basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

IIMVAVANYO ZONYAKA NONYAKA KUZWELONKE

IBANGA 2

IMATHEMATIKA- ISIXHOSA

ULUHLU 3: 2012 IPHEPHA ELINGUMZEKELO

Isikhokelo sokusebenzisa imizekelo ka-ANA

1. Umbono jikelele

Uvavanyo lonyaka nonyaka (ANA) luvavanyo oludibeneyo lolwazi nezakhono ezifanele ukuphuhliswa, kubafundi bebanga lo-I ukuya kwele-6 kunye nele-9. Ukuncedisana novavanyo oluqhutywa esikolweni nokuqinisekisa ukuba abafundi bazithemba ngokwaneleyo ukuze bathathe inxaxheba ngempumelelo kwiimvavanyo zangaphandle,uluhlu lootitshala kunye neencutshe kwizifundo bavelise iimvavanyo eziyimizekelo ezinokusetyenziswa ngootitshala kwizifundo zoLwimi Lwasekhaya neMathematika. Unikwe imibuzo yemizekelo yemvavanyo ethatyathwe kumsebenzi wesikolo wonyaka wekharityhulam ukusuka kwikota yokuqala, eyesibini neyesithathu, kunye nesiboniso esipheleleyo sovavanyo (ANA) sebanga ngalinye. Imizekelo yovavanyo equka nesiboniso esipheleleyo soviwo zongeza kuvavanyo oluqhubekayo esikolweni olwenziwa qho kubafundi nekufuneka lungayekwa.

2. Unxulumano namanye amacebiso okufunda nokufundisa

Ngenxa yokubaluleka kokudibanisa eyindlela yokufundisa, eminye imibuzo ekwimizekelo yeemvavanyo inxulunyaniswe neeNcwadi Zomsebenzi ngokwamabanga. Imizekelo yeemvavanyo ilinganiswe neemfuno zekharityhulam, kusetyenziswe amaxwebhu ekharithyulam i-National Curriculum Statement Grades R-12 (NCS) ne-Curriculum and Assessment Policy Statements (CAPS) kumabanga ngamabanga, kusetyenziswe nendlela yokuhlola esemthethweni (National Protocol for Assessment). La maxwebhu ewonke kunye nalawo isikolo siwanika utitshala ukuze enze amacebiso angawo okunceda utitshala xa elungiselela izifundo kwakunye naxa esenza uvavanyo olusesikweni.

3. Unxulumaniso nezinye izixhobo zokufunda nokufundisa

Ukuze kubekho unxulumano olufanelekileyo, eminye imizekelo yezicatshulwa nemibuzo idityaniswe kwiincwadi zokusebenzela zamabanga ngamabanga ezingqale kumgangatho wabafundi. Le mizekelo ilungelelanisiwe ukuze iqwalasele iimfuneko zeNkcazelo yeKharityhulam yeSizwe yamabanga R ukuya ku 12 (NCS), iinjongo zekharityhulam, iNkcazelo yePolisi yeKharityhulam enxulumene namabanga abafundi kunye nendlela yokuhlola esemthethweni. Yonke le miqulu kwakunye neminye imiqulu enokufumaneka esikolweni izizixhobo ezingundoqo ezinokusetyenziswa ukuncedisa ootitshala njengoko bequlunqa izifundo belawula nohlolo olungundoqo (uhlolo olukhulisayo).

4. Isetyenziswa njani imizekelo yovavanyo

Nangona imizekelo yovavanyo yebanga ngalinye nesifundo ngasinye yenziwe yaza yadityaniswa utitshala akanyanzelekanga ukuba abafundi abaphendulise ngexesha elinye. Utitshala makakhethe umzekelo onombuzo onxulumene nesifundo asilungiseleleyo. Imibuzo ekhethwe kumzekelo vavanyo okanye iqela lemibuzo enokuphenduleka ngexesha elinye ingasetyenziswa ngokuye kukhula ukufunda nokufundisa ngolu hlobo:

4.1 Ekuqaleni kwesifundo, njengovavanyo lokuqonda nokwahlula izinto abafundi abakwazi ukuzenza/abazaziyo nezo bangakwazi ukuzenza/bangazaziyo. Ukuqonda lo mahluko kukhokhelela ekubeni abafundi bacoselelwe ukufundiswa nokuze kwakhiwe izifundo ezilungele ukulungisa ezo ngxaki banazo baze baphucule ukuqonda. Olu vavanyo lokuqonda lungenziwa umsebenzi wasekhaya ukonga ixesha.

