mabotlolo a dinotsididi, mabotlolo maswi, a matute le • Jeke e e supa melatekanyo ya litasa e le1 • Ba a bapisa le go rulaganya mothamo wa ditshelo tse di farologaneng jaaka sekotlolo sa yogate,sekotlolo sa bebetsididi ,lebokoso ladijo,moteme wa pente o o lolea, dikgamelo j.j.Dilwana tsa mothamo o o farologaneng di tshwanetse go dirisiwa.Barutwana ba tlhalosa mothamo e le potlana go Letara e le1,diletara tse pedi,garengnga Letara e le 1 le di le 2, diletara di le 5 • Barutwana ba a bapisa ,rulaganya le rekota mothamo wa diphuthelwana tsa kgwebo tse mothamo wa tsona o kaiwang ka diletara sekao diletara tse pedi tsa maswi. Letara e le nngwe ya senotsididi, diletara di le tlhano tsa pente • Fopholetsa, lekanya, bapisa, rulaganya, le go rekota mothamo ka mililetara Bua barutwana ka gore dimililetara ke metso e ka gale e edirisediwang go lekanya mothamo le bolumu.Thalosa gore dimililetara ke metso e mennye mo diletareng.ba ithute lefoko le khutsafatso ya lona,gonne mo diphuthelwaneng tsa thekiso le dijeke tsa tekanyo khutsafatso e dirisitswe thata Barutwana ba bapisa ,rulaganyale rekota mothamo wa diphuthelwana tsa kgwebo tse mothamo wa tsona o kaiwang ka dimiliLetara sekao diletara tse 500 tsa maswi, diletara tse 330 tsa aseine, diletara tse 200 tsa senotsididi, diletara tse 200 tsa polishe ya fa fatshe j.j.	Dithuto di le 2

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo ya go ruta	Mo paka-thutong ya ura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Ketapele ya tekanyo e e tlhamaletseng** • Fopholetsa, lekanya, bapisa, rulaganya, le go rekota mothamo wa dilo ka go lekanya ka diletara, halofo ya letara le kotare ya letara • Go bapisa,rulaganyale rekota mothamo wa di-phuthelwana tsa kgwebo tse mothamo wa tsona o kaiwang ka diletara sekao diletara tse pedi tsa maswi. Letara e le nngwe ya senotsididi, diletara di le tlhano tsa pente kgotsa ka dimililetara sekao dimililetara tse 500 tsa maswi, dimililetara tse 340 tsa senotsididi, dimililetara tse 750 oli • Itse gore kemo ya kopi ke dimililetara di le 250 • Itse gore kemo ya leswana ke dimililetara di le 5 Ga go tlhokego phetolelo magareng a dimililetara le diletara	• Go bapisa ,rulaganyale re-kota mothamo wa diphuthel-wana tsa kgwebo tse moth-amo wa tsona o kaiwang ka diletara sekao diletara tse pedi tsa maswi. Letara e le nngwe ya senotsididi, diletara di le tlhano tsa pente kgotsa ka dimiliLetara sekao dimililetara tse 500 tsa maswi, dimililetara tse 340 tsa senotsididi, dimililetara tse 750 oli • Itse gore kemo ya kopi ke dimiliLetara di le 250 • Itse gore kemo ya kopi ke dimiliLetara di le 250 Ga go tlhokego phetolelo magareng a dimiliLetara le diletara	Barutwana ba lekanye kgapetsa ka : • metso e e tlhomameng kopi go simolola go go nna le maikutlo a gore domili-letara tse 250 di lekana le eng • maikutlo a gore leswana la tekanyo e lekana le 5ml • Jeke e e nang mela ya tekanyo ka dimililetara.Fa barutwana ba buisa fela dipalo tse di mo moleng wa tekanyo.Ba tla tsepama mo go buiseng mela tekanyo e e senang dipalo ko thutong ya bogareng Sala morago diresepe,go tsenyetsa go baka, ke tiriso e barutwana ba tiisang tekanyo Barutwana ga ba a solofelwa go • go itse gore 1 000mi = 1 l • go dira diphetolelo gareng ga dimililetara le diletara, kgotsa • Buisa mela tekanyo e esenang dipalo mo jekeng(se se dirwa go tswa go mophato wa 4) **Go rekota tekanyo** Lemororo go lekanya e le tiro ya bokgoni jwa tiriso,barutwana ba tshwanetse rekota ditekanyo tsa bona(ka tlwaelo kgotsa ese ka tlwaelo)ka dinako tsotlhe. **Go lekanya mothamo/bolumu jaaka tiriso go rarabolola dipalo le dipalelo** Kabo ya nako ya dipalo,dioperaisene le kamano,barutwana ba ka rarabolola dipalo tse didirisa tiriso ya tekanyo e e sa tlhomamang ya tekanyo motlhamo kgotsa bolumu, sekao Gogo o dirisitse dikopi di le pedi tsa maswi go dira puding.Fa a menaganya metswako, wa go tlhoka maswi a kae? • Diletara • Dimililetara Tsaya tsia palotlhathamano e e maleba ya kgwditharo, le tlhatlhamano ya mefuta ya dipalo tsa kgwditharo.	Dithuto di le 2

MOPHATO WA 3 KGWEDI-THARO YA 1 5. GO DIRA KA DIPALO TSA TSHEDIMOSETSO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 1**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele jwa Nako)** (Mo thutong ya ura le metsotso e le 24)
5.4 **Kgobokanya le go rulaganya tshedimosetso**	**Kgobokanyo le go Thulaganyo ya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi go araba dipotso tse di bodiwang ke morutabana • Rulaganya tshedimosetso e e neetsweng ke morutabana kgotsa mo bukeng - Mananaaneng - Mananeo a bontshang nyalano - Mananeo	**Kgobokanyo le go Thulaganyo ya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi go araba dipotso tse di bodiwang ke morutabana **Dirisa dithobane tse di bontshang nyalano go rekota tshedimosetso mo ditlhopheng tse neetsweng** **Tshwantshanya tshedimosetso** **Tshwantshanya tshedimosetso mo** • Lenaneong • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso **Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisang dinoko tse di tsepameng go emela tshedimosetso.	**Pharologanyo ke eng mo mophatong wa 2** • Barutwana ba rulaganya tshedimosetso go ya ka manaane, nyalano ,mananeo • Barutwana ba itsesiwe ka ga dikerafo tse di dirisang dinoko tse di tsepameng go emela tshedimosetso • Barutwana ba tswelela go dira ka dikerafo tse di dirisediwang ditshwantsho, ga mmogo le go di aga jaaka karolo ya sekele ya tshedimosetso le go sekaseka kerafo e e dirisediwang ditshwantsho tse ba di neilweng. **Tsheko ya tshedimosetso e e feletseng** • Mo tshekong (saekele) ya dipalo tse di dirang ka tshedimosetso • Barutwana ba kgobokanya tshedimosetso go araba potso.Ka gale mo kgatong ya motheo le bogare, potso e e bodiwa ke morutabana kgotsa mo bukeng • Barutwana ba tlhaola le tshwantsha ka ditsela tse di dirang gore go nne bonolo go sekaseka tshedimosetso. Tsela ya go tshwantshanya e barutwana ba mophato wa 3 ba dirang ka yone ke manaane, d nyalano, mananeo, le kerafo e e dirisediwang ditshwantsho le kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso, le • Barutwana ba sekaseka tshedimosetso ka go araga dipotso tse di boditsweng ke morutabana Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso ya phaposi Go atlenegedisitswe gore barutwana ba mophato wa 3 ba dire ka sekele yotlhe ya tshedimosetso bonnye gangwe mo ngwageng: Go dira mmogo mo phaposing go thusa barutwana go tsaya karolo mo dikgatong tsotlhe kwa ntle ga go latlhegelwa ke dintlha ka botlalo tsa kgato. Go dira kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso go go neela ya tšhono ya go tsepamisetsa barutwana mo dintlhakgolo tsa dipalo tsa go dira ka tshedimosetso le go itsese barutwana dikarolokgolo tsa kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso	Dithuto di le 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa Nako) (Mo thutong ya ura le metsotso e le 24)
5.5 **Tshwantshanyo tshedimosetso**	**Tshwantshanya tshedimosetso** **Tshwantshanya tshedimosetso** • Kerafo e e dirisediwang tshedimosetso ya ditshwantsho . • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso	**Kgobokanyo le go Thulaganyo ya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi go araba dipotso tse di bodiwang ke morutabana **Dirisa dithobane tse di bontshang nyalano go rekota tshedimosetso mo ditlhopheng tse neetsweng** **Tshwantshanya tshedimosetso** **Tshwantshanya tshedimosetso mo** • Lenaneong • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso **Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisang dinoko tse di tsepameng go emela tshedimosetso.	• Gore o tšhwaya kerafo kae le jang (setlhogo sa kerafo) • Gore o tšhwaya kae le gore o tšhwaya jang matlhakore (ditlhogo mo matlhakoreng) • O thala jang dinoko(bars) - Thala dinoko(bars) tsa boleele jo bo nepagetseng go bontsha tshedimosetso - Dira bophara jo bo tshwanang jwa dinoko(bar) - Tlogela diphatlha fag are ga dinoko (bars) - Tšhwaya ka go bonagala noko(bar) nngwe le nngwe • O buisa jang kerafo Go a tlhokagala gore barutwana ba itse fa go le botlhokwa go buisa setlhogo sa kerafo pele, gore ba kgone go itse gore tshedimodisetso ke ka ga eng. Go tlhokagala gore ba buise gape ditlhogo tse di mo matlhakoreng a a rapameng le a a tsepameng. Ga go tlhokagale gore barutwana ba itse mareo a setegeniki a a dirisitsweng go tlhalosa dikarolo tsa jerafo, se ba tshwanetseng go se buisa ke kwa tlase le mo letlhakoreng go bona se kerafo e leng ka ga šone. Ka gale fa re buisa, re buisa go tswa mo molemeng go ya kwa mojeng, mme fela fa barutwana ba buisa dikerafo go tlhokagala gore ba buise go tswa kwa molemeng go ya kwa mojeng lekwa godimo le kwa tlase.Se se tlhokagala go tlhalosediwa barutwana. Ba tlhoka le go ikatisetsa ka dikgono tse.Go dira mo sekeleng yotlhe ya tshedimosetso go ka tsaya dithuto di le 3.	Dithuto di le 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 1	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa Nako) (Mo thutong ya ura le metsotso e le 24)
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosetso** • Kerafo e e dirisediwang tshedimosetso ya ditshw-antsho • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso	**Kgobokanyo le go Thulaganyo ya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi go araba dipotso tse di bodiwang ke morutabana **Dirisa dithobane tse di bontshang nyalano go rekota tshedimosetso mo ditlhopheng tse neetsweng** **Tshwantshanya tshedimosetso** **Tshwantshanya tshedimosetso mo** • Lenaneong • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso **Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisang dinoko tse di tsepameng go emela tshedimosetso.	**Kgobokanya le go rulaganya tshedimosetso** Mo mophatong wa 3 o tshwanetse go botsa dipotso tse di nayang barutwana tšhono ya go kgobokaanya tshedimosetso sekao "Ke mebala efe e re e ratang mo phaposing? "Mo kgatong ya motheo barutabana ba tshwanetse go netefatsa gore ba tlhopa ditlhogo tse di maleba le go kgobokanya tshedimosetso le sekaseka mo mophatong o monngwe le monngwe. Ditlhogo tse di maleba di akaretsa metshameko e re e ratang, dinotsididi tse re di ratang, mebala e re e ratang, dijo tse re di ratang, Mananeo a thelebišhene a re a ratang jalo jalo Barutwana ba ka simolola go itlhopela. Fa o na le kakanyo ka dikarabo tse di farologaneng, o tshwanetse o bope ditlhopha tse barutwana ba ka tlhophang mo go tsona. Naya barutwana tšhono ya go ikatisisetsa go dirisa ditsela tsa go tshwantshanya kwa ntle ga keraro jaaka manaane, go dirisa mananeo tse di bontshang nyalano le mananeo; ▪ Kwala maina a barutwana ka fa tlase ga ditlhogo tsa manaane a dilo tse ba itlhopetseng gore ba a di rata. ▪ Bontsha barutwana go dira lenaneo la nyalano go tswa mo lenaaneng (go ruta barutwana go dirisa dithobane tse di bontshang nyalano go ka tsaya pakathuto yotlhe) le ▪ Dira lenaneo la dinomore go tswa mo lenaneong la dithobane tse di bontshang nyalano. **Fa tshedimosetso e kwadilwe mo lenaneong, bontsha barutwana go thala kerafo**e e dirisang dinoko tse di tsepameng go emela tshedimosetso(lebelela methalokaedi e e fa godimo) **Sekaseka le go ranolola tshedimosetso** Barutwana ba araba dipotso tse o di botsang ka ga kerafo e e dirisediwang ditshwantsho **Sekao** a) "Ke mmala ofe o o rategang thata mo phaposing ya rona" b) Ke mmala ofe o o ratiwang ke barutwana ba ba mmalwa mo phaposing?" c) "A barutwana ba le bantsi ba rata.....kgotsa.....?" d) "Ke barutwana ba le bantsi ba ba kae ba ratang.....go na le.....?	Dithuto di le 3

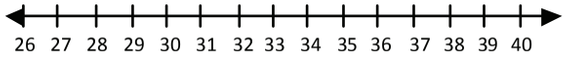
MOPHATO 3 KGWEDITHARO 2 1. DIPALO, MATSHWAO LE DIKAMANO			
Ditlhogo	**Dikgopolo le dikgono tse di** **Tlhokegang mo bofelong jwa ngwaga**	**Dikgopolo le dikgono** **Tsepamo mo kgweditharong ya bobedi**	**Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta**
1.1 **Go bala didiriswa**	**Go bala didiriswa tse di kgonngwang** Fopholetsa le go bala ka didiriswa ka botshepegi go fitlhela bonnye 1000 letsatsi le letsatsi. Togamaano ya go rulaganya e a tlhotlheletswa.	Rulagannya bonnye didiriswa di le 500 letsatsi le letsatsi go lekanyetsa le go bala ka nepagalo. Neela phopholetso e e amogelesegang ya palo ya didiriswa tse di ka balwang le go tlhomamiswa.	**Pharolganyo ke eng mo KGWEDITHARO 1?** Tlhatlhamano ya palo e oketsega go fitlha 500. Koketso mo tlhatlhamanong ya palo tse re dumelang gore barutwana ba tla: • Rulaganya didiriswa go kgontsha go bala; • Bala ka masome go fitlha 500 le go bua mainapalo ka tatelano; gape • tshwantshanya sekao le palo e e badilweng ka go kwala palo kgotsa go e bontsha le tlhotlhwa ya dikarata. Leba dintlha tsa thuto tsa KGWEDITHARO 1.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.2 **Go balela go ya kwa pele le kwa morago**	Balela kwa pele le kwa morago ka: • Go bala ka bonngwe go tswa mo palo nngwe magareng ga 0 go fitlha 1000 • Bolesome go tswa mo katisanetsweng magareng ga 0 le 1000 • Botlhano go tswa mo katisanetsweng ya 5 magareng ga 0 le 1000 • Bobedi go tswa mo katisanetsweng ya 5 magareng ga 0 le 1000 • Botharo go tswa mo katisanetsweng ya 5 magareng ga 0 le 1000 • Bonne go tswa mo katisanetsweng ya 5 magareng ga 0 le 1000 • Ka bo 20, bo 25, bo 50, bo 100 bonnye go fitlha g 1 000	• Go bala ka bonngwe go tswa mo palo nngwe magareng ga 0 go fitlha 500 • Bolesome go tswa mo katisanetsweng magareng ga 0 le 500 • Bolesome go tswa mo katisanetsweng ya 5 magareng ga 0 le 500 • Botlhano go tswa mo katisanetsweng ya 5 magareng ga 0 le 500 • Bobedi go tswa mo katisanetsweng ya 5 magareng ga 0 le 500 • Boraro go tswa mo katisanetsweng ya 5 magareng ga 0 le 500 • Bone go tswa mo katisanetsweng ya 5 magareng ga 0 le 500 • Bo 50, bo100 bonnye go fitlha go1000	**Pharolganyo ke eng mo KGWEDITHARO 1?** Mo kgweditharong e barutwana ba simolola go bala ka di 50. Tlhatlhamano ya dipalo e oketsega go 1 000. Mo kgweditharong e barutwana ba tswelela ka go dirisa go bala ka go tlolaganya lenaneo la katiso le go neela thulaganyo dipalo. Leba dintlha tsa thuto tsa KGWEDITHARO 1.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.3 **Matshwaopalo le mainapalo**	**Tlhaola ,lemoga le go bala dipalo** • Tlhaola,lemoga le go bala matshwaopalo 0 - 1 000 • Kwala mainapalo 0-1 000 • Tlhaola, lemoga le go bala mainapalo 0 -1 000 • Kwala mainapalo 0-1 000	**Tlhaola ,lemoga le go bala dipalo** • Tlhaola,lemoga le go bala matshwaopalo 0 - 1 000 • Kwala mainapalo 0-1 000 • Kwala matshwaopalo 0-1 000 • Tlhaola,lemoga le go bala matshwaopalo 0 - 250 • Tlhaola,lemoga le go bala mainapalo 0 - 250 • Kwala mainapalo 0-250	
1.4 **Tlhalosa, go tshwantshanya le go rulaganya dipalo**	**Rulaganya le go tshwantsha go 999** • Tlhalosa le go tshwant-sha palotlalo go fitlha go 999 , o dirisa bonnye go feta, bogolo go feta, bontsi go feta, bonnye go feta le go lekana le.. • Tlhalosa le go rulaganya palotlalo go fitlha go 999 go tswa go bonnye go bogolo le go tswa go bogolo go bonnye. **Dirisa dibolengkemeditatelano go bontsha thulaganyo, lefelo kgotsa maemo** • Dirisa, bala le go kwala dibolengkemeditatelano, go akaretsa mokgwa wa khutshwafatso ya go fitlha ka 31	**Rulaganya le go tshwantsha go 500** • Tlhalosa le go tshwantsha palotlalo go fitlha go 500 , o dirisa bonnye go feta, bogolo go feta, bontsi go feta, bonnye go feta le go lekana le.. • Tlhalosa le go rulaganya palotlalo go fitlha go 500 go tswa go bonnye go bogolo le go tswa go bogolo go bonnye. **Dirisa dibolengkemeditatelano go bontsha thulaganyo, lefelo kgotsa maemo** • Dirisa, bala le go kwala dibolengkemeditatelano, go akaretsa mokgwa wa khut-shwafatso ya go fitlha ka 31	Mo kgweditharong e tlhatlhamano ya dipalo e oketsega go tswa go 99 go fitlha go 500. Jaanong barutwana ba rulaganya palo ya dinomoro di le tharo. Go rulaganya palo ya dinomoro di le tharo, Barutwana ba tshwanetse go: • Bua mainapalo; • Kwala palo; le • Go lemoga boleng jwa palo nngwe le nngwe. Letlelela barutwana go dirisa molapalo, palotlhomamiso, papetlana dipalo, kgotsa kitso ya bona ya go tlhatlhamolola dipalo ka makgolo, masome le bonngwe go bontsha go tlhaloganya ga bona.Fa ba rulaganya dipalo barutwana ba tshwanetse ba bo ba kgona go tlhalosa gore eng palo e le kgolo go feta fa a dirisa boleng jwa dipalo. Sekao**:** 339 e nnye go feta 239 gonne: Ke itse gore le 30 le 9 le le 30 le 9. Barutwana ba tshwanetse ba bo ba na le bokgoni jwa go itse gore 300 e feta 200 ka go itse go dirisa didiriswa ka ditlhopha go bontsha palo ya bo100 mo palong nngwe le nngwe.Barutwana ba ka batla lefelo la palo mo moleng ka go bua ba re 339 e tla morago ga 239, ka jalo ke itse jaana gore e kgolo.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.5 **Boleng palo**	**Lemoga boleng ba palo ya dinomoro di le tharo go 999** **Itse gore palo nngwe le nngwe e emetse eng** **Tlhamolola palo ya dinomoro di le 3 go fitlha go 999 ka katiso ya 100, katiso ya masome le metso (KG, S,M)** **Supa le go bolela boleng jwa palo nngwe le nngwe**	**Lemoga boleng ba palo ya dinomoro di le tharo go 500** **Itse gore palo nngwe le nngwe e emetse eng** **Tlhamolola palo ya dinomoro di le 3 go fitlha go 500 ka katiso ya 100, katiso ya masome le metso (KG,S,M)** **Supa le go bolela boleng jwa palo nngwe le nngwe**	**Pharologanyo ke eng mo KGWEDITHARO 1?** Mo kgweditharong ya bobedi learners barutwana ba tlhamolola palo ya dinomoro di le tharo lwa ntlha. Boleng pal obo oketswa go akaretsa makgoloGo tlhaloganya ga barutwana go ka godiswa ka go botsa dipotso jaaka. Go bona bolesome go feta le bolesome tlase. Jaaka sephetho sa gale sa maitemogelo mo go ageng mareo a boleng palo barutwana ba tshwanetse go kgona go bala ba itshepa ka makgolo, ba tshwanetse go ribolola dipaterone tse di golaganngwang le boleng palo, go aga le go tlhamololola palo di le pedi le tharo. Barutwana ba tshwanetse go neelwa tshono e e lekaneng go aga palo ya dinomoro di le tharo le diboloko tsa dienes kgotsa diboko di le 10 Go botlhokwa gore dipalo di agege go dira 100 le go e lemoga e le sengwe se le sengwe . Barutwana ba tshwanetse go botswa gore ba n a le ditlhopha di le kae tsa 10. Dikarata tsa boleng palo di tshwanetse go diriswa go bontsha dipalo. O dirisa di dienes kgotsa motheo diboloko di le lesome,dipotso tse di latelang kgotsa ditaelo di ka botswa kana tsa neelwa: • Go makgolo a le makae mo go: • Aga dipalo tse di latelang: Mo kgweditharong barutwana ba ithuta go bolela le go kwala boleng jwa palo. Mo go boleng jwa 5 is sometlhano. Mo go , boleng jwa 5 ke tlhano Go botlhokwa go golaganya go tlhaloganya gore 50 go fitlha go 5 dingatana tsa lesome le botlhano go fitlha go botlhano ya tse e seng dingatana. Se se tla thusa barutwana fa ba rulaganya le go tshwantsha dinomoro. Dikarata tsa boleng palo di botlhokwa ka go lekana. Dikarata tsa boleng palo di diriswa go tlhamolola dipalo go bontsha boleng jwa palo nngwe le nngwe. Barutwana ba ka dirisa setlhopha sa dikarata tsa boleng palo ka bo bona.Enfelopo e ka kgomaretswa ka fa morago ga dibuka tsa bona tsa go direla ka fa phaposing mme dikarata di bolokwe ka fat eng Dikarata di ka diriswa fa barutwana ba tlhakanya dipalo e ka nna mokgwa mongwe oo ba o dirisang go netefatsa dikarabo tsa bona.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.5 **Boleng palo**	**Lemoga boleng ba palo ya dinomoro di le tharo go 999** **Itse gore palo nngwe le nngwe e emetse eng** **Tlhamolola palo ya dinomoro di le 3 go fitlha go 999 ka katiso ya 100, katiso ya masome le metso (KG, S,M)** **Supa le go bolela boleng jwa palo nngwe le nngwe**	**Lemoga boleng ba palo ya dinomoro di le tharo go 500** **Itse gore palo nngwe le nngwe e emetse eng** **Tlhamolola palo ya dinomoro di le 3 go fitlha go 500 ka katiso ya 100, katiso ya masome le metso (KG,S,M)** **Supa le go bolela boleng jwa palo nngwe le nngwe**	Dirisa dikarata tse go bontsha se: **Tlhamolola palo ya dinomoro di le pedi go atisa makgolo, masome le metso.** Barutwana ba ka tlhamolola dipalo go: • Boleng jwa makgolo, masome le metso sekao. 273 = 200 + 70 + 3 (go ka dira se dikarata tsa boleng palo di botlhokwa go dira se) • Katiso ya masome le metso sekao. 273 = 2 makgolo, 7 masome + 3 metso **Go tlhabolola palo ya dinomoro di le pedi go tswa mo dikarolong tsa boleng palo** Sekao: Kwala palo: lekgolo le masome a le 3 Makgolo a mabedi le masome a le 4 le metso e 5 Makgolo a mararo le masome a le 9 le metso e 2 Makgolo a mane le masome a 5 le metso e 7 **Sekao:** Feleletsa: a) 346 = 300 + □ + 6 b) 400 + 20 + 8 = □

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
THARABOLOLO MO TIRISONG YA DIPALO			
1.6 **Ditogamaano tsa tharabololo**	Dirisa ditogamaano tse di latelang fa o rarabolola le go go tlhalosa ditharabololo: • Go tlhabolola le go tlhamolola dipalo • Go aroganya le koketsopedi • Mela pedi • Go balela gaufi ka masome	Dirisa ditogamaano tse di latelang fa go rarabolola: • Go tlhabolola le go tlhamolola dipalo • Go aroganya le koketsopedi • Melapedi • Go balela gaufi ka masome	Barutwana ba tswelela go rarabolola palofoko ba dirisa ditogamaano tse di latelang: • Go tlhabolola le go tlhamolola dipalo • Go aroganya le koketsopedi • Mela pedi Leba dintlha tsa thuto tsa kgweditharo 1. **Ke eng se se farologanang le sa KGWEDITHARO 1?** **Go balela gaufi** Mo kgweditharong barutwana ba simolola go balela gaufi dipalo go atametsa go 10.Go balela gaufi ke mokgwa o o tlwaelegileng wa fopholetsa. Fa moithuti e le mofopholetsi yo o tlhotlhwa bokgoni ba gagwe ba go balela gaufi bo tshwanetse go laolega le go tlhaloganngwa sentle. Pele barutwana ba ka balela gaufi jaaka togamaano fa ba tlhakanya kgota ba fokotsa,ba tshwanetse go ikatisetsa togamaano e pele. Se se ka dirwa go diriswa molapalo. Sekao:  A 33 e gaufi le 30 kgotsa 40? • A e gaufi le 30 kgotsa 40? Barutwana ba tshwanetse go tlhaloganya gore 35 e fa magareng ga 30 le 40. Ra re bogaufi ba 10 go 35 ke 40 gonne re balela gaufi fa palo e le gaufi le masome a le mabedi. Leba dintlha tsa go ithuta tsa kgweditharo 2

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.7 **Go tlhakanya le go tlosa**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararbololo ya dipalo tse di akaretsang katiso ya go tlhakanya le go tlosa ka dikarabo tse di fitlhang 999	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararbololo ya dipalo tse di akaretsang katiso ya go tlhakanya le go tlosa ka dikarabo tse di fitlhang 400	**Dikao tsa dipalo tse di ka dirwang mo kgweditharog e .** **Dipalofoko tsa go tlhakanya le go tlosa** • Mmalethabo o kgobokantse dikhurumelo tsa mabotlolo di le 413. Fa Lebogang a mo neela dikhurumelo tse 29 o tla nna le palo e e tshwanang le ya ga Mmalethabo. - Botlhe ba tla bo ba tshotse dikhurumelo tsa mabotlolo di le kae? - Mo tshimologong Lebogang o ne a tshwere dikhurumelo tsa mabotlolo di le kae? • Mme Molefe o adima Mme Mokhine madi a a kana ka diranta di R80.00. Jaanong Mme Molefe o na le madi a a kana R360.00 a a setseng. Ke bokae e Mme Molefe a neng a na le yona mo tshimologong? • Mpho o buisitse ditsebe tsa buka di le 115. Basetsana ena o buisitse di le 126. Ke ditsebe di le kae tseo Basetsana a di buisitseng go feta Mpho . Jan o buisitse ditsebe tse 115 Nandi o buisitse tse 126. Nandi o buisitse ditebe tse kae go gaisa Jan. • Diratsagae o na le di mabole di le 218. O na le di mabole tse di 97 kwa tlaseka palo go gaiswa ke Rebone. Rebone o na le di mabole di le kae?
1.8 **Poeletso ya tlhakanyo e e isang kwa katisong**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararbololo ya dipalo tse di akaretsang katiso ya go tlhakanya le go tlosa ka dikarabo tse di fitlhang 99	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararbololo ya dipalo tse di akaretsang katiso ya go tlhakanya le go tlosa ka dikarabo tse di fitlhang 75	**Dikao tsa dipalo tse di ka dirwang mo kgweditharog e .** Leba kgweditharo 1 go bona dikao mme o fetole tlhatlhamano ya dipalo ka tshwanelo. • Mookamedi o tsenya theko ya maotwana a dibese di le 8. Fa e le gore nngwe le nngwe ya dibese e tlhoka maotwana a le marataro mmogo le leotwana le le beetsweng thoko. Ke maotwana a le makae a o mookamedi a a tshwanetseng go tsenya theko ya ona. • Mogobe wa sekolo o boleele jwa dimitara di le 10.Mauki o thuma dikgara di le 6. O thumile boleele jo bo kae? **Mofuta wa tharabololo 9. Tatelano** • Tshingwana ya merogo e na le mela e le 12 e e jetsweng. Mola mongwe le mongwe o na dijalo di le 7. Ke dijalo di le kae mo tshingwaneng yotlhe? • Tshingwana ya merogo e na le mela e le 12 ya dijalo. Mola mongwe le mongwe o tshotse palo e e lekanang ya dijalo.Fa paloyotlhe ya dijalo di le kana ka 48. Go kaya gore go na le dijalo di le kae mo moleng mongwe le mongwe? • Tshingwana ya merogo e na le dijalo di le 48 tseo di jetsweng ka mela. Go na le dijalo di le 7 mo moleng mongwe le mongwe.Ke mela e le mekae mo tshingwaneng yotlhe . **Papiso ya kabo** • Galaletsang o na le dimonamone di le 6.Galaletsang o na le dimonamone tseo di fetang tsa Ronny gararo. Ronny o na le dimonamone di le kae ? • Thabo o na le dimonamone di le 18. Di feta tsa Ronny ga boraro go menagane .Thabo o na le dimonamone di le kae? Mokgwa o wa tharabololo ya dipalofoko ke go na o tsenngwa mo kgweditharong ya 2. Barutwana ba ka tsaya nako go rarabolola mofuta o wa dipalofoko.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.9 **Kgobokanyo le kgaoganyo e e isang kwa katisong**	Rarabolola le go tlhalosa tharabololo ya dipalo tse di dirisegang di akaretsa kgobokanyo, le kgaoganyo e e lekanang go fitlha go 200 ka dikarabo tse di ka akaretsang le tse di setseng.	Rarabolola le go tlhalosa tharabololo ya dipalo tse di dirisegang di akaretsang kgobokanyo, le kgaoganyo e e lekanang go fitlha go 100 ka dikarabo tse di ka akaretsang le tse di setseng.	**Dikao tsa dipalo tse di ka dirwang mo kgweditharog e .** Ke dikoloi di le kae tse di batlegang go tsamaisa batho ba le 24 fa ba le bane ba ka tsena mo koloing? Go na le dikausu di le 65 mo llaing. Go na le dipara di le kae tsa dikausu? **Kgobokanyo** Nthabiseng o rekisa dikgetse mme nngwe le nngwe ya tsona e na le dinamune di le lesome. O na le dinamone di le 40. Ke kgetse tse kae tseo tse a ka di tlatsang? Thato o na le dimonamone di le 66.Tsatsi le letsatsi o ja dimonamone di le 3, Ke matsatsi a le makae a a ka jang dimonamone tse ka ona?
1.10 **Kgaoganyo e e isang kwa katisong**	Rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di di akaretsang go aroganya ka tekano go go isang kwa ditharabololong tse di akaretsang dipalophatlo tsa tsela yosi le tse di seng tsa tsela yosi. Sekao $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{5}$ jalo le jalo.	Rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di di akaretsang go aroganya ka tekano go go isang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopanang le tse di sa kopaneng. Sekao $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{5}$ jalo le jalo.	Mo kgweditharong ya 1learners barutwana ba ne ba ithuta ka dipalophatlo tse di sa kopanang sekao nngwe tharong kgotsa pedi tharong.Tshono e e lekaneneng e tshwanetse go neelwa dipalophatlho. **Dikao tsa dipalo tse di ka dirwang mo kgweditharong e:** a) Kgaoganyo e e isang kwa dipalophatlong b) Kgaoganya tšhokolete ka dinoko di le 8 magareng ga ditsala tse 3 gore botlhe ba bone palo e elekaneng ya dinoko tsa tšhokolete mme go se sale sepe. c) Palophatlho ya kgobokanyo d) Batla nngwe tharong ya dimonamone tse 20 e) Dimonamone di le 6 ke dipalophatlo tse kae tsa dimonamone di le 24. **f) Koko o neela Neo R12. Neo o batla go boloka nngwe tharong ya madi ao.O tshwanetse** go boloka madi a le makae? Mokgwa o wa tharaano o tshwanetse go tliswa fela morago ga gore barutwana ba rarabolole gane kgotsa gatlhano dipalophatlo tse di kgobokanyang le tse di kgaoganyang ba itse le maina a dipalophatlo. **Go kwala dipalophatlo** Barutwana ga ba tshwanela go kwala sekao sa palophatlho. Barutwana ba tswelele ka go tshwaya dikarolo tsa dipalophatlho jaaka nngwe tlhano, nngwe tharong, tharo thatarong. **Go tlhagisa dipalofoko tsa dipalophatlo** Barutwana ba tshwanetse go kwala dikarabo tsa bona go bontsha fa ba tlhaloganya dipalo. Solofela gore barutwana bangwe ka ba araba ka tshwanelo fela ba palelwa ke go bitsa dikarolo tsa dipalophatlho sentle.Thusa barutwana ba go bitsa dipalophatlho ka tshwanelo. (Leba ditlha tsa go ithuta ka go bitsa dipalophatlho mo tlhakanyong e e seng mo tirisong.) Barutwana ba tshwanetse go bitsa dikarolo tseo di kgaoganngwang ba e kwale jaaka bobedi tharo.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.11 **Madi**	• Lemoga le go tlhaola madi a tshipi le a pampiri a Aforika Borwa • Go rarabolola dipalo tsa madi tse di akaretsang dipalogotlhe le tšhentšhi/ madi a a salang mo diranteng kgotsa disente. • Go dira diphetolelo magareng ga diranta le disente	• Lemoga le go tlhaola madi a tshipi le a pampiri a Aforika Borwa • Go rarabolola dipalo tsa madi tse di akaretsang di-palogotlhe le tšhentšhi/madi a a salang mo diranteng kgotsa disente. • Go dira diphetolelo magareng ga diranta le disente	**Dikao tsa dipalo tse di ka dirwang mo kgweditharong e** • Go dira dipalogotlhe jwa boleng jwa tšhelete jaaka:. - Go kwala disente tse kana ka 525 jaaka diranta le disente. - Ke ka mekgwa e mekae e e farologaneng e o ka dirang R400 go nna t∞helete ya pampiri fela? O itse jang gore o bone ditharabololo tsotlhe jang? - Mmakgabo o na le disente di le 50 le disente di le 20 tse nne .Tlhotlhwa ya dimonamone ke R1.20. tšhelete e e tla salang ka one a makae? • Vusi o duela R2.50 mo thekising ya go ya sekolong. - O duela bokae go ya le go boa sekolong tsatsi le letsatsi. - tšhelete ya thekethe ya terena ke R6 go ya le go boa. Ke senamelwa sefe se se tlhotlhwa tlase, a ke terena kgotsa thekisi? • Tharaano ya go rekisa le go reka - Koko wa ga Mmalethabo o mo neile R5. Ke dimonamone dife di le 3 tseo a ka di rekang? Tšhokolete ya R2.70, Tšhunkama R1.80, dimonamone tse di botlha R140.00, dmonamone tsa perekisi R.60, dimonamone tsa minti R2.20, dimonamone tsa matokomane R1.20. - Mosidi o reka dibuka di le tharo tsa tšhelete a kana ka R80 nngwe le nngwe. O tla salelwa ke madi a le makae fa a tshotse R300? - Dipakete tsa diminti tse 5 tsa madi a kana ka disente tse 44 nngwe le nngwe . Rre Motsepe o batla diminti di le 88. Ke dipakete tse kae tsa diminti tseo a tshwanetseng go di reka? O tla duela bokae? • Dibese di le tharo di tsamaya mo tseleng e e duelwang mme di tshwanetse go duela R40 nngwe le nngwe.Palogotlhe e e tshwanetseng go duelelwa tsona tsotlhe ke bokae? (Go solofetswe gore barutwana ba tla dirisa tlhakanyo ya dipalo gabedi mo boleng bar anta bo leng kwa godimo.)
DIPALELO TSE DI SENG MO TIRISONG			

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.12 **Ditogamaano** **(mekgwa kgotsa ditogamaano)**	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le go tlhamolola dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le tlhamolola dipalo • Go oketsa gape le go arog-anya ka bogare • Melapalo • Go garela ka bolesome	Barutwana ba solofetswe go dirisa ditogamaano tse di latelang fa ba dirisa dipalelo tse di seng mo tirisong: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome Letlelela barutwana go tlhopha togamaano e ba ka iketlang mo go yona. Fela fa barutwana ba sa dirise manontlhotlho a togamaano ba tshwanetse go kaelwa go dirisa mekgwa e e manontlhotlho. tse di seng. Leba dintlha tsa thuto mo kgweditharong 1 ka • Go aga le • e le go aroganya ka bogare tlhamolola dipalo • Go oketsa gape • Melapalo **Go potoka go bolesome** Leba ditlhaloso mo karolong ya tharabololo ya dipalo mo kgweditharong ya 2.
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha go 999 • Tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 400 • Tlosa go tswa go 400 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	**Ke eng se se farologanang mo KGWEDITHARO 2?** Mo kgweditharong e barutwana ba dira dipalelo le palo ya dinomoro di le tharo lwa ntlha. Gore ba dire dipalelo le palo ya dinomoro di le tharo ka boitshepo,barutwana ba tshwanetse ba bob a na le bokgoni jwa: • Go bala le go kwala matshwao go fitlha go 400: • Go rulaganya le go tshwantsha dipalo bonnye go fitlha ka 400: • Bala ka ditlhopha go fitlha go ; • Bala ka kgaotso ka le go fitlha go .