4.2 Kwisifundo phakathi, uvavanyo olucwangcisiweyo lusetyenziswa ukuvavanya ukuba ulwazi nezakhono zabafundi ziyaphuhla na. Njengoko isifundo siqhuba lukwasetyenziswa ukuvavanya nokuqinisekisa ukuba akukho mfundi ushiyekayo kwisifundo.

4.3 Ukugqibezela isifundo okanye iqela lezifundo uvavanyo oludityanisiweyo luyenziwa ukuvavanya ukuba abafundi bayaqonda kwaye bayakwazi ukusebenzisa ulwazi nezakhono abazifumene kwizifundo.Inkcaza yokuba abafundi baqhube njani mabayinikwe ngoko nangoko, ngelo xesha utitshala wenza isigqibo ngeendawo ezifuna ukuphindwa kwisifundo okanye kwizifundo ukuncedisa ulwazi okanye izakhono ezingaphuhlanga.

4.4 Kuwo onke la manqanaba makusetyenziswe iindlela ngeendlela zokubuza, umz. indlela yokuphendula ngokukhetha kwiimpendulo azinikiweyo, imibuzo efuna impendulo yakhe, imibuzo efuna impendulo emfutshane, njalo-njalo.

Nangona uvavanyo lokufumana ukuqonda novavanyo lokwakha ulwazi lusenokuba lufutshane ngokwemibuzo, uvavanyo oludityanisiweyo lunokuquka imibuzo emininzi kuxhomekeka kumsebenzi osele wenziwe. Okubalulekileyo kukuqinisekisa ukuba abafundi baqhelaniswa nendlela yokuphendula uvavanyo olupheleleyo olufana novavanyo lukazwelonke lonyaka nonyaka (ANA).

5. Imemorandam okanye iindlela zokuphendula

Umzekelo wendlela yokuphendula okanye iimpendulo ezilindelekileyo zilungiselelwe kumzekelo wovavanyo.Ootitshala mabakhumbule ukuba imemorandam ayiniki mpendulo igqibeleleyo, Imemorandam inika nje kuphela iimpendulo ezilindelekileyo, ngoko utitshala angamnika umfundi amanqaku ngeempendulo ezahlukeneyo, ezivumelekileyo ezinikwe ngabafundi.

6. Ukugutyungelwa kwekharityhulam

Kunyanzelekile ukuba ikharityhulam igutyungelwe yonke kwibanga ngalinye. Imizekelo yovavanyo yebanga ngalinye ayimeli ikharityhulam, ikhupha nje iisampula zovavanyo lolwazi nezakhono ezibalulekileyo kwaye zezomsebenzi wekota yokuqala ukuya kweyesithathu yonyaka Isantya sokusebenza somsebenzi ekufuneka wenziwe sinikezelwe kumaxwebhu ekharityhulam (CAPS DOCUMENTS).

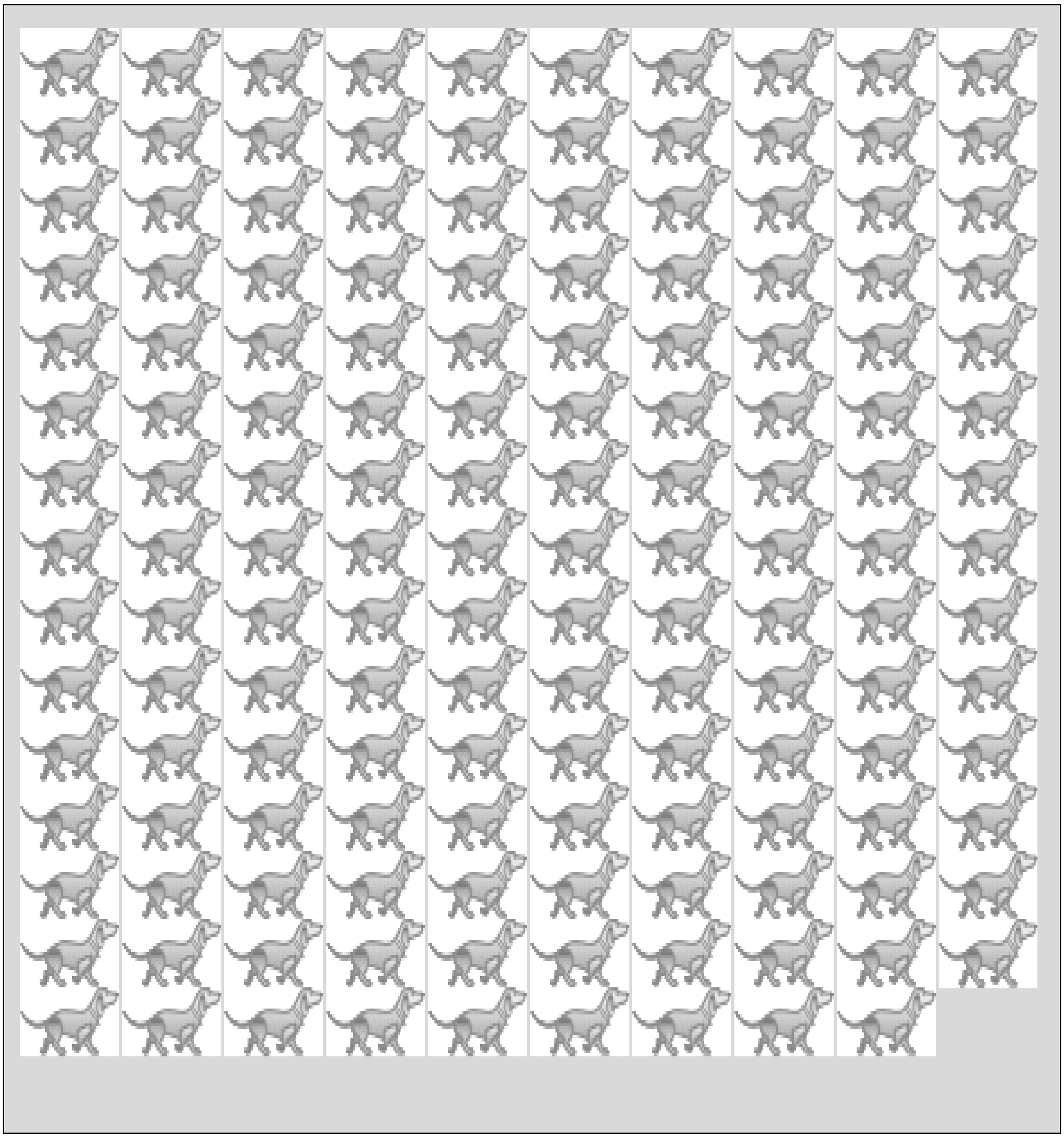
7. Ukuphetha

Injongo yeSebe leMfundo kukuphucula nokwakha ezona zisekelo zibalulekileyo, ukufunda nokubala kwabafundi.Uvavanyo lonyaka nonyaka sesinye sezixhobo iSebe leMfundo esisebenzisa ukuqaphela ukuba umgangatho wabafundi uyenyuka,uhleli ndawonye okanye uyehla. Izithili nezilkolo kulindeleke ukuba zincedise ootitshala kwaye zidlulise amacebo aluncedo ukuphucula ukufunda nokufundisa ezikolweni. Ngokusebenzisa imizekelo yokuvavanya njengelinye icebiso lokufundisa, ootitshala baza kunceda abafundi baqhelane neendlela nobuchule bokuvavanya.

Ukusetyenziswa kwale mizekelo kuya kunceda abafundi bafumane ulwazi olufanelekileyo baze baphuhlise nezakhono ezinxulumene nokufunda ukuze baphucule kuvavanyo lukazwelonke olulandelayo.

1. Amanani, iophareyishini nolwalamano.

Jonga imifanekiso uze uphendule imibuzo.



a. Bala izinja uze ubhale ukuba zingaphi zizonke. _____________
b. Mangaphi amaqela ezihlanu ezinja akhoyo? _________
c. Mangaphi amaqela amashumi ezinja akhoyo? _________
d. Mangaphi amaqela ezibini ezinja akhoyo? _________

e. Mangaphi amaqela oonontathu ezinja akhoyo? _________
f. Mangaphi amaqela ezine ezinja akhoyo?_________