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha go 999 • Tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 400 • Tlosa go tswa go 400 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	Mo kgweditharong e barutwana ba tswelelago kgaoganya gore ba kgone go dira dipalelo. Kgobokanyo le kgaoganyo ya dipalo e sala e le togamaano tse di botlhokwa tseo barutwana ba tla di dirisang mo kgweditharong e. **Mekgwa e e farologaneng go bontsha dipalelo tsa go tlhakanya le go ntsha.** • Kgaoganya dipalo ka dikarolwana di le dinnye go dira dipalelo bonolo. Ditogamaano di le dintsi tse barutwana ba di dirisang di akaretsa go kgaoganya dipalo. Ba tswelela go dira jalo ka go dirisa palo ya dinomoro di le tharo. • Go tlhakanya ka go dirisa palo e le nngwe. Go tlhakanya palo ya dinomoro di le tharo le palo ya dinomoro di le pedi . Sekao: 324 + 82 = □ 324 + 82 = (300 + 20 + 4) + (80 + 2) = 300 + (20 + 80)+ (4 + 2) = (300 + 100) + 6 = 400 + 6 = 406 Sekao: Go tlhakanya palo ya dinomoro di le tharo le palo ya dinomoro di le tharo. Go kgaoganya dipalo tsotlhe. 323 + 136 = □ 323 + 136 =(300 + 20 + 3) + (100 + 30 + 6) = (300 + 100) + (20 + 30) + (3 + 6) = 400 + 50 + 9 = 459

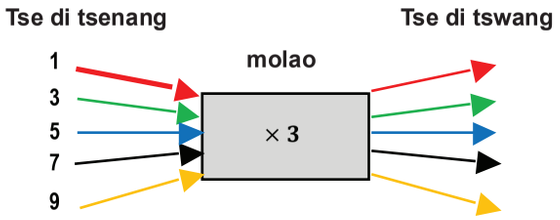
Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha go 999 • Tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 400 • Tlosa go tswa go 400 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Go tlhakanya ka (go kgaoganya palo e e tshwanetseng go tlhakanngwa.) Barutwana ba tla kgaoganya ka mekgwa e e kgonegang go laolega mo go bona.Se se kaya gore ba tlase dira ka mekgwa e e farologaneng Sekao: 324 + 82 = □ 324 + (40 + 40 + 2) 324 + 40□ 364 + 40□ 404 + 2 = 406 Sekao: Adding 3-Digit with 3-digits 323 + 136 = □ 323 + 136 = 323 + (100 + 30 + 6) = (323 + 100) + 30 + 6 = (423 + 30) + 6 = 453 + 6 = 459 Go dira dipalelo mo go 40 go tswa go 324 e ka dirwa ka go dira dipalelo mo bolesomeng10. • Go tlosa • Go kgaoganya dipalo Palo ya dinomoro di le tharo ntsha palo ya dinomoro di le pedi Sekao: 389 – 137 = □ 389 – 137 = (300 + 80 + 9) – (100 + 30 + 7) = (300 – 100) + (80 – 30) + (9 – 7) = 200 + 50 + 2 = 252 • Go tlosa ka go kgaoganya palo e le nngwe. Sekao: 389- 137 = □ 389 – (100 + 30 + 7) 389- 100 □ 289- 30 □ 259- 7 = 252 • Go dirisa go aroganya- gabedi go kgaoganya palo. Sekao: 225 + 16 = 225 + 8 +8 = (225 + 8) + 8 = 233 + 8 = 241

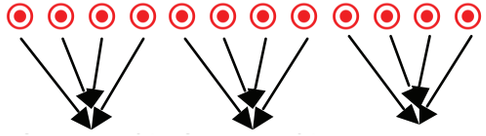
Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha go 999 • Tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 400 • Tlosa go tswa go 400 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Go balela kwa pele le go balela kwa morago 305 + 298 = □ Go balela kwa godimo ka metso go tloga go i ke togamaano e e maleba gonne dipalo di atamelane. • Tlhaola bobedi jo bogaufi Sekao: 145 + 146 = 191 o tlhalosa gore ke bobedi 145 tlhakanya 1 kgotsa oketsa gabedi 146 ntsha 1. 145 + 145 + 1 (100 + 40 + 5) + (100 + 40 + 5) + 1 (100 + 100) + (40 + 40) + (5 + 5 + 1) 200 + 80 + 11 280 + 11 280 + 10 + 1 290 + 1 291 • Fetolela palo go katisanetswa ka lesome mme o tlosa kgotsa tlhakanya metso. Balela godimo kgotsa tlase go atametsa go 10. Sekao: 288 + 11 288 + 10 = 298 298 – 1 = 297 **Sekao :** 188 + 19 188 + 20 = 208 208 – 1 = 207 **Go godisa le go diragatsa ditogamaano tsa go tlhakanya le go ntsha.** Barutwana ba tshwanetse go diragatsa mefuta mengwe ya go tlhakantsha le go tlosa. • Ikatiso ya ditogamaano go fitlha go 30 • Tlhakanya o be o ntsha katiso ya 10

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha go 999 • Tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 400 • Tlosa go tswa go 400 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	Baithuto ba tshwanetse go bona ditšhono go dira mefuta ya dipalelo e e latelang ka dipalo go fitlha go 400. Tlhakanya kgotsa tlosa bobedi ba dikatiso jwa 10, go fapaanya 100. 40 + 70 70 + 80 120 – 30 150 – 60 Tlhakanya kgotsa tlosa 10 kgotsa go tswa go nngwe ya palo ya dinomoro tse pedi kgotsa tse tharo go akaretsa go fapaanya bolekgolo. Sekao: 65 + 10 124 + 10 326 – 10 358 - 10 Tlhakanya kgotsa tlosa palo e le nngwe go kgotsa go tswa go palo ya dinomoro di le tharo kwa ntle ga go fapaanya bolesome. Sekao: 234 +5 475 + ☐ = 479 768 – 4 Tlhakanya le go tlosa palo e le nngwe go kgotsa go tswa go katiso ya 100. Sekao: 200 + 4 300 + 3 300 - 6 400 - 5 Simolola go tlhakanya le go tlosa bobedi jwa katiso ya 100. 100 + 100 100 + 200

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.13 **Tlhakanyo le ntsho**	• Tlhakanya go fitlha go 999 • Tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 400 • Tlosa go tswa go 400 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	Barutwana ba tshwanetse go neelwa ditšhono go ikatisetsa dipaterone go tlhakanya kgotsa go tlosa. Fa ke itse gore 1+ 1 = 2 Jaanong se ke eng: 10 + 10 100 + 100 **Netefatsa sephetho sa dipalelo** Go atlhola ka nepagalo ditharololo. Barutwana ba tshwanetse go katisetswa go atlhola ditharololo ka nepagalo Tsela nngwe ya go dira se ke fopholetsa dikarabo tsa bona pele ba dira pele ba ka dira dipalelo. Fa ba tlhakanya dipalo di le pedi tse di atamelaneng jaaka 145 le 146,barutwana ba ka dirisa koketso-gabedi jaaka tsela ya fopholetsa dikarabo tsa bona. **Netefatsa ditharololo** Barutwana ba tshwanetse go itse gore ba ka kgona go • Netefatsa dipalelo tsa go tlhakanya ka go tlosa. Sekao: Fa 236 + 18 = 254; jaanong 254 – 18 = 236; le • Netefatsa dipalelo tsa go tlosa ka go tlhakanya.Sekao384 – 48 = 336, then 336 + 48 = 384. O dirisa tirisopitikolologo go netefatsa tharabololo ke nngwe ya mabaka a go ruta go tlhakanya le go tlosa di le tsotlhe.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.14 **Tlhakanyo-poeletso** **Tse di isang mo katisong**	• Atisa dipalo 1 go fitlha go10 ka 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □)	• Atisa 2, 4, 5, 10, 3 go pal-ogotlheng ya 50 • Dirisa matshwao a a maleba (x, =, □)	Mo kgweditharong e barutwana ba tswelela go: • Dirisa ole go tlhaloganya puo ya katiso. emela katiso ka tatelano; dirisa matshwao a a maleba go fetolela polelopalo. • Tlhaloganya gore tlhakanyopoeletso e ka emelwa ka go dirisa matshwao a katiso. • Ikatise le go tlhaloganya gore katiso e ka dirwa ka tatelano nngwe le nngwe.(molaothefosa-no kgotsa mokgwathefosano) le • Dirisa molapalo go bontsha dipalelo tsa katiso le go ka kgona go tlhalosa kemedi (jaanong metlolo e bontsha tlhakanyo e e boleditsweng Barutwana ba ka tswelela go dirisa tatelano go kwala tlhakayopoeletso le katiso ya dipolelopalo. Sekao: Kwala dipolelopalo tsa ditlhakanya di le pedi le dikatiso di le pedi ka tatelano. Ditshwantsho tsa dikakanyo tse di diriswang go tlhalosa katiso di ka katoswa. Lenaanekatiso le ka itsisiwe. Sekao: × | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 1 2 3 4 5 Go opelwa ga lenaanekatiso go ka dirwa. Barutwana ga ba tshwanela go itse lenaanekatiso mo mophatong wa bo 3.Tsepamo e mo puong, e e letlang ditshwantsho tsa tlhaloganyo mo setlhopheng. Sekao: • Nngwe gabedi ke pedi • Pedi gabedi ke nne

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.14 **Tlhakanyo-poeletso** **Tse di isang mo katisong**	• Atisa dipalo 1 go fitlha go10 ka 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □)	• Atisa 2, 4, 5, 10, 3 go pal-ogotlheng ya 50 • Dirisa matshwao a a maleba (x, =, □)	• tharo gabedi ke thataro • nne gabedi ke robedi • tlhano gabedi ke lesome. • thataro gabedi ke somenngwe • supa gabedi ke somenne • robedi gabedi ke somethataro • robonngwe gabedi ke somerobedi • some gabedi ke masome a mabedi Go e bua jaana go tshegetsa kitso e e godisitsweng fa go dirwa tlhakanyopoeletso. Go opela go tshwanetse go tshegetswa ka go supa tatelano ya go bala kgotsa molapalo. Barutwana ba ka dirisa gape papetlakaelo go rekota dintlha tsa katiso. Sekao: 

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.15 **Karolo**	• Arola dipalo go fitlha go 99 ka 1, 2, 3, 4, 5, 10 • Dirisa matshwao a maleba (÷, =, □)	• Arola dipalo go fitlha go 50 ka 2, 4, 5, 10, 4 • Dirisa matshwao a maleba (÷, =, □)	Mo kgweditharong e ya bobedi barutwana ba tswelela ka go ikatisa le go tiisa ka go dirisa letshwao la go arogantsha .Ba tshwanetse go tlhaloganya gore karolo ya polelopalo e ka tlhalosa boemo jwa go akaretsa mo kgobokanyong le mo kgaogantshong. **Ke eng se se farologanang le sa KGWEDITHARO 1?** Mo kgweditharong e barutwana ba tshwanetse ba bo ba kgona go kwala le go tlhalosa dikarolopolelo tse di dumelanang: Barutwana ba tshwanetse go kgona go rekota tse di latelang: 30 ÷ 6 = □ le gore 30 ÷ 5 = □ **Barutwana ba tshwanetse go godisa ditogamaano tse di kwalwang palelokarolo tsa bona.** **Sekao:** **Tloso Poeletso** Go re o kgone go balela □ Barutwana ba tshwanetse go dirisa ditshwantsho tsa bona tse di bontshang go kgaoganya le go kgobokanya.  Setlhopha se le 1 sa 4 Setlhopha se le 1 sa 4 Setlhopha se le 1 sa 4 Kgaoganya setlhopha sengwe le sengwe ka nne , ka nne le nne. Di nne tharo . 12- 4 □ 8 – 4 □ 4- 4 = 0 Jaaka setlhopha se le sengwe san ne se beelwa mo letlhakoreng le le lengwe barutwana ba ka ntsha 4 ya ntlha morago ba bo ba bala gore ba setse ka di le kae. Ba tswelela ka go dira se go fitlhelela ba ntsha sengwe le sengwe. Kgatelelo mo mophatong wa bo 3 e tshwanetse go nna mo kgobokanyong go na le mo kgaoganyong. Go dira dipoeletso tsa go ntsha ka tlhatlhamano ya dipalo go maleba.Barutwana ba tla tshwanelwa ke go neelwa karoloya dipolelopalo go di fetsa tseo di letlelelang poeletso ya go ntsha.Go dira poeletso ya go ntsha ya 96 ÷ 3 kgotsa togamaano e e manontlhotlho gonne tlhatlhamano ya palo e kwa godimo thata.Mo tshimologong go ka nna ga nna thata gore barutwana ba bone/lemoge gore ke palopolelo efe(ke tlhatlhamano ya palo) e leng maleba go dirisa poeletso ya go ntsha.

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.16 **Dipalo tsa tlhogo**	**Tlhatlhamano ya kgopolopalo 999** • Rulaganya sete ya dipalo tse di tlhophilweng. • Bapisa dipalo go fitlha go 999 mme o bue gore ke efe e e leng 1,2,3,4,5 le 10 bontsi le bonnye **Gopola ka bonako** • Dintlha tsa go tlhakanya le go ntsha go fitlha 20 • Tlhakanya kgotsa ntsha katiso ya 10 go tswa go 0 go fitlha ka 100 • Katiso le dintlha tsa karolo tsa: • Lenaanekatiso la pedi go fitlha go 2 x 10 • Lenaankatiso la lesome go fitlha go 10 x 10 **Ditogamaano tsa dipalelo** Dirisa ditogamaano tsa dipalelo tse di latelang: • Baya palo e kgolo pele gore o balele kwa pele kgotsa go balela kwa morago. • Molapalo • Koketsopedi le go aroganya-gabedi • Go aga le go kgaoganya • Dirisa kamano magareng ga tlhakanyo le go ntsha. • Dirisa kamano magareng ga katiso le karolo.	**Kgopolopalo: Tlhatlhamano ya 500** • Rulaganya sete ya dipalo tse di tlhophilweng. Tlhatlha-mano -500 • Bapisa dipalo go 500 mme o bue gore ke efe e e leng 1,2,3,4,5 le 10 bontsi le bonnye **Gopola ka bonako:** • Gopola dintlha tsa tlhakanyo le go ntsha go fitlha 20 • Tlhakanya kgotsa ntsha katiso ya 10 go tswa go 0 go fitlha ka 100 **Ditogamaano tsa tlhogo** Dirisa ditogamaano tsa dipalelo tse di latelang: • Baya palo e kgolo pele gore o balele kwa pele kgotsa go balela kwa morago. • Molapalo • Go aga le go kgaoganya • Dirisa kamano magareng ga tlhakanyo le go ntsha • Dirisa kamano magareng ga katiso le karolo.	**Kgopolopalo** Dikao tsa dipotso tse di ka botswang: **Mainapalo le matshwao** Tsholetsa karata kgotsa kwala leinapalo. Tlhopha morutwana go kwala palo e e nyalalnang. **Bontsi kgotsa bonnye** Ke eng se: • Bonnye ga 1 go feta 500 • Bontsi ga 1 go feta 499 • Bontsi ga 2 go feta 502 • Bonnye ga 2 go feta 405 • Bontsi ga 3 go feta 477 • Bonnye ga 3 go feta 251 • Bonnye ga 4 go feta 185 • Bontsi ga 10 go feta 490 • Bonnyega 10 go feta 660 Tlhaka ya botlhano ya dialefabete ke eng? Kgwedi ya bo 9 mo ngwageng ke efe? **Go rulaganya le go bapisa** Ke efe e kgolo: 621 kgotsa 671? Mphe palo e e magareng ga 154 le 159. Dintlha tsa go tlhakanya le go ntsha: Leba dintlha tsa go ithuta mo kgweditharong1. Tlhakanya kgotsa ntsha katiso ya go tswa go Bolela gore ke dikato tse kae tse di tshwanetseng go tsewa o dirisa molapalo go tloga o le mo go 30 go fitlha mo go kgotsa go tloga mo go fitlha go . Bona sebedi sa dkarata go dira Baya dipalo ka mo lebokosong go dira 100. □ + 70 = 100 20 + □ = 100 100 – □ = 90 100 – 40 = □ **Ditogamaano tsa dipalelo:** Leba dintlha tsa go ithuta mo kgweditharong1

Ditlhogo	Dikgopolo le dikgono tse di Tlhokegang mo bofelong jwa ngwaga	Dikgopolo le dikgono Tsepamo mo kgweditharong ya bobedi	Dintlha dingwe tsa tshedimosetso kgotsa metheotaelo tsa go ruta
1.17 **Palophatlogale**	• Dirisa le go neela di-palophatlo maina ka mo tirisong e e tlwaelegileng o akaretsa go aroganya ka bogare,dikotara,boro bedi,boraro,borataro,bo tlhano. • Lemoga dipalophatlo ka mokgwa wa lenaneo la ditshwantsho. • Simolola go lemoga gore dihalofo di le pedi kgotsa boraro-tharong dira bonngwe fela le gore halofo e le nngwe le pedi tharong di a lekana. Kwala dipalophatlo jaaka halofo ,pedi tharong,		Mo kgweditharong e barutwana ba tswelela ka go: • Ithute maina a dikarolo tsa dipalophatlo; • Dirisa maina mo tirisong e e farologaneng;use the names in different contexts; • Tlhaola dikarolo tsa dipalophatlho; • Simolola go tlhaloganya kamano ya bogolo ba dipalophatlo; • Bona dipalogotlhe tsa dididriswa le; • Go ithuta ka palo phatlo-maleka. Mo kgweditharong e barutwana ba bapisa dipalophatlo. • O dirisa setiripi tsa dipalophatlo kgotsa dithupana tsa Cuisenaire . Sekao**:** Didiriswa tse di maleba go dirisetswa go ruta barutwana go ka neela dipalophatlho maina le go di bapisa. Sekao Mmala wa namune (khibidu) Botala jo bo tsenelentseng	Botala jo bo tsenelentseng pepole	pepole	pepole	pepole khibidu	khibidu	khibidu	khibidu	khibidu	khibidu w w w w w w w w w w w w Bontsha dipalophatlo mo lebotaneng le le bontshang bonngwe fela,dihalofo,boraro , dikotara,bo tlhano,borataro,borobedi, bolesome, . Go botlhokwa gore barutwana ba dire ka didiriswa tse di kgonngwang mme ba se bapise dipalophatlo,ba dirisa dipalophatlo mo lebotaneng mo ditshwantshong. Barutwana ba tshwanetse go tshwara didiriswa o di lekanyetsa le tse dingwe. ka go ngwang. Dipotso tse di latelang di ka botswa: • Ke dihalofo di le kae tse di ka dirang palotlalo? • Ke dikotara di le kae tse di ka dirang palotlalo? • Ke dikotara di le kae mo halofong e le nngwe? Letla barutwana go bapisa disetiripi go bona dikarabo. • Ke boraro jo bokae jo bo dirang palotlalo? • Ke borataro jo bokae jo bo dirang boraro? • Ke borataro jo bokae jo bo dirang halofo? • Ke efe e kgolo, boraro kgotsa halofo? • Ke efe e kgolo pedi tharong kgotsa nngwe tharong?

Mophato3 Kgweditharo 2 2. Dipaterone,Tiriso le Alejebera/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**BOLEELE JWA NAKO**
2.1 **Dipaterone tsa Jeometeri**	**Kopololo, Katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dik-gongwang • Ka go thala mela dipope-go kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Kopololo , katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didi-riswa. Tlhatlhamano ya dipaterone Dipaterone tse di bonolo tse e leng gore popego kgotsa setlhopha sa dipopego se se boelediwang ka mokgwa o o tshwanang Dipaterone tse e leng gore palo kgotsa bogolo jwa dipopego tsa tsona di fetoga ka tsela e e lebeltsweng.. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa.	Tswelela go fa barutwana dipaterone tse ditlhatlaganeng tse ditshwanang mo kgweditharong ya 1,mme akaretsa dipopego le didiriswa mo dipateroneng jaaka didiriswa mo popego le boalo.Lebelela dintlha tsa tsa KGWEDITHARO 1 le dintlha tsa popego le boalo mo kgweditharong ya 2. Letlelela barutwana go kopolola pele mme ba atolose le go tlhalosa dipaterone kwa bofelong barutwana ba tshwanetse ba be ba kgona go tlhalosa dipaterone kwa ntle ga thuso ya kaedi ya dipotso.Tswelela mo tsepamiseng kgolo ya puo e barutwana ba e tlhokang go tlhalosa sa dipaterone.	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	BOLEELE JWA NAKO
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 1000 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka150 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 500 • Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 500 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-500 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 500 • Nngwe-tharong le ya bone go tloga mo katisong ya 3 magareng ga 0 le 500 • Ya bone go tloga mo katiso nngwe le nngwe magareng ga 0 go fitlha 500 • Ya bo some amatlhano,le y a bo lekgolo go fitlha ka bon-nye 1000.	Lebelela dintlha mo kgweditharong ya 1 Atolosa dipalo tsa tlhatlhamano le go bala ka tatelano ka tsela e elatelng: Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago ka : • bonngwe go tloga ka palo nngwe le nngwe magareng ga 0 le500 • bosome go tloga ka katiso ya 10 magareng ga 0 le 500 • botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-500 • bopedi go tloga ka katiso ya 2 magareng ga 0 le 500 • lekgolo go tloga ka katiso ya 100 go fitlha ka bonnye 1000. • bosome amtlhano go tloga ka katiso ya50 go fitlha bonnye 1000 • gararo go tloga ka katiso ya 3 magareng ga 0 le 500 • Ybonne go tloga ka katiso ya 4 magareng ga 0 le 500 Dirisa di didiriswa,ditshwantsho,papetlana le kelelo ya ditshwantsho go thusa barutwana go fetola go tloga mo go tloleng go bala le tatelano ya go katisa ka 10,5,2,4 Go thusa barutwana go dirisa dipaterone tse ba di itseng jaaka tshimologo fitlha go ikatisa le go ithuta ka dipaterone tse dinngwe sekao: • Tatelano ya bopedi go baya tshimologo ya tatelano ya bone le • Tatelano ya botlhano go baya tshimologo ya tatelano ya bosomeamtlhano	Dithuto di le 3

MOPHATO ya 3 KWEDITHARO 2 3. BOALO LE DIPOPEGO)				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedithаro 2**	**Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta**	**Boleele jwa nako** Mo thutong ya ura le metsotso e le 24
3.1 **Kemo,dikaelo le dipono**	**Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe • Neela leina la sediriswa fa o kaeditswe pono e e sa tlwaelegang • Buisa,ranola le go thala dimmapa tse eseng tse di sa tlhomamang,kgotsa pono ya fa godimo ya kgobokanyo ya didiriswa • Batla didiriswa fa godimo ga dimmapa • Maemo le dikaelo • Sala morago ditaelodikaelo go tsamaya mo phaposing le mo sekolong • Neela ditaelodikaelo go tsamaya mo phaposing le sekolong • Go sala morago dikaelo go tswa molefelong le lengwe go fitlha go le lengwe mo mmapeng o o sa tlhomamang.	**Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe • Neela leina la sediriswa fa o kaeditswe pono e e sa tlwaelegang **Maemo le dikaelo/ditaetso** • Sala morago ditaelodikaelo go tsamaya mo phaposing le mo sekolong • Go naya ditaelodikaelo go tsamaya mo phaposing le sekolong	**Pharologanyo ke eng mo mophatong wa 2 .** • Ga gona tsepamo e e totobetseng ya go godisa puo ya maemo jaaka se se dirilwe mo mophatong wa 1 le • Go sala morago ditaelo tse di matlametlo go tsamaya mo sekolong eseng fela mo phaposing • Neela ditaelo kwa mafelong a phaposi le sekolo • Mmapa le tebo ya kgobokanyo ya didiriswa go tloga mo godimo.Se ke totobalo/tsepamo ya kwedithаro ya 3 **Katlenegiso e e totobetseng ya KGWEDITHARO 2:** Mo kgwedithаrong ya 2,go atlenegisiwa gore dirwe poeletso ya tiro ya mophato wa 2 go akarediwa • Tlhaolo ya didiriswa go tswa mo setshwantshong se supa tebego ya pono e e sa tlwaelegang ya sona le • Go latela ditaelo go ya kwa mafelong a a kwa ntle ga phaposi Simolola ka go tlhatlhoba se barutwana ba itseng le go se gakologelwa ka ga maemo le dikaelo **Maemo le dikaelo/ditaetso** • Go sala morago ditaelo Se se ka dirwa ka mokgwa tiriso mo barutwana ba itsamaisang ba latele ditaelo.Mo mophatong wa3 barutwana ba ka neela tiro ya molomo kgotsa ditiro tsa go kwala - go tsamaya mo phaposing sekao “tla mo pele ga phaposi”,ema fa thoko ga setilo sa gago”,tlola nkgwana ya matlakala” - go tsamatsamaya mo tikologong ya phaposi kgotsa sekolo,sekgala se se telele,go feta fa kgorong,retogela fa molemeng,tshwelela go tsamaya ka mogogoro,go fapaanya lebala,jaanong o fa kae? • Go nnela ditaelo	Dithuto di le 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
3.1 **Kemo,dikaelo le dipono**	**Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe • Neela leina la sediriswa fa o kaeditswe pono e e sa tlwaelegang • Buisa,ranola le go thala dimmapa tse eseng tse di sa tlhomamang,kgotsa pono ya fa godimo ya kgobokanyo ya didiriswa • Batla didiriswa fa godimo ga dimmapa • Maemo le dikaelo • Sala morago ditaelodikaelo go tsamaya mo phaposing le mo sekolong • Neela ditaelodikaelo go tsamaya mo phaposing le sekolong • Go sala morago dikaelo go tswa molefelong le lengwe go fitlha go le lengwe mo mmapeng o o sa tlhomamang.	**Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe • Neela leina la sediriswa fa o kaeditswe pono e e sa tlwaelegang **Maemo le dikaelo/ditaetso** • Sala morago ditaelodikaelo go tsamaya mo phaposing le mo sekolong • Go naya ditaelodikaelo go tsamaya mo phaposing le sekolong	Bangwe ba barutwana bat la bona gole motlhofo go neela ditaelo ka go popego ya se be se ba buang ka ditaelo tseo ba di neetsweng.Mo barutwaneng ba bangwe e ka thusa go neelana ka dintlhakgolo tsa ditaelo • Bua gore a o a tswelela kgotsa go tsamaya mo ditaelong/ntlheng oe o e lebileng • Bua gore a o tsamaya ka tlhamalalo kgotsa,retogela fa molemeng kgotsa ka fa mojeng • Neela matshwao mo fatshe mo o tshwanetseng go tshika teng sekao fa o fitlha fa kantorong ya mokwaledi o tshikele ka fa molemeng, le • bua gore o ka tsamaela bokgakala jo kae.Go na le ditsela tse dintsi tsa go bua gore o ka tsamaela bokgakala jo bokae o tsamaya sekgala sa dikgato di le30 kgotsa tsamaya dimitara di le 10 o tsamaya o fete diphaposi di le 3,kgotsa tsamaya o fete phaposi ya ga Rre Maretela o Tsamaya sebaka sa motsotso o le mongwe. **Maemo le dipono** Mo mophatong wa 3 barutwana ba tshwanetse go neelwe dithutiso tse ba ka kgonang go bapisa dipono tse di farologaneng(dipono go tloga mo godimo,mo matlhakoreng,go tswa kwa pele)tsa dipopego Se se ka thusa barutwana go ranola methalo ya dipopego tsa thutatekano tse di didirilweng go tswa mo diponalong tse di farologaneng.Barutwana ba tshwanetse go neelwa ditiro tse ba tlhaolang didiriswa go tswa mo ditshwantshong tse di thadilweng,dinepe di tshotswe go tswa mo pono e e tlwaelegileng,pono ya kwa godimo ya kgomo kgotsa pono ya kwa pele ya segotlhameno	Dithuto di le 2

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
3.2 **Popegotlha-korethoro 3-D**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(tse kgolokwe) • Dipopego tsa mabokoso(porisime) • Diselennere • piramiti • khounu **Dipharologantsho tsa sedirwa/didriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa pop-egotekatekanyotharo • flat or curved surfaces • sefatla se se sephaphathi kgotsa obegileng	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(dokgolokwe • Dipopego tsa mabokoso(porisime • Diselennere **Dipharogantsho sedirwa/ didirwa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka • Tekatekanyopedi e e dirang sefatlhego sa popegotekate-kanyotharo • sefatla se se sephaphathi kgotsa obegileng **Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seretse,matlhaka a go nwa,le dipopegotekateksnyotharo	**Pharologanyo ke eng mo mophatong wa 2** • Barutwana ga ba tlhole ba leba gore a didiriswa di a relela kgotsa kgoromediwa,ba lebelela gore a lebala le obegile kgotsa sephaphathi . • Fa sediriswa se na le lebala le le sephaphathi,barutwana ba leba gore a sediriswa ke khutlonne,khutlonnetsepa,khutlotharo kgotsa sediko. • dikhounu le dipiramiti di aitsisiwe(tse di ka totobadiwa mo kgweditharo 3 le 4) Katlenegiso e e totobetseng ya kgweditharo 2: Barutwana ba dira ka didiriswa tse ba di dirisitseng mo mophatong wa 2 • dibolo le didiriswa tse di bopegileng jaaka dibolo , • Diselennere le dipopego tse di bopegileng jaaka selennere • Mabokoso a a farologaneng le dipopego tse di bopegileng jaaka porisime kgotsa popegotaese Barutwana ba ka tsepama mo didirisweng tse di ntshwa(piramiti le dikhouno) mo kgweitharo ya 3 le ya 4 **Go lemoga le go neela maina a dibolo(dikgolokwe) le mabokoso(diporisime) le diselennere** Barutwana ba tshwelela go neela maina,go tlhaola,le go kgobokanya mme diselennere di akareditswe. Barutwana ba tshwanetse ba neelwa dipopego tse difarologaneng go dira ka tsona jaaka • Dikgolokwe sekao dibolo tsa bogolo jo farologaneng dimabole,dinamone jalo-jalo • Diporisime sekao diboloko,ditena,mabokoso a bogolo jo bo farologaneng • Diselennere tse di telele le tse di molomu o monnye jaaka matlhaka a go nwa senotsididi	Dithuto di le 3

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
3.2 **Popegotlha-koretharo 3-D**	**Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seloko,matlhaka a go nwa,le didiriswatsa tse dingwe tsa popegotekatekanyotharo	**Tlhatlhamano ya dipopego** • sediko • khutlotharo • Khutlonne • khutlonnetsepa **Dipharolgantsho tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi maleba le • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe	Barutwana ba ka bona didirswa tse di bopegileng jaaka bolo(dikgolokwe),kgotsa mabokoso,diselennere fa neetswe kgobokanyo ya dipopego,mme barutwana ba kgona go bona kgotsa go supa dipopego tse di bopegileng jaaka mabokoso mo phaposing sekao jaaka" thini ya tamati e bopegile jaaka selennere" Ka nako e e kobiseditsweng barutwana ka nosi,ba ka tswelela go dira dibolo, diselennere le dibokoso tse di bopegileng jaaka diporisimo go tswa mo tegeng e e tshamekang **Tsepamo mo dipharogantsho popegotlhakoretharo go didiriswa tsa tlhakoretharo gore :Boalo jo bo sephaphathi,obegile,dipopego tsa boalo jo bo sephaphathi** • Go aga sebopego sa tekatekanyo tharo Barutwana ba dirisa ditshwantsho tse di segilweng tsa khutlonne kgotsa khutlonnetsepa dira lebokoso.Se se tsepamisa barutwana mo sebopegong sa boalo jo bo sephaphathi jwa bokoso Barutwana ba lebelela boalo jo bo sephaphathi mo diporisimong le diselennere le go ditlhalosa gore a di kgolokwe,khutlonne kgotsa khutlonnetsepa • Boalo jo bo sephaphathi kgotsa obegileng Go aga bokoso(porisime)go thusa barutwana go tsepama mo didirisweng tsa boalo jo bo sephaphathi.Barutwana ba ka leba gore a dipopego tsotlhe tse tekatekanyo ya giometeri di nale boalo jo bo sephaphathi.Mo mophatong wa1 le 2,barutwwana ba farologantse dipopego tsa giometeri go ya ka tseo relelang kgotsa di kgokologa.Se se thusitse barutwana tsepama mo goreng a boalo jwa sebopego bo sephaphathi kgotsa bo obegile **Ditiro tsa go kwala** L e mororo bontsi jwa tiro ke ka popegotekatekanyotharo bo dirilwe ka tiriso,tiro e ka tiisiwa ka ditiro kwalo.Tsepamo mo mophatong wa 3,e tshwanetse go nna mo go neelwang maina le go bua ka didiriswa le boalo jwa tsona.Ga go a solofelwa go barutwana gore ba bale kgotsa le go itse palo ya dikhutlonne,bokhutlonnetsepa,kgotsa bokgolokwe jo sediriswa se nang naso. **Puo** Bokgoni jwa puo e botlhokwa ka dipopego tsa tekatekanyotharo Boalo,sephaphathi,obegileng,dibokoso,dibolo,diselennere	Dithuto di le 3

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 2	Dintlha tsa tshedimosetso kgotsa dikaelo tsa go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
3.3 **popegotlha-korepedi 2-D**	**Tlhatlhamano ya dipopego** • sediko • khutlotharo • Khutlonne • khutlonnetsepa **Dipharologantsho dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe **Thala dipopego** • sediko • khutlotharo • Khutlonne • khutlonnetsepa	Ga gona tiro e e totobetseng ya popegotlhakorepedi mo kgweditharong 2. Le fa go le jalo tiro e tshwanetse go tiisiwa/kopangwa ka tiro kwalo ka se ba ithutileng ka go lemoga le go neela maina dipopegotekatekanyopedi mo kgweditharong ya 2 ka go dira dithutiso ka nako ya morutwana ka nosi		
3.4 **Tekanyo**	**Tekanyo** • Go lemoga lego thala mola wa tekatekanyo mo sebopegotlhakorepedi le tse e seng popegotlha-koretharo • Go tlhomamisa mola wa tekatekanyo ka mena pampiri le tshupatshwano	**Tekanyo** • Go tlhomamisa mola wa tekatekanyo ka mena pampiri le tshupatshwano	**Ke eng se sešwaa mo mophatong wa 2** • Go bona mola wa tekatekanyo ka go mena pampiri le tshupatshwano Ditirwana tsa go menwa ga dipampiri go godisa kitso ya tekatekanyo go akareditswe • ditiro tse pente e beilweng mo pampiring pele e menwa le • Ditiro mo pampiri e segiwang mo go menilweng teng Ditiro tse di ka dirwa ka nako ya pakathuto ya dipalo le dikgono tsa botshelo Kopa barutwana go bonele pele gore ke popego efe e batla e boning fa ba menolola pampiri e e sigilweng.Se se thusa ikatiso ya go bopa ditshwantsho tsa popegotekatekanyo.	Dithuto di le 2

MOPHATO 3 KGWEDI-THARO 2 TEKANYO				
Topics	**Dikgopolo le bokgoni tse di** **Tlhokagalang kwa bokhutlong jwa ngwaga**	**Tsepamo ya dikgopolo le bokgoni** **Go kgweditharo 2**	**Dintlha tlhaoso kgotsa metheo kaelo ya go ruta**	**Boleele jwa nako** Mo thutong ya ura le metsotso e le 24
4.1 **Nako**	**Bolela ka nako** • Buisa matlha mo khalentareng • Baya malatsi a matsalo, meletlo ya sedumedi, malatsi a boikhutso a botlhe, Ditiragalo tsa hisetori, ditirgalo tsa sekolo mo kalentareng. • Bolela diura tse 12 ka nako ya - Diura - Halofo ya diura - Kwatara ya diura - metsotso mo tshupanako ya manaka le tshunakopalo le didiriswa tsa tshupanakopalo le go bontsha nako mo sk.mo mogaleng wa letheka. **Balela bolelele jwa nako le nako e tsamaileng/fetileng.** Dirisa dikhalentara go bala le go tlhalosa boleele jwa nako mo letsatsing le mo bekeng kgotsa dikgwedi re tsenya: • Fetolela gare ga malatsi le dibeke • Fetolela gare ga dibeke le dikgwedi. O diirisa tshupanako balela boleele jwa nako mo diureng kgotsa mo halofong ya diura.	**Bolela ka nako** • Buisa matlha mo kalentareng • Baya malatsi a matsalo, meletlo ya sedumedi, malatsi a boikhutso a botlhe, Ditiragalo tsa hisetori, ditirgalo tsa sekolo mo khalentareng. • Bolela diura tse 12 ka nako ya - Diura - Halofo ya diura - Kwatara ya diura - metsotso mo tshupanako ya manaka le tshunakopalo le didiriswa tsa tshupanakopalo le go bontsha nako mo sk.mogaleng wa letheka. **Balela bolelele jwa nako lenako e e tsamaileng/ fetileng.** Dirisa dikalentara go bala le tlhalosa boleele jwa nako mo letsatsing le mo bekeng kgotsa dikgwedi, re tsenya :. • O dirisa tshupanako , balela boleele jwa nako mo diureng kgotsa mo halofong ya diura .	Barutwana ba tswelela go dira puo ka boleele jwa nako le tatelano ya nako. Mo tsamaong ya nako ya thuto,le nako e tsepamiseditsweng setlhopha, barutwana ba tswelela go tlotla ka letsatsi la beke , kgwedi tsa ngwaga le letlha la letsatsi leo le one malatsi a pele, le a tlang. Barutwana ba tswelela go a baya mo khalentareng ditiragalo jaaka di tlhagela. • Matsalo; • Meletlo ya bodumedi; • Ditiragalo tsa hesitori; • Ditiragalo tsa sekolo; le • Malatsi a boikhutso a botlhe Tswelela go kopa barutwana go neela nako ka diura, halofo ya ura ,le kwatara go diriswa tshupanako ya manaka le diura le metsotso ka tshunakopalo mo dikhutsong ka letsatsi le letsatsi . Lebelela dintlha tsa KGWEDITHARO 1. **Nakopalo /ya dijitale** Dirisa dithuto tse 2 o boeletsa puiso ya nako ya nakopalo . Lebelela dintlha tsa KGWEDITHARO 1 Lebelela dintlha tsa KGWEDITHARO 1 Mo tsamaong ya nako e ikemetseng barutwana ba tswelela go ikatisa ka go bolela nako • Mo diureng , halofo ya diura le kwatara ya diura mo tshupanakong ya manaka le • Mo diureng le metsotso mo tshupanakopalo Barutwana ba ka dira dipalo ka dibeke kgotsa malatsi fa ba a filwe ka khalentara kgotsa botlhangwe jwa khalentara sekao.go batla matlha le go balela pharologanyo ya nako mo gare ga bona . Barutwana mo mophatong wa 2. • Tsepama mo tekanyetsong e sa tlhomamang ka diyuniti tsa boleele tse eseng tsa maemo le tsa • go tlhagisa tekanyetso ka dimetara mo tekanyetsong. Mo kgweditharong ya 2 ya mophato wa 3 barutwana ba ka tswelela ba dira tekanyetso e e sa tlhomamang go dirisiwa diyuniti tse di sa tlwaelegang mo tekanyetsong ka dimetara Mo kgweditharong ya 3 ba ka simolola go lekanyetsa ka disentimetara go diriswa kotana tekanyetso. **Go fopholetsa, go lekanyetsa le go rekota boleele , bogodimo le bophara**	Dithuto di le 2

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgwedithoro 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Tekanyetso e sa tlhomamang** • Lekanyetsa, o lekanye ,bapisa , rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlwaelegang s.k sekgala sa seatla , dikgato , boleele jwa phensele le didiriswa tsa palo. • Tlhalosa boleele jwa dilwana ka go bala le go bolela gore diyuniti tse di sa tlhomamang di boleele jo bokae. • Dirisa puo, go bolela ka papiso s.k.boleele, bokhutshwane, boleele , bophara **Tlhagiso ya tekanyetso e tlhomameng** • Lekanyetsa o lekanye, bapisa ,le go rulaganya go rekota boleele go diriswa dimetara (gongwe ka kotana ya metara kgotsa mogala wa boleele jwa metara) jaaka boleele jwa yuniti ya maemo . • Lekanyetsa le go lekanya boleele mo disentimetara o dirisa kotana ya disentimetara. Ga go tlhokafale phetholelo e batlegang mo gare ga dimetara le disentimetara	**Tekanyetso e sa tlhomamang** • Lekanyetsa, o lekanye bapisa, rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlwaelegang s.k sekgala sa seatla, dikgato, boleele jwa phensele le didiriswa palo. • Tlhalosa boleele jwa dilwana ka go bala le go bolela gore diyuniti tse di sa tlhomamang di boleele jo bokae • Dirisa puo, go bolela ka papiso sekao.boleele, bokhutshwane, boleele , bophara. **Tlhagiso ya tekanyetso e tlhomamameng** • Lekanyetsa o lekanye bapisa , le go rulaganya go rekota boleele go diriswa dimetara (gongwe ka kotana ya metara kgotsa mogala wa boleele jwa metara) jaaka boleele jwa yuniti ya maemo .	**Pharologanyo ke eng go tswa go mophato wa 2** **Go diriswa diyuniti tsa boleele tse di sa tlhomamang** Barutwana ba ithuta melwana yotlhe le tiriso ya tekanyetso go dirisiwa diyuniti tse e seng tsa maemo. Tekanyetso ka diyuniti tse e seng tsa maemo di se ka tsa lebelelwa gore ga di na boleng go na le go lekanyetsa ka diyuniti tsa maemo. Tekanyetso ya boleele ka diyuniti tse e seng tsa maemo tse di akaretsang palo,Ke diyuniti tse kae go tse di tlhopilweng di tshwanang le dilwana tse di lekanyeditsweng Sekao,boleele jwa teseke ke dikgato tse 8 tsa seatla . Barutwana ba tshwanetse go lekanyetsa dilwana tsa mefutafuta tse dirisang tlhatlhamano ya dilwana jaaka diyuniti tse sa tlhamameng. Go tsela tse tharo tsa go dirisa diyuniti tse sa tlhomamang : • Paka ditselana go kgabaganya dilwana tse lekanyetswang palo ya dilwana tse boleele jo bo lekanang jaaka mabokoso a mokgwaro, dikhurumelo tsa popego e tshwanang tsa mabotlole kgotsa dibadisi pensele tse di šwa jalo-jalo . Sekao go lekanyetsa bophara jwa teseke,phensele e ntšhwa e ka pakiwa mo ntlheng e nngwe ya teseke go e ralala go ya ya ntlheng e nngwe . Fa go botlhokwa gore jaaka dikhurumelo tse di lesome pedi - A dilwana tsotlhe di a lekana ka boleele .O ka se boleele jwa buka ya gago bo sephara jaaka dikhurumelo tsa mabotlole tse di 12 e le gore dikhurumelo tsa mabotlole di fapaana ka bogolo .sk.dikhurumelo tsa 2 l etara ya maswi, dikhurumelo a dibotlole tsa polasitiki tsa senotsididi, dikhurumelo tsa mabotlole a metala le - Ga go diphatlha tse tlogelwang gareng ga dilwana: di tshwanetse go pakiwa gore di amane . • Dirisa dilwana tse di tshwanang jaaka diyuniti tse e seng tsa maemo . Baya e nngwe le nngwe go bapa le nngwe le e nngwe , mme o sutisetse ya ntlha go ya ka fa go ya bobedi kwa ntlheng e nngwe . Se se dirwa fa go lekanyetswa ka seatla, boleele jwa leoto kgotsa diphatlha . • Go diriswa selwana se le sosi jaaka tekanyetso ya maemo sa tlhomamang le gongwe go tlodisa kgotsa go tshwaya kwa e felelang gone pele o e reledisa go ya pele.	Dithuto di le 2

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgwedithoro 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Tekanyetso e sa tlhomamang** • Lekanyetsa, o lekanye ,bapisa , rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlwaelegang s.k sek-gala sa seatla , dikgato , boleele jwa phensele le didiriswa tsa palo. • Tlhalosa boleele jwa dilwana ka go bala le go bolela gore diyuniti tse di sa tlhomamang di boleele jo bokae. • Dirisa puo, go bolela ka papiso s.k.boleele, bokhutshwane, boleele , bophara **Tlhagiso ya tekanyetso e tlhomameng** • Lekanyetsa o lekanye, bapisa ,le go rulag-anya go rekota boleele go diriswa dimetara (gongwe ka kotana ya metara kgotsa mogala wa boleele jwa metara) jaaka boleele jwa yuniti ya maemo . • Lekanyetsa le go lekanya boleele mo disentimetara o dirisa kotana ya disen-timetara. Ga go tlhokafale phetholelo e batlegang mo gare ga dimetara le disentimetara	**Tekanyetso e sa tlhomamang** • Lekanyetsa, o lekanye bapisa, rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlwaelegang s.k sekgala sa seatla, dikgato, boleele jwa phensele le didiriswa palo. • Tlhalosa boleele jwa dilwana ka go bala le go bolela gore diyuniti tse di sa tlhomamang di boleele jo bokae • Dirisa puo, go bolela ka pa-piso sekao.boleele, bokhut-shwane, boleele , bophara. **Tlhagiso ya tekanyetso e tlhomamameng** • Lekanyetsa o lekanye bapisa , le go rulaganya go rekota boleele go diriswa dimetara (gongwe ka kotana ya metara kgotsa mogala wa boleele jwa metara) jaaka boleele jwa yuniti ya maemo .	Barutwana ba tshwanetse go rutwa ka metlha go bolela diyuniti s.k. Buka e bophara jwa dikhurumelo tsa mabotlole di le 12, Phaposiborutelo e boleele dikgato tse 38 . Ganngwe fela fa barutwana ba lekanyeditse ka yuniti e nngwe le e nngwe makgetlho a malwa , Ba lekanyetse gore ka gore selwana se se tlileng go lekanyetswa se boleele jwa diyuniti tse kae . Tekanyetso pele pele go ka dirwa tekanetso e botlhokwa mme e tla dirwa fela fa barutwana ba sena go lekanyetsa ka yuniti eo. Barutwana ba tshwanetse go rutwa gore ba tle ba lekanyetse boleele, bogodimo, kgotsa bophara yuniti e tshwanang e tshwanetse go diriswa. Sekao fa bophara jwa matseno a mojako o lekanyeditsweng e le diatla di le 20 le bophara jwa teseke ke boleele jwa diphensele tse 8, Re ka se ka sa re matseno a mojako a bophara go feta teseke. Barutwana ba tshwanetse go lekanyetsa ka diyuniti tse di sa tlhomamang gore ba tle ba ba itse go : • Simolola go tlhaloganya yuniti e nnye , gore ke palo e kgolo e kae e tla dirisiwa .sk. bophara jwa phaposiborutelo e tla bo e le dikgato tse 20 mme le boleele jwa maoto a le 48 ; le • Go simolola go dirisa diyuniti tse di maleba go se se lekanyetswang sk lekanyetsa ka bophara jwa phaposi borutelo ka dikhurumelo tsa mabtlole ke tshenyo ya nako.. **Fopholetsa , lekanyetsa tshwantsha mme rekota boleele, bogodimo , le bophara o dirisa dimetara .** Barutwana ba tshwanetse go tiisa/gatela go tlhaloganya ga bone boleele jwa 1metara le go dirisa boleele jwa metara go lekanyetsa .Se se ka dirwa sentle fela fa morutwana a lekanyetsa ka sediriswa se se boleele jo bo lekanang le jwa selekanyo sa metara jaaka selekanyo sa metara kgotsa thupana e segilweng boleele jwa metara kgotsa thudi/tlhale .Ka gore boleele jwa metara bo thusa barutwana go ipopela setshwano sa gore metara ke eng.Go a kgonagala go lekanyetsa mo dimetareng ka leotwana la terantele, mme boleele jwa metara ga bo bonwe bonolo. Barutwana ba batla didirswa tse di leng boleele jwa metara kgo! Go botlhokwa go dirisa dibapisi letsatsi le letsatsi go bapisa sekao: bophara jwa mojako le boleele jwa fensetere ga se ka nako tsotlhe e leng 1 metara . Se se thusa barutwana go dirisa boleele kgotsa bophara job a bo boning go fopholetsa boleele jwa didiriswa tse dingwe tse ba di lekanyetsang.	Dithuto di le 2