2. **Fakela amanani ashiyiweyo.**

a. 162; ______; ______; 168; 170; _______

b. 152; 155; ______; ______; 164; _______

3. **Gqibezela ezi patheni zamanani.**

a. 170; _____; 150; _____; 130; ______; 110

b. 105; 110; _______; 120; _____; 130; _______140

4. **Bhala iimpawu zala manani magama.**

a. Ikhulu elinamashumi asibhozo _________

b. Ikhulu elineshumi elinanye ________

c. Ikhulu elinamashumi amathandathu anesithandathu ________

5. **Bhala amanani magama ala manani.**

a. 44 ____________________________________

b. 68 ____________________________________

c. 27 ____________________________________

d. 73 ____________________________________

e. 59 _____________________________________

6. **Zoba imigca ukutshatisa amanani namagama amanani.**

a. 49	ashumi elinesibhozo
b. 55	amashumi asixhenxe anesine
c. 33	amashumi amathandathu anesithathu
d. 74	amashumi amahlanu anesihlanu
e. 18	amashumi amane anethoba
f. 63	amashumi amathathu anesithathu

7. **Biyela inani elincinci kwisibini ngasinye.**

a. 21; 12

b. 55; 33

c. 46; 64

d. 32; 23

e. 73; 37

8. **Landelelanisa amanani ukusuka kwelikhulu ukuya kwelincinci.**

a. 10 17 25 43 38

______ ______ _______ ______ ______

b. 53 35 75 57 55

______ ______ _______ ______ ______

c. 40 63 25 73 68

______ ______ _______ ______ ______

9. **Landelelanisa amanani ukusuka kwelincinci ukuya kwelikhulu.**

a. 11 33 66 55

______ ______ _______ ______

b. 53 35 47 74

______ ______ _______ ______

d. 24 61 42 16

______ ______ _______ ______

10. Kwinani u **73**

a. Ixabiso lika **7** ngama _______

b. Ixabiso lika **3** sisi _______

11. **Bala usebenzisa ukuphindaphinda.**

Umzekelo: 24 + 25 = 25 + 25 - 1 okanye 24 + 25 = 24 + 24 + 1

= 50 - 1 = 48 + 1

= 49 = 49

a. 28 + 29 =

b. 36 + 37 =

12. **Bala ngokucazulula amanani.**

Umzekelo: 29 + 34 = 20 + 9 + 30 + 4

= 20 + 30 + 9 + 4

= 50 + 13

= 63

a. 41 + 33 =

b. 52 + 19 =

c. 86 - 42 =

13. **Bhala ihafu yenani.**

	Inani	**Ihafu yenani**
a.	124	
b.	116	
c.	162	

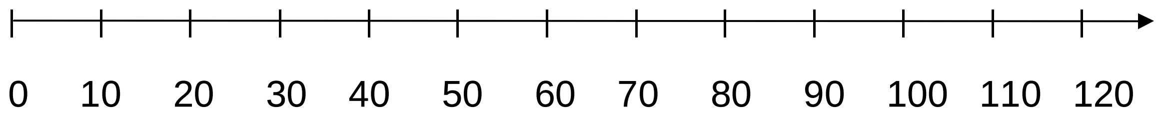
14. **Phinda kabini inani olinikiweyo.**

	Inani	Inani eliphindiweyo
a.	19	
b.	26	
c.	37	

15. **Sebenzisa umgca manani**

a. ukudibanisa u 40 no 30.

b. ukuthabatha u 30 ku 110.



16. **Ukusombulula ingxaki (izibalo zamagama)**

Phendula imibuzo elandelayo.

a. UTim ebenamapetyu angama 94. Ulahle amapetyu angama 30. Mangaphi amapetyu ashiyekileyo?

Amapetyu ashiyekileyo =____________

b. UThoko ebenee lekese ezingama 52. Uthenge ezinye ezingama 20 ngaphezulu. Zingaphi iilekese anazo ngoku u Thoko?

Inani leelekese = _________________

c. UJames uchole ii orenji ezingama 74 waze u Ben wachola ihafu yee orenji ezicholwe ngu James. Zingaphi iiorenji ezicholwe ngu Ben?

UBen uchole ii orenji ezi____________.

d. UThembi, uLorraine, uMandla no Paul emnye kubo uneelekese ezili 18. Zingaphi iilekese abanazo zizonke?

Inani leelekese=______________

17. **Ukwehlula ngamaqela nokwabelana**

☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
☺	☺	☺	☺	☺	☺	☺	☺	☺	☺
☺	☺	☺	☺	☺	☺	☺	☺	☺	☺

Jonga izintlu zobuso ezingentla uze ugqibezele isivakalisi ngasinye.

a. Kukho imiqolo emi 5 umqolo ngamnye unobuso obu ______.

b. Bubonke ubuso bungama _____.

18. a. UBongani kufuneka afake iibhisikithi ezingama 54 kwiipakethe, ipakethe nganye ibeneebhisikithi ezili 9. Zingaphi iipakethe anokuzena?

____

b. Ukuba i R96 yahlulelwa a bantu aba 8 ngoku linganayo umntu emnye uzakufumana malini?

____

c. Kwiklasi yebanga lesi 2 kukho amakhwenkwe angama 34.
Inani lamantombazana linani lamakhwenkwe liphindiwe. Mangaphi amantombazana akule klasi?

____

19. **Phendula imibuzo elandelayo.**

a. Yahlula imilo engentla ibe ngamacala ama 2 alinganayo.

b. Khuhla ikota yolu xande.

Imali

20. **Ggibezela le theyibhile.**

	Ixabiso	Ubhatele	Itshintshi
a.	R71,00		R4
b.		R20	R6
c.	R43,00	R50	

21. UBetty uthenga incwadi exabisa i R6.50. Ubhatala ngama R20. **Biyela itshintshi yakhe?**

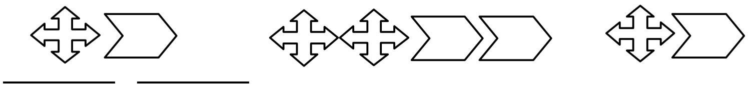
A. R14.00 B. R12.00 C. R13.50 D. R13.00

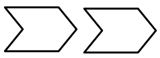
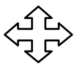
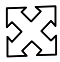
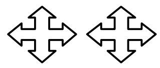
22. UPiet une R21.00 uJack une R14.00. Bayidibanisile imali yabo ukuthenga ibhola exabisa i R32.00. Kufuneka befumene itshintshi yamalini?

R ____________________

23. **Iipatheni**

Biyela imilo elandelayo kwipatheni.



A  B  C  D 

24. **Bhala amanani ama-3 alandelayo kulandelelwano lwamanani.**

a. 132; 122; _____; _____ ; 92 ;_____

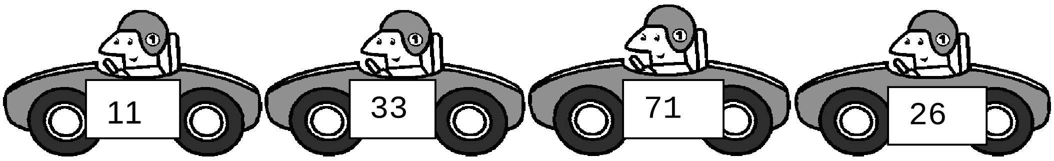
b. 180; 175; _____; _____; 160; ______

c. 96; 98; _____; _____; 104; ______

d. 80; 84; 88; _____; _____; ______

e. 96; 99; _____; 105; ____; 111;_____

Indawo.

25. 

Nazi iimoto ezi-4 zime ngomkrozo.

Gqibezela

a. Imoto enenombolo u _____ ingaphambili.

b. Imoto enenombolo u _____ nenenombolo ____ zisemva kwemoto engunombolo u 33.

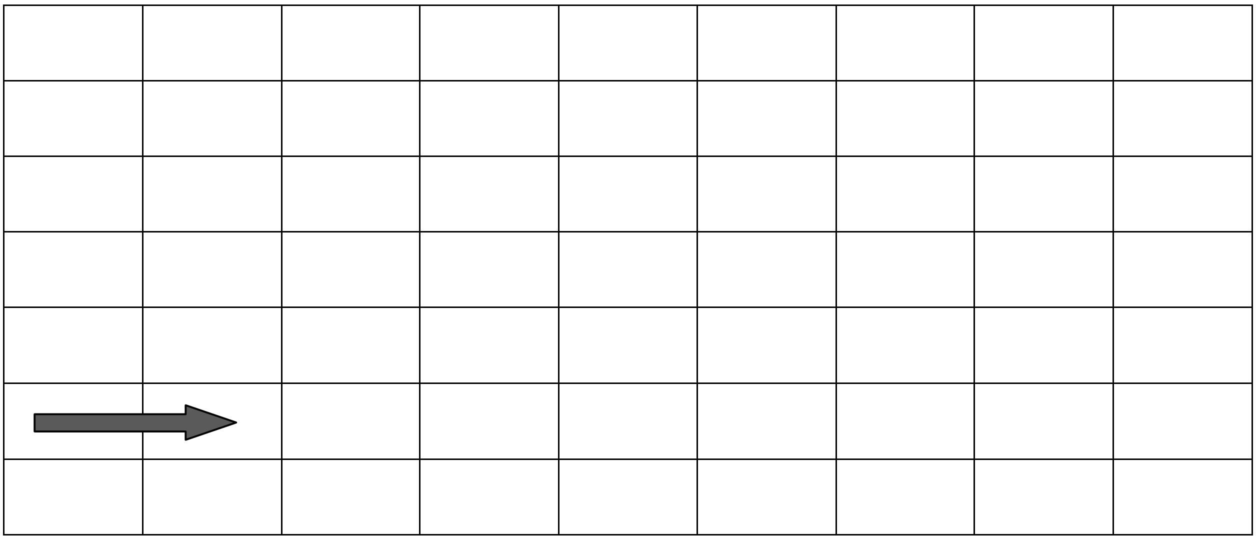
c. Imoto enenombolo u ______ isemva kwemoto enenombolo u 71.