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgwedithar o 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.2 **Boleele**	**Tekanyetso e sa tlhomamang** • Lekanyetsa, o lekanye ,bapisa , rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlwaelegang s.k sekgala sa seatla , dikgato , boleele jwa phensele le didiriswa tsa palo. • Tlhalosa boleele jwa dilwana ka go bala le go bolela gore diyuniti tse di sa tlhomamang di boleele jo bokae. • Dirisa puo, go bolela ka papiso s.k.boleele, bokhutshwane, boleele , bophara **Tlhagiso ya tekanyetso e tlhomameng** • Lekanyetsa o lekanye, bapisa ,le go rulaganya go rekota boleele go diriswa dimetara (gongwe ka kotana ya metara kgotsa mogala wa boleele jwa metara) jaaka boleele jwa yuniti ya maemo . • Lekanyetsa le go lekanya boleele mo disentimetara o dirisa kotana ya disentimetara. Ga go tlhokafale phetholelo e batlegang mo gare ga dimetara le disentimetara	**Tekanyetso e sa tlhomamang** • Lekanyetsa, o lekanye bapisa, rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlwaelegang s.k sekgala sa seatla, dikgato, boleele jwa phensele le didiriswa palo. • Tlhalosa boleele jwa dilwana ka go bala le go bolela gore diyuniti tse di sa tlhomamang di boleele jo bokae • Dirisa puo, go bolela ka papiso sekao.boleele, bokhutshwane, boleele , bophara. **Tlhagiso ya tekanyetso e tlhomamameng** • Lekanyetsa o lekanye bapisa , le go rulaganya go rekota boleele go diriswa dimetara (gongwe ka kotana ya metara kgotsa mogala wa boleele jwa metara) jaaka boleele jwa yuniti ya maemo .	Barutwana ba tswanetse go fopholetsa pele ba lekanyetsa.Barutwana bat la bona dilo tse di telele motlamongwe tse di khutshwane go metara o le 1. Barutwana ba ka lekanyetsa boleele jo bo farologanyeng mo dimetareng. Boleele jo bo farologanyeng bo tshwanetse jwa tshwantshiwa. **Go rekota ditekanyetso** Le fa golekanyetsa e le kgono tirisong barutwana ba tshwanetse go rekota ditekanyetso.(ka diyuniti tse di sa tlhomamang le ka dimetara) ka nako tsotlhe. **Go lekanyetsa boleele jaaka tiriso ya rarabolola dipalo le dipalelo.** • Ka nako e e beetsweng kwa thoko ya dipalo.ditiro le kamano barutwana ba tla rarabolola dipalo ka go dirisa ditogamaano tsa: • Tekanyetso e e sa tlhamalalang ya boleele:le informal measurement of length; and • Tekanyetso ya boleele ka dimetara. E la tlhoko tlhatlhaganyo ya dipalo tse di maleba tsa kgwedithar o,le tsone dipalo tse di maleba tse di tlhatlhamang tsa kgwedithar o.	Dithuto di le 2

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgweditharo 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	**Tekanyetso e sa tlhomameng** • Lekanyetsa , lekanya . rulaganya le go rekota boima o dirisa tekanyetso e seng mo maemong , le tekanyetso ya tekano s.k.diboloko , ditena jalo-jalo. • Dirisa puo, go bolela ka papiso s.k.bofefo , boima, bofefonyane boimana. **Ketiso pele ya tekanyetso e tlhomameng** • Lekanya rulaganya le rekota boima jwa dilwana phuthelwana tsa papatso tse boima jwa tsona bo neetsweng ka dikilogeramo s.k.2 kilogeramo tsa reise le 1 kilogeramo ya folouru mo geramo sekao 500 digerama tsa letswai . • Lekanyetsang boima jwa lona ka dikilogerama le dirisa sekale sa phaposi ya botlhapelo . Ga go tlhokege phetolelo mo gare ga digeramo le dikilogerama.	**Tekanyetso e sa tlhomameng** • Lekanyetsa , lekanya rulaganaya le go rekota boima o dirisa tekanyetso e seng mo maemong , le tekanyetso ya tekano s.k.diboloko , ditena jalo-jalo. • Dirisa puo, go bolela ka papiso s.k.bofefo , boima , bofefonyane boimana **Ketiso pele ya tekanyetso e tlhomameng** • Lekanya rulaganya le rekota boima jwa dilwana phuthelwana tsa papatso tse boima jwa tsona bo neetsweng ka dikilogeramo s.k.2 kilogeramo tsa reise le 1 kilogeramo ya folouru mo geramo sekao 500 digerama tsa letswai . • Lekanyetsang boima jwa lona ka dikilogerama le dirisa sekale sa phaposi ya botlhapelo . • Mo go dikale tsa phaposi ya botlhapelo teng Barutwana ba kgona go lekanyetsa boima jwa bona mo dikilogerameng ba dirisa sekale sa phaposi ya botlhapelo. Se se letetsweng fela ke gore barutwana ba buise fela go fitlha fa palong e gaufi le mola o mogolo.Ba tlhalosa boima jwa bona jaaka gaufi le bontsi go feta ,batlile go le gontsi kgotsa nnye go , go le gonnye go feta kgotsa ke yona palo **e** lekanang le(mo dikilogerameng) ba di buisa go tloga go metara .	**Pharologanyo ke eng mo mophatong wa 2?** Mo mophatong o barutwana ba tsepama mo tekanyetsong e e sa tlwaelegang ya diyuniti tsa boima tse di seng mo boemong Barutwana ba dirisa seelamaleka sa tekanyetso go dira se.Le gone ba simolola go dira ka dikelogerama Ba rulaganya tsatsi le letsatsi dikumo tsa boima jwa dikelogerama Ba bala boima go tloga go sekale sa ntlwana tlhapelo. **Boima jwa tekanyetso e e sa tlwaelegang go diriswa seelomaleka le diyuniti tse di seng mo boemong.** Barutwana b aka ithuta metheo yotlhe le tiriso ya tekanyetso ba dirisa diyuniti tse di seng mo boemong .Tekanyetso k aka diyuniti tse di seng mo boemong e se ka ya tsewa jaaka e le gore ga e na mosola go na le go dirisa diyuniti tse di mo boemong.Barutwana b aka tiisa bokgoni jwa bona go dirisa dingwe diyuniti tsa boima tse di sa tlwaelegang ka diyuniti tse di seng tsa boemo .Dielomaleka tsa boima tsa kgwebo di ka dirisiwa .a di seyo o ka di iterela yone ka go kopanya para ya dihangere tsa diaparo , le setshelo sa yogate ,le marago a lebotlole la 2 letara le sesego sa marago letara ya mašwi kgotsa lebokose la senotsididi (Ditshelo tse di tshwanang di patagangwa ka fa letlhakoreng le lengwe le lengwe la dihangere Go lekanyetsa ka diyuniti tsa boima tse di senang boemo go akaretsa bo bala gore ke didiriswa tse kae tse di tsa diyuniti tse di tlhophilweng e leng tsa boima jo bo lekenang le didiriswa tse di lekanetswang. Sekao , rulara e boima jo bo lekana le ditena tse 9 sekao rulara e na le boima jo bo lekanang le diboloko tse 9 . .Barutwana ba tshwanetse go lekanyetsa didiriswa tse di farologaneng go diriswa didiriswa tsa tlhatlhamano jaaka diyuniti tse di tlwaelegang . Barutwana ba tshwanetse ka nako tsotlhe go rutwa go bolela diyuniti fa ba neela boima sekao : dibuka di boima jwa dimabole di le 34. Gangwe fela fa barutwana ba lekanyeditse ka yuniti ngwe le ngwe makgetlo a mmalwanyana , ba tshwanetse go fopholetsa gore go tlhokega diyuniti tse kae tse di lekanang tse di nnang le boima jwa dididiriswa tse di lekanyetswang. Phopholetso ya tlhokega pele go lekanyetswa ,mme e ka dirwa fela fa barutwana ba setse ba dirile tekanyetso ka yuniti eo. Barutwana ba tshwanetse go rutwa gore fa ba batla go bapisa boima jwa didiriswa tse di farologaneng diyuniti tsone tse di dirisitsweng di tshwanetse go diriswa sekao fa rulara e na le boima jwa diboloko tse 20 le sekere se na le boima jwa dimabole di le 20 , O ka nna war re di na le boima jo bo lekanang kgotsa nnya kgotsa ke efe e leng boima go feta.. **Go rekota tekanyetso** Lefa tekanyetso e le bokgono jwa tiriso , barutwana ba tshwanetse go rekota tekanyetso ka nako tsotlhe.	Dithuto di le 4

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgwedithar o 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	**Tekanyetso e sa tlhomameng** • Lekanyetsa , lekanya . rulaganya le go rekota boima o dirisa tekanyetso e seng mo maemong , le tekanyetso ya tekano s.k.diboloko , ditena jalo-jalo. • Dirisa puo, go bolela ka papiso s.k.bofefo , boima , bofefonyane boimana. **Ketiso pele ya tekanyetso e tlhomameng** • Lekanya rulaganya le rekota boima jwa dilwana phuthelwana tsa papatso tse boima jwa tsona bo neetsweng ka dikiloger-amo s.k.2 kilogeramo tsa reise le 1 kilogeramo ya folouru mo geramo sekao 500 digerama tsa letswai . • Lekanyetsang boima jwa lona ka dikilogerama le dirisa sekale sa phaposi ya botlhapelo . Ga go tlhokege phetolelo mo gare ga digeramo le dikilogerama.	• Mo sekale sa seelomaleka ka dikarotshana tsa boima jo tshwailweng ka digerama go leng teng , barutwana ba kgona go lekanyetsa didiriswa tsa boima **jo** bo farologaneng. Ga go tlhokege phetolelo mo gare ga digeramo le dikilogerama **Kitsisopele ya tekanyetso e tlhomameng** • Bapisa ,rulaganya le go rekota boima jwa dilwana tsa kgwebo tsa boima jo bo gatisitsweng ka dikilogerama S.K. 2dikilogerama tsa reise le 1 kilogerama ya bupi kgotsa sekao: 500 digeramo tsa letswai • Mo dikale tsa phaposi ya botlhapelo di leng teng , barutwana ba ka kgona go lekanyetsa boima jwa bona ba dirisa dikale tsa phaposi tsa botlhapelo. Se se leb-eletsweng ke gore barut-wana ba bale fela fa moleng kgaoganyo o mogolo o gaufi. Ba tlhalose boima jwa bona jaaka almosto batlile, gaufi le , bapile bogolo jwa/ bonnye jwa/ lekana le palo ya (dikilogerama) ba bale boima ka dimetara. • Fa dikale tsa maleka di le teng ka dintlhana tsa boima tse di kgaogantsweng ka digeramo , barutwana ba ka lekanyetsa boima jwa dilwana tse di farologaneng. Ga go diphetolelo gare ga digerama le dikilogerama tse di batlegang	**Go dirisa dikilogerama** • Thulaganyo go ya boima jwa dikumo Barutwana b aka dira ka dikousari tse di rekisiwang ka dikilogerama ,Mo palo ya dikilogerama e kwadilweng mo diphuthelwaneng . Barutwana ba kgona go tshwantsha boima jwa diphuthelwana ka teng tse di farologaneng (jaaka reise, sukiri , papa, bupi jwa f olouru sesepa sa poere sa go tlhatswa)se se rekisiwang ka tlhwatlhwa ya 1kg. Ba ka di pega fa godimo ga seelomaleka go bona seo lefa bogolo jwa diphuthelwana bot la farologana , di batlile kgotsa tlase ka kgotsa di lekana le ka boima. Barutwana ba newa diphuthelwana tse di tlhatlhamanang tsa ditlhana tse di farologaneng go tloga go boima go , bofefo go , jaaaka di latelana go ya ka boima jwa boima jo kwadilweng mo diphuthelwaneng sekao 2 kg reise ,l kg sukiri , 5 kg papa , 10 kg setampo.. Barutwana ba tshwanetse go itse khutshwafatso ya “kg” ya dikilogerama **Go dira ka digerama** • Rulaganya dikumo ka boima. Barutwana ba dira ka dikorousari tseo tse di rekisiwang ka digerama, mo digeramo di kwadilweng mo diphuthelwaneng. Barutwana ba kgona go tshwantsha boima jwa diphuthelwana ka diteng tse di farologaneng (jaaka dijo tsa masea , teye , kofi, letswai , dinawa , dipaki tse di nnye tsa maswi a poere , paki ya jelly paki e nnye ya reise) tse di rekisiwang ka digerama. Barutwana ba kgona go newa tlhatlhamano ya diphuthelwana ka diteng tse di farologaneng di rulagantswe go tloga go e boima thata go fitlha go e bofefo thata, fa di tlhatlhamaneng go ya ka boima jaka bo kwadilwe mo diphuthelwaneng . 2 kg reise, 1 kg sukiri, 5 kg papa, 10 kg setampo. Go botlhokwa thata gore barutwana ba senolelwe go bonnye le boima jwa diphuthelwana , jaaka letswai le diphuthelwana tse di kgolo jaaka diresepe tsa reise kgotsa dikon folekese. Se , se ba letla go tlhaloganya gore dithoto tse dikgolo ga se gantsi di le boima go tse dinnye e seng gongwe o di bapiswa. O ka nna fela le bonnete gore sephuthelwana se segolo se na le boima jo bogolo fela fa: • Diteng tse di lekanag di bapiswa ; le • Go netefatsa boima ka sekale (seo se batlega fela mothetlase wa me-phato).	Dithuto di le 4

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgwedithoro 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.3 **Boima**	**Tekanyetso e sa tlhomameng** • Lekanyetsa , lekanya . rulaganya le go rekota boima o dirisa tekanyetso e seng mo maemong , le tekanyetso ya tekano s.k.diboloko , ditena jalo-jalo. • Dirisa puo, go bolela ka papiso s.k.bofefo , boima , bofefonyane boimana. **Ketiso pele ya tekanyetso e tlhomameng** • Lekanya rulaganya le rekota boima jwa dilwana phuthelwana tsa papatso tse boima jwa tsona bo neetsweng ka dikilogeramo s.k.2 kilogeramo tsa reise le 1 kilogeramo ya folouru mo geramo sekao 500 digerama tsa letswai . • Lekanyetsang boima jwa lona ka dikilogerama le dirisa sekale sa phaposi ya botlhapelo . Ga go tlhokege phetolelo mo gare ga digeramo le dikilogerama.	• Mo sekale sa seelomaleka ka dikarotshana tsa boima jo tshwailweng ka digerama go leng teng , barutwana ba kgona go lekanyetsa didiriswa tsa boima **jo** bo farologaneng. Ga go tlhokege phetolelo mo gare ga digeramo le dikilogerama **Kitsisopele ya tekanyetso e tlhomameng** • Bapisa ,rulaganya le go rekota boima jwa dilwana tsa kgwebo tsa boima jo bo gatisitsweng ka dikilogerama S.K. 2dikilogerama tsa reise le 1 kilogerama ya bupi kgotsa sekao: 500 digeramo tsa letswai • Mo dikale tsa phaposi ya botlhapelo di leng teng , barutwana ba ka kgona go lekanyetsa boima jwa bona ba dirisa dikale tsa phaposi tsa botlhapelo. Se se lebeletsweng ke gore barutwana ba bale fela fa moleng kgaoganyo o mogolo o gaufi. Ba tlhalose boima jwa bona jaaka almosto batlile, gaufi le , bapile bogolo jwa/bonnye jwa/ lekana le palo ya (dikilogerama) ba bale boima ka dimetara. • Fa dikale tsa maleka di le teng ka dintlhana tsa boima tse di kgaogantsweng ka digeramo , barutwana ba ka lekanyetsa boima jwa dilwana tse di farologaneng. Ga go diphetolelo gare ga digerama le dikilogerama tse di batlegang	Barutwana ba tlhoka go itse khutshwafatso ya “ g” ya digerama. Ga go a lebelelwa gore barutwana ba ba buise sekale sa ntlwana kapelo ka digerama Se se dirwa mo motheotlase gare **Bala sekale sa ntlwana ya botlhapelo ka dikilogeramo** Fa go naleng sekale mo ntlwana ya go tlhapa gone, barutwana ba ka dirisa se , go buisa boima jwa bona Go mefuta e mebedi ya metara wa boima:dijitale le tshupo ka dinaka. Dikale dingwe tsa dijitale di balega bonolo gonne boima jwa teng bo kwadilwe ka dipalo.Fa o nale sekale sa dijitale mo phaposi ya botlhapelo , tlhomamisa gore boima bo gatisitswe fela ka dikilogerama tse di feletseng O itse go ka rulaganya gore dikale dingwe di bontshe fela dikilogerama. Fa o sa kgone go e rulaganya gore e bontshe fela dikilogerama,ruta barutwana go se tseele dikarolo tsa dikilogerama tlhogong jaanong.. Bontsi jwa dikale tsa tshupo ka dinaka di na le palo ya 10 kg , ka mola o mo teletsana o bontsha boemo jwa 5 kg. Methalo ya 1kg gantsi ga e bontsiwe ka dipalo.Se , se tshwana fela ljaaka tsela ya mela le tiro ya dipalo tsa rulara . Letlelela barutwana go simolola ka go bona gore go diphatlha tse 10 pele ga ltshwao la 10 kg gore phatlha e nngwe le nngwe e emelwe ke 1 kg , mme mela e meleele e emelwe ke 5 kg . Barutwana b aka buisa tekanyetso go tswa go sekale sa bonnete sa phaposi ya botlhapelo le tsone ditshwantsho .Go botlhofo go buisa boima go tswa go setshwantsho.sa phaposi ya botlhapelo ,go na le go buisa mo sekaleng sa nnete . **Rekota tekanyetso** Lef tekanyetso e le bokgono tiriso, barutwana ba tshwanetse go rekota tekanyetso tsa bona ka metlha yotlhe. **Go lekanyetsa boima jaaka tiriso ya go rarabolola palelo ya dipalo.** Ka nako ya nako e e beetsweng kwa thoko ya dipalo , tiriso le kamano barutwana ba kgona go rarabolola dipalo tse di dirisang tiriso ya • tekanyetso ya boima e e sa tlwaelegang le • tekanetso ya boima ka dikilogerama Tsaya tsia tlhatlhamano ya dipalo e e nepagetseng mo kgwedithoro , le yone tatelano ya mefuta ya dipalo tse di nepagetseng tsa kgwedithoro. Ga go a lebelelwa gore barutwana ba : • itse gore 1 000 g = 1 kg; kgotsa • go fetolela digerama le dikilogerama . Palelo ka digerama e ka tlhotswa mme se fete 1 000 g.	Dithuto di le 4

Topics	Dikgopolo le bokgoni tse di Tlhokagalang kwa bokhutlong jwa ngwaga	Tsepamo ya dikgopolo le bokgoni Go kgweditharo 2	Dintlha tlhaoso kgotsa metheo kaelo ya go ruta	Boleele jwa nako Mo thutong ya ura le metsotso e le 24
4.4 **Mothamo/ Bolumo**	**Tekanyetso e e tlhamaletseng** • Fopholetsa le go lekanyetsa le go bapisa le go rulaganya mothamo wa ditshelo (sekao boleng jo setshelo se kgonang go bo tsaya ka go dirisa tekanyetso e e seng ya maemo a tsepameng sekao.dintsho , dikopi • Tlhalosa mothamo wa ditshelo ka go bala le go bolela gore go tsaya diyuniti tse di senang boemo di le kae go tlatsa ditshelo sekao lebotlole le na le mothamo wa 4 dikopi . **Ketapele ya bolekanyo jo bo tlhomameng.** • Bapisa , rulaganya le rekota mmese wa papatso ya sephuthtelo sa dilwana tse e leng gore mmese wa tsone o kaiwa ka diletara s. k. 2-Diletara le 1 letara ya senotsidid 5diletara ya pente kgotsa mo militareng500ml ya maswi,340 milietara tsa senotsididi ,750 miiletara ya oli • Itse gore maemo a boleng jwa kopi ke 250 miiletara. • Itse gore leswana ke 5 mililetara Ga go na phetholelo mogare ga mililetara le letara	Ka nako ya barutwana e ikemetseng , barutwana ba tswelela go: Fopholetsa le go lekanyetsa ,bapisa , rulaganya le go rekota mothamo wa ditshelo kgotsa bolumo ya ditshelo go dirisiwa tekanyetso e e senang boemo .Go latelwa diresepe go akaretswa go baka , ke tiriso e mosola e ka yona barutwana ba ikatisang tekanyetso ka yona .Tlhopha diresepe mo ditsompelo di neetsweng ka dikopi,dintshwana kgotsa yuniti tse di sa tlwaelegang. • Tshwantsha le go rulaganya mothamo wa tlhatlhamano ya mabotlole le dilwana tsa korousari mo bolumo e kwadilweng semmuso mo diphuthelwaneng. • Dirisa gongwe 1letara ya lebotlole kgotsa 1 letara ya jeke go fopholetsa le go lekanyetsa , tshwantshisa le go rulaganya rekota mothamo wa ditshelo kgotsa bolumo ya ditshelo ka diletara . Lebelela dintlha tsa KGWEDITHARO 3 . Barutwana ba tshwanetse go newa ditirwana go kwala go tiiisa tse di latelang go buisa ditshwantsho ka : • Dikumo tsa mothamo o kwadilweng mo go tsone ka tatelano go rulagantswe le • Ditshwantsho tsa dijeke mo mothamo o gaufi le palo ya 1 letara kgotsa 2 letara mo moleng o mogolo Se se lebeletsweng ke gore barutwana ba buise fela palo e gaufi le molao mogolo. Ba tlhalose dibolumo tsa bona jaaka batlile, gaufi le , go gontsinyana , gontsi kgotsa gonnye , go lekana le palo (I letara) fa ba buisa mo jekeng. **Go lekanyetsa boleele jaaka tiriso ya go rarabolola dipalelo tsa dipalo** Ka nako ya e beetsweng kwa thoko ya dipalo, tiriso le kamano barutwwana ba kgona go rarabolola dipalo tse di dirisang tiriso ya : • Tekanyetso e e senang boemo ya mothamo/ bolumo; • Sekao nkoko o dirisa 2-Dikopi tsa maświ go dira puting .Fa a dirsa resepe gabedi o tla tlhoka maświ a kae? • Diletara • Tseela tsia palo tatelano e e siameng tsa kgweditharo gammogo le tatelano ya mefuta ya dipalo.		

MOPHATO WA 3 KGWEDI-THARO YA 2 5. DIPALO TSA GO DIRA KA TSHEDIMOSETSO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 2**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	
5.4 **Kgobokanya le go rualganya tshedimosetso**	**Kgobokanya le go rualganya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo ka go araba dipotso tse di bodiwang ke morutabana • Rulaganya tshedimosetso e neetsweng ke morutabana kgotsa mo bukeng • Rulaganya tshedimosetso mo - manaane - dithobane tse di bontshang nyalano - mananeo			
5.5 **Tshwantshanya tshedimosetso**	**Tshwantshanya tshedimosetso** **Tshwantshanya tshedimosetso mo** • kerafong e e dirisediwang ditshwantsho • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso			
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso e e bontshitsweng mo • kerafong e e dirisediwang ditshwantsho • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso	**Sekaseka le go ranolola tshedimosetso go tswa mo tshwantshisong e e neetsweng**	Fa barutwana ba dirile tikologo ya tshedimosetso yotlhe mo kgwedi-tharong 1, go sekaseka mefuta e e farologaneng ya tshedimosetso e e tshwantshisitsweng go tshwanetse go nne botlhokwa. Go atlegenedisitswe gore barutwana ba sekaseke tshedimosetso bonnye • Kerafo e e dirisidiwang ditshwantsho e le 1 • Mo Lenaneong Barutwana ba tshwanetse go araba dipotso tse o di botsang ka ga kerafo le lenaneo: lebelela kgwedi-tharo 1 mefuta ya dipotso tse di maleba	thuto 1

MOPHATO WA 3 KGWEDITHARO 3 1. DIPALO, MATSHWAO LE DIKGOLAGANO				
Ditlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedithаro 3**	**Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Nako**
1.1 **Bala didiriswa**	Bala didiriswa **tse di kgongwang tsa letsatsi le letsatsi le go bala ka nepagalo go fitlhela bonnye ko go 1000.** Togamaano ya go kgobokanya e a tlhotlheletswa.	• Kgobokanya didiriswa **tse di kgongwang tsa letsatsi le letsatsi fopholetsa le go bala ka nepagalo** • Neela phopholetso e e dumelesegang ya palo ya didiriswa tse di ka netefatswang ka go balwa	**Pharologanyo ke eng mo KGWEDITHARO 2?** Tlhatlhamano ya palo e oketsegile, barutwana ba tshwanetse go neelwa tšhono go tshwara, go tsamaisa le go bala didriswa di le 750 tse di kgobokantsweng ka go farologana Leba dintlha tsa kgwedithаro 1 le 2.	
1.2 **Go balela kwa pele le kwa morago**	Balela kwa pele le kwa morago mo: • Ganngwe go tswa go palo nngwe le nngwe go tswa magareng ga 0 le 1000 • Bolesome go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 1000 • Botlhano go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 1000 • Bopedi go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 1000 • Botharo go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 1000 • Bonne go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 1000 • Bo 20, • Bo 20, bo25, bo 50 ,bo100 go fitlha bonnye 1 000	Balela kwa pele le kwa morago mo: • Ganngwe go tswa go palo nngwe le nngwe go tswa magareng ga 0 le 700 • Bolesome go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 700 • Botlhano go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 700 • Bopedi go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 700 • Botharo go tswa go palo nngwe le nngwe ya katiso magareng ga 0 le 700 • Bone go tswa go katiso ya 4 magareng ga 0 le 700 • Bo20, bo25, bo50 ,bo100 go fitlha bonnye 1 000	**Pharologanyo ke eng mo kgwedithаrong ya 2?** Tlhatlhamano e oketsega go fitlha go 700. **Leba dintlha tsa kgwedithаro 1 le 2.**	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.3 **Matshwaopalo le mainapalo**	**Itse le go bala** • Supa, o lemoge le go bala matshwaopalo 0- 1000 • Kwala matshwaopalo 0-1 000 • Supa, o lemoge le go bala mainapalo 0-1000 • Kwala mainapalo 0 -1000	**Itse le go bala** • Supa, o lemoge le go bala matshwaopalo 0- 1000 • Kwala matshwaopalo 0-1 000 • Supa, o lemoge le go bala mainapalo 0-500 • Kwala mainapalo 0 -500	**Pharologanyo ke eng mo KGWEDITHARO 2 ?** **Barutwana ba supa, ba bala le go kwala:** • Matshwaopalo go fitlha go1 000; le • Mainapalo go fitlha go 500. **Leba dintlha tsa KGWEDITHARO 2.**	
1.4 **Tlhalosa,** **bapisa le go rulagannya dipalo**	**Rulaganya le go bapisa dipalo go 999** • Rulaganya dipalogotlhe go fitlha go 999 go tloga ka bonnye go fitlha go bogolo, bogolo go fitlha go bonnye. • Bapisa dipalogotlhe go fitlha go 999 o dirisa bonnye go feta, bogolo go feta,bontsi go feta bonnye go feta le go lekana le. **Dirisa paloketatelano go bontsha tatelano,lefelo le boemo.** • Dirisa, bala le go kwala palokelotatelano o akaretsa mokgwa o o khutshwafaditsweng go fitlha go 31.	**Rulaganya le go bapisa dipalo go 500** • Rulaganya dipalogotlhe go fitlha go 500 go tloga ka bonnye go fitlha go bogolo, bogolo go fitlha go bonnye. • Bapisa dipalogotlhe go fitlha go 500 o dirisa bonnye go feta, bogolo go feta,bontsi go feta bonnye go feta le go lekana le. **Dirisa paloketatelano go bontsha tatelano,lefelo le boemo.** **Dirisa paloketatelano go bontsha tatelano,lefelo le boemo.** • Dirisa, bala le go kwala palokelotatelano o akaretsa mokgwa o o khutshwafaditsweng go fitlha go 31.	**Pharologanyo ke eng mo KGWEDITHARO 2 ?** Barutwa ba rulaganya le go tshwantsha dipalo go fitlha go 500 le go tshwelela go dirisa mokwalo wa popego e e khutswafaditsweng go kwala dipalotatelano. **Lebelela dintlha tsa KGWEDITHARO bo 2.**	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.5 **Boleng palo**	**Lemoga boleng ba palo ya dinomoro di le tharo go 999** • **Itse gore palo nngwe le nngwe e emetse eng** • **Tlhamolola palo ya dinomoro di le 3 go fitlha go 999 ka katiso ya 100, katiso ya masome le metso (KG,S,M)** • **Supa le go bolela boleng jwa palo nngwe le nngwe**	Lemoga boleng ba palo ya dinomoro di le tharo go 750 • **Itse gore palo nngwe le nngwe e emetse eng** • **Tlhamolola palo ya dinomoro di le 3 go fitlha go 750 ka katiso ya 100, katiso ya masome le metso (KG,S,M)** • **Supa le go bolela boleng jwa palo nngwe le nngwe**	**Pharologanyo ke eng mo KGWEDITHARO 3?** Mefuta ya dipotso le ditaelo di a fiwa mo kgweditharong 3. Palotlhatlhamano e oketsegile mme barutwana bas a dira ka palo ya dinomoro di le tharo.. Tsepamo mo kgweditharong e e tshwanetse go tswelela mo: • Boleng jwa palothe value; • Go tlhatlhamolola dipalo ka bo makgolo, bolesome le metso o dirisa dikarata tsa boleng ka thulaganyo ya palo ya diboloko di le lesome.le • Go kwala foromo ya dipalo e e lotolositsweng. Leba dintlha tsa KGWEDITHARO 2.	
THARABOLOLO YA DIPALO				
1.6 **Ditogamaano tsa tharabololo**	Dirisa ditogamaano tse di latelang fa o rarabolola le go go tlhalosa ditharabololo: • Go tlhabolola le go tlhamolola dipalo • Go aroganya le koketso-gabedi • Mela pedi • Go balela gaufi ka masome	Dirisa ditogamaano tse di latelang fa o rarabolola le go go tlhalosa ditharabololo: • Go tlhabolola le go tlhamolola dipalo • Go aroganya le koketso-gabedi • Mela pedi • Go balela gaufi ka masome	Barutwana ba solofetswe go rarabolola palofoko o dirisa ditogamaano tse di latelang. • Go tlhabolola le go tlhamolola dipalo • Go aroganya le koketso-gabedi • Mela pedi • Go balela gaufi ka masome Leba dintlha tsa KGWEDITHARO 2	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.7 **Go tlhakanya le go tlosa**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararabololo ya dipalo tse di akaretsang katiso ya go tlhakanya le go ntsha ka dikarabo tse di fitlhang 999 .	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararabololo ya dipalo tse di akaretsang katiso ya go tlhakanya le go tlosa ka dikarabo tse di fitlhang go 800	Dikao tsa mefuta ya ditharabololo tse di ka dirwang mo kgweditharong e. Ditharabololo tsa tlhakanyo le go tlosa. - Galaletsang o kgobokantse dikhurumelo tsa mabotlolo tse 413. Fa Mpho a mo neela dikhurumelo tse 29, O tla nna le palo e e lekanang le ya Galaletsang. - Ba tla nna le dikhurumelo di le kae tsa mabotlolo? - Ke mabotlolo a le makae a Mpho a neng a na le ona mo tshimologong? • Barutwana ba mophato wa 2 ba kgobokantse dimabole di le 500. Ba mophato wa 3 ba na le dimabole bonnye tse 170 go na le ba mophato wa 2. Ke di mabole di le kae tseo ba mophato wa 3 ba nanng le tsona? • Lena le Lenia ba kgobokanya dikgomaretsi di le 250. Lena o bone tse 160. Ke dikgomaretsi di le kae tseo di bonweng ke Lenia?	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.8 **Poeletso ya go tlhakanyo e e isang kwa katisong**	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararabololo ya dipalo ba dirisa katiso ya dikarabo tse di fitlhang go 99	Rarabolola dipalofoko di le mo tirisong mme ba tlhalose thararabololo ya dipalo ba dirisa katiso ya dikarabo tse di fitlhang go 75	**Dikao tsa dipalo tse di ka dirwang mo kgwedithoro e.** **Mofuta wa tharabololo : Tatelano e rulagantsweng.** • Tshingwana ya merogo e na le mela e le 12 e e jetsweng. Mola mongwe le mongwe o na dijalo di le 7. Ke dijalo di le kae mo tshingwaneng yotlhe? • Tshingwana ya merogo e na le mela e le 12 ya dijalo. Mola mongwe le mongwe o tshotse palo e e lekanang ya dijalo.Fa paloyotlhe ya dijalo di le kana ka 48. Go kaya gore go na le dijalo di le kae mo moleng mongwe le mongwe? • Tshingwana ya merogo e na le dijalo di le 48 tseo di jetsweng ka mela. Go na le dijalo di le 7 mo moleng mongwe le mongwe.Ke mela e le mekae mo tshingwaneng yotlhe. **Go bapanya kabo** • Galaletsang o na le dimonamone di le 6.Galaletsang o na le dimonamone tseo di fetang tsa Ronny gararo. Ronny o na le dimonamone di le kae? • Thabo o na le dimonamone di le 18. Di feta tsa Ronny ga boraro go menagane .Thabo o na le dimonamone di le kae? **Go bapanya kabo** • Galaletsang o na le dimonamone di le 6.Galaletsang o na le dimonamone tseo di fetang tsa Ronny gararo. Ronny o na le dimonamone di le kae? • Thabo o na le dimonamone di le 18. Di feta tsa Ronny ga boraro go menagane .Thabo o na le dimonamone di le kae? Kelo Diperekisi di rekiswa ka R8 ka kilogerama.Fa ke reka dikilogerama , tse 4 , se se tla ja madi a le makae? Diperekisi di rekiswa ka R8ka kilogerama. Fa ke na le . R32, ke dikilogerama tse kae tse nka di rekang? Ke reka dikilogerama sa diperekisi di le nne mme di njele R32. Kilogerama e le nngwe ke bokae?. **Go dirisa katametso** Thekisi e nametsa bapalami ba le 15.A batho ba le 73 ba ka lekana ka mo dithekising di le 5.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.9 **Kgobokanyo le kgaoganyo e e isang kwa katisong?**	Rarabolola le go tlhalosa tharabololo ya dipalo tse di dirisegang di akaretsa kgobokanyo, le kgaoganyo e e lekanang go fitlha go 200 ka dikarabo tse di ka akaretsang le tse di setseng.	Rarabolola le go tlhalosa tharabololo ya dipalo tse di dirisegang di akaretsa kgobokanyo, le kgaoganyo e e lekanang go fitlha go 150 ka dikarabo tse di ka akaretsang le tse di setseng.	**Dikao tsa dipalo tse di ka dirwang mo kgweditharog e** • Mme Mokhine o paka dikuku di le 66 mme o di tsenya mo dipaketeng di le 6. O na le dipakete di le kae? • Ronnie o bona R72 ka go rekisa ditekete tsa rafole ka R9,00 .O rekisitse ditekete di le kae? • Setšhaba se thusa malapa a le 9 ba ba latlhegetsweng ke dithoto ka ntlha ya molelo. Go na le dikobo di le 75 go thusa malapa a mme ba tshwanetse go di arogana ka go lekana. a) Lelapa lengwe le lengwe le tlile go bona di le kae? b) Ke tse kae tse di setseng? Kelo Diperekisi di rekiswa ka R8 ka kilogerama.Fa ke reka dikilogerama , tse 4 , se se tla ja madi a le makae? Diperekisi di rekiswa ka R8 ka kilogerama. Fa ke na le . R32, ke dikilogerama tse kae tse nka di rekang? Ke reka dikilogerama sa diperekisi di le nne mme di njele R32. Kilogerama e le nngwe ke bokae?. Mefuta ya ditharabololo tsa kelo ke tse dintšhwa mo kgweditharong ya 3. Barutwana ba tka thoka nako fa ba rarabolola dipalo tse. Mefuta ya ditharabololo tsa kelo di dintšhwa mo kgweditharong 3.Barutwana ba ka batla nako e ntsi fa ba rarabolola dipalo. Leba dintlha tsa KGWEDITHARO 2.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedithoro 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.10 **Kgaoganyo e e isang kwa katisong**	Rarabolola le go tlhalosa ditpalo tse di mo tirisong tsa dipalo tse di di akaretsang go aroganya ka tekano go go isang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopanang le tse di sa kopaneng. Sekao $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{2}{5}$ jalo le jalo	Rarabolola le go tlhalosa ditharaano tse di mo tirisong tsa dipalo tse di di akaretsang go aroganya ka tekano go go isang kwa ditharabololong tse di akaretsang dipalophatlo tse di kopanang le tse di sa kopaneng. Sekao $\frac{1}{2}, \frac{1}{4}, \frac{3}{4},$ jalo le jalo	**Dikao tsa dipalo tse di ka dirwang mo kgwedithoro e:** • Kgaoganyo e e isang kwa dipalophatlhong • Kgaoganya tšhokolete ka dinoko di le 7 magareng ga ditsala tse 3 gore botlhe ba bone palo e elekaneng ya dinoko tsa tšhokolete mme go se sale sepe. Mongwe le mongwe o tla bona bokae? • Kgaoganya tšhokolete ka dinoko di le 13 magareng ga bana ba le 4 gore botlhe ba bone palo e e lekaneng ya dinoko . Mongwe le mongwe o tla bona bokae? Palophatlho ya kgobokanyo • **Koko o neela Neo R12 . Neo o batla go boloka nngwe tharong ya madi ao. O tshwanetse go boloka madi a le makae?** • **Go na le dikuku di le 12 mo sejaneng.Itumeleng o tsaya kotare ya di-kuku. Go setse di le kae?** **Go kwala dipalophatlo** Barutwana ga ba tshwanela go kwala sekao sa palophatlo. Barutwana ba tswelele ka go tshwaya dikarolo tsa dipalophatlo jaaka nngwe tlhano, nngwe tharong, tharo thatarong.Se se ba thusa go tlhaloganya maina a dipalophatlo,tlhalosa gore go na le dikarolo di le kae tse di lekanang tseo bojotlhe bo kgaogantsweng ka jone. Sekao halofo, boraro,kotara jalo le jalo. Sa bobedi ke dikarolo di le kae tseo di betsweng tlhoko. **Go tlhagisa dipalofoko tsa dipalophatlo** Barutwana ba tshwanetse go kwala dikarabo tsa bona go bontsha fa ba tlhaloganya dipalo. Solofela gore barutwana bangwe ka ba araba ka tshwanelo fela ba palelwa ke go bitsa dikarolo tsa dipalophatlo sentle. Barutwana ba tshwanetse go bitsa dikarolo tseo di kgaoganngwang ba e kwale jaaka bobedi tharo.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.11 **Tšhelete**	• Lemoga le go tlhaola tšhelete a tshipi le a pampiri a Aforika Borwa • Go rarabolola dipalo tsa madi tse di akaretsang dipalogotlhe le tšhentšhi ya tšhelete a a salang mo diranteng kgotsa disente. • Go dira diphetolelo magareng ga diranta le disente	• Lemoga le go tlhaola tšhelete a tshipi le a pampiri a Aforika Borwa • Go rarabolola dipalo tsa madi tse di akaretsang dipalogotlhe le tšhentšhi ya tšhelete a a salang mo diranteng kgotsa disente. • Go dira diphetolelo magareng ga diranta le disente	**Dikao tsa dipalo tse di ka dirwang mo kgweditharong e** • Go dira dipalogotlhe jwa boleng jwa madi jaaka:. • Go kwala disente tse kana ka 325 jaaka diranta le disente. • Ke ka mekgwa e mekae e e farologaneng e o ka dirang R400 go nna madi a pampiri fela? O itse jang gore o bone ditharabololo tsotlhe jang? Ntate Molefe ke moagi mme o bona dikatso (dibonase) go fetsa tiro ya gagwe ka nako. o tsaya tshweetso ya go arogana bonase ya gagwe mmogo le mmetli. Mongwe le mongwe o bona R400. Se se kaya gore o bone bokae ya bonase? Nina and her three friends shared R20,60.Mongwe le mongwe o bone bokae?	
DIPALELO TSE DI SENG MO TIRISONG				
1.12 **Ditogamaano (mekgwa kgotsa ditogamaano)**	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le go thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le go thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome	Barutwana ba solofetswe go dirisa ditogamaano tse di latelang fa ba dirisa dipalelo tse di seng mo tirisong: • Go aga le thuba dipalo • Go oketsa gape le go aroganya ka bogare • Melapalo • Go garela ka bolesome Leba dintlha tsa kgweditharo 1.	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 800 • tlosa go tswa go 800 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	**Pharologanyo ke eng mo KGWEDITHARO 3 ?** Mo kgweditharong e barutwana ba dira dipalelo le palo ya dinomoro di le tharo go fitlha go 800. Gore ba dire dipalelo le palo ya dinomoro di le tharo ka boitshepo,barutwana ba tshwanetse ba bo ba na le bokgoni jwa: • Ka go itshepa bala le go kwala matshwaopalo go fitlha go 800: • Ka go itshepa rulaganya le go tshwantsha dipalo bonnye go fitlha ka 800: • Bala ka ditlhopha go fitlha go ; le • Bala ka go itshepa ka kgaotso ka le go fitlha go .	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 800 • tlosa go tswa go 800 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	**Mekgwa e e kgonegang go bontsha dipalelo tsa go tlhakanya le go tlosa.** • Go tlhakanya ka go kgaoganya dinomoro ka bobedi Go tlhakanya paloya dinomoro di le thari le palo ya dinomoro di le pedi. 524 + 82 = □ = (500 + 20 + 4) + (80 + 2) = 500 + (20 + 80+ (4 + 2) = (500 + 100) + 6 = 600 + 6 = 606 Go tlhakanya palo ya dinomoro di le tharo le palo ya dinomoro di le tharo. 323 + 436 = □ 323 + 436 = = (300 + 20 + 3) + (400 + 30 + 6) = (300 + 400) + (20 + 30) + (3 + 6) = 700 + 50 + 9 = 759 • Go tlhakanya (ka go kgaogantsha palo e e tla tlhakanngwang) Barutwana bat la kgaoganya palo ka mekgwa e e ka laolegang mo go bona. Se se kaya gore bat la e dira ka mekgwa e e farologaneng. 524 + 82 = □ 524 + (40 + 40 + 2) 524 + 40 □ 564 + 40 □ 604 + 2 = 606 Go bala ka 40 go tloga go 524 go ka dirwa ka go bala ka bo 10. Go tlhakanya palo ya dinomoro di le tharo le palo ya dinomoro di le tharo 323 + 436 = □ = 323 + (400 + 20 + 6) = (323 + 400) + 20 + 6 = (723 + 20) + 6 = 743 + 6 = 749	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 800 • tlosa go tswa go 800 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Go tlosa ka go kgaoganya dipalo tsotlhe tse pedi. Palo ya dinomoro di le tharo, ntsha palo ya dinomoro di le pedi 889 – 137 = □ 889 – 137 = (800 + 80 + 9) – (100 + 30 + 7) = (800 – 100) + (80 – 30) + (9 – 7) = 700 + 50 + 2 = 752 • Go tlosa ka go kgaoganya palo e le nngwe. 889 – 137 = □ 889 – (100 + 30 + 7) 889 – 100 □ 789 – 30 □ 759 – 7 = 752 • Go dirisa go aroganya gabedi ga palo 525 + 16 = 525 + 8 + 8 = (525 + 8) + 8 = 533 + 8 = 541 • Go balela kwa pele le go balela kwa morago. 805 = 798 = □ Go balela kwa godimo ka bonngwe go tloga go 798 ke togamaano e e maleba gonne dipalo di atamelane thata. Tlhaola bobedi jo bo gaufi 245 + 246 O ka bua palogotlhe e e fa godimo jaaka bobedi 245 + 1 bobedi 246 – 1 245 + 245 + 1 = (200 + 40 + 5) + (200 + 40 + 5) + 1 = (200 + 200) + (40 + 40) + (5 + 5) + 1 = 400 + 80 + 10 + 1 = 400 + (80 + 10) + 1 = 400 + 90 + 1 = 491	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 800 • tlosa go tswa go 800 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Fetolela palo go katiso ya bolesome le go ntsha kgotsa go tlhakanya bonng-we. Count up or down to the nearest 10 588 + 9 588 + 10 = 598 598 - 1 = 597 588 + 19 588 + 20 = 608 608 – 1 = 607 **Go godisa le go ikatisetsa ditogamaano tse di rileng tsa go tlhakanya le go tlosa.** Barutwana ba tshwanetse go bona ditšhono go dira mefuta ya dipalelo ka dipalo go fitlha go 800. Tlhakanya kgotsa tlosa bobedi jwa katiso ya 10, go tlolela go 100 40 + 70 70 + 80 120 – 30 150 – 60 Tlhakanya kgotsa go tlosa 10 go fitlha go kgotsa go tswa go nngwe ya tse pedi kgotsa palo ya dinomoro di le tharogo akaretsa go tlolela go bo lekgolo Sekao: 65 + 10 124 + 10 326 – 10 358 - 10 Tlhakanya kgotsa go tlosa palo ya nomoro e le nngwe go fitlha go kgotsa go tloga gopalo ya dinomoro di le tharo kwa ntle ga go tlolela go bolesome Sekao: 634 +5 775 + ☐ = 779 768 – 4	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 800 • tlosa go tswa go 800 • Dirisa matshwao a a maleba (+, –, =, ☐) • Ikatise ka kgolagano ya dipalo go fitlha go 30	Tlhakanya le go tlosa palo ya nomoro e le nngwe fo ya go kgotsa go tloga go katiso ya Sekao: 600 + 4 500 + 3 700 - 6 800 - 5 Simolola go tlhakanya le go tlosa bobedi jwa katiso ya 100 100 + 100 100 + 200 200 + 200 300 + 400 Barutwana ba tshwanetse go neelwa tšhono to ikatisetsa dipaterone tsa go tlhakanya le go ntsha. 1+ 1 = 2 Jaanong ke eng se:: 10 + 10 100 + 100 Simolola go tlhakanya le go tlosa bobedi go tswa go nngwe ya paloya dinomoro di le tharo Sekao: 675 + 100 762 - 100 **Netefatsa sephetho sa dipalelo** Go atlhola ka nepagalo ditharololo. Barutwana ba tshwanetse go katisetswa go atlhola ditharololo ka nepagalo Tsela nngwe ya go dira se ke fopholetsa dikarabo tsa bona pele ba dira pele ba ka dira dipalelo.Fa ba tlhakanya dipalo di le pedi tse di atamelaneng jaaka 145 le 146, barutwana ba ka dirisa koketso-gabedi jaaka tsela ya fopholetsa dikarabo tsa bona.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • tlosa go tswa go 999 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	• Tlhakanya go fitlha go 800 • tlosa go tswa go 800 • Dirisa matshwao a a maleba (+, –, =, □) • Ikatise ka kgolagano ya dipalo go fitlha go 30	**Netefatsa ditharololo** Barutwana ba tshwanetse go itse gore ba ka kgona go • Netefatsa dipalelo tsa go tlhakanya ka go ntsha. Sekao: Fa 436 + 118 = 454; jaanong 454 – 118 = 436; le • Netefatsa dipalelo tsa go ntsha ka go tlhakanya.Sekao684 – 248 = 436, then 436 + 248 = 684. • Atisa dipalo 1 go fitlha go10 ka 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □) • Atisa dipalo 1 go fitlha go10 ka 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □) O dirisa tirisopitikolologo go netefatsa tharabololo ke nngwe ya mabaka a go ruta go tlhakanya le go ntsha di le tsotlhe.	
1.14 **Tlhakanyo-poeletso tse di isang mo katisong**	• Atisa dipalo 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □)	• Atisa dipalo 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □)	Mo kgweditharong e barutwana ba tswelela go: • Dirisa le go tlhaloganya puo ya katiso. • emela katiso ka tatelano; • dirisa matshwao a a maleba go fetolela polelopalo. • Tlhaloganya gore tlhakanyopoeletso e ka emelwa ka go dirisa matshwao a katiso. • Ikatise le go tlhaloganya gore katiso e ka dirwa ka tatelano nngwe le nngwe. (molaothefosano kgotsa mokgwathefosano) le • Dirisa molapalo go bontsha dipalelo tsa katiso le go ka kgona go tlhalosa kemedi (jaanong metlolo e bontsha tlhakanyo e e boleditsweng • Simolola go tlhaloganya katiso e e phatlhaladitsweng. Barutwana ba ka tswelela go dirisa dithwantsho tse di farologaneng go tlhaloganya katiso	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.14 **Tlhakanyo-poeletso tse di isang mo katisong**	• Atisa dipalo 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □)	• Atisa dipalo 2, 3, 4, 5, 10 go ya palogotlheng ya 99 • Dirisa matshwao a a maleba (x, =, □)	Leba dintlha tsa kgweditharo 2 Ditogamaano tse di botlhokwa tsa katiso: □ Go dirisa koketso -gabedi Sekao: Tlatsa mola wa katisa ga tlhano. O lemoga dipaterone dife?	

	1	2	3	4	5	6	7	8	9	10
× 5										
× 10										

Oketsa gabedi dipalo momoleng wa katiso ya botlhano go bona dipalo mo moleng wa katisa ka 10. O bona dipaterone dife?

Tlatsa mola wa katisa ga tlhano.

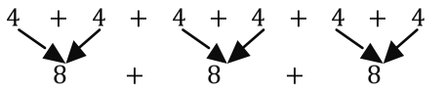
	1	2	3	4	5	6	7	8	9	10
× 2										
× 4										

Oketsa dipalo mo meleng e mebedi e ya katiso go bona dipalo mo moleng wa katiso ya bone. O bona dipaterone dife?

- O dirisa koketsa-gabedi

Ditlhopha di le tharo tsa 8 le 24

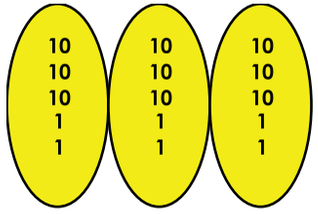
Ditlhopha di le thataro tsa 4 le 24



Ka moo:

Ditlhopha di le 6 tsa 4 e tshwana le ditlhopha di le 8 tsa 3

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.15 **Karolo**	• Arola dipalo go fitlha go 99 ka • 2, 3, 4, 5, 10 • Dirisa matshwao a maleba (÷, =, □)	• Arola dipalo go fitlha go 99 ka • 2, 3, 4, 5, 10 • Dirisa matshwao a maleba (÷, =, □)	Mo kgweditharong e tlhatlhamano ya dipalo e barutwana ba t la dirang ka yona e tlhatlogilego 99. Fa o dirisa tlhatlhamano ya dipaloe e tlhatlogileng go raya gore barutwana ba tshwanetse go simolola go dira ka ditogamaano tse di maleba le direkoto tse di maleba go fitlhelela dikarabo.. **Ditogamaano tsa go rekota** Mo kgweditharong ya 3 le 4 Barutwana ba tab o ba ikatisetsa karolo e e rekotiwang ba dirisa dinomoro mme ba sa ikaega ka ditshwantsho.Ditogamaano tse di rekotiwang di ka se fitlhelege mo barutwaneng fa ba sa tlhaloganye tsamaiso.Fa o lekelela mekgwa e bas a e tlhaloganyeng e tla dira gore ba dire diphoso tseo barutwana ka bo bona ba ka se kgoneng go di lemoga. Go botlhokwa gore barutwana ba lemoge go supa dikamano magareng ga karolo le katiso. Mosola wa direkoto tse di kwadileng e tshwanetse go nna go godisa go tlhaloganya ga barutwana kamano ya dipalo. **Fa o dirisa katiso** Barutwana ba tshwanetse go dirisa tlhaloganyo ya bona ya go katisa. Ba tshwanetse go simolola gore: 96 ÷ 3 = □ Ke itse: 10 x 3 = 30 Jaanong: 96 – 30 = 66 Ke itse; 10 x 3 = 30 Jaanong: 66 – 30 = 36 Ke itse 10 x 3 = 30 Jaanong: 36 – 30 = 6 6 ÷ 3 = 2 Mo mokgweng o o fa godimo, barutwana ba dirisa katiso ba bo ba boeletsa go ntsha go tswa go 96. Jaanong ba tlhakanyetsa kwa godimo gore ba ntshitse gakae: 2 + 10 + 10 + 10 = 32	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.15 **Karolo**	• Arola dipalo go fitlha go 99 ka • 2, 3, 4, 5, 10 • Dirisa matshwao a maleba (÷, =, □)	• Arola dipalo go fitlha go 99 ka • 2, 3, 4, 5, 10 • Dirisa matshwao a maleba (÷, =, □)	**Go kgaoganya dipalo** Barutwana ba ka aroganya 96mo dinomorong tse di ka golaganngwa le 3. Barutwana gape ba dirisa kitso ya katiso go kgona go diradipalelo tsa karolo. 96 ÷ 3 = □ 96 = 30 + 30 + 30 + 6 ↓ ↓ ↓ ↓ Ditlhopha 10 tsa 3 / Ditlhopha 10 tsa 3 / Ditlhopha 10 tsa 3 / Ditlhopha di le 2 tsa 3 Se barutwana ba se dirang mo dikaong tsotlhe, ke go dirisa poeletso ya go ntsha ka go phutha. 'go phutha'. Fela jaaka katiso e godisa dipalo,katiso e ka sonwa jaaka go arogantsha dipalo.Ka mokgwa o go tlhaloganya ga katiso go gatelelwa jaaka thanolo ya katiso. Barutwana ba ka dirisa go ntsha go go boeleditsweng jaaka go phutha , le go rekota mo go yona mekgwa e e tshwanang le e e fa tlase.  96 ÷ 3 = □ 96 ÷ 3 = 32 **Go dira ka tse disala** Barutwana bat la bo ba dirile ka disala fa ba dira kgobokanyo le kgaoganyo ya ditharololo tsa dipalo le go kgaoganya ditharabololo tsa dipalo.Go botlhokwa gore ba neelwa katiso ya dipalelopalo.(e e seng mo tirisong) tse di letlang disala.Sekao Tlhalosetsa barutwana gore: Fa ba itse gore 28 ÷ 7 = 4. **29** ÷ 7 = 4e tla nna eng ? Go solofetswe gore barutwana ba rekote dikarabo tsa bona ka mokgwa o o latelang: 29 ÷ 7 = 4 go sala 1. Re batla barutwana ba kgone go bua gore ke dintlha dife tsa katiso tseo ba se itseng; sekao ke itse gore 25 ÷ 5 = 5 jaanong 26 ÷ 5 = 5 go sala. 1	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhaloganyo**	**Tlhatlhamano ya kgopolopalo 999** • Rulaganya sete ya dipalo tse di tlhophilweng. • Bapisa dipalo go fitlha goCompare 999 mme o bue gore ke efe e e leng1,2,3,4,5 le 10 bontsi le bonnye • Itse gore ke palo efe e e leng 1 bonnye 1 • Itse gore ke palo efe e e leng 2 bonnye 2 • Itse gore ke palo efe e e leng 3 bontsi kgotsa bonnye 3 • Itse gore ke palo efe e e leng 4 bonnye 4 • Itse gore ke palo efe e e leng 5 bontsi kgotsa bonnye 5 • Itse gore ke palo efe e e leng 10 bontsi kgotsa bonnye 10	**Tlhatlhamano ya kgopolopalo 750** • Rulaganya sete ya dipalo tse di tlhophilweng. • Bapisa dipalo go fitlha go 200 mme o bue gore ke efe e e leng bontsi le bonnye • Itse gore ke palo efe e e leng 1 bonnye 1 • Itse gore ke palo efe e e leng 2 bonnye 2 • Itse gore ke palo efe e e leng 3 bontsi kgotsa bonnye 3 • Itse gore ke palo efe e e leng 4 bonnye 4 • Itse gore ke palo efe e e leng 5 bontsi kgotsa bonnye 5 • Itse gore ke palo efe e e leng 10 bontsi kgotsa bonnye 10	**Dipalo tsa tlhaloganyo** Bona ditlha tsa kgweditharo 2, mme o dirise tlhatlhamano ya palo e e kwa godimo e e tlhagisitsweng fa godimo.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.16 **Dipalo tsa tlhaloganyo**	**Ka bonako gakologelwa:** • Dintlha tsa go tlhakanya le go ntsha • Tlhakanya kgotsa go ntsha dikatiso tsa 10 go tswa 0 go fitlha go 100 • Dintlha tsa Katiso le karolo tsa: • Tafole ya ikatiso ya pedi go fitlha 2 x 1 • Tafole ya katiso ya 10x10 **Ditogamaano tsa tlhaloganyo** Dirisa ditogamaano tsa dipalelo tse di latelang. • Baya palo e e kwa godimo pele go kgona go rulaganya kwa pele le go balela kwa morago. • Molapalo • Koketso-gabedi le kariganyo-gabedi • Kgobokanyo le kgaog-anyo • Dirisa kamano magareng ga tlhakanyo le go ntsha • Dirisa kamano magareng ga katiso le karolo.	**Ka bonako gakologelwa:** • Gopola dintlha tsa tlhakanyo le go ntsha go 20 • Tlhakanya kgotsa ntsha katiso ya 10 go tloga 0 go fitlha go 100 **Ditogamaano tsa tlhaloganyo** Dirisa ditogamaano tsa dipalelo tse di latelang. • Baya palo e e kwa godimo pele go kgona go rulaganya kwa pele le go balela kwa morago. • Molapalo • Koketso-gabedi le kariganyo-gabedi • Kgobokanyo le kgaoganyo • Dirisa kamano magareng ga tlhakanyo le go ntsha • Dirisa kamano magareng ga katiso le karolo.	**Dipalo tsa tlhaloganyo** Bona ditlha tsa kgweditharo 2, mme o dirise tlhatlhamano ya palo e e kwa godimo e e tlhagisitsweng fa godimo.	

Ditlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgweditharo 3	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Nako
1.17 **Dipalophatlo tse di tlwaelegileng**	• Dirisa le go neela dipalo-phatlo maina mo tirisong e e tlwaelegileng o aka-retsa go aroganya ka bog are,dikotara,borobedi,bor aro,borataro,botlhano. • Lemoga dipalophatlho ka mokgwa wa lenaneo la ditshwantsho. • Simolola go lemoga gore dihalofo di le pedi kgotsa boraro-tharong dira bonngwe fela le gore halofo e le nngwe le pedi tharong di a lekana. • Kwala dipalophatlo jaaka halofo ,pedi tharong,		Mo kgwedithaarong e barutwana ba tswelela ka go: • Ithute maina a dikarolo tsa dipalophatlho; • Go ithuta goirisa maina ka dikarolo tsa palophatlo • Go dirisa maina mo tirisong e e farologaneng; • Simolola go tlhaloganya kamano ya bogolo ba dipalophatlho; • Bona dipalogotlhe tsa dididriswa; • Go ithuta ka palo phatlo-tekani.le • Go tshwantshanya dipalophatlo O bala dikarolo tsa dipalophatlo letlelela barutwana go bona dikarolo tsa katiso le go ba neela puo ya dipalophatlo tse di tlhakatlhakanengle palophatlorona. Dikgolokwe tsa dipalophatlo di maleba gi dirisetswa kakanyo e. Rotloetsa barutwana go bala jaaka ba bala fa ba kgobokanya didiriswa.sekao nngwe mo boning, pedi mo boning, tharo mo boning,nne mo boning, botlhano mo boneng. .....O ka botsa barutwana go dira palogotlhe o dirisa bonne o bo o botsa: Fa o na le botlhano mo boneng ,a ke bontsi go feta palogotlhe e le nngwe,bonnye go feta palogotlhe e le nngwe kgotsa go tshwana le palogotlhe e le nngwe.. Tsaya tšhono e go baakanya tiro ya tshimologo go dira dipalophatlho tse di tlhakatlhakaneng ka go botsa: “Tsaya boraro jo bosupa. Ke dipagotlhe di le kae tse o ka di dirang? Ke dikarolo di le kae tse di saditsweng? Re batla barutwana gore ba re: “dipalogotlhe ke tse pedi le nngwe tharo e e setseng.” Mo kgwedithaarong e barutwana ba ka simolola go bala dikarolo tsa dipalophatlo le go ithuta maina a dipalophatlo tse ntšhwa. Mofuta o wa tirwana o tlhotlholetsa: • Go tlhaloganya dipalo tsa go aroganya mo dipalogotlheng • Mekgwa e e farologaneng go bua ka katiso ya dinomoro le dihalofo.	

Mophato3 Kgweditharo 3 2-Dipaterone,Tiriso le Alejebera/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgong-wang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didi-riswa. Tlhatlhamano ya dipaterone Dipaterone tse di bonolo tse e leng gore popego kgotsa setlhopha sa dipopego se se boelediwang ka mokgwa o o tshwanang Dipaterone tse e leng gore palo kgotsa bogolo jwa dipopego tsa tsona di fetoga ka tsela e e lebeltsweng. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang Ka go thala mela,dipopego kgotsa didiriswa	Tswelela go fa barutwana tlhatlhamano ya dipaterone tse ditshwanang mo kgweditharong ya 1 mme o akaretse dipopego tsotlhe le didiriswa tse dintša mo dipateroneng jaaka fa di dirwa mo popegong le boalo.Lebelela dipaterone tsa KGWEDITHARO ntlha le dintlha tsa mo kgweditharong ya 2 Letla barutwana go kopolola pele o be o atolosa le go feleletsa go tlhalosa dipaterone.ka nako e ba tshwanetse go be ba kgona go tlhalosa dipaterone kwa ntle ga thuso ya kaedi ya dipotso.Tswelela go tsepama mo go godiseng puo e barutwana ba e tlhokang go tlhalosa di paterone.	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena .	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka180 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 750 Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 750 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-750 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 750 • Nngwe-tharong le ya bone go tloga mo katisong ya 3 magareng ga 0 le 750 • Ya bone go tloga mo katiso nngwe le nngwe magareng ga 0 go fitlha 750 • Ya bo some le bobedi ,le y a bo somepedi le botlhano, Ya bo some a matlhano ,le y abo lek-golo go fitlha ka bonnye 1000. Go tlhama le go tlhalosa dipaterone ka bowena Go tlhama le go tlhalosa dipaterone tsa dipalo ka bowena.	Leba dintlha tsa KGWEDITHARO 1 Atolosa dipalo tsa tlhatlhamano le go bala ka tatelano ka tsela e elatelng: Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago: • Ya ntlha got log aka palo nngwe le nngwe magareng ga0 le 750 • Nngwe –someng go tloga ka katiso nngwe le nngwe ya 10 magareng ga 0 le 750 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-750 • Ya bobedi go tloga ka katiso nngwe le nngwe ya 2 magareng ga 0 le750 • Ya lekgolo go tloga ka katisonngwe le nngwe ya 100 go fitlha ka bonnye 1000. • Ya masometlhano go tloga ka katiso ya 50 go fitlha bonnye 1000 • Ya masome a mabedi tlhano go tloga k aka katiso nngwe le nngwe ya 25 go fitlha go bonnye 1000 • Ya masome a mabedi go tloga ka katiso ya nngwe lnngwe ya 20 go fitlha ka bonnye 1000 • Ya boraro go tloga ka katiso ya 3 magareng ga 0 le750 • Ya bone go tloga ka katiso ya 4 magareng ga 0 le 750 Dirisa di didiriswa,ditshwantsho,papetlana le kelelo ya ditshwantsho go thusa barutwana go fetola go tloga mo go tloleng go bala le tatelano ya go katisa ka 10, 5, 2, 3, 4 Go thusa barutwana go dirisa dipaterone tse ba di itseng jaaka tshimologo fitlha go ikatisa le go ithuta ka dipaterone tse dinngwe sekao: • Tatelano ya bobedi go baya tshimologo ya tatelano ya someamabedi	Dithuto 3

Mophato 3 Kgweditharo 3 2. Dipaterone,Tiriso le Alejebera/Thutadipalo				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.**	**Nako**
2.1 **Dipaterone tsa Jeometeri**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgong-wang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didi-riswa. Tlhatlhamano ya dipaterone Dipaterone tse di bonolo tse e leng gore popego kgotsa setlhopha sa dipopego se se boelediwang ka mokgwa o o tshwanang Dipaterone tse e leng gore palo kgotsa bogolo jwa dipopego tsa tsona di fetoga ka tsela e e lebeltsweng.. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgongwang Ka go thala mela,dipopego kgotsa didiriswa	Tswelela go fa barutwana tlhatlhamano ya dipaterone tse ditshwanang mo kgweditharong ya 1 mme o akaretse dipopego tsotlhe le didiriswa tse dintša mo dipateroneng jaaka fa di dirwa mo popegong le boalo.Lebelela dipaterone tsa KGWEDITHARO ntlha le dintlha tsa mo kgweditharong ya 2 Letla barutwana go kopolola pele o be o atolosa le go feleletsa go tlhalosa dipaterone.ka nako e ba tshwanetse go be ba kgona go tlhalosa dipaterone kwa ntle ga thuso ya kaedi ya dipotso.Tswelela go tsepama mo go godiseng puo e barutwana ba e tlhokang go tlhalosa di paterone.	Thuto 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa dikaelo tsa go ruta.	Nako
2.2 **Dipalo tsa dipaterone**	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena .	**Go kopolola ,go atolosa le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka180 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 750 • Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 750 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-750 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 750 • Nngwe-tharong le ya bone go tloga mo katisong ya 3 magareng ga 0 le 750 • Ya bone go tloga mo katiso nngwe le nngwe magareng ga 0 go fitlha 750 • Ya bo some le bobedi ,le y a bo somepedi le botlhano, Ya bo some a matlhano ,le y abo lek-golo go fitlha ka bonnye 1000. Go tlhama le go tlhalosa dipaterone ka bowena Go tlhama le go tlhalosa dipaterone tsa dipalo ka bowena.	Leba dintlha tsa KGWEDITHARO 1 Atolosa dipalo tsa tlhatlhamano le go bala ka tatelano ka tsela e elatelng: Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago: • Ya ntlha got log aka palo nngwe le nngwe magareng ga0 le 750 • Nngwe –someng go tloga ka katisenetswa e nngwe le nngwe ya 10 magareng ga 0 le 750 • Ka botlhano go tloga ka katisisenetswa e nngwe le nngwe ya 5 magareng ga 0-750 • Ya bobedi go tloga ka katisenetswa nngwe le nngwe ya 2 magareng ga 0 le750 • Ya lekgolo go tloga ka katisenetswa nngwe le nngwe ya 100 go fitlha ka bonnye 1000. • Ya masometlhano go tloga ka katisenetswa ya 50 go fitlha bonnye 1000 • Ya masomemabedi tlhano go tloga k aka katiso nngwe le nngwe ya 25 go fitlha go bonnye 1000 • Ya masomeamabedi go tloga ka katiso ya nngwe lnngwe ya 20 go fitlha ka bonnye 1000 • Ya boraro go tloga ka katiso ya 3 magareng ga 0 le750 • Ya bone go tloga ka katiso ya 4 magareng ga 0 le 750 • Dirisa di didiriswa,ditshwantsho,papetlana le kelelo ya ditshwantshiso go thusa barutwana go fetola go tloga mo go tloleng go bala le tatelano ya go katisa ka 10,5,2,3,4 Go thusa barutwana go dirisa dipaterone tse ba di itseng jaaka tshimologo fitlha go ikatisa le go ithuta ka dipaterone tse dinngwe sekao: • Tatelano ya bobedi go baya tshimologo ya tatelano ya someamabedi	Dithuto di le 3

MOPHATO 3 KWEDITHARO 3 3. BOALO LE POPEGO				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele jwa nako** Mo thutong y aura le metsotso e le 24
3.1 **Maemo,dikaelo le dipono**	**Maemo le dipono** • Bapisa dipono tse di farologaneng tsa sedirswa se le sengwe • Neela leina la sediriswa fa o bontshiwa pono e e sa tlwaelegang ya yona • Buisa,ranola le go thala dimmapa tse di sa tlhomamang,kgotsa dipono tsa fa godimo tsa didiriswa tse di kgobokantsweng • Batla didiriswa mo dimmapeng **Kemo le dikaelo** • Sala ditaelo morago go tsamaya mo phaposing le sekolo • Go naya ditaelodikaelo go tsamaya mo phaposing le sekolong • Sala morago dikaelo go tswa mo lefelong le lengwe go fitlha go le lengwe mo mmapeng o o sa tlhomamang	**Maemo le dipono** • Buisa,ranola le go thala dimmapa tse di sa tlhomamang,kgotsa dipono tsa fa godimo tsa didiriswa tse di kgobokantsweng • Batla didiriswa mo dimmapeng **Kemo le dikaelo** Sala morago dikaelo go tswa mo lefelong le lengwe go fitlha go le lengwe mo mmapeng o o sa tlhomamang	***Ke eng se sešwa mo mophatong wa 3*** • Mmapa, methalo(dipolane) le dipono go tswa kwa godimo ga tswa mo kgobonyong ya didiriswa - go batla didiriswa mo mmapeng - go latela ditaelo mo mmapeng - thalo ya dimmapa tse di sa tlhamalalang,methalo, dipono go tswa kwa godimo ya kgobokanyo ya didiriswa **Go buisa,go ranola dimmapa** Dimmapa ke dipono godimo tsa mekgwa e e itshokeditseng ya lefelo.Mo mophatong wa 3 barutwana ba dira fela dimmapa tse di sa totobalang.Se ga se tsenyeletse dimmapa tsa tsela kgotsa tsa thuta lefatshe Se se ka thusa barutwana go simolola methalo kgotsa pono ya kwa godimo ya boalo jo bo nnye sekao therei ya didiriswa kgotsa mothalo wa phaposi pele ba leba mmapa wa dikakorolo tse di tonna Mo kgweditharong 2-Dira ka papiso ya pono ya kwa godimo,ya thakore le ya kwa pele.Pono e e sekameng ke pono e e bonalang go le gonnye go tswa kwa godimo le fa letlhakoreng.Barutwana ba bona pono e e sekameng ya lefatshe thata go na le e e kwa godimoFa dipono tse pedi(e e sekameng le ponogodimo) di neetswe,barutwana b aka e tshwantsha se ba se boning le nngwe ya le tlhakore go le lengwe. Santlha thusa barutwana go tlhaloganya dimmapa le methale (dipolane),mme ba kope go batla didiriswa kgotsa mafelo mo mmapeng sekao batla kliniki:ke eng se se gaufi le yona? Fa barutwana ba kgona go fitlhelela mafelo bonolo mo mmapeng,simolola go ba neela dikaelo go tswa lefelong le lenngwe go fitlha go le lenngwe mo mmapeng **Go thala dipono tsa kwa godimo tsa didiriswa tse di kgobokantsweng le dimmapa tse di sa tlhamalalang** Go botlhofo gore barutwana ba thale pono ya kwa godimo ya selo se ba tla se boning kwa tlase go nale le gore ba thale go tswa mo kgakologelong kgotsa mo kgopolong.Tshimologo fitlha go thala pono ya kwa godimo ke go letla barutwana go leba kgobokanyo ya didiriswa sekao didiriswa mo tekeseng ya morutabana,kgotsa therei ya didiriswa e beilwe fa fatshe,kopa barutwana go e thala ba e lebeletse go tswa kwa godimo.Barutwana ba ka tswelela go thala methalo(dipolane)le dimmapa tsa mafelo a mannye tse di sa rulaganang sekao phaposi,lefelo la sekolo	Dithuto di le 3

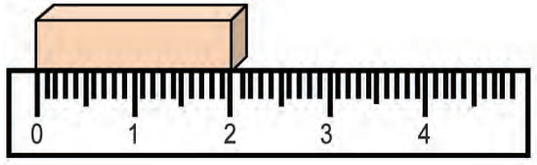
Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
3.2 **Didiriswa tsa tlhakoretharo**	**Tlhatlhamano ya di diriswa** Lemoga le go neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(dikgolokwe) • Dipopego tsa mabokoso(porisime • Diselennere • Dipiramiti • Dikhounu **Dipharologantsho tsa sedirwa/didiriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa pop-egotekatekanyotharo • sefatla se se sephaphathi kgotsa obegileng **Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seretse,matlhaka a go nwa,le dipopegotekateksnyotharo	**Tlhatlhamano ya di diriswa** Lemoga le go neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(dokgolokwe • Dipopego tsa mabokoso(porisime • Diselennere • Dipiramiti • Dikhounu **Dipharologantsho tsa sedirwa/didiriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa popegotekate-kanyotharo • flat or curved surfaces sefatla se se sephaphathi kgotsa obeg-ileng **Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seretse,matlhaka a go nwa,le dipopegotekatekanyo-tharo	Katlenegiso e e totobetseng ya kgweditharo 2: • Barutwana ba ka tsepama mo didirisweng tse dintshwa mo mophatong wa 3 ke gore dipiramiti le dikhounu • Barutwana ba aga didiriswa ka matlhaka a go nwa,ditlhokwana tsa go phepafatsa meno kgotsa dipampiri tse di menagantsweng. Itsise barutwana dikhouno le dipiramiti **Tsepamo mo dipharologantsho tsa popegotlhakoretharo**:**Boalo jo bo sephaphathi kgotsa obegileng,dipopego tsa boalo jo bo sephaphathi** • Boalo jo bo sephaphathi kgotsa obegileng Mo kgweditharong 2 Barutwana ba tsepama mo goreng a didiriswa di nale boalo jo bosephaphathi kgotsa jo bo obegileng • Barutwana ba tlhalosa boalo jwa dipopego tse di sephaphathi ka gobua gare a ke sediko,khutlotharo,khutlonne kgotsa khutlonnetsepa Barutwana ba tswelela go dira se mo kgweditharong 3,mme jaanong ba leba dipiramiti le dikhouno • Go aga didiriswa tsa tekatekanyotharo e le nngwe - Barutwan ba dirisa ditlokwana tsa go phepafatsa meno, dipampiri tse di menagantsweng matlhaka a go nwa,dipeipi go dira dipiramiti.Se se tsepamisa barutwana boloso(edges) jwa piramiti.Barutwana gab a solofelwe go bala bolosi kgotsa dikhutlo(se se dirwa mo mophatong wa 6)	Dithuto di le 3

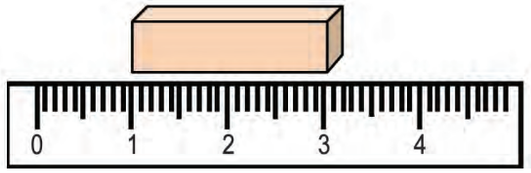
Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
3.2 **Didiriswa tsa tlhakoretharo**	**Tlhatlhamano ya di diriswa** Lemoga le go neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(dikgolokwe) • Dipopego tsa mabokoso(porisime • Diselennere • Dipiramiti • Dikhounu **Dipharologantsho tsa sedirwa/didiriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa pop-egotekatekanyotharo • sefatla se se sephaphathi kgotsa obegileng **Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seretse,matlhaka a go nwa,le dipopegotekateksnyotharo	**Tlhatlhamano ya di diriswa** Lemoga le go neela maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(dokgolokwe • Dipopego tsa mabokoso(porisime • Diselennere • Dipiramiti • Dikhounu **Dipharologantsho tsa sedirwa/didiriswa** Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa popegotekate-kanyotharo • sefatla se se sephaphathi kgotsa obegileng **Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seretse,matlhaka a go nwa,le dipopegotekatekanyo-tharo	**Go lemoga le go neela maina a didiriswa** Barutwana ba tshwanetse go neelwa didiriswwa tse di farologaneng do dira ka tsona: - Tse di bopegileng jaaka dikgolokwe sekao dibolo tsa bogolo jo farolo-ganeng dimabole,dinamone • Di bopegile jaaka lebokoso sekao diboloko,ditena,mabokoso a bogolo jo bo farologaneng sekao mabokoso a mokgwaro,a diserele,a teye,a selhapisa meno - Tse di bopegileng jaaka diselennere tse di telele le tse di molomu o monnye jaaka matlhaka a go nwa,dipeipi tsa diselennere j.j - bopegileng jaaka dikhounu le. - bopegileng jaaka piramiti Barutwana ba tshwanetse go kopiwa go batla le go supa didiriswa tse di bopegileng jaaka bolo (dikgolokwe),mabokoso(porisimo),diselennere,dipiram iti kgotsa dikhounu. - fa ba neetswe kgobokanyo ya didiriswa:kgotsa - mo phaposingSekao setene se se bopilwe jaaka lebokoso kgotsa namune e bopilwe jaaka bolo. Ka kako ya barutwana ka nosi ba ka dira dibolo le diselennere le dibokoso(porisime),piramiti le go tswa mo teging e e tshamekang kgotsa tlhama **Dithutiso tsa go kwala** Le mororo bontsi jwa didiriswa tsa popegotekatekanyotharo bo dirilwe ka tiriso tiro,tiro e ka tiisiwa ka dithutiso- kwalo.Tsepamo mo mophatong wa 3,e tshwanetse go nna mo go naya maina le go bua ka didiriswa le boalo jwa tsona.Barutwana ga ba tsholofelwe go bala kgotsa go itse palo ya dikh utlonne,bokhutlonnetsepa,bokgolokwe jo sediriswa se nang naso,dipalo tsa dikhutlo le bolosi **Puo** Bokgoni jwa go dirisa puo botlhokwa go bua ka didiriswa tsa dipopego tsa tekatekanyotharo Boalo,sephaphathi,obegileng,dibokoso,dibolo,diselennere,dipiramiti le dikhouno	Dithuto di le 3

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
3.3 **popegotlha-korepedi**	**Tlhatlhamano ya dipopego** • Didiko • Dikhutlotharo • DiKhutlonne • Dikhutlonnetsepa **Dipharogantsho tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi ka maemo a: • popego • matlhakore a a tlhama-letseng • matlhakore a a kgolokwe • **Thala dipopego** • Didiko • Dikhutlotharo • Dikhutlonne • Dikhutlonnetsepa	**Tlhatlhamano ya dipopego** • **Didiko** • **Dikhutlotharo** • **DiKhutlonne** • **Dikhutlonnetsepa** **Dipharogantsho tsa dipopego** Tlhalosa,tlhaola le go tshwantsha popegotlhakorepedi ka maemo a: • popego • matlhakore a a tlhamaletseng • matlhakore a a kgolokwe • **Thala dipopego** • Didiko • Dikhutlotharo • Dikhutlonne • Dikhutlonnetsepa	Leba dintlha kaelo tsa kgweditharo 1 Barutwana ba tshwanetse go tshola tsepamo e e tshwanang mme ba dira ditiro tse di farologang Barutwana ba dira ka didiko le dikhutlonne tsa bogolo jo bo farologaneng,le dikhutlotharo le dikhutlonntsepa tsa bogolo jo farologaneng.Ba di tlhaola go ya ka gore a din a le matlhakore a a tlhamaletseng kgotsa kgolokwe Barutwana ba tlhaola le go kgobokanya didiriswa go ya ka gore a ke dikhutlo tharo,dikhutlonne,dikhutlonnetsepa kgotsa didiko Tiro e kgobokangwa ka tiro kwalo,tse di tsenyeletsang go thala ditshwantsho tsa di popego tse di tlhokegang	Dithuto di le 3

MOPHATO WA 3 KGWEDI YA 3 4. TEKANYO				
Ditlhogo	**Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele jwa nako** **Mo thutong y aura le metsotso e le 24**
4.1 **Nako**	**Go bolela ga nako** • Bala matlha mo khalentareng • Kwala malatsi a botsalo, meletlo ya sedumedi, malatsi a botlhe, ditiragalo tsa hisetori, le meletlo ya sekolo mo khalentareng • Bolela nako ya diura tse 12 ka - diura - halofo ya diura - kwatara ya diura - metsotso mo tshupanako ya manaka le tshupanako ya nako palo le tse dingwe tsa didiriswa tsa nako palo tse di bontshang nako jaaka mogala wa letheka **Go balela boleele wa nako le tsamao ya nako** Dirisa sebaledi go balela le tlhalosa boleele jwa nako ka malatsi, dibeke kgotsa dikgwedi o akareditse • go fetolela malatsi go dibeke • go fetolela dibeke go dikgwedi Dirisa tshupanako go balela boleele jwa nako ka diura le halofo ya ura	**Go bolela nako** • Bala matlha mo khalentareng • Kwala malatsi a botsalo, meletlo ya sedumedi, malatsi a botlhe, ditiragalo tsa hisetori, le meletlo ya sekolo mo khalentareng • Bolela nako ya diura tse 12 ka - diura - halofo ya diura - kwatara ya diura - metsotso mo tshupanako ya manaka le tshupanako ya nako palo le tse dingwe tsa didiriswa tsa nako palo tse di bontshang nako jaaka mogala wa letheka **Go balela boleele jwa nako le tsamao ya nako** Dirisadikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi kgotsa dibeke,kgotsa dikgwedi o tsenyeletsa go • fetolela malatsi go dibeke • go fetolela dibeke go dikgwedi • Dirisa tshupanako go balela boleele jwa nako ka diura, halofo ya diura le kwatara ya diura	Barutwana ba tswelela go ikatisetsa go bua ka nako le tatelano ya nako. Ka nako ya go ruta botlhe le go ruta ka setlhopa barutwana ba tswelela go bua ka malatsi a beke, dikgwedi tsa ngwaga, le letha la letsatsi la ka jeno, gape le malatsi pele le a a tlang. Barutwana ba tswelela go kwala ditiragalo tse di latelang mo khalentareng jaaka: • malatsi a botsalo • meletlo ya sedumedi • ditiragalo tsa hisetori • ditiragalo tsa sekolo le • malatsi a botlhe. Tswelela go kopa barutwana go bolela nako ka malatsi otlhe - Ka diura le metsotso mo tshupanko ya dijitale. - Ka diura, halofo ya diura le kwatara ya di Sekao barutwana ba ka kopiwa go bolela nako ya fa sekolo se tsena / simolola, ka nako ya boikhutso le kwa gae, kgotsa fa ba fetola diphaposi borutelo. Tlhopa dinako mo lonaka lo bontshang ura, kgotsa halofo ya ura, kgotsa kwatara ya ura. Go ka thusa go nna le tshupanako e kgolo mo phaposing, e barutwana ba ka lebelela mo go yone. Barutwana ba ka itirela ditshupanako dibokoso. Ka jalo o ka ba kopa go bontsha nako tse di farologaneng mo go tsona jaaka ; bontsha 10 mo tlhogong . Bontsha gore (e ne e le nako mang) lonaka le ne le eme fa kae kwatara y aura pele. Barutwanan ba ka dira dipalelo ba dirisa tshupanako jaaka ba bontsha fa nako e le 12 o, clock thapama, botsa gore e tla nna nako mang mo diura tse 3 tse di latelang. Ba tsamaise lonaka la tshupanako ya bone ya maitirelo (ba ka lebelela tshupanako e e mo phaposing kgotsa ya setshwantso mo phaposing) go balela dikarabo tsa bone.	Dithuto di le 5

Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.1 **Nako**	**Go bolela ga nako** • Bala matlha mo khalentareng • Kwala malatsi a botsalo, meletlo ya sedumedi, malatsi a botlhe, ditiragalo tsa hisetori, le meletlo ya sekolo mo khalentareng • Bolela nako ya diura tse 12 ka - diura - halofo ya diura - kwatara ya diura - metsotso mo tshupanako ya manaka le tshupanako ya nako palo le tse dingwe tsa didiriswa tsa nako palo tse di bontshang nako jaaka mogala wa letheka **Go balela boleele wa nako le tsamao ya nako** Dirisa sebaledi go balela le tlhalosa boleele jwa nako ka malatsi, dibeke kgotsa dikgwedi o akareditse • go fetolela malatsi go dibeke • go fetolela dibeke go dikgwedi Dirisa tshupanako go balela boleele jwa nako ka diura le halofo ya ura	**Go bolela nako** • Bala matlha mo khalentareng • Kwala malatsi a botsalo, meletlo ya sedumedi, malatsi a botlhe, ditiragalo tsa hisetori, le meletlo ya sekolo mo khalentareng • Bolela nako ya diura tse 12 ka - diura - halofo ya diura - kwatara ya diura - metsotso mo tshupanako ya manaka le tshupanako ya nako palo le tse dingwe tsa didiriswa tsa nako palo tse di bontshang nako jaaka mogala wa letheka **Go balela boleele jwa nako le tsamao ya nako** Dirisadikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi kgotsa dibeke,kgotsa dikgwedi o tsenyeletsa go • fetolela malatsi go dibeke • go fetolela dibeke go dikgwedi • Dirisa tshupanako go balela boleele jwa nako ka diura, halofo ya diura le kwatara ya diura	Barutwana ga ba lebelelwa go balela boleele jwa nako ya diura kgotsa halofo ya ura ba sa lebelela mo tshupanakong. • Dirisa dikhalentara go balela le go tlhalosa boleele jwa nako ka malatsi a beke. Ka nako ya tiro ya bonngwe barutwana ba tswelela go dira dithutiso tse di tsamaelang le tsa go bolela nako • Ka diura, halofo ya diura le dikwatara mo tshupanako ya manaka; le • Ka diura le metsotso mo tshupanako ya nako palo Barutwana ba ka dira dipalelo tsa dibeke kgotsa malatsi fa ba neetswe khalentara kgotsa karolo ya khalentara jaaka go bona letlha le bo balela nako gare ga tsona. **Go bala nako ya tshupanako ya manaka ka metsotso** Dirisa dithutiso tse tharo o tsepame mo barutwana baithuteng dikgono tse di tlhokagalang tsa go bala nako ya manaka ka metsotso • Gopotsa barutwana ka bokao jwa a.m. (mosong) le p.m. (thapama) • Gopotsa barutwana gore go na le metsotso e le 60 mo ureng e 1, ke gore go na le metsotso e 30 mo halofo y aura le metsotsoe e 15 mo kwatareng y aura. Ba letle go bala ka bo 5 fa o supa nako mo tshupanako ya manaka. • Tlhalosa diphetolelo jaaka (“past”) morago ga le (“to”) pele ga • Neela barutwana ikatiso e ntsi ya nako ya manka ka metsotso. Kopa barutwana go neela / go bua nako ka metlha letsatsi lotlhe mo ngwageng yotlhe. Barutwana ba ka lebelela mo nako palong gore a ba neetse nako e e siameng fa ba bala tshupanako ya manaka. Ba letle go dira ditshupanako tsa maitirelo tse ba ka di dirisang go bolela nako le go balela dipharologano tsa nako.	Dithuto di le 5

Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirise ditekanyetso tse di sa tlwaelegang jaaka bophara jwa mabogo, dikgato, boleele jwa dipensele, dibadisa jalo jalo • Tlhalosa boleele jwa dilwana ka go balela le go bolela gore ke boleele jwa diyuniti tse kae tse di sa tlwaelegang. • Dirisa puo go bua ka ga papiso ya boleele jaaka; telele, khutsane, teletsana, bophara **Kitsiso tekanyetso e e tlhamaletseng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirisa dimetara (kgotsa kota ya metara kgotsa mogala wa metara) jaaka yuniti ya seemo sa boleele. • Lekanyetsa, lekanya, le go rekota boleele ka disentimitara o dirisa rula. Ga go tlhokagale phetolelo gare ga mitara le disentimitara.	**Ketisopele tekanyo e e tlhomameng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirisa dimetara (kgotsa kota ya metara kgotsa mogala wa metara) jaaka yuniti ya seemo sa boleele. • Lekanyetsa, lekanya, le go rekota boleele ka disentimetara o dirisa rula.	**Ke eng se se farologaneng go tswa mo kgwditharo 2?** Ka kgwditharo 2 barutwana ba tsepama mo • Tekanyo e e sa tlhomamang ya boleele le diyuniti tsa seemo se se sa tlwaelegang; le • Go lekanya ka dimitara Ka kgwditharo 3 barutwana ba simolola ka go lekanya ka disentimitara ba dirisa rula. Se e tla nna sediswa sa ntlha sa tekanyetso se ba balang tekanyo mo go sona ka tselana ya dipalo. **Lekanyetsa, lekanya, bapisa, le go rekota boleele, bogodimo le bophara o dirisa dimitara** • Barutwana ba tshwanetse go gatisa kitso ya bone ya boleeleya 1 metara le boleele jwa metara jwa tekanyo. Lebelela dintlha tsa kgwditharo 2 **Lekanyetsa, lekanya, bapisa, le go rekota boleele, bogodimo le bophara ka disentimitara o dirisa rula.** • Dirisa rula Bontsha barutwana gore ba simolola mo go noto go lekanya. Fa barutwana ba dirisa diyuniti tse di sa tlhomamang, ba simolola ka go baya ka tsela dilwanan tse di tlileng go diriswa jaaka yuniti, go simolola sediriswa se se lekantsweng. Fa o lekanya ka disentimetara, ga o beye tshimologo ya rula ka tsela ka tshimologo ya sedirwa se se lekanwang. O simolola ka sediriswa se se lekannwang mo go noto mo ruling.  Sephimolo sa ditlhaka (eraser) se boleele jwa 2cm. Gape go botlhokwa go lolamisa tshimologoya sedirwase se lekannwang ka nomoro e nngwe mo ruling o bo o ntsha nomoro mo tshimologong ya sedirwa le kwa bofelong jwa sedirwa.	Dithuto di le 5

Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirise ditekanyetso tse di sa tlwaelegang jaaka bophara jwa mabogo, dikgato, boleele jwa dipensele, dibadisa jalo jalo • Tlhalosa boleele jwa dilwana ka go balela le go bolela gore ke boleele jwa diyuniti tse kae tse di sa tlwaelegang. • Dirisa puo go bua ka ga papiso ya boleele jaaka; telele, khutsane, teletsana, bophara **Kitsiso tekanyetso e e tlhamaletseng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirisa dimetara (kgotsa kota ya metara kgotsa mogala wa metara) jaaka yuniti ya seemo sa boleele. • Lekanyetsa, lekanya, le go rekota boleele ka disentimitara o dirisa rula. Ga go tlhokagale phetolelo gare ga mitara le disentimitara.	**Ketisopele tekanyo e e tlhomameng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirisa dimetara (kgotsa kota ya metara kgotsa mogala wa metara) jaaka yuniti ya seemo sa boleele. • Lekanyetsa, lekanya, le go rekota boleele ka disentimetara o dirisa rula.	 Rabara e boleele bo (3 cm 1 cm) = 2 cm Fela fa barutwana ba botsa kgotsa ba e fitlhela ka bo bona e tlhogelelwe mophato 4 • Go bapisa ka disentimitara Barutwanan ba tshwanetse go fitlhela dilo tse i 1 cm sentle. Ka gongwe mongwe o na le monona wa bophara jwa 1cm. Se se ka dirisiwa jaaka selekanyi sa boleele, bophara, le bogodimo ka disentimitara.Fa ba sena go nna le boibitlhelo jwa tekanyo ka disentimitara, ba lekanyetse pele ba lekanya. • Ditsela, methalo le dilwana A barutwana ba simolole go lekanya ditsela. Go bofefo go lekanya boleele jwa ditsela tse di dirang boleele, bogodimo kgotsa bophara jwa dilwana fa o dirisa rula.. Go matsapa thata go lekanya boleele, bogodimo, kgotsa bophara jwa dilwana tse di bonegang o dirisa rula. Mo mophato 4 barutwana bat la lekanya ka disentimitara le dimiliLetara. Mo mophato 3 ga ba lebelelwa go dirisa dimiliLetara. • Go bapisa tekanyo ka disentimitara Barutwana ba tshwanetse go lekanya boleel, bophara le bogodimo jwa dilwana tse di lakantsweng ka disentimitara. • Go rekota tekanyetso Lefa tekanyo e le bokgoni jo bo tirisong , barutwana ba tshwanetse go rekota ditekanyo tsa bona (ka bobedi diyuniti tse di sa tlwaelegang le dimetara) ka nako tsotlhe **Go lekanya boleele mo tirisong ya go rarabolola dipalo le dipalelo** Ka nako e e beetsweng Dipalo, Dipalelo le Dikamano barutwana ba rarabolole dipalo mo tirisong eo • tekanyo ya boleele e e sa tlhomamang • go lekanya boleele ka dimitara; le	Dithuto di le 5

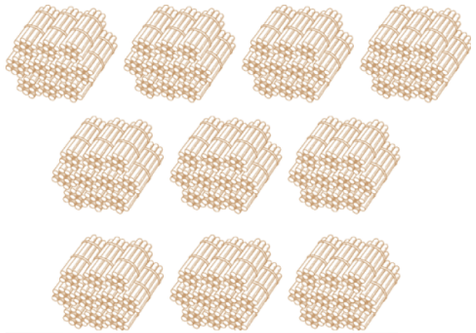
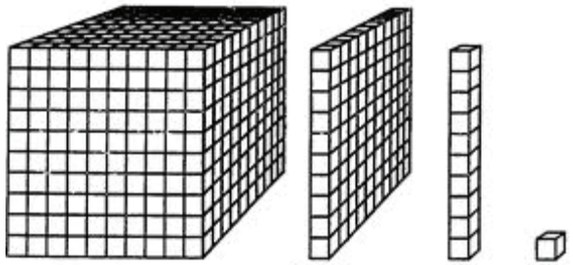
Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.2 **Boleele**	**Tekanyo e e sa tlhomamang** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirise dite-kanyetso tse di sa tlwael-egang jaaka bophara jwa mabogo, dikgato, boleele jwa dipensele, dibadisa jalo jalo • Tlhalosa boleele jwa dilwana ka go balela le go bolela gore ke boleele jwa diyuniti tse kae tse di sa tlwaelegang. • Dirisa puo go bua ka ga papiso ya boleele jaaka; telele, khutsane, teletsana, bophara **Kitsiso tekanyetso e e tlhamaletseng** • Lekanyetsa, lekanya, bap-isa, rulaganya le go rekota boleele o dirisa dimetara (kgotsa kota ya metara kgotsa mogala wa metara) jaaka yuniti ya seemo sa boleele. • Lekanyetsa, lekanya, le go rekota boleele ka disentim-itara o dirisa rula. Ga go tlhokagale phetolelo gare ga mitara le disentimitara.	**Ketisopele tekanyo e e tlhomameng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirisa dimetara (kgotsa kota ya metara kgotsa mogala wa metara) jaaka yuniti ya seemo sa boleele. • Lekanyetsa, lekanya, le go rekota boleele ka disentimetara o dirisa rula.	Elatlhoko mefuta ya dipalo tse di siametseng kgwedi-tharo eo, le mefuta ya dipalo tse di siametseng kgwedi-tharo eo. Barutwana ga ba a leblelelwa go • go itse gore 100 cm= 1m; • go dira phetolelo gare ga disentimetara le mitara; • go bala boleele ka dimililetara (se se dirwa mo mophato4 • Go dira diphetolelo gare ga sentimitara le miliLetara. Dipalelo ka disentimetara di ka tlhophiwa gore ba se fitlhe go 100 cm.	Dithuto di le 5

Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.3 **Boima / Mmese**	**Tekanyo e e sa tlhomamang** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boleele o dirise ditekanyetso tse di sa tlwaelegang tekatekanyo, e.g. diboloko le itene, jalo jalo • Dirisa puo go bua ka ga papiso ya bofefo, boima, bofefonyana, boiman **Ketisopele ya tekanyo e e tlhomameng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota boima jwa diphuthelwana tsa thekiso tsa boima jo bo kwadilweng ka dikilogorama e.g. 2 kilogorama ya reise, le 1 kilogorama ya folouro kgotsa ka digorama (grams) e.g. 500 gorama ya letswai • Lekanyetsa, lekanya boima jwa tsona ka dikilogorama o dirisa sekale sa phaposibotlhapelo. Ga go tlhokagale phetolelo gare ga miliLetara le diletara.		Ka nako ya tiro ya bonngwe barutwana ba tswelele go • Lekanyetsa, lekanya rulaganya, bapisa le go rekota boima jwa dilwana o dirisa tekanyo tekanyetso ka diyuniti tse is a tlhomamang tsa tekanyo • Bapisa, rulaganya,le go rekota diphitlhelo tsa bona • Dikerosara le boima jwa tsona bo kwadilwe ka dikilogorama • Dikerosara le boima jwa tsona bo kwdilwe ka gorama Ela - tlhoko dintlha tsa kgweditharo [2] **Go lekanya boima mo tirisong ya go rarabolola dipalo le dipalelo** Ka nako e e beetsweng thoko Dipalo, Dipalelo le dikamano barutwana ba ka raraboloa dipalo tse i dirisang tiriso ya • tekanyo e e sa tlhomamang ya boima • boima ka dikilogorama; le • Boima ka dikilogorama Elatlhoko mefuta e e farologaneng ya dipalo tse di siametseng kgweditharo eo, le mefuta ya dipalo tse i siametsengkgweitharo eo.	Dithuto di le 5

Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Tekanyo e e sa tlhomamang** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota mothamo wa ditshegetsi (i.e boleng jo setshegetsi se ka bo tsayang fa se tletse) o dirise ditekanyetso tse di sa tlwaelegang tekatekanyo, e.g. mashwana le dikopi. • Tlhalosa mothamo wa ditshegetsi ka go bala le go kwala gore ke tse kae tsa di yuniti tse di sa tlwaelesegang tse i tlatsang e.g. botlolo,e na le mothamo wa dikopi tse 4. • Dirisa puo go bua ka ga papiso ya bofefo, boima, bofefonyana, boiman		Ka nako ya tiro ya bonngwe barutwana ba tswelele go • Lekanyetsa, lekanya rulaganya le go rekota mothamo wa itshegetsi kgotsa bolumo ya ditshegetsi o dirisa tekanyo ya tekanyetso ya diyuniti tse dia tlhomamang. • Fa o latelela metswako, go tsenyetsa le wa go baka, ke tiriso e e siameng e barutwana ba ka ikatisetsang tekanyo. Tlhopa motswako o oneetsweng ka dikopi, le mashwana kgotsa diyuniti/metso tse di sa tlhomamang. - Bapisa le rulaganya methamo ya dibotlolo tse farologaeneng tsa dikerosara tse bolumu ya tsona e kwadilweng mo sephuthalwaneng, - Dirisa botlolo ya 1 letara kgotsa jeke ya 1 letara go lekanyetsa le go lekanya, go bapisa, go rulaganya mothamo wa ditshelo kgotsa bolumo e e ka ditshelong tsa diletara. - Dirisa ditshelo tse di tshwailweng ka dimililetara e.g. 200 ml, 33 ml, 500 ml, kgotsa 250 ml dikopi kgotsa mashwana a tekanyo, kgotsa jeke e e nang le ditsela tsa dimililetara tsa go lekanya bolumu kgotsa mothamo wa ditshelo tse di sa kwadiwang. Lebelela dintlha tsa kgweditharo 1. Barutwana ba tshwanetse go neelwa tiro ya go kwala go gatisa tse di latelang, go tsenyetsa go bala ditshwantsho tsa: • Dilwana tse mothamo wa tsona o kwadilweng ka diletara mo go tsona gore di rulaganngwe • Ditshwantsho tsa dijeke mo bolumo ya tsona e le gaufi le nomoro 1letara kgotsa 2 Letara tsela ya garatasi Tebelelo ke gore barutwana ba bale go fitlha gaufi le tsela ya garatasi. Ba tlhalosa bolumo ya bona jaaka e ba tlile go/ e bapile le/ gonnye go / gaufi kgotsa kgakala le/ e lekane nomoro ya (diletara) ba dib ala mo jekeng. • dilwana ka mothamo wa tsona o kwadilwe ka dimililetara mo go tsona gore o di ralaganye • ditshwantsho tsa dijeke mo bolumo ya tsona e kwadilweng mo gaufi le mililetara e e nomorilweng tsela ya garatasi.	Dithuto di le 5

Ditlhogo	Ditlhokego tsa bofelo jwa ngwaga tsa dikgopolo le dikgono	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 3	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa nako Mo thutong y aura le metsotso e le 24
4.4 **Mothamo/ bolumu**	**Ketisopele ya tekanyo e e tlhomameng** • Lekanyetsa, lekanya, bapisa, rulaganya le go rekota mothamo wa dilwana ka go lekanya ka diletara, halofo ya diletara le dikwatara tsa diletara. • Bapisa , rulaganya le go rekata mothamo wa dilwana tsa dithekiso tse mothamo wa tsona o kwadilweng e.g. 2 Letara ya maswi, 1 letara ya senitsididi, le 5 Letara ya pente kgotsa ka dimililetara e.g. 500 ml ya maswi, 340 ml ya senotsididi, 750 ml ya oli. • Itse gore kopi ya seemo se tlhomameng ke 250ml • Itse gore leshwana ke 5 ml Ga go tlhokagale phetolelo gare ga mililetara le diletara.		**Go lebeletswe gore barutwana ba bale fela gaufi le tsela ya garatasi.** **Tekanyo ya mothamo mo tirisong ya go rarabolola dipalo le dipalelo** Ka nako e e beetsweng dipalo, dipalelo le dikamano barutwana ba ka rarabolola dipalo tse di dirisang tiriso ya • Tekanyetso e e sa tlhomamang ya mothamo/bolumo, sekao nkgono o dirisa dikomiki di le pedi tsa mašwi go dira phuding. Fa a boeletsa resipe, o tla dirisa mašwi a le kana kang • Tekanyo e e sa tlhomamang ya mothamo / bolumo e.g. mmemogolo o dirisa 2-Dikopi tsa mashi go dira putting.Fa a e menagana, o tla tkhoka mashi a ma kae? • diletara • dimiletara Elatlhoko mefuta e e farologaneng ya dipalo tse di siametseng kgweditharo eo, le mefuta ya dipalo tse di siametseng kgweitharo eo.	Dithuto di le 5

MOPHATO YA 3 KGWEDI-THARO YA 3 5. TSHEDIMOSETSO TSA DIPALO				
Setlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 3**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele jwa nako (mo thuton ya 1 ura le 24metsotso**
5.4 **Kgobokanya le go rulaganya tshedimosetso**	**Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana • Rulaganya tshedimosetso e e neetsweng ke morutabana kgotsa mo bukeng • Rulaganya tshedimosetso go ya ka - manaaneng - Dithobane tse di dirisiwang go bontsha nyalano • Mananeo	**Kgobokanya le go rulaganya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana **Tshwantshanya tshedimosetso** Tshwantshanya tshedimosetso Mo kerafong e e dirisang dinoko tse di tsepameng go emela tshedimosetso **Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso mo kerafong e e dirisang dinoko tse di tsepameng go emela tshedimosetso	Go atlenegedisitswe gore barutwana mo mophatong wa 1 ba tshwantsho kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso ya phaposi, le gore mo kgwedi-tharo ya 2 ba sekaseke kerafo e e dirisediwang ditshwantsho le mananeo a ba a neilweng. Mo kgwedi-tharo ya 3 barutwana ba ka nna ba dira mo sekeleng yotlhe ya tshedimosetso(lebelela dintlha mo kgwedi-tharo 1) kgotsa simolola ka tshedimosetso e e neilweng mo manaaneng kgotsa mananeo ba ba rulaganye gape mo kerafong e e dirisang dinoko tse di tsepameng go emela tshedimosetso Go bonolo mo barutwaneng go thala kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso O dirisa pampiri ya diboloko. Go a tlhokagala gore o gakolole barutwana ka ga dikarolokgolo tsa kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso (lebelela dintlha tsa kgwedi-tharo 1) Barutwana ba araba dipotso ka ga kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso : lebelela kgwedi-tharo 1 e e maleba le mefuta ya dipotso tse di farologaneng	Dithuto di le 3
5.5 **Tshwantshanya tshedimosetso**	**Tshwantshanya tshedimosetso** Tshwantshanya tshedimosetso mo • Kerafo e e dirisediwang ditshwantsho Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso			
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso e e neetsweng • Kerafo e e dirisediwang ditshwantsho - Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso			

MOPHATOWA 3 KGWEDITHARO 4 1.DIPALO, TIRAGATSO LE KAMANO				
Setlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopololng le dikgono tsa kgwedithаro 4**	**Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta**	
1.1 **Go balela didiriswa**	**Go balela didiriswa tsa go kgaoganngwa.** Lekanyetsa o balele ka ikanyego bonnye go fitlha 1 000 didiriswa ka letsatsi. Togamaano ya ditlhopha e a rotloetswa.		Mo bokhutlong jwa kgwedithаro e barutwana ba tshwanetse ba bo ba bone, tshwere le go tsamaisa didiriswa di le 1 000. Ba tshwanetse go nna le temosi go ya bontsintsi jwa 1 000. Togamano ya ditlhopha e a rotloediwa.   Dikete Makgolo Masome Bongwe	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.1 **Go balela didiriswa**	**Go balela didiriswa tsa go kgaoganngwa.** Lekanyetsa o balele ka ikanyego bonnye go fitlha 1 000 didiriswa ka letsatsi. Togamaano ya ditlhopha e a rotloetswa.		Kwa bofelong jwa kgweditharo e barutwana ba tshwanetse go itse go arabela mofuta o o latelang wa dipotso le ditaelo: • Bolela dibadisi ka ditlhopha tsa bo tlhano le bolesome. Rulaganya gape le go balela gape. A o na le dipalo tse di tshwanang tsa dibadisi? • Fa go dibadisi tse 200. Di balele ka go di di r aka ditlhopha tsa lesome. Go balela dibadisitsotlhe tse 200,a o ka ruta go balela ka ditlhopha tsa 20kgotsa25? Go reng? • Fetsa gore ke mokgwa ofe go balela kgobokanyo ya di phensele. • Fa go na le dibadisi tse 80. Fa re balela ka sebedi kgotsa selsomes,a dibadisi tsa palogotlhe di nna di tshwana? • Balela dibadisi di le 46 go dira ditlhopha tsa bobedi.Go bonako\ka pele go balela ka sebedi go na le go balela go sengwe?	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.2 **Balela kwa pele le kwa morago**	Balela kwa pele le kwa morago go: • bo1s go ttswa go nomore nngwe le nngwe magareng ga 0 le 1000 • Bo 10s go tswa go atisa magareng ga 0 le 1000 • bo5s go tswa go atisa ka 5 magareng ga 0 le 1000 • bo 2s go tswa go katiso ya 2 magareng ga 0 le 1000 • bo 3s go tswa go katisa ya 3 magareng ga 0 le 1000 • bo 4s go tswa go palo nngwe le nngwe magareng ga 0 le 1000 • Mo bo 20s, 25s, 50s,100s go fitlha ka 1 000	Balela kwa pele le kwa morago go: • 1s go ttswa go nomore nngwe le nngwe magareng ga 0 le 1000 • 10s go tswa go atisa magareng ga 0 le 1000 • 5s go tswa go atisa ka 5 magareng ga 0 le 1000 • 2s go tswa go katiso ya 2 magareng ga 0 le 1000 • 3s go tswa go katisa ya 3 magareng ga 0 le 1000 • 4s go tswa go palo nngwe le nngwe magareng ga 0 le 1000 • Mo 20s, 25s, 50s,100s go fitlha ka 1 000	**Kwa bofelong jwa kgweditharo e barutwana ba tshwanetse go itse go:** Go balela ka go itshepa, ka molomo ka bongwe, bolesome, botlhano, bobedi, bomasome a mabedi, some a mabedi tlhano, bosomeamatlhano le makgolo le sekete. Go araba dipotso jaaka: Balela ka bolesome go tswa go 400 go fitlha go 500. Balela gape kwa morago. Balela ka 2s go tswa go 564go fitlha go 580. Balela gape kwa morago. Balela morago ka bolesome go tswa go 200 go fitlha go 40. Balela ka bosomeamatlhano go tswa go 600 go fitlha go 800. Balela morago ka 100 go tswa go 620. O baleltse dibuka di le kae? Balela kwa morago ka bongwe go tswa go 876 go fitlha go 866. Ke bongwe ga kae ba kae t? Fa o balela ka di bo 25 go tswa go 525 go fitlha go 850 a o tla dirisa dinomore tse 725? Balela le go netefatsa	
1.2 **Balela kwa pele le kwa morago**	Balela kwa pele le kwa morago go: • bo1s go ttswa go nomore nngwe le nngwe magareng ga 0 le 1000 • Bo 10s go tswa go atisa magareng ga 0 le 1000 • bo5s go tswa go atisa ka 5 magareng ga 0 le 1000 • bo 2s go tswa go katiso ya 2 magareng ga 0 le 1000 • bo 3s go tswa go katisa ya 3 magareng ga 0 le 1000 • bo 4s go tswa go palo nngwe le nngwe magareng ga 0 le 1000 • Mo bo 20s, 25s, 50s,100s go fitlha ka 1 000	Balela kwa pele le kwa morago go: • 1s go ttswa go nomore nngwe le nngwe magareng ga 0 le 1000 • 10s go tswa go atisa magareng ga 0 le 1000 • 5s go tswa go atisa ka 5 magareng ga 0 le 1000 • 2s go tswa go katiso ya 2 magareng ga 0 le 1000 • 3s go tswa go katisa ya 3 magareng ga 0 le 1000 • 4s go tswa go palo nngwe le nngwe magareng ga 0 le 1000 • Mo 20s, 25s, 50s,100s go fitlha ka 1 000	Ke dipalo dife tse di tlang gape (fa thoko)? 467, 468, 469, 725, 750, 775, 420, 440, 460 820, 800, 780 Balela o dirisa molapalo Thala mothalo o o se nang sepe o bontshe dipalo mo go ona: 602, 604, 610. O ka baa kae 606? Balela o dirisa molapalo go tswa go 602 go fitlha go 610. Balela o dirisa bolesome go tswa go 314 go fitlha go 344. Ke nomore palo efe e e sa fetogang? Goreng makgolo a sa fetoge? Fa o balela kwa morago go diragala eng?	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.3 **Matshwaopalo le mainapalo**	**Tlhaola, lemoga le go bala dipalo** • Tlhaola, lemoga le go bala matshwaos 0 go fitlha 1 000 • Kwala matshwao palo 0-1 000 • Tlhaola, lemoga le go bala • 0-1000 • Kwala mainapalo 0-1000	**Tlhaola, lemoga le go bala dipalo** • Tlhaola, lemoga le go bala matshwaos 0 go fitlha 1 000 • Kwala matshwao palo 0-1 000 • Tlhaola, lemoga le go bala • 0-1000 • Kwala mainapalo 0-1000	**Kwa bofelong ba kgweditharo e barutwana ba tshwanetse go kgona go dira tse di latelang:** Go bala le go kwala dipalo go fitlha go 1 000 Go araba dipotso jaana: Ke palo efe e e mo karateng e? **642** Batla karata e e nang le 738 kgotsa makgolo a a supa masomeamararo le bobedi. Balela dipalo tse di latelang kwa godimo: 534, 947, 974, 345 Bala mafoko a: • Makgolo a mararo el some a mane pedi • Makgolo a robedi masome a mabedi le nngwe • Makgolo a mane masome a marataro robongwe • Sekete • Some a mabedi robongwe Kwala ka dipalo • Makgolo a matlhano le bosupa • Makgolo a mane • Makgolo a marataro masome a robedi le botlhano	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.4 **Tlhalosa Tshwantshanya le go rulaganya dipalo**	**Tlhalosa, go tshwantsha le go rulaganya dipotso go fitlha go 999** • Tlhalosa le go tshwanthsa dipalogotlhe tse di fitlhang go 999 o dirisa nnye go , kgolo go, e ntsi go, e nnye go le elekana le. • Tlhalosa le go rulaganya palogotlhe go999 go tswa go nnye go fitlha go kgolo, le bogolo le bonnye. **Dirisa bolengkemedi tatelano go bontsha thulaganyo, lefelo kgtsa maemo** • Dirisa, bala le go kwala dipalotatelano o tsenya khutshwafatso go tswa go 31	**Tlhalosa, go tshwantsha le go rulaganya dipotso go fitlha go 999** • Tlhalosa le go tshwanthsa dipalogotlhe tse di fitlhang go 999 o dirisa nnye go , kgolo go, e ntsi go, e nnye go le elekana le. • Tlhalosa le go rulaganya pal-ogotlhe go999 go tswa go nnye go fitlha go kgolo, le bogolo le bonnye. **Dirisa bolengkemedi tatelano go bontsha thulaganyo, lefelo kgtsa maemo** • Dirisa, bala le go kwala dipalo-tatelano o tsenya khutshwa-fatso go tswa go 31	**Mo bofelong jwa kgweditharo e barutwana ba tshwanetse go itse go dira tse di latelang:** Rulaganya dipalo bonnye go fitlha go 1000 Arabela dipotso tse diboditsweng o ditseleng tse di farologaneng : Ithute molapalo. 450 e tlhagelela kae ? 700? e tlhagelela kae ? 350. e tlhagelela kae ? Tlhalosa dipalo tse di setseng Kwala dipalo go tswa go kgolo go fitlha go nnye 345, 428, 389, 561, 600, 739, 620, 824 Bapisa dipalo go fitlha 999 Ke palo efe e 1 e le kgolo go feta 563 Ke palo efe e etlang morago ga 768 Ke palo efe e 1 e le nnye go feta 431 Ke palo efe e 10 e le kgolo go feta 620 Ke palo efe e 10 e le nnye go feta 650 Ke palo efe e 20 e le kgolo go feta 480 Ke palo efe e 20 e le nnye go feta 740 Araba ka nnete kgotsa e seng nnete. Neela lebaka mo karabong ya gago 220 e gaufi le 200 go feta 250 403 is not closer to 400 go feta 420 15 e gaufi le 0 go feta go 30 Tlatsa ka bontsi go na le bonnye 145ke _____ 154 823 ke _____ 789 466 ke _____ 664 Dirisa palo e ele nngwe 9, 0, 6 go dira palo e kgolo e ekgonagalang. Ke palo efe e nnye e o ka e dira?	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.5 **Kemopalo**	**Lemoga kemopalo ya dipalo tse di nang le dinomore tsa tharo go fitlha ka 999** • Lemoga gore nomorepalo nngwe le nngwe e emetse eng. • Kgaoganya dipalo tsa dinomore di le tharo go fitlha go 999 ka go atisa ka 100, ka katisanetse ya bolesome le bongwe • Tlhaola le go neela boleng jwa dinomore di le robedi.		Mo kgweditharo e go golaganya ga dikakanyo di tshwanetse go gatelelwa le go rotloetdiwa: • Dipalo di ka aroganngwa go fitlha lekgolo, masome le bone. • Tlhaloganya gore 51e kgolo go 15 gonne 51e na le ditlhopha tse 5 setlhopha sa bolesome le 15 felamo setlhopheng \ditlhopheng tsa lesome. • Fa o balela ka bolesome ,fa barutwana ba fitlhelela someamane, ba itse gore ba tshwanetse go balela bolesome ba bane (40)ba itse gore ba tshwanetse go balela bolesome ba bane(4). **Kwa bofelong jwa kgweditharo e, barutwana ba tshwanetse go itse go:** **Go dirisa, buisa le go kwala puo go kgona go dira ka dikemopalo le go ditlhaloganya.** Palo nngwe kgotsa bongwe, bolesome, bolekgolo, nakopalo, palo ya nako nngwe, paloya dinomore tse tharo, palo ya dinomore tse pedi, bolengkemedi. Lemoga **0 jaaka bokoso e e emelang dipalo tsa dinomore tse pedi le dipalo tsa dinomore tse thalo jaaka :** 60 305 720 **Aroganya dipalo go bontsha boleng jwa nomore palo** 637 = 600 + 30 + 7 Dirisa diboloko go bontsha kemopalo ya dipalo **600** **30** **7** Dirisa diboloko tsa (dienes) go bontsha kemopalo ya dipalo .	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.5 **Kemopalo**	**Lemoga kemopalo ya dipalo tse di nang le dinomore tsa tharo go fitlha ka 999** • Lemoga gore nomorepalo nngwe le nngwe e emetse eng. • Kgaoganya dipalo tsa dinomore di le tharo go fitlha go 999 ka go atisa ka 100, ka katisanetse ya bolesome le bongwe • Tlhaola le go neela boleng jwa dinomore di le robedi.		**Arabela dipotso tse di jaana:** Bolela gore 7 e emetse nomore palo efe mo go 127 gape pedi 2? Gape 1? Ke bolekgolo b aba kae mo dinomoreng tse di latelang: 300, 500, 700, 412, 568 Ke ditlhopha di le kae tsa bolesome tse di leng teng mo dipalong tse di latelang? 50, 80, 100, 200, 700, 120 **Kwala dipalo tse:** Kgolo le botlhano Kgolo a marataro some a mabedi le botlhano Kgolo a mane somarobedi le borobongwe Kgolo a mararo le boraro **Kwala dipalo tse** lekgolo + 2 masome Makgolo a mabedi + 3 masome + 7 bonngwe Makgolo a mane + 9 masome + 3 bonngwe Tlhalosa gore ke dipalo dife tse di tsenang mo bokosong 872 = □ + 70 + 2 129 = 100 + □ + 20 + 9 346 = 300 + 40 + □ Neela boleng jwa palo nngwe le nngwe mo go 762.	
THARABOLOLO YA DIPALO DI LE MO TIRISONG				

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.6 **Ditogamano tsa go rarabolola dipalo**	Dirisa ditogamano tse di latelang fa ba rarabolola dipalo mme ba tlhalose tharabololo ya dipalo: • Go aga le go aroganya dipalo • Koketsopedi le halofo • Molapalo • Go atametsa go bo le-some		Barutwana ba solofetswe go rarabolola dipalofoko ba dirisa ditogamaano tse: • Go aga le go aroganya dipalo • Koketsopedi le halofo • Molapalo • Go atametsa go bo lesome Bona kgweditharo mo togamaanong e • Go aga le go aroganya dipalo • Koketsobedi le halofo • Molapalo **Go atameletsa go bolesome** Mo kgweditharo e barutwana ba tshwanetse go dirisa togamaano ya go atametsa go bolesome fa ba dira dipalofoko. Sekao: Noah o na le R48,00. Dikarata tse a di kolokileng di rekwa ka tšhelete a kana ka R5,00. A ka reka dikarata di le kae ? Barutwana b aka atametsa go bolesome jwa R48gaufi le lesome,ke eng se R50,00. Se se raya gore a ka reka dipakete tse lesome. Barutwana ba tshwanetse go dira palelo mme ba dire dikarata tsa bona gaufi le go atametsa go bolesome. Letla barutwana go tlhopha togamano e e ba siametseng. Fela, fa barutwana ba dirisaa togamaano e bas a e kgoneng, ba tshwanetse go bontshiwagore ba kgone go tlhopha togamaano tse ba di kgonang sentle. Barutwana ga ba tshwanela go nna ba thelela mo togamaanong tse. Ba tla tshwanelwa go dirisa gape mo motheo wa bogare.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgwedithаro 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.7 **Tlhakano le go tlosa**	Rarabolola dipalofoko di le mo tirisong o tlhalose tharabololo ya dipalo tse di akaretsang go tlhakanya, go ntsha ka dikarolo go fitlha 999.		**Kwa bofelong jwa kgwedithаro e barutwana ba tshwanetse go dira dipalo tsa mefuta tse.** **Go tlhakanya le go tlosa** Go na le bonnye mefuta ya dipalo e meraro ya go tlhakanya le go tlosa e e ka bewang ka ditsela di le dintsi. Mefuta ya motheo ke a: Go fetola Noluthando o na le dikgomaretsi tse di 234. Silo o mo fa tsa gagwe di le 80. O na le dikgomaretsi tse kae gotlhe? Bapalami ba ba 500 mo setimeleng. Bapalami ba ba 176 ba a fologa. Go setse bapalami b aba kae m setimeleng? Kopanya Nosisi o kgobokanya dilwana tsa sekolo tsa porojeke ya go tsenya mo tirisong gape. O kgobokanya dibotlolo tsa polasetiki di le 124 le meteme ya thini e le 268. O kgobokantse dilwana di le kae? Lebenkele le na le dipakete di le 368 tsa ditšhipisi;tse 82 ke ttsa chippos tse dingwe tsotlhe ke tsa ziksnacks. Ke dipakete di le kae tsa r Zicksnacks tse di leng teng? Bapisa Mophato wa 2 o kgobokantse R446. Mophato wa 3o kgobokantse R729. Mophato wa 3 o kgobokantse tšhelete e kae? **Go botsa dipalo ka mokgwa o o farologaneng** Dipalo di tshwanetse go botswa ka mokgwa o o farologaneng. Sekao, Bobedi ba dipalo tse ke tsa go fetolela, fela tse di sa “itsiwing” di mo lifelong le le farologaneng, mo dipalong. Lebenkele le na le dipakete tsa bupi tse; 55 di romeltswe. Jaaning go na le diphakete tse 170tsa bupi. Ke dipakete tse kae tse di neng di le teng kwa tshimologong? Lebenkele le na le dipakete tse 500 a tshukiri. Fa ba sena go rekisa dipakete tse dingwe,ba setse ka dipakete di le 324 tsa sukiri. Ba rekisitse dipakete di le kae tsa sukiri?	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.8 **Poeletso ya go tlhakanya e e isang kwa go atiseng**	Tharabololo ya dipalofoko di le mo tirisong mmee o tlhalose tharabololo ya dipalo tse di akaretsang katiso, ka dikarabo go fitlha go 99.		**Dikao tse di ka dirwang mo kgwedithoro e** **Boelatsa go tlhakanya** Dikoli tse 36 di na le maotwana a makae? **Keelo \ selekanyetso** Thami o boloka disente di le someamararo le botlhano (35c)ka beke. O bolokile madi a ma kae mo dibekeng di le robedi (8)? **Dikeriti** Rre Khumalo o jala mela e le 20 ya ditlhare tsa dinamune. Go na le ditlhare di le 12 mo moleng. Ke ditlhare di le kae gotlhe tse di jetsweng? **Mo bonno jwa dipalo tse di nang le kamano ya tiro e e farologaneng** Heila o rekisa marotho a nama e le nngwe R4. Diratafole go mo thusa go bona tlhotlhwa ya thomelo e e kwa godimo. Palo ya marotho a nama | | | | | | | | Boleng ka R | | | | | | | | Dirisa tafole go bona tlhotlhwa ya marotho a nama a 23. Sedick o tlhokomela ngwana. O duedisa R20 e leng tšhelete ya loeto, gape le R5 go ura nngwe le nngwe e a tlhokomelang ngwana ka yona. Tlatsa tafole e e latelang:	
1.9 **Kgobokanyo le kgaoganyo e e isang go karogano**	Rarabolola le go tlhalosa dikarabo tsa katiso dipalo tse di akaretsang tse di akaretsang go aroganya go go lekaleanang go fitlha go 200 ka dikarolo tse di tsenyeletsang disala.		**Dikao tsa dipalo tse dika dirwang mo kgwedithoro e ,** **Ditlhopha** Ditlhopha, tlogela se se salang Koloi ya marotho e rekisa marotho ka dikgetse di le 12. Ba na le marotho a le 118. Ke dikgetse di le kae go di le 12 tsa marotho e nngwe le e nngwe e ka e dirang gotlhe? **Ditlhopha, go akaretsa tse di setseng ka mo karabong.** Molemi o na le mae a le 227. O tshanetse go dirisa dibokoso tsa mae a marataro tse kae, fa a tshwanetse go phaketela mae a gagwe otlhe? **Go kgaoganya \ aroganya** Kgaoganya tlogela tse di salang Ditsala tse tlhano ba aroganya dibokoso di le 84tsa dimonamone gore mongwe le mongwe wa bona a bone palo ya dimonamone e e lekaneng.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.10 **Go aroganya go go isang go dipalophatlo**	Rarabolola le go tlhalosa ditharaano tse do mo tirisong tse di akareetsang go aroganya ka tekatekano go go isang kwa go rarabololeng tse di kopaneng le tse di sa kopang. Sekao½, ¼, ¾, 2/5 jalo. jalo.		**Dikao tsa dipalo tse di ka dirwang mo kgweditharo e** Go aroganya go go isang kwa go dipalophatlo Aroganya ditšhokolete di le 15 mo ditsaleng tse 6 gore batho ba bone karolo e e lekaneng ya tšhokolete gore go se ke ga nna le sepe \ epe e e salang. Aroganya tšhokolete ya dibara tse7 mo ditsleng tse 3 gor mongwe le mongwe a bone dibara tsa ditšhokoletetse di lekalekanang go se ke ga sala sepe. **Kgobokanyo ya dipalophatlo** Nkoko o neela Kiki R12. Kiki o batla go boloka boraro jwa madi ao. O tshwanetse go boloka bokae? Mofuta o wa dipalo o tswhanetswe go botswa fa morago ga gore barutwana ba rarabolole dipalo tsa go aroganya tse nne go fitlha go tse tlhano, tse di isang go dipalophatlo le go itse maina a diphtlo. **Go baa dipalophatlo mmogo** Mokatisi wa bolotloa o neela motshameki mongwe le mongwe halofo ya kgetse ya dinamune. Ke batshameki ba ba 14. O tlhoka dinamune di le kae? Mofuta o wa dipalo o tshwanetse go botswa fela fa barutwana ba rarabolotse dipalo di le nne kgotsa di le tlhano tsa go aroganya, tse di isang go dipalophatlo le go itse maina a dikwalwana tsa dipalophatlo.. **Go kwala dipalophatlo** Barutwana ga ba tshwanela go kwala matshwao a dipalophatlo. Barutwana ba tshwanetse go itse go neela dikarolwana tse 1 botlhano, 3 kotara kgotsa 3 bothataro. Se se ba thusa go tlhaloganya pele gore dipalophatlo le maina a teng di tlhalosa gore ke dikarolwana tse kae tse di lekalekanang, fa palogotlhe e arogantswe.sekao, dihalofo, boraro, dikotara, jalo. jalo.Sa bobedi ke tse kae tsa dikarolwana tse di tse di tlhokometsweng. Sekao: boraro ba babedie.2 thirds.) **Go emela dipalophatlo tsa dipalofoko** Barutwana bat hale dikarabo tsa bona go bontsha gore ba tlhaloganya dipalo. Solofela gore barutwana ba bangwe ba ka thala sentle (ka nepagalo) mme ba palelwe ke go neela maina a dikarolwanaphatlo . Barutwana ba neele maina a dikarolwanatse di arogantsweng ka go kwala jaana. 2 boraro.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.11 **Tšhelete**	• Lemoga le go tlhaola tšhelete ya ditshipi le a dipampiri a Aferika Borwa • Rarabolola dipalo tsa tšhelete tse di akaretsang palogotlhe lee tšhentšhi kgota disente • Fetolela magareng ga diranta le disente		**Dikao tse di ka dirwang mo kgweditharo e** • Boleng jwa tšhelete le go dira dipalogotlhe. Sekao. - Kwala 325c ka diranta le disente. - Ke ka ditsela di le kae tseo o ka dirang R400 o dirisa tšhelete a di-pamiri fela? O tla iste jang gore o na le tharabololo ya tsotlhe. - Travis e na le dikarolwana tsa 50cle dikarolwana tsa dissente tse 20c. Ditofi R1, 20. O tla boelwa ke bokae? • Mandla o duela R5, 50 go tsamaya ka tekisi go ya sekolong. - O duela bokae lleeto la gagwe ka sekolo fa a ya le go boa? Go reka le go rekisa dipalo • Nkokoagwe Pedro o mo neela R5. A ka reka dimonamone dife tse tharo? Choc chuckle R2,70; gums R1,80; diboko tse dibotlha R1,40; perekisi R1,60; diminti tsa metlholo R2,20;tofi R1,20. • Damon o rekile dibuka tse tharo ka R80 e le nngwe, o boelwa ke bokae fa a dirisitse R300? • Pakete ya diminti tse 5 ke 44c e le nngwe. Rre King o tlhoka 88c ? O tshwanetse go reka dipakete tse kae? O tla duela bokae?	
DIPALELO				
1.12 **Ditogamaano** **(mekgwa kgotsa ditogamaano)**	Dirisa ditogamaano tse di latelang fa ba diragatsa dipalelo: • Go aga le go aroganya dipalo • Koketsopedi le halofo • Molapalo • Atametsa go bolesome		Bona kgweditharo 3.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgwditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Mo kgwditharo e barutwana ba tswelela go aroganya dipalo gore ba kgone go balela. Mekgwa ya go bontsha go balela ka go tlhakanya le go ntsha. **Kgaoganya dipalo gay a ka dikarolwana tse nnye go dira go balela bonolo** **Tiriso ya kitso ya kemopalo go aroganya dipalo ka lekgolo, lesome, bongwe.** • Tlhakanya ka go kgaoganya dipalo tsotlhe. Go tlhakanya dipalo tsa dinomore tse tharo le dipalo tsa dinomore di le pedi. 524 + 82 = □ = (500 + 20 + 4) + (80 + 2) = 500 + (20 + 80)+ (4 + 2) = (500 + 100) + 6 = 600 + 6 = 606 Go tlhakanya palo ya dinomore tse tharo le palo ya dinomre tse tharo . 323 + 436 = □ 323 + 436 = = (300 + 20 + 3) + (400 + 30 + 6) = (300 + 400) + (20 + 30) + (3 + 6) = 700 + 50 + 9 = 759 • Tlhakanya dipalo tsa dinomore di le tharo le dipalo tsa dinomore di le tharo Barutwana ba ka kgaoganya dipalo ka ditsela tse di leng bonolo go dirisiwa. Se se raya gore bat la di dira mo ditseleng tse di farologaneng. 524 + 82 = □ 524 + (40 + 40 + 2) 524 + 40 □ 564 + 40 □ 604 + 2 = 606	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Tlhakanya dipalo tsa dinomore tse tharo le dipalo tsa dinomore tse tharo 323 + 436 = □ = 323 + (400 + 20 + 6) = (323 + 400) + 20 + 6 = (723 + 20) + 6 = 743 + 6 = 749 • Tlosa ka go kgaoganya dipalo tsotlhe Dipalo tsa dinomore di le tharo ntsha dipalo tsa dinomore tse tharo 889 – 137 = □ 889 – 137 = (800 + 80 + 9) – (100 + 30 + 7) = (800 – 100) + (80 – 30) + (9 – 7) = 700 + 50 + 2 = 752 • Ntsha ka go kgaoganya palo e le nngwe 889 – 137 = □ 889 – (100 + 30 + 7) 889 – 100 □ 789 – 30 □ 759 – 7 = 752 • Dirisa halofo go kgaoganya dipalo 525 + 16 = 525 + 8 + 8 = (525 + 8) + 8 = 533 + 8 = 541 • Balela pele le balele kwa morago 805 = 798 = □ Baleela godimo gangwe go tswa go 798 ka togamano e e maleba gonne dipalo di le gaufi le gaufi.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		• Tlhaola gaufi le koketsopadi 245 + 246 Mongwe a ka bua palo e jaaka 245 + 1 kgotsa koketsopedi 246 – 1 245 + 245 + 1 = (200 + 40 + 5) + (200 + 40 + 5) + 1 = (200 + 200) + (40 + 40) + (5 + 5) + 1 = 400 + 80 + 10 + 1 = 400 + (80 + 10) + 1 = 400 + 90 + 1 = 491 **Go godisa le go ikatisa ka go tlhakanya le go tlosa ka dikgono** Barutwana ba tshwanetse go ikatisa mefuta e mengwe ya dikgono go tlhakanya le go dintsha **Balela godimo kgotsa tlase gaufi le 10** 588 + 9 588 + 10 = 598 598 - 1 = 597 588 + 19 588 + 20 = 608 608 – 1 = 607 Barutwana ba tshwanetse go nna le ditšhono \ sebaka tsa go dira dipalelo ka mekgwa e e latelang ya dipalo go fitlha go 800: Tlhakanya kgotsa tlosa para sa atisa ka 10, kgabaganya 100 40 + 70 70 + 80 120 – 30 150 – 60	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Tlhakanya kgotsa ntsha 10 go kgotsa go tswa go palo nngwe le nngwe ya dinomorepalo di le pedi-kgotsa dinomore palo di le tharo, go tsenyeletsa go kgabaganya 100s. Sekao: 65 + 10 124 + 10 326 – 10 358 - 10 Tlhakanya kgotsa tlosa nomorepalo e le nngwe kgotsa go fitlha go nomorepalo ya dipalo tse tharo ntle le go kgabaganya bolesome. Sekao: 634 +5 775 + □ = 779 768 – 4 Tlhakanya le go tlosa nomorepalo e le nngwe go le go tswa go atisa ka 100 Sekao: 600 + 4 500 + 3 700 - 6 800 - 5 Simolola go tlhakanya le go tlosa para ya go atisa ka 100 100 + 100 100 + 200 200 + 200 300 + 400 Barutwana ba tshwaneste go neelwa ditšhono (sebaka) sa go ikatisetsa dipaterone ka go tlhakanya le go ntsha. Fa o itse gore 1+ 1 = 2 Jaanong ke eng e: 10 + 10 100 + 100	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Simolola go tlhakanya kgotsa go ntsaha bobedi ba go atisa go tswa go nngwe le nngwe ya dipalo tsa dinomore tse tharo. sekao: 675 + 100 762 - 100 **Tlhaloganya go tlhakanya kwa bofelong jwa ngwaga.** Kwa bofelong jwa ngwaga barutwana ba tshwwanetse go itse go: Go itse le go tlhakanya puo ya go tlhakanya: bontsi, tlhakanya, palo, palogotlhel, altogether,lekana le, letshwao….le go buisa le go kwala matshwao a go tlhakanyathe (+) le letshwao la go lekana (=) Tswelela go godisa le go tlhakanya le go balela jaaka setepe (kgato) ya molapalo. Sekao, Araba tse di latelang. Ke tlhoka eng go tlhakanya 67 go dira 85? Tse ke dipalofoko tsa dipotso: 67 + □ = 85. Arabela mefuta ya dipotso tse di latelang: • Tlhakanya gotlhe 43 and 19 • Tlhakanya lesome go 167 • 51 tlhakanya le 83 • Tlhakanya 70 go 50 • 280 = 120 + 80 + □ • Ke eng 30 e ntsi go 160 • Bona palogotlhe ya 156 le 14 • Tlhakanya somepedi go lekgolo l le someamasupa le botlhano • Ke palo efe e lesome e leng ntsi go 483? • Ke palo efe e o tshwanetseng go e tlhakanya le 45 go dira 178? • Ke palo efe eo e tlhakanyang go 25 go dira 178? • Ke palo efe eo e tlhakanyang le 56go dira 170? • Makgolo a mararo tlhakanya le bolesome ba bane le bolesome baba raro • Bolesome b aba (12) le bo nngwe ba ba robedi (8) • 245 + 10 = □ 245 + 20 = □ 245 + 30 = □	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Itse gore □e emetse palo e e sa itsiweng 45 + 81 = □ 67 + □ = 125 47 + 32 + 8 = □ 31 + □ + 20 = 160 □ + △ = 100 □ + △ = 120 □ + △ = 450 Tlhaloganya le go dirisa kitso ya go tlhakanya gore e ka dirwa ka mokgwa o mongwe: 178 + 12 = 190 se se raya gore 12 + 178 = 190 **Kwa bofelong jwa ngwaga ba tshwantse go tlhaloganya go ntsha** Dirisa le go tlhaloganya puo ya go tlosa: Tlosa fa, tlosa, go setse tse kae, ke bokae bo bonnye..jaanong ..., farologanyo magare ga , bokae bo bontsi ke...gape...., bokae bo bontsi go dira... buisa le go kwala letshwao la gontsha (-) Tswelella go godisa go tlhakanya go tlosa: • Go tlosa ; le • Go batla,pharologanyo magareng. Tlhaloganya gore go ntsha lefela go tlogela palo e sa fetoga: 192 – 0 = 192 □ 192 = 192 – 0 Arabela go potso e e kwadilweng mo ditseleng tse di tshwanang le: 37 tlosa 13 Tlosa 40 go tswa 280 162 o tlosa 42 Ntsha 45 go tswa 390 Pharologanyo ke eng magareng ga 738 le 157? Ke bonnye bo bo kae 117 go 449?	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Ke palo efe e o tlosang mo go 56 go dira 122? Ke palo efe e o tlosang mo go 56 go dira 132? Ke palo efe e o tlosang mo go 56 go dira 142? Batla para ya dipalo tse di nang le pharologano ya 10 Go na le pensele tse 45 mo towareng ya morutabana. O ntsha dipensele tse 17. Go setse tse kae? Para ya dipalo tse di farologaneng ka 20. Itse gore¨e emetse palo e e sa itsiweng. 557 – 134 = □ 800 – 530 = □ 762 – □ = 448 598 – 42 = □ 687 – □ = 375 13 – 6 = 15 - □ □ – 18 = 24 174 – 14 = □ 199 – □ = 25 Simolola go tlhaloganya gore: 125 – 10 e farologane go 10 – 125 Tlhaloganya kgolaganyo magareng ga go tlhakanya le go ntsha. Dirisa kgolagano magareng ga go tlhakanya le go ntssha. Bua le go kwala dintlha tse di tsamaelanang le go ntsha go neela dintlha tsea go tlhhakanya le go tlhanola. Sekao: 25 + 68 = 93 go raya gore 93 – 68 = 25 68 + 25 = 93 go raya gore 93 – 25 = 68 122 – 104 = 18 go raya gore 18 + 104 = 122 Kwa ntle ga tiriso ya didiriswa: O itse gore 145 + 120 = 265	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.13 **Go tlhakanya le go tlosa**	• Tlhakanya go fitlha go 999 • Ntsha go tswa go 999 • Dirisa matshwao a a maleba (+, -, =, □) • Ikatise ka kgolagano ya dipalo go fitlha ka 30		Ke eng: 120 + 145 265 – 120 265 – 145 O itse gore 154 – 38 = 116 Ke eng: 154 – 116 116 + 38 38 + 116 Kwala o arabe tse di latelang 64 – 37 = □ se se raya gore 37 + □ = 64 137 – 17 = □ se se raya gore□ + r = 137 200 - 100 = □ se se raya gore□ + 100 = 200 89 – 38 = 51 ; 51 ke pharologanyo gonne□ + r = 89 Kwala dipalofoko ts nne o dirisa dinomore tse tharo. 160, 35, 125 **Go tlhola dipoelo tsa go balela** **Sekaseka dipalo tse di maleba** Barutwana ba tshwanetswe go rutiwa go tsaya tshweetso e e maleba ya ditharabololo. Tseela e nngwe ya go dira tse ke go bonela pele dikarabo pele ba balela. Fa o tlhakanya dipalo tse pedi tse di leng gaufi le e nngwe, sekao. 45 le 46 Barutwana b aka dirisa koketsopedi jaaka tsela ya go bonela pele dikarabo. **Go tlhatlhoba dipalo tse** Barutwana ba tshwanetse go itse gore ba ka kgona go • Tlhola go tlhakanya ka go balela. Sekao:Ga 36 + 18 = 54; le 54 – 18 = 36 • Tlhola go ntsha ka go balela ka go tlhakanya. Sekao 84 – 48 = 36, le 36 + 48 = 84 Dirisa itiragatso ya phetolo ga tlhoal ditharabololo gore ka lebaka gore o rute go tlhakanya le go ntsha ka gangwe.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.14 **Poeletso ya go tlhakanya e e isang go katisa**	• Atisa dipalo 1 go 10 ka 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (x, =, □)		Mo kgweditharo e, barutwana ba tla tshwanelwa ke go : • Dirisa le go tlhaloganya puo ya go ikatisa; • Emelela ikatisa (go atisa) ka tlhomamo; • Dirisa matshwao a a maleba go tlhalosa dipolelopalo; • Ikatise le go tlhaloganya gore atisa e ka dira ka mokgwa mongwe le mpngwe; • Dirisa molapalo go bontsha palelo katiso le go tlhalosa dikemedi tsa teng (go bontsha gore go tlola go boeletsa go tlhakanya jang); • Dirisa molapalo go bontsha palelo katisole go tlhalosa dikemedi tsa teng (go bontsha gore go tlola go boeletsa go bontsha go tlhakanya); le • Bua tafole ya go tlhakanya (katiso). Mo bofelong jwa kgweditharo e, barutwana ba tla tshwanelwa ke go : Dirisa puo ya go atisa mo maanong a a diragadiwang .: Bopedi dinako, atisa, atisa ka, atisa go.., bontsi ba, setlhopha sa.., dinako (kgolo, ltelele, bophara..), tgabedi, gararo ka, le go bala le go kwala lesthwao la atisa (x) Dirisa puo go diira go balela ka go atisa **Go tlhaloganya go dira go balela ka go atisa** 6 e tlhkanya ga 3 e lekana le: 6 + 6 + 6 = 18 3 bontsi ba 6 = 18 3 atisa 6 = 18 6 x 3 = 18 3 x 6 = 18 **Go tlhaloganya go atisa go go tlhalosang tatelano** $5\times3 = 15$ $3\times5 = 15$	

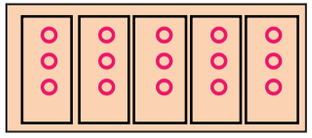
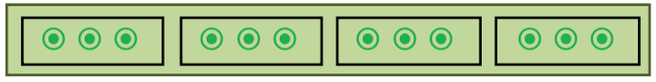
Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.14 **Poeletso ya go tlhakanya e e isang go katisa**	• Atisa dipalo 1 go 10 ka 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (x, =, □)		Simolola go lemoga gore go atisa go ka dirwa ka tatelano e nngwe le enngwe. **Arabela dipotso tse di botswang ka ditsela tse di fapaneng** Botlhano b aba bedi Tlhano ga bedi Tharo ga tlhano5 Dibadisi tse tharo mo moleng. Go na le mele e le mene. Ke dibadiisi tse kae tse di leng tsotlhe? 2 atisa ka 7 16 ga 2 **Go tlhaloganya molao wa go refosana wa go atisa** 3 x 4 = 12 e tswhana le 4 x 3 = 12 **Lemoga go dirisa seemedi □go emela palo e e sa itsiweng.** 2 + 2 + 2 = □ 2 x □ = 6 5 + 5 +5 + 5 + 5 ka ga jalo 5 x r = 25 4 + 4 + 4 ka ga jalo 4 x 3 = □ 10 + 10 + 10 + 10 + 10 ka ga jalo 10 x □ = 50 5 x □ = □ x 5 = 45 4 x 8 = □ x 4 8 + 8 + 8 = 3 borobedi = 8 x □ = 24 Gotlhaloganya kamano magareng ga go stisa le koketsopedi Kopolola tafolee. Tlatsa mola wa go atisa ka nne Dirisa mefura e e farologaneng ya dikakanyo ya go dira go atisa • Digerete tsa go atisa • Papetlakaelo • Ditafole	

	1	2	3	4	5	6	7	8	9	10
4s										
2s										

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.15 **Karolo**	• Arola dipalo go fitlha go 99 by 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, □)		**Pharologanyo ke eng mo kgweditharo e ya 3?** Kwa bofelong jwa kgweditharo e re tshwanetse go netefatsa gor barutwana ba kgona go: • Go tlhaloganya gore halofo (seripagare ke phetolelo ya sebedi le go gopola sebdi sa dipalo tsotlhe go 20 le tse di dumelesegang; • Lemoga go arola jaaka setlhopha; • Tlhlaloganya le go itumelela kamano magareng ga go arola jaaka e le tiriso ya phetolelo. • Dirisa tiragatso ya mekgwa e sa tlhomamang le mekgwa ya go kwala go dira karolo ka dipalo tsa mono-pedi le ya mono-nngwe; • Dirisa ikatisa le mekgwa e e sa rulaganyang ya go kwala le go dira karo-ganyo ya dipalo tsa dinomore tse pedi le dipalo tsa nomore e le nngwe; • Dirisa kitso ya bone ya kemopalo go dira palelo ya go atisa le go arola\ aroganya; • Tlhalosa gore ke balelo efe e ba e dirisang le gore goreng; le • Dira puisano ka dikarabo tsa bona le go tlhalosa go nagan ga bona le • Dirisa kitso ya nomore tiraggatso le diphotsotswhano o tsenyeletsa koketsopedi le halofo go lekanyetsa le go lebelela kwa morago. **Ditogamaano tsa go rekota \ go gatisa** Go le mokgwa mongwe wa go rekota \ go gatisa o barutwana b aka o dirisang mo mophatong wa 3. Barutwana baa ka se thelele mo ditogamaanong tsotlhe. Ba tshwanetse go kaelwa \ supetswa go lebelela karoganyo ya dipalo polelo leggo tsaa tshwetso ka togamaano e e maleba e e tla dirisiwang. Go ssolofetswe gore barutwana b aka se tlhole ba nna ba esi mo go thaleng ditshwantsho le go dirisa dipalo go tlhalosa go nagana ga bona. **Boeletsa go tlosa** Togamaano e e tshwanetse gore e dirisiwe fa ba rarabolola dipalofoko le gore barutwana ba tshwanetse go supetswa tsela mo go lebeleleng tlhatlhamano ya dipalo go tsaya tshwetso gore palelo e ka dirisiwa go boelletsa go ntsha kgotsa go nnya. 40 ÷ 8 = □ 40 – 8 → 32 – 8 → 24 – 8 → 16 – 8 → 8 – 8 = 0 Barutwana ba balela dipalo tsa nako e ba ntshang 8 go bona 0.	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.15 **Karolo**	• Arola dipalo go fitlha go 99 by 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, □)		**Boeletsa go tlhakanya** Barutwana bangwe ba ka dirisa togamaano e fa ba tlhaloganya kamano magareng ga go atiasa le go arola. Gangwe gape tlhatlhamnao ya dipalo go tlhomamisa gore togamaano e lebagane kgotsa nnya. 40 ÷ 8 = □ 8 + 8 → 16 + 8 → 24+ 8 → 32 + 8 → 40 Barutwana ba balela dipalo tsa nako e ba tlhakanya 8 go bona 0. **Dirisa atisa** Barutwana ba tshwwanetse gore:“ke eng se ke se itseng ka go atisa se se ka nthusang go balela karoganyo?” Barutwana b aka kwala dintlha tsa go atisa tse ba di itseng mo botong, go thusaa ba banwe go aroganya. **(Boroto ya motlhala)** K e a itse: 10 x 3 = 30 Ke a itse: 4 x 3 = 12 72 ÷ 3 = □ 10 x 3 = 30 10 x 3 = 30 30 + 30 = 60 72 – 60 = 12. 4 x 3 = 12 10 + 10 + 4 = 24 Ka jalo 72 ÷ 3 = 24	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.15 **Karolo**	• Arola dipalo go fitlha go 99 by 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, □)		**Pharologanyo ya dinomore** Pharologanyo ya dinomore wa karoganyo mo godimo ga go tlhakanya go raya gore dipalo di ka kgaoganngwa ka dikarolwana tse di bonolo go balela. 39 ÷ 3 = □ = (30 + 9) ÷ 3 = (30 ÷ 3) + (9 ÷ 3) = 10 + 3 = 13 Go kgaoganya dipalo ka ditlhopha \seripa: 60 ke halofo Fa barutwana ba ipolelela gore: “Ke itse eng ka go arola ka 5?”Barutwana ba itse gore 30 e arolwa ka 5 e tlogele sesala. 60 ÷ 5 = □ 30 ÷ 5 = **6** 30 ÷ 5 = **6** **6** + **6** = 12 Dirisa dihalofo go arola ka 4 Barutwana ba dira koketsopedi le halofo tsa ngwaga tse tharo. Ba tlhoka go dirisa dikgono tse di jaaak ditogamaano tsa go balela. Kitso ya koketsopedi le halofo e ka dirisiwa go aroganya: 96 ÷ 4 = □ 96 ÷ 2 = 48 48 ÷ 2 = 24 **Mo bokhutlong jwa kgweditharo e, barutwana ba tshwanetse go kgona go:** Tlhaloganya, go dirisa le go simolola go buisa: Nngwe gangwe, pedi, nngwe … arola, halofo, halofo, palotlalo, arola, arola ka 3, arola ka 4, arola ka 2, arola go 3, tse di tlogetsweng, arola ka … ditlhopha tse di lekalekanang ..., tse di setseng Bala, kwala le go dirisa letshwao la go arola (÷)	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.15 **Karolo**	• Arola dipalo go fitlha go 99 by 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, □)		Dirisa puo go dira palelo ya go arola. Tlhaloganya go arola jaaka setlhopha, kgotsa boeletsa ya go ntsha Arabela dipotso tse di botswang ka mefuta e e farologaneng: Kgaoganya 16 ka 2 Aroganya 20 ka 5 Ke botlhano ba ba kae ba ba dirang 50? Ke disente tse dilesome di le kae go dira 50c? Ke bonne b aba kae mo go in 20, in 28, in 36? Ke botlhano b aba kae mo go20, in 40, in 50, in 60? Annina a re o ithuta mafoko a matlhano a mašwa ka letsatsi.5. She takes □ matsatsi go ithuta mafoko a 40. 6 bolesome ÷ 3 = □ bolesome Lemoga tiriso ya matshwao jaaka □ ka dipalo tse di sa itsiweng Lebelela dibadisi tse di fa tlase o feleletse dipalofoko  Go na le □ditlhopha tsa 3 15 – 3 – 3 - □ - □ - □ = 0 15 ÷ 3 = □ Leba ditshwantsho o feleletse dipolelo :  Go na le □ya kgolokwe gotlhe ∆ya ditlhopha tsa dikgolokwe tse 3 go nngwe le nngwe. Ka jalo: □ ÷ 3 = ∆ Go na le □ya dikgolokwe gotlhe le ditlhopha tse 4 tsa dikgolokwe di le tharo gongwe le gongwe. Ka jalo: □ ÷ 4 = ∆	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.15 **Karolo**	• Arola dipalo go fitlha go 99 by 1, 2, 3, 4, 5, 10 • Dirisa matshwao a a maleba (÷, =, □)		Kopolola le go feleletsa: 20 ÷ 2 = □ 20 ÷ □ = 10 20 ÷ □ = 2 21 ÷ 3 = □ 21 ÷ □ = 7 21 ÷ 7 = □ Tlhaloganya melawana ya go arola ka 1 le 0 6 ÷1 = □ 8 ÷ 1 = □ 12 ÷ □ = 12 6 ÷ 0 = □ □ ÷ 4 = 0 1 ÷ 1 = □ 0 ÷ 7 = □ Dirisa, bala le go simolola go kwala: Se se setseng, se se salang.... Balela disala fa o dira palelo ya go arola: 12 ÷ 5 ke 2 se sala ke 2 23 ÷ 7 ke 3se sala ke 3 Tlhaloganya kamano magareng ga go atisa le halofo Araba mofuta o o latelang wa dipotso: Kopolola tafole e e fa tlase. Tlatsa lenaneo la katiso ya bone (4) Ke paterone efe e o e bonang?	

	1	2	3	4	5	6	7	8	9	10
4s										
2s										

Kgaola dipalo go nne (4') mo moleng go bana le dipalo tse pedi (2) mo moleng'.

Ke paterone efe e o e bonang?

Tlhaloganya gore go arola go dirilola \ fetola go atisa.

Bontsha dipoleopalo (palopolelo) ka dithalo (ditshwantsho)

4 x 5 = □ 20 ÷ 5 = □

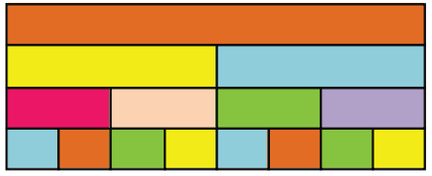
12 x 4 = □ 48 ÷ 4 = □

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.16 **Dipalo tsa tlhaloganyo \ tlhogo**	**Tlhatlhamano tya palokakanyo tsa: 999** • Neela tatelano ya sete ya dinomore tse di tlho-philweng • Bapisa dipalo go tswa go 999 le go bolela gore ke eng 1,2,3,4,5 le 10 gantsi kgotsa nnye **Go gopola ka bonako:** • Dintlha tsa go tlhakanya le go ntsha go fitlha go 20 • Tlhakanya kgotsa tloso katiso ya 10 go tswa go 0go fitlha go 100 • Dintlha tsa go atisa le go arola go: Lenaneo la katiso • la pedi go fitlha 2 x 10 - Lenaneo la katiso la go fitlha go 10 x 10 **Togamaano ya palelo** Dirisa ditogamaano tse di latelang: • Baa dipalo \ palo e kgolo pele ka tatelano gore o kgone go balela pele kgotsa go balela morago • Molapalo • Koketsopedi le molapalo • Go aga le go kgaoganya • Dirisa kamano magareng a go tlhakanya le go ntsha • Dirisa kamano magareng ga go atisa le go aroganya		**Dikao tsa dipotso tse dika botswang:** **Dipalokakanyo:** **Dipaloleina le matshwao** Tshwarelela karata kwa godimo o kwale dipalofoko. Tlhopha morutwana go kwala dipalo tse di nyalelanang. **Kgolo kgotsa nnye** Ke eng se? 1 e nnye go 900 1 kgolo go feta 899 2 kgolo go feta 702 2 nnye go feta 405 3 kgolo go feta 477 3 nnye gofeta 251 4 kgolo go feta 868 4 nnye go feta 967 5 kgolo go feta bontsi go 729 5 nnye go feta 685 10 kgolo go feta 490 10 nnye go feta 660 Ke tlhaka efe ya botlhano ya mo alefabeteng ya (5th)? Ke kgwedi efe ya borobongwe mo ngwageng ya (9th)? **Go rulaganya le go bapisa** Ke efe e ntsi: 621 kgotsa 671? Neela dipalo magareng ga 154 le 159. **Dintlha tsa go tlhakanya le go ntsha:** • Itse ka pelo go tlhakanya le go tlosa tlhano ya dinomore go fitlha go • 20. □ + △ = 20 □ + △ = 16	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.16 **Dipalo tsa tlhaloganyo \ tlhogo**	**Tlhatlhamano tya palokakanyo tsa: 999** • Neela tatelano ya sete ya dinomore tse di tlho-philweng • Bapisa dipalo go tswa go 999 le go bolela gore ke eng 1,2,3,4,5 le 10 gantsi kgotsa nnye **Go gopola ka bonako:** • Dintlha tsa go tlhakanya le go ntsha go fitlha go 20 • Tlhakanya kgotsa tloso katiso ya 10 go tswa go 0go fitlha go 100 • Dintlha tsa go atisa le go arola go: Lenaneo la katiso • la pedi go fitlha 2 x 10 - Lenaneo la katiso la go fitlha go 10 x 10 **Togamaano ya palelo** Dirisa ditogamaano tse di latelang: • Baa dipalo \ palo e kgolo pele ka tatelano gore o kgone go balela pele kgotsa go balela morago • Molapalo • Koketsopedi le molapalo • Go aga le go kgaoganya • Dirisa kamano magareng a go tlhakanya le go ntsha • Dirisa kamano magareng ga go atisa le go aroganya		Tlhakanya le go tlosa dintha mo dinomoreng tse tsotlhe go fitlha go, le akaretsa 20. 1 + 11 = 12 11 + 1 = 12 2 + 10 = 12 10 + 2 = 12 3 + 9 = 12 9 + 9 = 12 18 – 4 = 14 18 – 14 = 4 18 – 5 = 13 18 – 13 = 5 18 – 6 = 12 18 – 12 = 6 Ka bonako gopola bobedi jwa go tlhakanya go 20. Se se tshwanetse go akaretsa dintlha tsa go tlosa tse di dumelelanang. • 1 + 1 = 2 • 2 + 2 = 4 • 3 + 3 = 6 • 4 + 4 = 8 • 5 + 5 = 10 • 6 + 6 = 12 • 7 + 7 = 14 • 8 + 8 = 16 • 9 + 9 = 18 • 10 + 10 = 20 Bontsha dinomore tse ditshwanetseng go tlhakanngwa go dira 20 (kwala o dirisa boleng kemo kgotsa karata e e dirisetswang boleng jwa dinomore). • 8 • 2 • 9 • 15 • 3	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.16 **Dipalo tsa tlhaloganyo \ tlhogo**	**Tlhatlhamano tya palokakanyo tsa: 999** • Neela tatelano ya sete ya dinomore tse di tlho-philweng • Bapisa dipalo go tswa go 999 le go bolela gore ke eng 1,2,3,4,5 le 10 gantsi kgotsa nnye **Go gopola ka bonako:** • Dintlha tsa go tlhakanya le go ntsha go fitlha go 20 • Tlhakanya kgotsa tloso katiso ya 10 go tswa go 0go fitlha go 100 • Dintlha tsa go atisa le go arola go: Lenaneo la katiso • la pedi go fitlha 2 x 10 - Lenaneo la katiso la go fitlha go 10 x 10 **Togamaano ya palelo** Dirisa ditogamaano tse di latelang: • Baa dipalo \ palo e kgolo pele ka tatelano gore o kgone go balela pele kgotsa go balela morago • Molapalo • Koketsopedi le molapalo • Go aga le go kgaoganya • Dirisa kamano magareng a go tlhakanya le go ntsha • Dirisa kamano magareng ga go atisa le go aroganya		Bontsha nomore e momolemeng fa …. A e tlositswe go 20 (Kwala kgotsa dirisa boleng kemedi kgotsa karata e e dirisetswang boleng jwa dinomore) • 5 • 18 • 0 • 14 • 7 **Ditogamano tsa palelo:** Dirisa ditogamaano tsa palelo go tlhakanya le go ntsha ka bokgoni. Tlhakanya dinomore tse di mmalwa o dirisa ditogamano jaaka : • Batla ditlhopha tsa dinomore tse di dirang 10 o dirise 2 + 7 , 8 +2 e di ra 10 jaanong tlhakanya 7. • Baya palo e kgolo pele gore o ballele pele kgotsa kwa morago. 5 + 15 Busetsa dipolelo nomore: 15 + 5 le go bala go fitlha go 20 • Fetola palo go 10 o bo o ntsha kgotsa tlhakanya 1 Sekao: 8 + 9 = 17 tlhalosa gore nngwe e ka dira 8 + 9 = 8 + 10 – 1 6 + 11 = 17 tlhalosa gore nngwe e ka dira 6 + 10 + 1 17 – 9 = 8 tlhalosa gore nngwe e ka dira 17 – 10 + 1 • Tlhatlhamolola nomore mp dikarolong tsa yona o be o tlhakanye. Aga le go tlhatlhamolola dinomore: Sekao: dira go rarabolola ditlhaloganya o be o tlhalose: Tswelela go tlhatlhamolola dinomore go bonnye ‘(small bits’) 8 + 12 = 8 plus (10 + 2) = 8 + 2 + 10 = 10 + 10 = 20	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.16 **Dipalo tsa tlhaloganyo \ tlhogo**	**Tlhatlhamano tya palokakanyo tsa: 999** • Neela tatelano ya sete ya dinomore tse di tlho-philweng • Bapisa dipalo go tswa go 999 le go bolela gore ke eng 1,2,3,4,5 le 10 gantsi kgotsa nnye **Go gopola ka bonako:** • Dintlha tsa go tlhakanya le go ntsha go fitlha go 20 • Tlhakanya kgotsa tloso katiso ya 10 go tswa go 0go fitlha go 100 • Dintlha tsa go atisa le go arola go: Lenaneo la katiso • la pedi go fitlha 2 x 10 - Lenaneo la katiso la go fitlha go 10 x 10 **Togamaano ya palelo** Dirisa ditogamaano tse di latelang: • Baa dipalo \ palo e kgolo pele ka tatelano gore o kgone go balela pele kgotsa go balela morago • Molapalo • Koketsopedi le molapalo • Go aga le go kgaoganya • Dirisa kamano magareng a go tlhakanya le go ntsha • Dirisa kamano magareng ga go atisa le go aroganya		• Dirisa bobedi jaaka togamaano ya palelo ya tlhaloganyo 8 + 7 = 15 tlhalosa gore ke bobedi 7 tlhakanya 1 kgotsa bobedi 8 ntsha 1 Lemoga gore fa dinomore tse pedi di le gaufi ka bogolo go bonolo go bona pharologanyo ka go bala pele, e seng go balela morago. 17- 13 = 4 o tlhalose gore go balela pele go simollo go 13 go fitlha go 17 e fa 4 Dipalo tse dingwe tsa tlhogo di ka dirwa kw ante le didiriswa, fela di ka nna botlhokwa go dira dipalo tsa tlhogo ka didiriswa. **Didiriswa tse di atlenegisitsweng** • Molapalo (popego le go se nne teng) • Gerete ya dinomore • Karata ya boleng felo • Dibaga tsa go bala	

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopololng le dikgono tsa kgweditharo 4	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta	
1.17 **Dipalophatlo tse di tshwanang**	• Dirisa le go neela dipalophatlo maina mo tirisong e e itsegeng o akaretsa dihalofo, dikwatara,borobedi, botharo, bothataro, le bo tlhano. • Lemoga dipalophatlo, go ya ka mokgwa wa sethalo. • Simolola go lemoga gore dihalofo tse pedi (2) kgotsa tharo e dira palotlalo le gore halofo e le nngwe le dikwatara tse pedi di a lekana. • Kwala dipalophatlo jaana halofo, botharo ba ba bedi .		Mo bokhutlong jwa kgweditharo e barutwana ba tshwanetse go kgona go: • Gopola dipopego tsa palophatlo le go tlaleletsa go tlhaloganya ga bona gore dihalofo di tshwanetse go nna le bogolo jo bo lekanang; • Itse gore dikotara tse nne di dira palotlalo le gore kotare nngwe le nngwe e tshwanetse go nna le bogolo jo bo lekanang; • Batla setlhopha sa dilo tsa dipalophatlo; • Bala le go buisa maina a palophatlo; le • Rulaganya, tlhalosa le go farologanya dipalophatlo. Mo bofelong jwa kgweditharo e barutwana ba tlhaloganya palophatlo jaaka karolo ya palotlalo le go kgona go araba dipotso tse di tshwanang: bohalofo = palotlalo dikwatara = palotlalo botharo = palotlalo bohalofo = palotlalo botlhano = palotlalo bothataro = palotlalo Araba dipotso tse di jaana Respond: Ga popego e arogantswe ka dikarolo tse pedi tse di lekanang, re bitsa dikarolo tse___ Ga popego e arogantswe ka dikarolo tse tharo tse di lekanang 3, re bitsa dikarolo tse ___ Ga popego e arogantswe go ____ dikarolo tse pedi tse di lekanang re bitsa dikarolo tse dikotara. **Kgona go farologanya bogolo jwa palophatlo**  A halofo e le nngwe e kgolo kgotsa nnye go dikwatara tse tharo (3)? Ke bokwatara ba ba kae ba ba tshwanang le palotlalo? Ke borobedi ba ba kae ba ba tshwanang le palotlalo? A dikwatara di le pedi di lekana le halofo e le nngwe? Batla palophatlo ya setlhopha sa didiriswa. Go na le dibaga tse pinki di le 12. 8 le tse 4 tse tshweu. Ke palophatlo efe ya dibaga e leng e tshweu?	

Mophato 3 Kgweditharo 4 2. Dipaterone,Tiriso le Alejebera				
Ditlhogo	**Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1**	**Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta.**	**Nako)**
2.1 **Dipaterone tsa Jeometeri**	**Kopololo ,katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Dipaterone tse di re dikanyeditseng** Supa,tlhalosa ka mafoko o be o kopolole dipaterone tsa jeometeri: • Tsa tlhago • Go tswa go tsa botshelo jwa sešweng jwa letsatsi ka letsatsi • Go tswa go ngwao bosa ya rona.	Barutwana bat la dira ka dipaterone go tloga tlholego,go tswa mo botshelong jwa letsatsi ka letsatsi le go tswa mo ngwaoboswa ya rona go tloga ka mophato wa 1 go fitlha ka 6.Se se raya gore ga o a tshwanela go tsaya nako e ntsi mo setlhogong.O tlhoka gape go tlhopha ditiro le dipaterone tse di maleba le mophato mongwe le mongwe. Mofuta mongwe wa paterone o barutwana ba ka o lebelela ke wa tekatekano sekao :bontsi jwa matlhare le difatlhego tsssa dddipholog o ka takatekanyo.Fela jaaka ditshenekegi o dilebile go tloga kwa godimo le dipaterone tsa dinonyane di le dintsi fa o di le bile kwa tlatse. Mo mophatong wa 3 go na le tsepamo mo go batleng mola wa takatekano ka pampiri e e mmenweng le tshupotshwano. Barutwana ba ka dira dipaterone ka go sega di popego ka pampiri tse di mennweng.Se se ka akaretsa go dira popong le dishelofo tsa setso tsa dipampiri ka dipampiri tse disegilweng tsa dipaterone.Barutwana ba ka lebelela le go bua ka dipaterone mo popong tse di kgwageditswengle ditshwantsho tsa dipatrone tse di segilweng ka dipampiri tsa setso tsa go dira dishelofo. Barutwana b aka lebelela gape dipaterone mo: • Legora/terata • Tiro ya ditena le thaele ya bodilo • Diaparo le masela/material • Sejana/poleiti/boroto,komiki le porinki • Kgwele ya dinao • Diphologo jaaka kgomo,mmoto le serurubele pitse ya naga,thutlwa,leng au,dinonyane,digagabi malomo le matlhare • Tiro ya dibaga ya setso le ya sešwa • Dipitsa tsa setso tsa letsopa kgotsa seroto se selogilweng Barutwana b aka tlhalosa dipaterone tse ba di bonang mo gare ga bona jang? Go na le mefuta e e farologaneng ya go tlhalosa dipaterone tse re dibonang mo go rona.Bontsi jwa dipoterone tse di mo go rona di dirilwe ka mela,popego kgotsa di diriswa.Dipopego kgotsa di diriswa ga di tlhoke go golagangwa le jeometeri/geometiri ya popego ya tlhakore pedi le di diriswa tsa tlhakoretharo e barutwana ba mophato wa 2 ba ka dirang ka yona.	Thuto eli 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta.	Nako)
2.1 **Dipaterone tsa Jeometeri**	**Kopololo ,katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosa ka mafoko • Dipaterone tse di bonolo tse di dirilweng ka dilo tse di kgongwang • Dipaterone tse di bonolo tse di dirilweng ka go thala mela,dipopego kgotsa didiriswa. Tlhama Dipaterone ka bowena Tlhama Dipaterone tsa Jeometeri ka bowena • Ka di diriswa tse dikgong-wang • Ka go thala mela,dipopego kgotsa didiriswa. Dipaterone tse di re di kaganyeditseng Tlhaola,tlhalosa ka mafoko le go kopolola Dipaterone tsa Jeometeri: • Mo tlhagong /tlholego • Mo sešweng sa letsatsi le letsatsi • Go tswa mo ngwao boswa jwa letsatsi ka letsatsi	**Dipaterone tse di re dikanyeditseng** Supa,tlhalosa ka mafoko o be o kopolole dipaterone tsa geometiri: • Tsa tlhago • Go tswa go tsa botshelo jwa sešweng jwa letsatsi ka letsatsi • Go tswa go ngwao bosa ya rona.	Tsotlhe tse barutwana b a di lebelela ke tse di latelang: Ke eng se se boelediwang sekao khutlo/lerotho/kwaba,mela,dipopego dingwe le dingwe le E boelediwa jang? Sekao: • Mela e e tlhamaletseng e e fapaanang(jaaka lesela la dijana) mela e ethadilweng kwa tlase ga metiriale/lesela kgotsa go ralala hempe,mela e e thadilweng mo maotong a borukhu • Mela e e o begileng jaaka e e tlhagelela fa go segiwa go ralala eiye. • Mela e e sa tlhamalalang jaaka methalo ya menwana le ya pitse ya naga le matsutsuba mo tloung,khudu le kgotsa motho yo mogolo. • Mela e e sa tlhamalalang e motho a e fitlhelang fa a sega go ralala khabetšhe,kgotsa e motho a e fitlhelang mo mmung wa lekhubu • Khutlo tse di lekalekanang,di khutlo tse di gasa gsaneng ka go lekana. • Dipopego tse di lekalekanang sekao dipaterone tsa ditena mo lebo-taneng kgotsa tselana thoko ya maoto. • Dipopego tsa mmala o le mongwe • Dipaterone tse di dirilweng ka popego e etshwanang tse di lebisitsweng mafelo a afarologaneng sekao khutlotharo e e lebeletseng kwa godimo kgotsa kwa tlase mo tirong ya dibaga ya setso kgotsa ditena tsa tse-lana ya maoto tse di lebileng mafelo a afarologaneng. • Dipaterone tse di dirilweng ka dipopego tse di farologaneng jaaka tsa thutlwa.	Thuto eli 1

Ditlhogo	Dikgopolo le Dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo Dikgopolo le dikgono tsa KGWEDITHARO 1	Dintlha dingwe tsa tshedimosetso kgotsa metheokaelo ya go ruta.	Nako)
2.2 **Dipalo tsa dipaterone**	**Kopololo ,go katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 200 Tlhama Dipaterone ka bowena Tlhama dipateronetsa dipalo ka bowena	**Kopololo , katoloso le go tlhalosa** Go kopolola,go atolosa le go tlhalosadipalo tse di bonolo ka tatelano bonnye go fitlha ka 1000 Tatelano e tshwanetse go bontsha go bala go ya pele le morago mo: • Ya ntlha go tloga ka palo nngwe le nngwe magareng ga 0 le 1000 Pele mo • Nngwe-someng go tloga ka katiso ngwe le nngwe ya10 magareng ga 0 le 1000 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-1000 • Ya bobedi go tloga ka katiso ya 2 magareng ga 0 le 1000 • Ya bo lekgolo go tloga ka katiso ya 100 ya go fitlha ka bonnye ka 1000 • Ya bo some amatlhano ,le ya bo lekgolo go fitlha ka bonnye 1000. • Ya bosomepedi le botlhano go tloga ka katiso ya 25 go fitlha bonnye e le 1000 • Ya bosomepedi go tloga ka katiso nngwe le nngwe ya 20 go fitlha bonnye 1000 Go tlhama le go tlhalosa dipaterone tsa dipalo ka bowena Kgaotso e tlhophilweng mo mophatong wa 2 ka koketso ya tlhatlhamano ya dipalo ya bosomeamabedi,somele bobedi tlhano,y abo some a matlhano, y abo lekgolo le go fitlha bonnye ka 1000	Leba dintlha tsa KGWEDITHARO 1 Atolosa dipalo tsa tlhatlhamano le go bala ka tatelano ka tsela e elatelng: Tatelano e tshwanetse go bontsha palo ya kwa pele le kwa morago: • Ya bonngwe go tloga ka palo nngwe le nngwe magareng ga0 le 1000 • Nngwe –someng go tloga ka katiso nngwe le nngwe ya 10 magareng ga 0 le 1000 • Ka botlhano go tloga ka katiso nngwe le nngwe ya 5 magareng ga 0-1000 • Ya bobedi go tloga ka katiso nngwe le nngwe ya 2 magareng ga 0 le1000 • Ya lekgolo go tloga ka katisonngwe le nngwe ya 100 go fitlha ka bon-nye 1000. • Ya bosomeamtlhanoi go tloga ka katiso ya50 go fitlha bonnye 1000 • Ya bosomeamabedi tlhano go tloga k aka katiso nngwe le nngwe ya 25 go fitlha go bonnye 1000 • Ya bosomeamabedi go tloga ka katiso ya nngwe lnngwe ya 20 go fitlha ka bonnye 1000 Dirisa di didiriswa,ditshwantsho,papetlana le kelelo ya ditshwantsho go thusa barutwana go fetola go tloga mo go tloleng go bala le tatelano ya go katisa ka 10,5,2,3,4	Dithuto di le 3

MOPHATO 3 KWEDITHARO 1 BOALO LE DIPOPEGO				
Ditlhogo	**Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele Nako** Mo thutong y aura le metsotso e le 24
3.2 **Popegotlha-koretharo**	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo • Dipopego tsa dibolo(dokgolokwe • Dipopego tsa mabokoso(porisime • Diselennere • Dipiramiti • Dikhounu **Dipharagantsho tsa sedirwa/didirwa**: Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa pop-egotekatekanyotharo • sefatla se se sephaphathi kgotsa obegileng **Ditiro tse di tsepameng** Go lemoga le go aga sidiriswa se se neetsweng sa tekatekanyotharo go dirisiwa popego tsa tekatekanyopedi tse di segilweng,seretse,matlhaka a go nwa,le dipopegotekateksnyotharo	**Tlhatlhamano ya di diriswa** Go lemoga go raya maina a popegotlhakoretharo mo phaposing le mo ditshwantshong • Dipopego tsa dibolo(dokgolokwe • Dipopego tsa mabokoso(porisime • Diselennere • Dipiramiti • Dikhounu **Dipharologanyo tsa sedirwa/didirwa**: Tlhalosa,tlhaola le go tshwantsha popegotlhakoretharo go ikaegilwe ka: • Tekatekanyopedi e e dirang sefatlhego sa popegotekatekan-yotharo - sefatla se se sephaphathi kgotsa obegileng	Leba dintlha kaelo tsa kgweditharo 2 Mo kgweditharong e o ka katisa,go dirwa ga poeletso le tiiso ya tiro ya tekatekanyopopegotharo go dirwa ditiro kwalo Go tsepama le go neela maina • Dibolo(dikgolokwe • Dipopego tsa mabokoso(porisime) • Diselennere • Dipiramiti • Dikhounu Fa ba supeditswe ditshwantsho tsa jeometeri kgotsa didiriswa tsa ka gale Dipotso tsa barutwana di tsepamisiwe mo • gore a boalo jwa didiriswa bo obegile kgotsa sephaphathi le • Gore a boalo jo bosephaphathi jwa sediriswa ke khutlotharo,khutlonnet sepa,khutlonne,kgotsa sediko	Thuto e le 1

Ditlhogo	Dikgopolong le dikgono tse di tlhokegalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi tharo 4	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele Nako Mo thutong y aura le metsotso e le 24
3.4 jeometeri	**Jeometeri** • Go lemoga lego thala mola wa tekatekanyo mo pop-egogong ya tlhakorepedi tsa jeometeri le tse e seng tsa jeometeri • Go tlhomamisa mola wa tekatekanyo ka go mena pampiri le tshupatshwano	**Jeometeri** • Go lemoga lego thala mola wa tekatekanyo mo popegogong ya tlhakorepedi tsa jeometeri le tse e seng tsa jeometeri	Tiro ya go menwa ga pampiri e e dirilweng ya tekatekanyo mo kgweditharong 2,e tshwanetse go thusa barutwana go tlhaola mola wa tekatekanyo mo go tse e leng tsa didiriswa tsa jeometeri le didiriswa tse e seng tsa thuutatekanyo . Dithutiso tsa go kwalwa di tshwanetse go akaretsa dikao mo: • mola wa tekatekanyo e se fela mola o tlhamaletseng le • Go na le go feta mola o le mongwe wa tekatekanyo mo sebopegong kgotsa sediriswa	Thuto e le 1

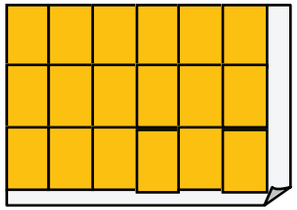
MOPHATO 3 KGWEDITHARO 4 4.TEKANYO				
Ditlhogo	**Dikakanyo le dikgono tse di tlhokegang bofelo jwa ngwaga**	**Dikakanyo le dikgono le tsepamo mo kgweditharo 4**	**Ditlhaloso dingwe tsa diteng kgotsa disupatsela**	**Boleele jwa nako (mo dithutong tsa 1 ura le 24 metsotso**
4.1 **Nako**	**Go bua \ bolela nako** • Buisa matlha mo ale-manakeng. • Bontsha matsatsi a bot-salo, a sedumedi, meletlo ya sedumedi, matsatsi a boikhutso, ditiragalo tsa hisitori le ditiragalo tsa sekolo mo alemanakeng. • Bua nako ya diura tse 12 - diura - halofo ya ura - kotara ya ura - metsotso mo tshupanakong ya dinaka le nakopalo le didiriswa tse dingwe tsa nako go bontsha nako, mogala wa letheka. **Balela boleele jwa nako le tsamao ya nako.** Dirisa alemanaka go tlhakanya le go tlosa boleele jwa nako ka malatsi dibeke le dikgwedi o akaretsa.	**Go bua nako** • Bala matlha mo alemanaakeng • Baa matsatsi a matsalo, tiragalo tsa sedumedi, meetlo ya sedumedi, mat-satsi a boikhutso,ditiragalo tsa hisetori,ditiragatso tsa sekolo mo alemanakeng. • Bua nako ya diura tse - diura - halofo ya ura - kwatara ya ura - metsotso mo tshupanakong ya dinaka le nakopalo le didiriswa tse dingwe tsa nako go bontsha nako, mogala wa letheka. **Balela boleele jwa nako le tsamao ya nako.** Dirisa alemanaka go tlhakanya le go ntsha boleele jwa nako ka matsatsi dibeke le dikgwedi o akaretsa.	Barutwana ba tswelela go ikatisa go bua ka sebaka sa nako le tatelano ya nako. Fa nako yotlhe ka go ruta mo phaposing le go tsepama mo ditlhopheng, barutwana ba tswelela go bua la letsatsi la bokae, dikgwedi tsa ngwaga le matlha a lona letsatsi leo, gape le matsatsi a pele ga le matsats morago ga 99.Barutwana ba tswelela go bat se mo alekanyetsang jaaka ditiragalo di tlhagelela. • Matsatsi a botsalo; • Ditiragalo tsa sedumedi; • Ditiragalo tsa hisitori; • Ditiragalo tsa sekolo;le • Matsatsi a boikhutso a botlhe. Tswelela go botsa barutwana go bua nako ka dinako tsa tlhomamo ka matsatsi otlhe. - Diura le metsotso mo nakopalo; le - Diura, halofo ya ura le kotara ya ura o dirisa tshupanako ya manaka . Sekao ; Barutwana ba ka botswa go bua nako fa sekolo se simolola, ka nako ya dijo le kwa gae kgotsa, fa ba fetola go tswa mo thutong e go fitlha go enngwe. Tlhopha dinako mo tshupanakong go bontsha e e supang ura kgotsa halofo ya aura kgotsa kotara kotara ya ura .Go botlhokwa go go nna le tshupanako e e bonagalang mo phaposing, gore barutwana ba ka kgona go bona \ lebelela. Barutwanaba ka dira setshwantsho sa tshupanoko. O ka kopa barutwana go go bontsha dinako tse di farologaneng le go tsenyeletsa go balela. Mpontshe ura ya bolesome. E ne e le nako mang? kotara morago ga ura ya bolesome.	Dithuto di le 2

Ditlhogo	Dikakanyo le dikgono tse di tlhokegang bofelo jwa ngwaga	Dikakanyo le dikgono le tsepamo mo kgweditharo 4	Ditlhaloso dingwe tsa diteng kgotsa disupatsela	Boleele jwa nako (mo dithutong tsa 1 ura le 24 metsotso
4.1 **Nako**	Go fetolela magareng ga malatsi le dibeke. Go fetolela magareng ga matsatsi le dibeke. • Go fetolela magareng ga malatsi le dibeke. • Go fetolela magareng ga dibeke le dikgwedi Dirisa tshupanako go bala boleele jwa nako mo ureng kgotsa halofo ya nako go akaretsa, kwatara ya ura.	Go fetolela magareng ga matsatsi le dibeke. Go fetolela magareng ga matsatsi le dibeke. • Go fetolela magareng ga mat-satsi le dibeke. • Go fetolela magareng ga dibeke le dikgwedi Dirisa tshupanako go bala boleele jwa nako mo ureng kgotsa halofo ya nako go akaretsa, kwatara ya ura.	Ka nako ya go itirisa (ya gago ka nosi) barutwana ba tla boeletsa tiro ya go bua \ bolela nako. - Diura, halofo ya ura le kotare ya ura mo tshupanakong ya dinaka. - Diura le metsotso mo tshupanako ya nakopalo, barutwana b aka dira palelo ka dibeke kgotsa matsatsi fa ba neetswe alemanaka kgotsa karolwana ya alemanaka, sekao, go batla matsatsi le go balela dipharologano magareng ga tsona. Barutwana baka dira palelo ka dibeke kgotsa karolwana fa ba neetswe alemanaka kgotsa karolwana ya alemanaka, sekao go batla matsatsi le go balela dipharologano magareng gag a tsona. **Go bala\ buisa tshupanako ya manakana mo metsotsong** Dirisa bonnye dithuto di le 2 o tsepame mo go ateleleng barutwana mo bokgonig jwa go bala tshupanako ya dinako mo metsotsong.Bona diteng tsa kgweditharo 3.	Dithuto di le 2
4.2 **Boleele**	**Tekanyetso e e sa tlhomamang** • Lekanyetsa, tekanyetso, thulaganyo le go kwala boleele o dirisa tekanyetso e e sa tlhomamang sekao. seatlaboalo, lobelo, boleele jwa pensele, le dibadisi. • Tlhalosa boleele jwa dilo ka go balela o tlhakanya le go bua gore ke dikarol-wana tse kae tse di sa tlhomamang • Dirisa puo e ka buang ka yona go bapisa, sekao: boleele, bokhutshwane, botelele le bophara.		Mefuta e yotlhe ya boleele jwa tekanyetso mo letlhakoreng le ka dirwa mo kgweditharong yotlhe nako ya fa o le nosi..Ditiro tsotlhe di tshwanetse go rekotiwa.	

Ditlhogo	Dikakanyo le dikgono tse di tlhokegang bofelo jwa ngwaga	Dikakanyo le dikgono le tsepamo mo kgweditharo 4	Ditlhaloso dingwe tsa diteng kgotsa disupatsela	Boleele jwa nako (mo dithutong tsa 1 ura le 24 metsotso
4.2 **Boleele**	**Go simolola ga tekanyetso e e sa tlhomamang** • Lekanyetsa, tekanyetso, thulaganyo le go kwala boleele o dirisa metara (e ka nna thobane ya go lekanyetsa ,kgotsa mogala wa go lekanyetsa) jaaka maemo a go lekanyetsa ka metso. • Lekanyetsa le tekanyetso ya boleele ka disentimetara o dirsa rula. • Ga go na diphetolelo magareng ga dimetara le disentimetara tse di tlhokagalang.		Mefuta e yotlhe ya boleele jwa tekanyetso mo letlhakoreng le ka dirwa mo kgweditharong yotlhe nako ya fa o le nosi..Ditiro tsotlhe di tshwanetse go rekotiwa.	
4.3 **Boima/Mmese**	**Tekanyetso e e sa tlhomamang** • Lekanyets, bapisa, thulaganyo le go kwala boima o dirisa seemo se se sa tlhomamang sa tekanyetso le tekanyetso ya e e lekaneng. sekao. diboloko, ditena.Jalo, jalo • Dirisa puo e o ka buang ka yona go bapisa sekao. bofefo, boima, bofefofefo, boimaima	**Simolola tekanyetso e e tlhomameng** Barutwana ba tshwanetse go dira tse di latelang, go tsenyeletsa go bala ditshwantsho, • Dikemo tsa boima bo bo kwadileng mo go tsona • Ditshwantsho tsa boima tsa phaposi botlhapelo Fa dintlhana tsa dinaleta o fitlha o mola o mogolo wa tekanyetso wa sekale	Go gatelela tiro e e dirilweng ka noima ngwaga otlhe, barutwana ba tshwanetse go ikatisa go dira tse: • Go bala ditshwantsho tse di ba letlang go bapisa boima jwa dilo go bontsha go lekanyetsa go go lekalekaneng. • Bala ditshwantso tse di letlang barutwana go lekanyetsa go go lekalekanang ka diuniti tse di sa rulaganngwangtsa tekanyetso; • Bapisa thulaganyo le go kwala diphitlhelelo tsa bona ka, - Ditshwantsho tsa diteko tse di nang le boima jwa dikilogerama. - Ditshwantsho tsa ditheko tse di tse di nang le boima jwa digerama, le • Go bala ditshwantsho tsa sekala sa phaposi botlhapelo mo boima bo bontshiwang gaufi le dikilogerama. Bona diteng tsa kgweditharo wa 2.	Thuto e 1

Ditlhogo	Dikakanyo le dikgono tse di tlhokegang bofelo jwa ngwaga	Dikakanyo le dikgono le tsepamo mo kgweditharo 4	Ditlhaloso dingwe tsa diteng kgotsa disupatsela	Boleele jwa nako (mo dithutong tsa 1 ura le 24 metsotso
4.3 **Boima/Mmese**	**Simolola tekanyetso e e tlhomameng** • Farologanya, thulaganyo le go kwala boima ba pakete ya thekiso dilo tse di nang le boima ba tsona tse di kwadilweng ka dikilogerama. Sekao dikilometara tsa reisitse pedi (2. Le kilokerama ya folouru kgotsa gerama.sekao. 500 ya gerama ya letswai • Tekanyetso ya boima ba tsona ka dikilogerama o dirisa selekano sa phaposi ya go tlhapela. Ga go na diphetolelo magareng ga digerama le dikilogerama tse di tlhokagalang.	**Simolola tekanyetso e e tlhomameng** Barutwana ba tshwanetse go dira tse di latelang, go tsenyeletsa go bala ditshwantsho, • Dikemo tsa boima bo bo kwadileng mo go tsona • Ditshwantsho tsa boima tsa phaposi botlhapelo Fa dintlhana tsa dinaleta o fitlha o mola o mogolo wa tekanyetso wa sekale	**Tekanyetso ya boima jaaka tiriso go rarabolola dipalo, le go balela.** Ka nako e e beetsweng (neetsweng) dipalo le kamano, barutwana ba ka rarabolola dipalo tse di dirisang tiriso ya • Tekanyetso ya boima bo bo sa tlhomamang; • Boima go dikilogeramama; le • Boima go digeramamass. Tlhokomela tlhatlhamano ya dipalo tse di leng maleba mo kgweditharo e, jaaka le tlhatlhamano ya dipalo le mefuta e e emakeba go kgweditharo.	Thuto e 1
4.4 **Maemo/Bolumu**	**Tekanyetso e e sa tlhomamang** • Tekanyetso le go lekanyetsa, Bapisa le go rulaganya maemo a ditshelo (ke gore , bogolo bo setshelo bo ka botswarang fa bo tladitswe) ka go dirisa tekanyo ya seemo se se sa tlhomamang sekao, leswana le kopi. • Tlhalosa maemo a setshelo ka go bala le go bolela gore ke bongwe bo bo kae bo bo sa tlhomamang go tlatsa setshelo? Seka, botlolo e na le maemo a dikopi tse nne.	**Tlhagiso ya tekanyetso e e sa tlhomamang** Barutwana ba dira tiro e e kwadilweng go go gatelela tse di latelang,go akaretsa go bala ditshwantsho tsa • Kuno le maemo a tsona a kwadilwe mo go tsona go di baya ka tatelano ya tsona • Ditshwantsho tsa dijeke moo bolumu leng gaufi le Letara e e nomorilweng Letara e le nngwe kgotsa diletara di le pedi mola o mogolo wa sekalekgotsa halofo ya Letara kgotsa kotara ya • Ditshwantsho ta dijeke moo bolumu e leng gaufi le nomore ya dimililetara mola o mogolo wa sekale	Mo nakong ya tiro ka bong barutwana ba tshwanetse go - Go lekanyetsa le tekanyetso,farologanya,rulaganya le go rekota maemo a disetshelo kgotsa bolumumo ditshelong o dirisa tekanyo ya seemo se se sa tlhomamang; - Farologanya le thulaganyo ya maemo a palotlhatlhamano ya lebotlolo le ditheko moo bolumu e kwadilwe mo paking; le - O ka dirisa letara ya botlolo kgotsa letara ya dijeke go lekanyetsa le tekanyetso, pharologanyo, thulaganyo le go rekota maemo a setshelo kgotsa bolumu mo setshelong ka diletara Bona dintlha tsa kgweditharo 3. Barutwana ba tshwanetse go neelwa ditro tse di kwadiwang go gatelela tse di latelang, puiso ya ditshwantsho e tshwanetswe go akaretswa • Kunole maemo a tsona a kwadilwe mo go tsona go di bay aka tatelano ya tsona; le • Ditshwantsho tsa dijeke moo bolumu e leng gaufi le nomore ya Letara kgotsa diletara tse pedi tsa 1 (2) mola o mogolo wa sekale .	Thuto e 1

Ditlhogo	Dikakanyo le dikgono tse di tlhokegang bofelo jwa ngwaga	Dikakanyo le dikgono le tsepamo mo kgweditharo 4	Ditlhaloso dingwe tsa diteng kgotsa disupatsela	Boleele jwa nako (mo dithutong tsa 1 ura le 24 metsotso
4.4 **Maemo/Bolumu**	**Tlhagiso ya tekanyetso e e sa tlhomamang** • Lekanyetsa, tekanyetso, tthulaganyo le rekoto ya maemo a dilo ka go lekanyetsa ka diletara, halofo ya letara le kotare ya diletara • Farologanya thulaganyo, le go rekota maemo a dilo tsa dipaki tsa thekiso tse maemo a tsona a neetsweng ka diletara. Sekao,diletara tse pedi tsa maši (2), Letara ya se-notsididi (1), diletara di le tlhano tsa pente (5) kgotsa ka dimilimitara. Sekao,. dimilimetara di le 500 tsa mašwi, dimilimitara di le 340 tsa senotsididi, dimilimetara di le 750 tsa mafura (oli) • Itse gore boemo jwa kopi ke dimililetara di le 250 • Itse gore leswana ke dimililetara di le 5 Ga go na diphetolelo magare ga dimililetara le diletara tse di tlhokagalang.	Tsholofelo ke gore barutwana ba balela fela go nomore e efa gaufi mola o mogolo wa sekale. Ba tlhalose bolumu ya bona jaaka e batlile e\ gaufi lego /e ntsi go ntsi kgotsa nnye/ke yona nomore / (ya diletara) ba bala jeke. Ga go na diphetolelo magareng ga dimililetara le diletara tse di tlhokagalang	Tsholofelo ke gore barutwana ba balela fela go nomore e efa gaufi mola o mogolo wa sekale . Ba tlhalose bolumu ya bona jaaka e balile e\ gaufi le go /e ntsi go ntsi kgtsa nnye/ke yona nomore / (ya diletara) ba bala jeke. **Tekanyo ya maemo jaaka tiriso tharabololo ya dipalo le dipalelo** Mo nokong e e beilweng go dinomore, tiro le kamano, learners b aka rarabolola dipalo ba dirisa tiriso ya • Tekanyo e e sa tlhomamang ya maemo \ bolumu sekao. Nkoko o dirisa dikopi tse pedi (2) tsa maši go dira phuting. Fa a dira diresipi gabedi, o tla tlhoka maši a makae? • Diletara • Dimililetara Tsaya tsia dinomore tsa tlhatlhamano ya dipalo tse di maleba go kgweditharo, le mefuta wa tlhatlhamano ya dipalo.	Thuto e 1

Ditlhogo	Dikakanyo le dikgono tse di tlhokegang bofelo jwa ngwaga	Dikakanyo le dikgono le tsepamo mo kgweditharo 4	Ditlhaloso dingwe tsa diteng kgotsa disupatsela	Boleele jwa nako (mo dithutong tsa 1 ura le 24 metsotso
4.5 **Perimetara le karolo**	**Perimetara** • Batlisisa sekgala go dikologa dibopego tse 2-D le dilo di le 3-D o dirisa mogala • **Karolo** • Batlisisa karolo o dirisa dithaele	**Karolo** Batlisisa karolo o dirisa	Barutwana ba tla simolola go rutiwa tekanyetso ya karolo la ntlha mo mophatong 3. Mo mophatong wa 3 le gone bontsi jwa karolo ya motheo wa bogareng di lekanyetswa ka selekano se se sa tlhomamang. Barutwana ba batlisisa gore ke dibopego tse kae kgotsa dilo tse di akaretsang boalo. Ba paka dipopego kgotsa dilo bas a tlogele diphatlha mo gare ga dipopego kgotsa dilo. Ba bala gore ke dilo kgotsa dibopego tse kae tse di akaretsang boalo.Sekao,barutwana ba simolola go paka dikhutlonne kgotsa dikhutlotharo mo go tsebe; ba bala gore ke dibopego tse kae tse di akaretsang tsebe. Barutwana ba tshwanetse go neela karolo ya tsebe ba lebeletse popego. Sekao, tsebe ya me e na le karolo ya dikhutlotharo di le somethataro (16). Dipopego di batlile di sa akaretse tsebe yotlhe, jaaka e bontshitswe mo tlase.  Barutwana ba tshwanetse go bolela bogolo ba tsebe ka go ela se tlhoko. Sekao, tsebe ya me ena le karolo bo bo fetang dikhutlotharo di le 18 fela bonnye jwa dikhutotharo di le 28. A barutwana ba ale dithaele karolo eo ka dibopego tse di farololganeng le dibopego tse di thshwanang ka bogolo bo bo farologaneng. Se se tla dira gore ba bone gore: • Ga sebopego se le se sennye,bontsi ba tsona di tla lekana sentle bo boalong; le • Sebopego se o se tlhophang se tla ama palo ya karabo e o e boneng. Barutwana ga ba solofelwa go balela dikarolo ka go bala khutlonne mo keriting ya khutlonne;Se bat la se dira kwa go motheo wa bogareng.	Thuto 2

MOPHATO WA 3 KGWEDI-THARO YA 4 5. TSHEDIMOSETSO YA DIPALO				
Setlhogo	**Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga**	**Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 4**	**Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta**	**Boleele jwa Nako** (Mo thutong ya ura le metsotso e le 24)
5.4 **Kgobokanya le go rualganya tshedimosetso**	**Kgobokanya le go rualganya tshedimosetso** • Kgobokanya tshedimosetso ka ga phaposi kgotsa sekolo go araba dipotso tse di bodiwang ke morutabana • Rulaganya tshedimosetso e e neetsweng ke morutabana kgotsa buka • Rulaganya tshedimosetso go ya ka - manaane - dithobane tse di bontshang go nyalana - mananeo			
5.5 **Tshwantshanya tshedimosetso**	**Tshwantshanya tshedimosetso** **Tshwantshanya tshedimosetso** • Kerafo e e dirisediwang ditshwantsho • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso			

Setlhogo	Dikgopolo le dikgono tse di tlhokagalang kwa bofelong jwa ngwaga	Tsepamo mo dikgopolong le dikgono tsa kgwedi-tharo 4	Dintlha tsa tshedimosetso kgotsa metheokaelo tsa go ruta	Boleele jwa Nako (Mo thutong ya ura le metsotso e le 24)
5.6 **Sekaseka le go ranolola tshedimosetso**	**Sekaseka le go ranolola tshedimosetso** Araba dipotso ka ga tshedimosetso e e neetsweng mo • Kerafo e e dirisediwang ditshwantsho - Kerafo e e dirisang di-noko tse di tsepameng go emela tshedimo-setso	**Sekaseka tshedimosetso go tswa mo tshwantshisong e e neetsweng**	Mo nakong e ya ngwaga, morutwana o tshwanetse go neela barutwana ditšhono tsa go bona tshedimosetso e e farologaneng e e tlhokagalang mo mophatong wa 3 (manaane, dithobane tse di bontshang nyalano, mananeo, dikerafo tse di dirisediwang ditshwantsho, Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso • Kerafo e e dirisang dinoko tse di tsepameng go emela tshedimosetso ele nngwe Lenaneo le lenngwe Barutwana ba tshwanetswe go araba dipotso tse o di botsang ka ga kerafo le lenaneo: lebelela kgwedi-tharo 1 e e bontshang dipotso tse di maleba	Thuto 1

KGAOLO 4: TLHATLHOBO

4.1 MATSENO

Go lekanyetsa ke tsamaiso e rulagantsweng e e tswelelang ya go tlhopha, kokoanya le go ranolela tshedimosetso ya diphitlhelelo tsa barutwana, go dirisiwa mekgwa e e farologaneng ya go lekanyetsa E akaretsang dikgato tse nne tse di latelang:

- Tlhama le go kgobokanya bosupi jwa diphitlhelelo;
- Go lekanyetsa bosupi jo;
- Go rekota diphitlhelelo
- Go dirisiwa tshedimosetso go tlhaloganya le go thusa barutwana mo kgolong ya bona go re ba tle ba tokofale mo dikgatong tsa go rutwa le go ithuta .

Tekanyetso e tshwanetse go nna gabedi,tekanyetso e sa seng ya semmuso (tekanyetso ya go ithuta) le e leng ya semmuso.Mo mabakeng o mabedi pegelo e tshwanetse go neelwa barutwana go godisa maitemogelo a bona a go ithuta .

Mo kgaotong ya Motheo botegeniki jo bogolo jwa tlhatlhobo e tlwaelegileng le sa tlwaelegang ke tsone tse morutabana o lemogang ka tsone motlotlo wa puisano tiragatso ya tshupetso le mokwalo o rekotilweng Tlhatlhobo ya mophato R bogolo thata ke ya puo ya molomo le go diragatsa .

4.2. TLHATLHOBO E SA TLWAELEGANG KGOTSA YA LETSATSI LE LETSATSI

Tlhatlhobo ya thuto ke tsamaiso e tswelelang ya kgobokanyo ya tshedimosetso ka phitlhelelo ya morutwana .Se le sona se bidwa tlhatlhobo e sa tlwaelegang.Ke tekanyetso ya letsatsi le letsatsi ya tswelelo ya morutwana .Se se dirwa ka go lemoga , le dipuisano le tiragatso ya ditshupetso mo tlhotlheletsanong mo phaphosiborutelo jalo-jalo.Se se seka sa lebelelwa jaaka ekete ga se karolo ya ditirwana tsa go ithuta tsa phaposiborutelo.Tlhatlhobo e sa tlwaelegang e letlelela morutabana go elatlhoko tswelelo morutwana le go tsaya ditshweetso tse di laotsweng .Tlhatlhobo e sa tlwaelegang e dirisetswa :

- Go neela barutwana pegelo
- Go tiisa thulaganyo le go ruta

Ka nako tse dingwe morutabana o ka nna a tshwara lenane-netefatso kgotsa lenane-tlhokomediso jaaka tsela ya go rekota tswelelo ya barutwana .Ka nako e nngwe barutwana kgotsa morutabana a ka tshwaya tirwana .Legale tlhatlhobo e e sa tlwaelegang ga e nne karolo ya morutwana ya rekoto ya semmuso Dipholo tsa tekanyetso ya ditirwana tse seng tsa semmuso ya letsatsi le letsatsi ga di dirisediwe tsweletso le maitlhomo a go ntsha sesupo.

4.3. TEKANYETSO YA SEMMUSO

Ditirwana tekanyetso tsotlhe tse di agang lenane la semmuso la tekanyetso mo ngwageng di lebelelwa jaaka tekanyetso ya semmuso.Tekanyetso tsa semmuso di a tshwaiwa le rekotiwa semmuso ke morutabana maleba le tlhatloso/tsweletso kgotsa ya maikaeleo a tlamelo ka sesupo . Tekanetso ya semmuso e tlamela barutabana ka tsela e rulagantsweng ya go tlhatlhoba gore barutwana ba tswelela ka bontle mo mophatong

mo serutweng se se rileng.

Morutabana o kgona fela go lebelela/lekanyetsa barutwana ba le 10 ka nako, Ka jaalo tekanyetso ya semmuso e tla diragala fela mo setlhopheng se se potlana go tsepamisitswe mo dikopanong mme go tla tsaya malatsi a mmalwa go lekanyetsa barutwana botlhe mo phaposing ka botlalo . Didiriswa le dithusathuto tse barutwana ba tlwaetseng go dirisa di tshwanetse tsa nna teng jaaka gale , (dibadisi tšhate ya dipalo, jalo-jalo.)

Mefuta ya tekanyetso e dirisiwang e tshwanetse e be godisitswe e le mo maemong a kgodiso e maleba. Tekanyetso ya semmuso e tshwanetse go tlamela ka tlhatlhamano ya dikakanyo tsa maemo le dikgono tsa barutwana.Moakanyetso wa ditirwana o tshwanetse go akaretsa diteng tsa serutwa ka tsela tse di farologaneng.

Mefuta ya tekanyetso e farologaneng (Kelotlhoko /ditemogo, motlotlo , ditiro tse di diragatswang le go kwalwa) e tshwanetse go diriswa ke morutwana go tlamela ka tshono ya go diragatsa seo o kgonang go se fitlhelela.Se ke ka gore barutwana bangwe ba kgona go bontsha bonolo se ba se itseng mo mefuta mengwe ya tekanyetso .Sekao ,

- Barutwana bangwe ba na le bothata jwa go buisa ba dira bontle mo dipalong.
- Ba bangwe ba ka nna ba bo ba se mo maemong a lebeletsweng a phitlhelelo mo puong ya go ithuta le go rutwa.

Ditirwana tsa tekanyetso tsa dipalo di tlhoka go akaretsa ditirwana le dithutiso tse di sa ikaegang ka puo le go sa buise ka nosi , go supa bokgoni jwa nnete jwa barutwana ba.

Le fa go ntse jaalo go tseelwe tsia se se lekanyetswang. Kitso le bokgoni jo bo rileng bo ka lekanyetswa sentle thata ka mefuta e rileng ya go lekanyetsa. Mefuta e e farologaneng ya tekanyetso e maleba go dikgono le tiriso e tlhokafalang mo ditlhogong tse farologaneng tsa ditlhopha tsa dingwaga tse di farologaneng. Go botlhokwa go dirisa lenanetlhokomediso la go sekseka go lekanyetsa barutwana go lekanyetsa mo mephatong e kwa tlase. Diruburiki di ka dirisiwa go tlhatlhoba dikgono tsa barutwana go rarabolola dipalo.

4.4. LENANEO LA TEKANYETSO YA SEMMUSO

Ditlhokego tsa tekanyetso ya semmuso ya dipalo tsa mophato 1-3 jaaka di neetswe mo lenaneng fa tlase :

	KGWEDITHARO 1	KGWEDITHARO 2	KGWEDITHARO 3	KGWEDITHARO 4	PALOGOTLHE
Moophato 1	2	2	2	1	7
Mophato 2	2	2	2	2	8
Mophato 3	2	3	3	2	10

Mo kgweditharo 1 go na le tirwana tekanyetso ya semmuso e le 1 (e tlhamilwe ka dipalo tsa ditirwana tse di tshwaraganeng ka ditlhogo tse di farologaneng tsa dipalo mo mophatong 1—3 mo tlaleletsong ya se , ke Annual National Assessments (ANA), e motheo wa yona e leng go lekanyetsa , e tla dirisiwa mo tshimologong ya kgweditharo 1 mophato 2 le 3. Mo mophatong 1 dikolo di rotloetswa go tsamaisa tekanyetso ya motheo(baseline) mo kgweditharo ya ntlha . Dipholo tsa barutwana mo tekanyetso motheoC baseline) di seka tsa dirisiwa go jaaka ke tsa bokgoni , mme e nne fela go tsaya tshweetso ya go ba fitlhisa mo ditirwaneng le go lekanyetsa gore ke karolo efe ya tiro e batlang go ka lebelelwa go e tokafatsa.

Barutwana ba gola ka dielo tse di farologaneng . Barutwana ba bangwe ba bonya mo tshimologong mme morago ga nako ba ka kgona go tswelela ka bonako mo dipalong .

Tekanyetso ya dipalo ya semmuso e akaretsa ditlhogo tse dintsi go feta e le nngwe mo dipalong . Tirwana tekanyetso mo tsamaong ya ngwaga e tlhoka go akaretsa dikarolo tsa diteng, mme ga se sengwe le sengwe se se mo ditlhokegong tsa khaikhulamo se lekanyetswang kgotsa go begwang ka sona. Dipalo , diophereishene ,dikamano di dira 60% tsa dipalo mo mophato 1--3. Se se tlhalosa gore 60% ya tekanyetso semmuso ya kgweditharo le go ralala ngwaga go tshwanetse go tsepamiswe tlhaloganyo mo dipalong , diophereishene le dikamanoThis means that 60% .

Tirwana tekanyetso nngwe le nngwe ya semmuso ga ya tshwanelwa go lebelelwa jaaka tiragalo e le nngwe kgotsa teko.Dilhokego dingwe di ka lekanyetswa ka nako e le nngwe , fela tse dingwe di tla lekanyetswa ka dinnako tse di farologaneng. Sekao fa dikgono tsa go bala tsa morutwana di lekanyetswa ,bokgoni jwa bona go dira tse di latelang go ka lekanyetswa ka yona tiragatso eo:

- ▪ Feleletsa tatelano ya go balela
- ▪ Buisa le go kwala ditlhakapalo.
- ▪ Bala.

Le fa go ntse jaalo , fa tirwana tekanyetso e tshwere go rarabolola dipalo ka go dira ditlhopha kgotsa GO AROGANYA KA GO LEKANA le go lekanyetsa bokgoni jwa barutwana go lekanyetsa mothamo ;e ka nna gore dikarolo tse tsa dipalo di tla lekanyetswa ka dinako tse di farologaneng .

4.5. GO REKOTA LE GO BEGA

Go rekota ke tsamaiso e mo go yona morutabana o agang lekwalo maemo a phitlhelelo tsa morutwana mo tirwana tekanyetso e e kgethegileng. E nna tshupo ya tswelelo ya morutabana mo diphitlhelelong tsa kitso jaaka e beilwe mo Pegelong ya Pholisi ya Kharikhulamo le Tlhatlhobomo . Direkoto tsa tiro ya morutwana di tshwanetse go tlamela ka bosupi jwa tswelelopele ya tlhaloganyo ya morutwana mo mophatong le mo go siameng ga gagwe go tswelela kgotsa a tlhatlosiwa go ya kwa mophatong o mongwe ke morutabana .Direkoto tsa bokgoni jwa morutwana di tshwanetse go dirisiwa go tlhotlhomisa tswelelopele e dirilweng ke barutabana le barutwana mo tsamaong ya go ithuta le go ruta.

Go bega ke tsamaiso ya tlhaeletsana ka tswelelopele ya morutwana go morutwana , batsadi , dikolo , le batsayakarolo ba bangwe.Tsweleopele ya morutwana e ka begwa ka ditsela tse di fapaaneng. Tse di akaretsa dikarata-pegelo , batsadi , dikopano , malatsi aketelo sekolo , morutabana go motsadi , dikhonferense ,kamogelo ya megala , makwalo ,makwalodikgang a phaposi le sekolo jaalo-jaalo. Barutabana mo mepatong yotlhe ba neela pegelo ka diphesente ka dirutwa. Maemo a diphitlhelelo tse di farologaneng le kwelano le dikgato tsa diphesente di tlhagisitswe fa tlase mo lenaneong.

Khoutu le diperesente tsa go rekota le pegelo

Khoute ya Selekanyo	Tlhaloso ya Bokgoni	Phesente
7	Phitlhelelo ka Dinaledi	80 – 100
6	Phitlhelelo ka Matsetseleko	70 – 79
5	Phitlhelelo e Tletseng	60 – 69
4	Phitlhelelo e e Itumedisang	50 – 59
3	Phitlhelelo ka Tekano	40 – 49
2	Phitlhelelo e e Potlana	30 – 39
1	Ga a Fitlhelela	0 – 29

4.6. GO LEKANETSA TEKANYO

Go lekanyetsa go lebisitse mo tsamaong e tlhomamisang gore ditirwana tekanyetso di a ikanyega , di na le boleng , di na le botshepegi. Go lekanyetsa go tshwanetse go tsenngwa tirisong mo maemong a kwa sekolong , mo sedikeng, porofenseng , le mo bosetšhabeng.Tiragatso ya go lekanyetsa e tlhaloganyesegang, maleba e tshwanetse e dirwe go tlhomamisa boleng jwa tekanyetso ya dirutwa.

4.7. KAKARETSO

Lokwalo lo, le tshwanetse go buisiwa mmogo le:

4.7.1 *National policy pertaining to the progrmme and promotion requirements of national Curriculam statement Grades R-12; and*

4.7.2 The policy document, *National Protocol for Assessment Grades R-12*

4.8 DIKAO TSA DITIRWANA TSA TLHATLHOBO TSA MOPHATO 1 - 3

Lenane-netefatso la sekao le le neetsweng fa tlase.Maitlhomo a lona go thusa barutabana go rulaganya le tsenya tirisong tlhatlhobo e tlhomameng ya tsela e tsweletseng .

MOPHATO 1				
Kelotlhoko ya lenane- netefatso ya mothamo le bolumo				
Karolo ya Diteng	Setlhogo	Ditlhokego	✓ kgotsa ×	Ditshwaelo
Tekanyetso	**Mothamo/bolumu**	Bapisa le go rulaganya bokanakang jwa seedi (bolumu) mo ditshelong tse pedi o di bapise .		
		Go bapisa dibolumu tsa ditshelo tse pedi kgotsa go feta tse di sa tshwaneng ka tebego ka go tshela mo teng ga setshelo sa boraro.		
		Rekota mothamo wa ditshelo ka go dirisa tekanyetso e seng ya tlhomamo , s.k. dintshwana le dikopi.		
		Araba dipotso tsa gore ke efeng e tshegetsang go gontsi .		
		Dirisa puo go bua go bapisa s.k. gontsi go feta, gonnye go feta, tletse, lolea.		

MOPHATO 1				
Kelotlhoko ya lenane- netefatso ya mothamo le boima				
Karolo ya Diteng	Setlhogo	Ditlhokego	✓ kgotsa ×	Ditshwaelo
Tekanyetso	**Boima**	Rulaganya le go bapisa boima jwa dilwana tse tharo kgotsa go feta , ka go baya para ya dilwana mo selekanyetsing sa maleka , go fitlhela dilwana di latelana.		
		Bolela yuniti/motso wa boima fa neela boima , s.k. buka e boima jo bo lekanang le 34 dimabole .		
		Dirisa puo ka go bua go bapisa , s.k. bofefo, boima, bofefonyana , boimanyana.		
		Kgono ya go rekota ditekanyetso tse tshotsweng		

Go dirisa ruburiki go tlhatlhoba tharabololo ya dipalo

Tharabololo ya dipalo e ka tlhatlhojwa ka go dirisa ruburiki.,

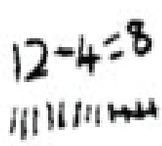
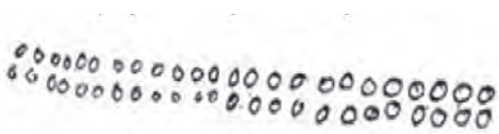
- Diphetogo jaaka barutwana di gola le go oketsega mo go tlhaloganyeng go tlhaloganya dipalo le tirso ya bokgoni ; le go
- Ikaega ka tsone tlhatlhamano ya dipalo mo dipalong le tlhago ya palo.

MOPHATO 1	
Ruburiki ya tharabololo ya dipalo	
Go sa itse gore a simolole kae kgotsa go dira sengwe se seng maleba .	1
Go tlhaloganya palo le go simolola mme o se kgone go feleletsa sentle.	2
Go tlhaloganya palo le go e dira go dirisiwa ditshwantsho (matshwao kgotsa mabadi. Kgona go ka tlhalosa . o ka dira diphoso tse dipotlana.	3
Feleletsa palo sentle. Kgona go tlhalosa tlhaologanyo ya gagwe le tsa ba bangwe ka bokgoni.	4
Ruburiki ya go rarabolola dipalo Mophato 2	
Go sa itse gore a simolole kae kgotsa go dira sengwe se seng maleba .	1
Go tlhaloganya palo le go simolola mme o se kgone go feleletsa sentle kgotsa Go tlhaloganya dipalo le go di dira o dirisa ditshwantsho (matshwao) kgotsa dibadisi fela . *	2
Go tlhaloganya dipalo le go di dira o dirisa dipalo mme o dira diphoso tse dipotlana ,Kgona go tlhalosa .	3
Feleletsa dipalo sentle o dirisa kitso ya dipalo le dithekeniki tsa go aroganya dipalo le go di kopanya gape , koketso-gabedi , go hafola , molapalo jalo-jalo.go tlhalosa tlhaloganyo ya gagwe le tsa ba bangwe ka bokgoni.	4

* Tlhatlhamano ya dipalo e barutwana ba mophato 2 ba simololang go sa e dire ka botlalo go balela ditshwantsho le go di bala.Kitso ya barutwana ya dipalo e tlhoka go agwa mo go lekaneng gore ba tle ba e dirise mo dipalong le go rarabolola dipalo le go bdi balela.

MOPHATO 1	
Ruburiki ya tharabololo ya dipalo	
Go sa itse gore a simolole kae kgotsa go dira sengwe se seng maleba	1
Go tlhaloganya palo le go simolola mme o se kgone go feleletsa sentle, kgotsa go dirisa matshwao (ditshwantsho) kgotsa dibadisi.	2
Go tlhaloganya dipalo le go rarabolola go dirisa dipalo. Kgona go ka tlhaolosa.	3
Feleletsa dipalo sentle o dirisa kitso ya dipalo le dithekeniki tsa go aroganya dipalo le go di kopanya gape , koketso-gabedi , go hafola , molapalo jalo-jalo.go tlhalosa tlhaloganyo ya gagwe le tsa ba bangwe ka bokgoni..	4

Dikao tsa ka mo ruburiki e dirisetsweng ka teng go dira dipalo, ke barutwana ba Mophato 1 – 3

Ntša e na le maoto a le 4. Dintša tse 12-Di na le a le kae ?	
	**Mophato 1: lekanyetsa: 1.** Morutwana ga a tlhaloganye polelopalo ka jaalo o dirisa togamaano e e seng maleba kgotsa tiragatso.
Nt***šwa e le nngwe e na le maoto a le 4*** Dint***šwa di le 12 di na le maoto a le makae? 48*** 	**Mophato 1: lekanyetsa: 4.** Barutwana ba tlhalogantse palo rarabolola palo e ka mokgwa o siameng wa mophato 1 mme o kgona go tlhalosa palo. **Mophato 2: lekanyetsa: 2.** Morutwana o tlhalogantse le go rarabolola palo ,mme fela , morutwana wa mophato 2 o tshwanetse go dirisa dipalo le matshwao a tiriso go tlhakanya ka poeletso (kgotsa go atisa , go ikaegile mo nakong ya ngwaga).
Molemisi o lema dijalo , mela e le 6 ya ditlhare di le 13 mo moleng o le osi***.*** *O lemile ditlhare di le kae tsotlhe?*	

13+13+13+13+13+13=78	**Mophato 2: lekanyetsa: 4.** Morutwana o tlhalogantse le go rarabolola palo , a dirisa dipalo tse di maleba le matshwao a tiriso mo mophato 2. **Mophato 3: lekanyetsa: 3.** Barutwana ba tlhalogantse le go rarabolola dipalo ka tsela e lekaneng Lefa go ntse jaalo , ga ba iponele tekanyetso ya maemo a kwa godimo ka gobo ga ba bontsha bothekeniki le tiragatso e e leng teng ya mophato 3 s.k. Go atisa o dirisa karoganyo ya dipalo le go di kopantsha gape : lebelela fa tlase.
Molemi o jala mela ya ditlhare. O jala mela e le 6 ka ditlhare di le 13 mo go nngwe le nngwe. Ke ditlhare di le kae tsotlhe? mabolomo 6×13=78 6×10=60 6×3=18	**Mophato 3: lekanyetsa: 4.** Feleletsa palo e sentle o dirisa dipalo tse di maleba le matshwao a tiriso le bothekeniki jo bo maleba jaaka go aroganya kopanya dipalo gape , koketso gabedi , hafola , goloka go busetsa , molapalo jalo-jalo.sentle . Go kgona go tlhalosa kakanyo tsa ba bangwe le ya gagwe, ka bokgoni
Gino o na le dikgomaretsi tse 258 le Josie na le dikgomaretsi tse 384 . Ba na le dikgomaretsi tse kae tse tsotlhe?	
G J 258 384 200 + 300=500 50 + 80=130 8 + 4=12 500 +130+12=642 642	**Mophato 3: lekanyetsa: 4.** Feleltsa palo e, sentle o dirisa kitso ya gago ya dipalo le bothekeniki jaaka go aroganya kopanya dipalo gape , koketso gabedi , hafola , goloka go busetsa , molapalo jalo-jalo.sentle . Go kgona go tlhalosa kakanyo tsa ba bangwe le ya gagwe. Ka bokgoni
Halofo ya ***237 ke bokae ?***	
237 100 100 15 15 =118½ 3 3 ½ ½	**Mophato 3: lekanyetsa: 4.** Rarabolola palo sentle o dirisa kitso ya gago ya dipalo le bothekeniki jwa go aroganya le kopanya dipalo gape , koketso gabedi , hafola , goloka go busetsa , molapalo jalo-jalo.sentle . Go kgona go tlhalosa kakanyo tsa ba bangwe le ya gagwe.

Mophato1 Kgweditharo1: Tirwana ya sekao sa molatheo wa tlhatlhobo

Mofuta wa tirwana	Ditlhokego	✓ kgotsa ×	Ditshwaelo
Motlotlo	A moithuti o kgona go • Bala didiriswa go fitlha ka 10? • Bolela gre ke kgobokanyo ya didiriswa dife di dinnye go feta/kgolo go feta? • Buisa matshwao a dipalo go fitlha ka 5?		
Tiragatso	A moithuti o kgona go • Tlhatlhamano ya didiriswa ? • Kpoisa popego? • Baya sediriswa fa pele ga gagwe? • Tlhaola didiriswa go ya ka o di rata ? • E tepaganye le palo gore o tle bone karabo ya yona?		

Mophato1 Kgweditharo1: Tirwana ya sekao sa tlhatlhatlhobo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo , Tiriso le Kamano	Tlhaloganyo ya dipalo	Bala didiriswa tse 10 ka botshepegi, o bolela maina ka tatelano
		Kwala le go buisa tlhakapalo go tloga go 1 go fitlha go 5
		Rulaganya dipalo go tloga go 1 – 5 go tloga go e nnye go fitlha go e kgolo thata
		Dirisa puo go tlhalosa bogolo jo amanang le dipalo : ya pele, morago, mo gare ga
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong go tsenyeletswa tlhakanyo, tloso ka dikarabo go fitlhelela go 5 Go diriswa dithusathuto le ditshwantsho Le go tlhalosa dikarabo tsa dipalo tsa gago
		Tlhalosa dipalo mo tirisong go akaretswa karoganyo e lekanang le kgobokanyo ka dipalotlalo go fitlha go 5 le ka dikarabo tse di tsenyeletsang sesala Ka go dirisa dithusathuto kgotsa ditshwantsho Tlhalosa dikarabo
	Palelo	Dira tlhakanyo go fitlha go5 O dirisa dithusathuto kgotsa ditshwantsho
		Dira tloso go tloga go palo nngwe le nngwe ya 5 kgotsa kwa tlase ga 5 O dirisa dithusathuto le ditshwantsho
Dipaterone , tiriso le alejebera	Dipalo tsa dipaterone	Feleletsa tlhatlhamano ya dipalo tse di balwang ka bonngwe go fitlha go 10 s.k. 1, 2, 3, 4, __, __, __, __, 9, 10
Boalo le Popego (Jeometeri)	Maemo	Latela ditaelo go baya sediriswa se le sengwe ka kamano le se sengwe s.k. baya phensele mo teng ga lebokose ; baya phensele mo letlhakoreng la seatla se moja mo lebokoseng
	Popegotlha-koretharo 3-D	Lemoga maina • Popego ya bolo (bolo) • Lebokose (porisemo)
Tekanyetso	Nako	Tlhalosa fa sengwe se diragala o dirisa puo ya gago s.s. Mo mosong , motshegare, bosigo, phakela, thari
	Boleele	Lekanyetsa boleele , bophara or bogodimo o dirisa tekanyetso e seng ya tlwaelo . Tlhagisa tekanyetso ka metso e sa tlhomamang
	Boima	Lekanyetsa le go bapisa boima jwa didiriswa tse tharo kgotsa go feta o dirisa selekanyetsi sa sekale o dirisa tekanyetso e seng ya tlwaelo. Rulaganya didiriswa go ya ka boima. Tlhalosa thulaganyo o dirisa bofefonyana , boimanyana boima thata.
Tiriso ya tshedimosetso	Tlhaola kgobokanya didiriswa	Kgobokanya le go tlhaola didiriswa tsa go kgongwa tsa letsatsi le letsatsi go ya ka ditlhokego tse di neetsweng ke morutabana Thala ditshwantsho tsa didiriswa tse di tlhaotsweng di kgobokantswe

Mophato 1 Kgweditharo 2: Sekao sa Tirwana Tlhatlhobo 1

Karolo ya Diteng	Setlhogo	Ditlhokego
Dipalo Tiriso le kamano	Tlhaloganyo ya Dipalo	Balela go tloga go didiriswa tse 20 ka botshepegi, o bolela maina ka tatelano
		Bolela gore kgobokanyo tse pedi tsa didiriswa tse di neetsweng di dintsi go feta kgotsa di nnye go feta mo kgobokanyo mmogo e le 10 kgotsa nnye go feta
		Buisa tlhakapalo go tloga go fitlha go 30
		Kwala tlhakapalo go fitlha 10
	Rarabolola di-palo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse fitlhang go 10 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
	Dipalelo	Dira tlhakanyo go fitlhela go10 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo Kwala dipalopolelo o dirisa +
		Dira tloso go tloga go palo 10 kgotsa e nnye go O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipalopolelo ka go dirisa -
Dipaterone Tiriso le Alejebera	Dipalo tsa Di-paterone	Feleletsa tatelano ya dipalo tse di balwang go fitlha go 30 • ka bonngwe s.k. 20, 21, 22, 23, __, __, __, __, 28; __; 30. • Ka botlhano s.k.5, 10, 15, __, __, 30,
	Dipaterone tsa Jeometeri	Kopolola le go atolosa dipaterone • E dirilwe ka go dirisa sediriswa se le sengwe mme e na le mebala ya didiriswa tse di fetogang ka tsela e tlhamaletseng kgotsa . • E dirilwe ka go dirisa didiriswa tse di tshwanang ka bogolo jo bo farololganeng
Boalo le popego (Jeometeri)	Popego tlha-korepedi-D	Tlhopha le go nnela maina Didiko dikhutlonne dikhutlotharo

Mophato 1 Kgweditharo 2: Sekao sa Tirwana Tlhatlhobo 2

Karolo ya Diteng	Setlhogo	Ditlhokego
Dipalo Tiriso le Dikamano	Tlhalogany0 ya Dipalo	Balela kwa pele le kwa morago ka1s mo gare ga 1 le 50
		Balela kwa pele ka 5s, 2s to 50
		Dirisa puo go tlhalosa kamano ya bogolo jwa dipalo : pele ga , morago ga ,mo gareng ga
		Bapisa bogolo jwa dipalo go fitlha go 10 o dirisa puo using language s.k. kgolo go feta, nnye go feta .
		Dirisa puuo go tlhalosa bogolo jwa dipalo go amana le pele ga , morago ga , mogare ga
		Rulaganya dipalo go 1 – 10 go tloga gonnye go feta go fitlha go kgolo thata
		Buisa tlhakapalo go tloga go 50
	Rarabolola Dipalo	Rarabolola dipalo mo tirisong tse tsenyeletsang karogano e lekanang le kgobokanyo ka dipalogotlhe go fitlha go 10 le dikarabo tse di tssenyeletsang sesala O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • melapalo le go tlhalosa dikarabo
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse fitlhang go 10 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
	Tšhelete	Lemoga kelo ya papetlana ya Aforika Borwa 5c, 10c, 20, 50c, R1, R2; R5
		Rarabolola dipalo ka Tšhelete e tsenyeletsa palogotlhe le tšhentšhi ya R10 le go fitlha go papetlana ya 20c disente
	Dipalelo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse fitlhang go 10 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo Kwala dipalopolelo o dirisa +
Dipaterone Tirisong le Alejebera	Dipalo tsa dipaterone	Feleletsa tatelano ya dipalo tse di balwang • ka bonngwe go ya morago go 50 s.k. 50, 49, 48, __, __, 45, __, __, 42; __; 40. • Ka bosome go fitlha 50 s.k.10, 20, 30, __, __,
Tekanyetso	Mothamo/ Bolumu	Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mothamo wa ditshelo ka go dirisa tekanyetso ya maemo a sa tlhomamang s.k. dintshwana le dikopi
Tlhagiso ya tshedimosetso	Tlhaola kgobokanyo ya didiriswa	Kokoanya le go tlhaola didiriswa tsa poego tsa letsatsi le letsatsi go ya ka ditlhokego tse di neetsweng ke morutabana Thala setshwantsho sa diiriswa tse di tlhaotsweng kgotsa tlhalosa kgobokanyo ya didiriswa

Mophato 1 Kgweditharo 3: Sekao sa Tirwana Tlhatlhobo 1

Karolo ya Diteng	Setlhogo	Ditlhokego
Dipalo Tiriso le Dikamano	Tlhaloganyo ya Dipalo	Balela didiriswa ka botshepegi go tloga go 40 , neela maina ka tatelano
		Bolela gore dikgobokanyo tsa didiswa tse pedi tse di neetsweng ke efe e ntsi go feta kgotsa nnye go feta mmogo mo dikgobokanyong tsa 15 kgotsa nnye go feta
		Buisa ditlhakapalo go tloga go fitlha go 70
		Kwala ditlhakapalo go 20
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse fitlhang go 15 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
	Dipalelo	Dirisa tlhakanyo go fitlha 15 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipalopolelo o dirisa +, =
		Dirisa tloso go tloga go palo nngwe le nngwe ya 15 kgotsa e nnye O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipalopolelo o dirisa ---, =
Dipaterone Tirisong, Alejebera	Dipalo tsa dipaterone	Feleletsa tatelano ya dipalo tse di balwang • ka bonngwe go ya morago go 60 s.k. 60, 59, 58, __, __, , __, 54; __; 51. Ka bopedi go fitlha s.k.44, 46, 48, __,-__:__,56___,60
	Dipaterone tsa jeometeri	Kopolola,atolosa le go tlhalosa dipaterone mo dipopegong tse di farologaneng di dira setlhopha,mme ditlhopha tsa didiriswa di boeletswe ka mokgwa o o tshwanang.
BOALO LE POPEGO (Jeometeri)	Popego ya tlhakoritharo/3-D	Lemoga le go neela maina • dipopego tsa bolo(bolo) • dipopego tsa lebokoso(poresimo)
		Tlhaola didiriswa go ya ka tse di kgokologang le tse di relelang

Mophato 1 kgwedithаro 3 : Sekao sa Tirwana Tlhatlhabo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele ka 10s, 5s, 2s go fitlha go 80
		Dirisa puo go tlhalosa kamano ya bogolo jwa dipalo : pele ga , morago ga ,mo gareng ga
		Bapisa bogolo jwa dipalo go fitlha ka 15 o dirisa puo s.k.kgolo go feta,nnye go feta,jalojalo,
		O ka phatlola dipalo 11 – 15 go 10 + bonngwe s.k. 12 = 10 + 2
	Rarabolola Dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo e boeletswang ka dikarabo go fitlha go 15 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
		Rarabolola dipalo mo tirisong go aroganngwa ka go lekana le go dira ditlhopha ka dipalotlalo go fitlha go 15 ka dikarabo tse akaretsang sesala. O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • melapalo le go tlhalosa dikarabo
	Tšhelete	Lemoga kelo ya papetlana tsa tšhelete ya Aforika Borwa 5c, 10c, 20, 50c, R1, R2; R5
		Rarabolola dipalo tsa tšhelete go akaretsa palogotlhe le tšhentshi go R20 mme le disente go fitlha go 20c disente
	Dipalelo	Dira tlhakanyo e e boeletswang go fitlha go15 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipalopolelo o dirisa+, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang • ka bonngwe go ya morago go 80 s.k. 80, 79, 78, __, __, __, __, 73, ___; __; 70. • Ka bosome go ya go 80 s.k.10, 20, 30, __, __,__, __, __, • Ka botlhano s.k.5, 10, 15, __, __, 30, __, __.45, __, __, 60, __, __, __, 80
Boalo le popego (jeometeri)	Tekano	Lemoga le go thala mola wa tekano mo popego ya tlhakorepedi/2-D ya dipopego tsa jemeteri le tse e seng jemeteri.
Tekanyetso	Boleele	Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota boleele o dirisa tekanyetso ya maemo a a sa tlhomamang.s.k.sepane sa diatla, dikgato, boleele jwa phensele, dibadisi, jalojalo.
Tlhagiso ya tshedimosetso	Tshedimosetso	Araba dipotso ka tshedimosetso ya kerafo ya ditshwantsho.

Mophato 1 kgwedithаro 4 : Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya Dipalo	Bala didiriswa ka botshepegi go tloga go 50, o bolela maina ka tatelano.
		Bolela gore kgobokanyo ya didiriswa tse di neeilweng di dintsi go feta kgotsa fa dikgobokanyo ka bobedi di nang le palo 20 kgotsa nnye go 20
		Buisa ditlhakapalo go tloga go 80
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse fitlhang go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
	Dipalelo	Dira tlhakanyo go fitlha go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa+, =
		Dira tloso go tloga mo palo 20 kgotsa nnye go feta O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa- , =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang ka bonngwe s.k. go ya morago go 80: 80, 79, 78, __, __, __, 74, __, __, 71. Ka bopedi s.k.64, 66, 68, __, __, __,76; __, 80
Boalo le popego (jeometeri)	Popego tlha-korepedi 2-D	Lemoga le go neela maina • didiko • dikhutlotharo • dikhutlonne Tlhaola go ya ka gore a di kgolokwe kgotsa matlhakore a tlhamaletse
Tekanyetso	Boima	• Fopholetsa , lekanyetsa , bapisa , rulaganya le go rekota boima go diriswa te-kanyetso ya maemo a a sa tlhomamang le sekale-maleka s.k.diboloko , ditena jalo-jalo. • Dirisa puo go bua ka go bapisa s.k. bofefo, boima, bofefonyana go feta , bo-imanyana go feta

Mophato 1 kgweditharo 4 : Sekao sa Tirwana Tlhatlhabo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo Dipalo	Balela kwa pele go 10s, 5s, 2s go 100
		Dirisa puo go tlhalosa kamano ya bogolo jwa dipalo : pele ga , morago ga ,mo gareng ga
		Bapisa bogolo jwa dipalo go fitlha go 20 o dirisa puo s.k. gontsi go feta ,nnye go feta more than, fewer than etc
		Rulaganya dipalo 1 – 20 go tloga go e kgolo go go fitlha go nnye
		Phatlola dipalo tsa 11 – 20 go 10 + bonngwe s.k. 14 = 10 + 4
		Buisa ditlhakapalo go tloga go fitlha go 100
		Kwala ditlhakapalo go 20
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse di fitlhang go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
		Rarabolola dipalo tirisong tse di akaretsang go aroganya ka go lekana le go dira ditlhopha ka dipalotlalo go fitlha go 20 ka dikarabo tse di ka nna tsa nna le sesala O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo
	Tšhelete	Lemoga kelo ya papetlana tsa tšhelete ya Aforika Borwa 5c, 10c, 20, 50c, R1, R2; R5
		Rarabolola dipalo tsa tšelete tse di tsenyeletsang palogotlhe le tšentshi go fitlha go R20 le mo disenteng go fitlha go 50c disente
	Dipalelo	Dira tlhakanyo e e boeletswang go fitlha go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa +, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang • ka bonngwe go ya morago s.k. 99, 98, __, 96, __, __, __, 92, ___; __; 89. • Ka bosome go fitlha go 100 s.k.10, 20, 30, __, __, __, __, __, 90, __. Ka botlhano s.k.20, 25, 30, __, __.45, __, __, 60, __, 70__, __,__, 90

Karolo ya diteng	Setlhogo	Ditlhokego
Boalo le popego	Maemo	Dirisa puo ya maemo go latela dikaelo go dikologa phaposiborutelo
		Nyalana matlhakore a farologaneng a sediriswa sona se le sengwe
Tekanyetso	Nako	Itse malatsi a beke Itse dikgwedi tsa ngwaga
Tlhagiso ya tshedimosetso	Tshedimosetso	Araba dipotso ka tshedimosetso ya kerafo ya ditshwantsho

Mophato 2 kgweditharo 1 : Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Dira ditlhopha o balele didiriswa go fitlha go 100.
		Bapisa le go rulaganya dipalotlalo go fitlha go 25
		Tlatlamolola monopedi go fitlha go 25 ka bolesome le ka bongwe s.k. 23 = 20 + 3
		Buisa le go kwala dipalotlhaka go tloga go 0 go fitlha go 100
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo le tloso ka dikarabo tse fitlhang go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola le go tlhalosa dikarabo tsa gago tsa dipalo
	Tšhelete	Lemoga kelo ya papetlana tsa tšhelete ya Aforika Borwa 5c, 10c, 20, 50c, R1, R2; R5 le tšhelete ya dipampiri R10, R20, R50
		Rarabolola dipalo tsa tšhelete tse di tsenyeleditseng palogotlhe le tšhentshi go R20 le mo disenteng go fitlha go 50c mo disenteng
	Dipalelo	Dira tlhakanyo go fitlha go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa +, =
		Dira tlhoso go fitlha go 20 O dirisa nngwe ya tse di latelang • dithusathuto • ditshwantsho • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa +, =

Karolo ya diteng	Setlhogo	Ditlhokego
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang go ya kwa pele le kwa morago • ka bonngwe go tloga go 0 – 100 s.k. 99, 98, 97, __, __, __, 93, __, 91, 90 • ka bolesome go tloga go 0 – 100 s.k 10, 20, 30, __, __, __, 70__, __, 100 • ka bopedi go tloga go 0 – 100 s.k. 80, 82, 84, __, __, 90, _, __, __, ___, 100
Boalo le popego	Popegotlhakoretharo/3-D	Lemoga le go neela maina • dipopego tsa bolo(bolo) • dipopego tsa lebokoso(poresimo)
	Dipopegotlhakorepedi/ tsa 2-D	Lemoga le go neela maina Didiko,dikutlotharo,dikhutlonne,dikhutlonnetsepa
Tekanyetso	Nako	Bolela nako mo tshupanako ya manaka mo diureng.
	Boleele	Fopholetsa,lekanyetsa,bapisa,rulaganya le go rekota boleele,bopara kgotsa boleele mo dimitareng.

Mophato 2 kgweditharo 2 : Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Bala ditshwantsho tsa ditlhopha tsa didiriswa go fitlha go 150
		Bapisa dipalo go fitlha go 50
		Buisa le go kwala dipalo go tlhoga go 0 – 150
		Balela kwa pele le kwa morago mo 10s, 2s, 5s go fitlha go 150
	Rarabolola dipalo	Rarabolola dipalo mo tirisong tse di tsenyeletsa go arogana ka go lekana le go dira ditlhopha ka dipalotlalo go fitlha go 50 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Le go tlhalosa dikarabo tsa gago tsa dipalo
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang go ya kwa pele le kwa morago Ka bonngwe go tloga go 0 – 150 s.K.131, 132, 133, __, __, __, 137, __, ___, ___, 141 • Ka bolesome magareng ga 0 le 200 e.G.150, 140, 130, __, __, 100, __, __.70, __, __, 40 • Go balela ka bopedi s.K. 150, 148, 146, 144, __, __, 138, __, __, 132. • Go balela ka botlhano go tloga 0 – 150 s.K. 105, 110, 115, __, __, __, 135, __, __, 150
		Kopolola, atolosa le go tlhalosa dipaterone tsa jeometeri tseo dipopego tse di tsh-wanang di tlhagelelang mme palo ya mofuta o mongwe le o mongwe wa popego o a oketsega kgotsa go fokotsega ka tsela e e tlwaelesegileng.
Tekanyetso	Nako	Bolela nako mo tshupanako ya manaka mo diureng le halofo ya ura.

Mophato 2 kgwedithаro 2: Sekao sa Tirwana Tlhatlhabo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele ka 3s, 4s
	Rarabolo dipalo	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di tsenyeletsa karoganya ya tekanyo tse di elang go dipalophatlo
	Dipalophatlo	Lemoga le go dirisa dihalofo, nngwe-thatarong, nngwe-nneng,, nngwe-tlhanong mo tirisong e e tlwaelesegileng.
		Lemoga dipalophatlo ka popego ya setshwantsho.
		Kwala dipalophatlo mo popegong ya halofo e 1,nngwetharong e 1,jalojalo
	Dipalelo	Dira tlhakanyo go fitlha go 50 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa +, =
		Dira tloso go fitlha go 50 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa __, =_
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo magareng ga 0 le 150 • Balela ka bonngwe • Bala ka bonnene s.K.4, 8, 12 __, __, 24, __, 32, __, __, __, 48 • Balela ka botharo s,k. 3, 6, 9, __, __,21, __, __,__, 33, 36.
Tekanyetso	Boima	• Fopholetsa , lekanyetsa , bapisa , rulaganya le go rekota boima go diriswa tekanyetso ya maemo a a sa tlhomamang le sekale-maleka s.K.Diboloko , ditena jalo-jalo.
		Rulaganya dikumo tse boima bo kwadilweng ka dikilogerama.

Mophato 2 kgwedithаro 3 : Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela ditshwantsho tsa didiriswa tse di kgobokantsweng go fitlha go 180.
		Bapisa le go rulaganya dipalo go fitlha go 75.
		Buisa le go kwala ditlhakapalo go fitlha go 180
		Balela kwa pele kwa morago ka 2s, 10s, 5s magareng ga 0 le180
		Tlhatlhamolola dipalo tsa monopedi go fitlha go 75 mo bolesomeng le mo bongweng s.K. 48 = 40 + 8
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo e e boeletswang e e elang kwa katisong go fitlha go 40 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Le go tlhalosa dikarabo tsa gago tsa dipalo
	Dipalelo	O ka atisa dipalo 1 – 10 ka 5 , 4 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Melapalo • Koketso gabedi • Kwala dipalopolelo o dirisa x, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo • Balela kwa pele le kwa morago ka bonngwe mo gareng ga 0 le 180 s.K. • 180, 170, 160, __, __, 120, __,__ 90, • Balela ka bopedi s.K. 150, 152, 154, __, 156, __, 160, __, __, 166 • Balela ka botlhano go tloga go 0 – 150 s.K.120, 125, 130, 135, __, __, __, 155, __, __, 170, __, 180
Boalo le popego	Boemo	Dirisa puo ya boemo go latela dikaelo go dikologa mo phaposingborutelong

Mophato 2 kgwedithаro 3 : Sekao sa Tirwana Tlhatlhabo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele ka 4s, 3s
	Rarabolola dipalo	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di tsenyeletsa karoganya ya tekanyo tse di elang go dipalophatlo
	Dipalophatlo	Lemoga le go dirisa dihalofo, nngwe-thatarong, nngwe-nneng,, nngwe-tlhanong mo tirisong e e tlwaelesegileng
		Lemoga dipalophatlo ka popego ya setshwantsho.
		Kwala dipalophatlo mo popegong ya halofo e 1,nngwetharong e 1,jalojalo
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo magareng 0 le 180 • Balela ka bonngwe • Balela ka bonne s.K. • 104,108, 112 __, __, 124, __, 132, __, __, __, 148 • Balela ka botharo s.K. 103, 106, 109, __, __,121, __, __,__, 133, 136.
	Dipaterone tsa jeometeri	Kopolola, atolosa le go tlhalosa dipaterone tsa jeometeri tseo dipopego tse di tshwanang di tlhagelelang mme palo ya mofuta o mongwe le o mongwe wa popego o a oketsega kgotsa go fokotsega ka tsela e e tlwaelesegileng.
Boalo le popego	Boemo	Nyalanya matlhakore a sediriswa sona se.
	Dipopego tlhakorepedi/2-d	Lemoga le go neela maina Didiko,dikutlotharo,dikhutlonne,dikhutlonnetsepa
		Tlhaola dipopego mo go tseo tse di matlhakore a a tlhamaletseng le tseo tsa matlhakore a a potologang.
Tekanyetso	Mothamo/ bolumu	Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mothamo wa ditshelo ka go dirisa tekanyetso ya maemo a sa tlhomamang s.K. Dintshwana le dikopi
	Nako	Bolela nako mo tshupanako ya manaka mo diureng le halofo ya ura.
		Dirisa khalentara go balela boleele jwa nako ka malatsi kgotsa dibeke.
Tlhagiso ya tshedimosetso	Tshedimosetso	Tlhama kerafo ya setshwantsho mo pampitshaneng ya boloko ka tshedimosetso e o e neetsweng.

Mophato 2 kgwedithаro 4: Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Bala ditshwantsho tsa didiriswa tse di kgobokantsweng go fitlha go 200
		Rulaganya le go tshwantshanya dipalo go fitlha go 99
	Rarabolola dipalo	Rarabolola dipalo tirisong tse di akaretsang ka go dira ditlhopha kgotsa ka go aroganya go fitlha go 99 ka dikarabo tse di akaretsang sesala O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Le go tlhalosa dikarabo tsa gago tsa dipalo
	Tšhelete	Lemoga kelo ya papetlana tsa tšhelete ya aforika borwa 5c, 10c, 20, 50c, r1, r2; r5 le tšhelete ya dipampiri r10, r20, r50
		Rarabolola dipalo tsa tšhelete tse di tsenyeleditseng palogotlhe le tšhentshi go r99 le mo disenteng go fitlha go 95c mo disenteng
Dipaterone,tiriso le alejebera	Tlhaloganyo ya dipalo	Feleletsa tatelano ya dipalo tsa go balela kwa pele le kwa morago • Ka bonngwe magareng ga 0 le 200 • Ka bolesome magareng ga 0 le 200 s.K. 130, 140, 150, __, ___, ___, __, 200
Boalo le popego	Dipopego tlhakorepedi/2-d	Lemoga le go neela maina • Didiko • Dikhutlotharo • Dikhutlonne • Dikhutlonnetsepa Tlhaola go ya ka gore e kgolokwe kgotsa matlhakore a tlhamaletse.
Tekanyetso	Nako	Dirisa tshupanako go balela boleele jwa nako e feta ka diura,halofo ya diura kgotsa kwatara ya diura.

Mophato 2 kgweditharo 4: Sekao sa Tirwana Tlhatlhabo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele le kwa morago ka 2s, 5s go fitlha go 200
		Buisa le go kwala ditlhakapalo go tloga go 200
	Dipalelo	Dira tlhakanyo go fitlha go 99 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Kwala dipalopolelo o dirisa +, =
		Dira tloso go tloga go palo nngwe le nngwe go fitlha go 99 kgotsa nnye go feta O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Kwala dipalopolelo o dirisa --, =
Dipaterone,tiriso le alejebera	Tlhaloganyo ya dipalo	Feleletsa tatelano ya dipalo magareng ga 0 le 200 • Balela ka bopedi s.K. 160, 162, 164, __, 166, __, 170, __, __, 176, __, 180 • Balela ka botlhano go tloga go 0 – 200 s.K.160, 165, 170, __, __, __, 190__, 200
Tlhagiso ya tshedimosetso	Tshedimosetso	Araba dipotso ka tshedimosetso ya ditshwantsho tsa kerafo.

Mophato 2 kgwedithаro 4 : Sekao sa Tirwana Tlhatlhabo 3

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele ka 4s, 3s
	Rarabolola dipalo	Rarabolola dipalofoko mo tirisong e tsenyeletsang tlhakanyo e e boelediwang e e elang go katisong ka dikarabo ka dikarabo tse fitlhang go 50 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Le go tlhalosa dikarabo tsa gago tsa dipalo
	Dipalelo	O ka atisa dipalo 1 – 10 ka 3 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola Kwala dipolelopalo o dirisa x, =
Dipaterone,tiriso le alejebera	Tlhaloganyo ya dipalo	Feleletsa tatelano ya dipalo magareng ga 0 le 180 • Balela ka bonngwe • Balela kwa morago ka bonne s.K. 48,44, 40 __, __, 28, __, __, 16, __, __, 0 • Balela kwa morago ka botharo s.K. 36, 33, 30, __, __, 21, 18, __,__, 9, __, __, 0.
Boalo le popego	Popego ya tlhakoritharo/3-d	Lemoga le go neela maina • Dipopego tsa bolo(bolo) • Dipopego tsa lebokoso(poresimo) • Selennere
		Tlhaola didiriswa go ya ka tse di kgokologang le tse di relelang
	Tekano	Lemoga le go thala mola wa tekano mo popego ya tlhakorepedi/2-d ya dipopego tsa jemeteri le tse e seng jemeteri.
Tekanyetso	Mothamo/bo-lumu	Rulaganya dikumo tsa tsatsi le letsatsi tse mothamo wa tsona o kwadilweng mo go tsona ka diletara
		Buisa bolumo mo diletareng go tloga mo ditshwantshong tsa jeke e e lekanyetsang.

Mophato 3 kgwedithаro 1: Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Dira ditlhopha le go balela didiriswa go fitlha go 200
		Bapisa le go rulaganya dipalotlalo go fitlha go 99
		Buisa le go kwala ditlhakapalo go tloga go 0 go fitlha go 500
		Tlhatlhamolola dipalo tsa mono-pedi go fitlha go 99 ka bolesome le bonngwe s.K. 78 = 70 + 8
	Rarabolola dipalo	Rarabolola dipalo tirisong tse di akaretsang tlhakanyo le tloso ka dikarabo go fitlha 99 O dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 • Le go tlhalosa dikarabo tsa gago go dipalo
	Tšhelete	Rarabolola dipalo tsa tšhelete tse di akaretsang palogotlhe le tšhentšhi ka diranta kgotsa ka disente
	Dipalelo	Dira tlhakanyo go fitlha go 99 o dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 • Kwala polelopalo o dirisa +, =
		Dira tloso go fitlha go 99 O dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 • Kwala dipalopolelo o dirisa +, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang go ya kwa pele le kwa morago • Ka bonngwe mo magareng ga 0 le 200 s.S. 199,1 98, 197, __, __, __, 13, __, 191, 190 • Ka bosome ,mo magareng ga 0 le 200 s.K. 110, 120, 130, __, __, __, 170__, __, 200 • Ka makgolo, mo magareng ga 0 le 500 s.K. 100, 200, 300, __, __, • Ka botlhano, mo magareng ga 0 le 200 s.K. 150, 155, 160, __, __, __, 180, __, __, 195, __ • Ka bopedi , mo magareng ga 0 le 200 s.K. 180,182, 184, __, __, 190, _, __, __, ___, 200
Boalo le popego	Dipopego tsa tlhakore 2-d	Lemoga le go neela maina Didiko,dikutlotharo,dikhutlonne,dikhutlonnetsepa
		Tlhaola dipopego go tseo tse matlhakore a tlhamaletseng le tse matlhakore a potologang
Tekanyetso	Nako	Buisa matlha mo khalentareng
		Bolela nako mo tshupanako ya manaka mo diureng le halofo ya ura.Le kwatara ya ura
	Mothamo/ bolumu	Fopholetsa, lekanyetsa, bapisa, rulaganya le go rekota mothamo wa ditshelo ka go dirisa tekanyetso ya maemo a sa tlhomamang s.K. Dintshwana le dikopi
		Rulaganya dikumo tsa letsatsi le letsatsi tse mothamo o kwadilweng ka dimililetara

Mophato 3 Kgwedithаro 2: Sekao sa Tirwana Tlhatlhobo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela ditshwantsho tsa di kgobokantsweng (s k . Setlhopha ka 10s, 25s, 50s or 100s) go fitlha go 500
		Rulaganya le go bapisa go fitlha go 500
		Buisa le go kwala go tloga go 0 – 1 000
	Rarabolola dipalo	Rarabolola dipalo mo tirisong tse di tsenyeletsa go arogana ka go lekana le go dira ditlhopha ka dipalotlalo go fitlha go 75 O dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 Le go tlhalosa dikarabo tsa gago go dipalo
	Dipalelo	Arola dipalo go fitlha go 50 ka 2, 5, 10
Dipaterone tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang go ya kwa pele le kwa morago • Ka bonngwe mo magareng ga 0 le 500 s.K. 389, 399, 400, , __, __, __, 404, __, ___, ___, 408 • Ka bosome mo magareng ga 0 le 500 s.K. 300, 310, 320, __, __, 350, __, __.370, __, __, 400 ▪ Ka makgolo mo magareng ga 0 le 1 000 s.K. 1000, 900, 800, __, __, 500, __, __.200, __, 0
Boalo le popego	Didiriswa tsa popego tlhakor-etharo3-d	Lemoga le go neela maina • Dipopego tsa bolo (bolo) • Dipopego tsa lebokosobox shapes (poresime) • Selennere
		Tlhaola didiriswa mo go tse di potologang le tse di nang le sebaka se se sephaphati.
Tekanyetso	Boleele	Fopholetsa, lekanyetsa, rulaganya le go bapisa boleele,bogodimo le bophara o dirisa tekanyetso e e sa tlhomamang.
		Fopholetsa, lekanyetsa,rulaganya le go bapisa boleele o dirisa dimitara.

Mophato 3 Kgweditharo 2: Sekao sa Tirwana Tlhatlhobo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo,tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele le kwa morago ka 2s, 4s kgotsa 3s go fitlha go 500
	Dipalelo	Dira tlhakanyo go fitlha go 400 O dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 • Kwala dipalopolelo o dirisa +, =
		Dira tloso go tloga go 400 kgotsa nnye o dirisa nngwe ya tse di latelang go fitlha go 400 O dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 • Kwala dipalopolelo o dirisa --, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tsa Feleletsa tatelano ya dipalocompletes number sequences of • Balela ka bopedi magareng ga 0 le 500 s.K. 450, 448, 446, 444, __, __, 438, __, __, 432. • Balela ka bonne magareng ga 0 le 500 s.K.404, 408, 412 __, __, 424, __, 432, __, __, __, 448 • Balela ka botharo magareng ga 0 le 500 s.K. 403,406, 409, __, __,421, __, __,__, 433, 436.
	Dipaterone tsa jeometeri	Kopolola, atolosa le go tlhalosa dipaterone tsa jeometeri tseo dipopego tse di tshwanang di tlhagelelang mme palo ya mofuta o mongwe le o mongwe wa popego o a oketsega kgotsa go fokotsega ka tsela e e tlwaelesegileng.

Mophato 3 kgwedithаro 2 : Sekao sa Tirwana Tlhatlhabo 3

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele ka 5s, 50s, 100s magareng ga 0 le 500
		Tlhatlhamolola dipalo tsa mono-tharo mo makgolong,bolesome le bonngwe s.K. 247 = 200 + 40 + 7
	Rarabolola dipalo	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di tsenyeletsang karoganyo e e lekanang e e elang kwa dipalophatlo.
	Dipalophatlo	Lemoga le go dirisa nngwepeding,nngwenneng, nngwerobeding,nngwetharong,nng wethatarong,nngwetlhanong,mo tirisong e e tlhwaelesegileng.
		Lemoga dipalophatlo mo popegong ya setshwantsho.
		Kwala dipalophatlo ka popego ya nngwepeding le nngwetharong,jalo le jalo.
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa thatelano ya dipalo • Balela ka botlhano magareng ga 0 – 500 s.K.. 105, 110, 115, __, __, __, 135, __, __, 150 • Balela ka bosome-matlhano magareng ga 0 – 1000 s.K.. 550, 600, 650, __, __, 800, __, __, __, 1 000,
Boalo le popego	Boemo le dikaelo	Latela dikaelo go tsamaya mo tikologong ya sekolo.
		Neela dikaelo tsa go tsamaela mo tikologong ya sekolo
Tekanyetso	Boima	• Fopholetsa , lekanyetsa , bapisa , rulaganya le go rekota boima go diriswa te-kanyetso ya maemo a a sa tlhomamang le sekale-maleka s.K.Diboloko , ditena jalo-jalo.
		Rulaganya dikumo tse mo go tsona boima bo kwadilweng ka digerama

Mophato 3 kgweditharo 3 : Sekao sa Tirwana Tlhatlhabo 1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Bala ditshwantsho tsa didiriswa tse di beilweng ka ditlhopha go fitlha go 750 (s.k.kwala setlhopha sa 20s, 25s, 50, kgotsa 100s)
		Bapisa le go rulaganya dipalo go fitlha go 750
		Buisa le go kwala ditlhakapalo go fitlha go 100
	Rarabolola dipalo	Rarabolola dipalopolelo mo tirisong tse di tsenyeleditseng katiso go fitlha go 75 o dirisa nngwe ya tse di latelang • go aga le go aroganya dipalo • melapalo • go oketsa gabedi le go hafola • atametsa go 10 • le go tlhalosa dikarabo tsa gago go dipalo
	Dipalelo	O ka atisa ka 2, 5, 10 go palogotlhe ya 99 O dirisa nngwe ya tse di latelang • Dithusathuto • Ditshwantsho • Melapalo • Koketso gabedi • Kwala dipalopolelo o dirisa x, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo tse di balwang go ya kwa pele le kwa morago • Ka bonngwe magareng ga 0 le 750 s.k. 665, 666, 667 , __, __, __, 671, __, ___, ___, 675__, __, 678 • Ka bolesome magareng ga 0 le 750 . 650, 660, 670, __, __, 700, __, __.730, __, __, 760 • Ka bolekgolo magareng ga 0 le 1 000 s.k.. 0, 100, 200, __, __, 500, __, __.800, __, 1 000

Mophato 3 kgweditharo 3 : Sekao sa Tirwana Tlhatlhabo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele le kwa morago ka 2s, 20s, 4s, 3s go fitlha go 750
		Tlhatlhamolola dipalo tsa mono-tharo go fitlha go 750 mo makgolong,bolesome le metso.S.K. 648 = 600 + 40 + 8
	Dipalelo	O ka atisa ka 3, 4 go fitlha go palogotlhe ya 99 O dirisa tse di latelang • Dithusathuto • Ditshwantsho • Melapalo • Koketso gabedi Kwala dipalopolelo o dirisa x, =
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo • Balela ka bopedi magareng ga 0 le 750 s.K. 750, 749, 748, __, __, 445, __, __, 742. • Balela ka bo masome-a-mabedi magareng ga 0 le 1000 s.K. 800, 820, 840, 860, __, __, 920, __, __, 980 • Balela ka bonne magareng ga 0 le 750 s.K.704, 708, 712 __, __, 724, __, 732, __, __, __, 748 • Balela ka bo tharo magareng ga 0 le 750 s.K. 630,633, 639, 641, __, __,650, __, __,__, 661
	Dipaterone tsa jeometeri	Kopolola,atolosa le go tlhalosa dipaterone tsa jeometeri tseo dipopego tse di tshwanang di tlhagelelang mme palo ya mofuta o mongwe le o mongwe wa popego o a oketsega kgotsa go fokotsega ka tsela e e tlwaelesegileng.
Boalo le popego	Dipopego tsa tlhakoripedi 2-d	Lemoga le go neelela maina,didiko,dikhutlotharo,dikhutlonne le dikhutlotharo.
		Thala didiko,dikhutlonne,dikhutlotharo.
Tlhagiso ya tshedimosetso	Tshedimosetso	Tlhama kerafo ya dinoko mo pampiring ya diboloko fa o neetswe tshedimosetso.

Mophato 3 kgwedithаro 3 : Sekao sa Tirwana Tlhatlhabo 3

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le dikamano	Tlhaloganyo ya dipalo	Balela kwa pele ka bo 5s, 50s, 25s to 750
	Rarabolola dipalo	Rarabolola le go tlhalosa dikarabo tsa dipalo tse di tsenyeletsang karoganyo e e lekanang tse di elang go dipalophatlo
	Dipalopatlo	Lemoga le go dirisa nngwe-peding,nngwe-nneng,nngwe-robeding,nngwe-thatarong,nngwe-tlhanong mo tirisong e e tlwaelesegileng.
		Lemoga dipalophatlo ka popego ya setshwantsho
		Lemoga gore nngwe-peding tse 2-Di dira palotlalo
		Kwala dipalophatlo mo popegong ya 1-peding, 1-tharong jalo-jalo.
Dipaterone,tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa tatelano ya dipalo • Balela ka botlhano magareng 0 – 750 s.K. 705, 710, 715, __, __, __, 735, __, __, 750 • Balela ka bosome a matlhano magareng ga 0 – 1000 s.K.1 000, 950, 800, __, __, 650, __, __, __, 450, • Balela ka bosome a mabedi tlhano counting magareng 0 – 1000 s.K.525, 550, 575, __, __, 650, __, __, __, 750
Boalo le dipopego	Maemo	Latela dikaelo o tloga go lefelo le lengwe go ya go le lengwe ka mmepe o sa tlhomamang
Tekanyetso	Nako	Bolela nako mo tshupanako ya dijitale ka diura le metsotso
		Dirisa khalentara go balela boleele jwa nako ka malatsi kgotsa dibeke

Mophato 3 Kgwedithаro 4: Sekao sa Tirwana Tlhatlhaobo1

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalotirisong le dikamano	Tlhaloganyo ya dipalo	Bala ditshwantsho tsa didiriswa tse di kgobokantsweng go fitlha go 1 000
		Rulaganya le go bapisa dipalo go fitlha go 999
	Rarabolola dipalo	Rarabolola dipalo tirisong tse di akaretsang ka go dira ditlhopha kgotsa ka go aroganya go fitlha go 100 ka dikarabo tse di akaretsang sesala O dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 • Le go tlhalosa dikarabo tsa gago go dipalo
	Dipalelo	Arola dipalo go 99 ka 2, 4, 5, 10, 3
	Tšhelete	Rarabolola dipalo tsa tšhelete e tsenyeletsa palogotlhe le tšhentšhi ka diranta kgotsa ka disente
Dipaterone tiriso le alejebera	Dipaterone tsa dipalo	Feleletsa dipalo tatelano ka go balela kwa pele le kwa morago • Ka bonngwe magareng ga 0 le 1000 s.K. 889, 890, 891, , __, __, __, 895 __, ___, ___, 889__, __, 892 • Ka bosome magareng ga 0 le 1000 s.K. 1000, 990, 980 __, __, 950, __, __.920, __, __, 890
Tekanyetso	Nako	Dirisa tshupanako go balela boleele jwa go feta ka diura le metsotso

Mophato 3 Kgweditharo 4: Sekao sa Tirwana Tlhatlhobo 2

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo tiriso le kamano	Tlhaloganyo ya dipalo	Balela kwa pele le morago ka 2s, 4s , 3s go 1 000
		Bala le go kwala tlhakapalo go tloga go ya go1 000
	Dipalelo	Dira tlhakanyo go filhelela go 999 o dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 Kwala dipalopolelo o dirisa +, =
		Dira tloso go filhelela go 999 kgotsa nnye go o dirisa nngwe ya tse di latelang • Go aga le go aroganya dipalo • Melapalo • Go oketsa gabedi le go hafola • Atametsa go 10 Kwala dipalopolelo o dirisa -, =
Dipaterone tiriso le alejebera	Dipalo tsa dipaterone	Feleletsa tatelano ya dipalo • Balela ka bopedi magareng ga 0 le 1 000 s.K. 1000, 998, 996, __, __, 990, __, __, 984 • Balela ka bonne magareng ga 0 le 1 000 s.K. 840, 844, 852 __, __, 864, __, 872, __, __, __, 894 • Balela ka botharo magareng ga 0 le 1 000 s.K. 960,963, 966, 969, 971, __, __,980, __, __,__, 691
Boalo le popego	Tekano	Lemoga le go thala mola wa tekano mo popegong ya tlhakorepedi mo dipopegong tsa jeometeri le tse eseng jeometeri
Tlhagiso ya tshedimosetso	Tshedimosetso	Araba dipotso ka tshedimosetso ya kerafo ya setshwantsho

MOPHATO 3 Kgweditharo4: Tirwana ya sekao sa tlhatlhobo 3

Karolo ya diteng	Setlhogo	Ditlhokego
Dipalo, tiriso le kamano	Tlhaloganyo ya palo	Balela kwa pele ka 5s, 50s, 25s mo gareng ga 0 le 1 000
	Rarabolola dipalo	Rarabolola dipalo mo tirisong go tsenyeletsatlhakanyo e boeletswang e tsaelang kwa go atiseng ka dikarabo tse di fitlhang kwa go 50 go dirisiwa tse di latelang • Didiriswa/dithusathuto • Ditshwantsho • Molapalo • Koketso gabedi le go hafola • Go aga dipalo le di aroganya Le go tlhalosa karabo tsa dipalo
	Dipalelo	Go ka atisiwa ka 3 go fitlha go 99 go dirisiwa dingwe ya tse di latelang • Didiriswa/dithusathuto • Ditshwantsho • Molapalo • Koketso gabedi Kwala dipolelopalo go dirisiwa x, =
Tiriso ya dipaterone le alejebera	Dipaterone tsa dipalo	Feleletsa tlhatlhamano dipolelopalo tse : • O bala ka botlhano gareng ga 0 – 1000 s.K. 1 000, 995, 990, 985, __, __, __, 965, __, __, 950 • O bala ka masome a matlhano gareng ga 0 – 1000 s.K.600, 650, 700, __, __, 850, __, __, __, • O bala ka masome a mabeditlhano gareng ga 0 – 1000 s.K.1 000, 975, 950, __, __, 875, __, __, __, 775
Boalo le popego	Popegotlhakoretaro 3-d	Lemoga maina a • Popego ya bolo (bolo) • Popego ya lebokose (poreseme) • Selentara • Dipiramiti • Dikhounu
		Tlhaola didiriswa go ya ka tse di nang letlhakore le le sephaphathi letlhakore le kobegang
		Tlhopha dipopego tlhakorepedi tse di dirang letlhakore le sephaphathi mo sedirisweng sa popego ya tlhakoretharo e umakilweng fa godimo
Tekanyetso	Mothamo le bolumu	Buisa bolumu ka diletara go tloga mo ditshwantshong tsa dijeke tse di lekanyetsang
		Buisa bolumu ka dimililetara go tloga mo ditshwantshong tsa dijeke tse lekanyetsang