d. Imoto enenombolo u ______ ingaphambili kwemoto enenombolo engu 33.

26. UKate usuka kowabo aye esikolweni ngebhasi. Itheyibhile ibonisa indlela nobude abuhambayo, kwaye iboniswe ngeebloko.

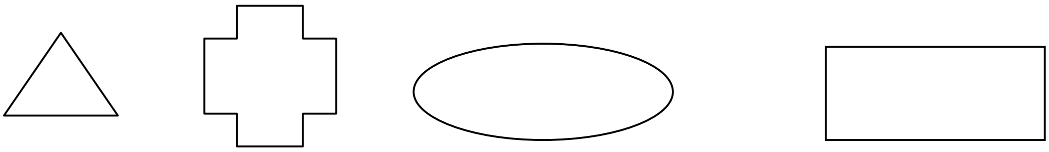
2	5	4	3	2	1	5
→	↑	→	↓	←	↓	→

Sebenzisa ulwazi olukule theyibhile ingentla uhambe ngeebhloko kele ndlela ahambe ngayo. Eyokuqala uyenzelwe.

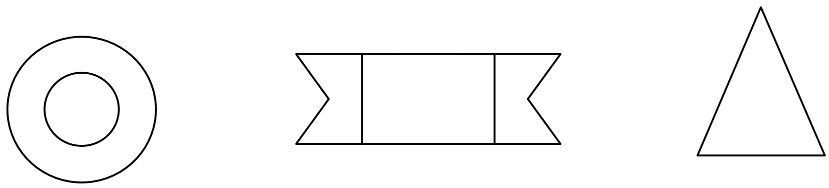


Imilo

27. **Phawula imilo enamagophe angqalileyo.**

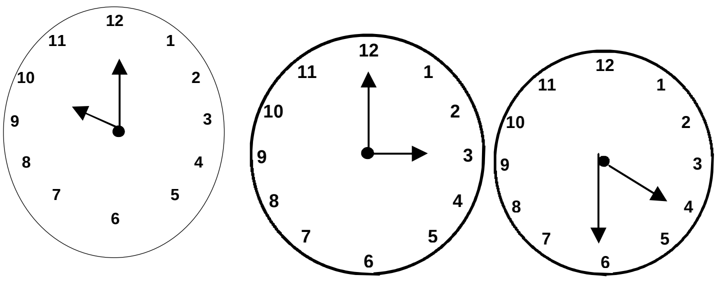
a. 

Zoba umgca wolingano macala kwezi milo zilandelayo.

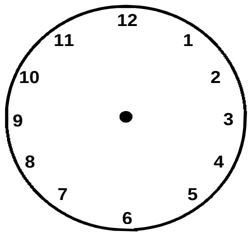
b. 

Ixesha

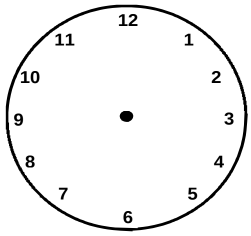
28. **Bhala ixesha eliboniswe kwezi wotshi zilandelayo.**



29. **Zoba usiba olubonisa imizuzu nolubonisa iiyure kwezi wotshi zilandelayo ukubonisa ixesha olinikiweyo.**



Intsimbi yesi 6



Icala emva kwentsimbi ye 4

30. USindi umka kowabo ngentsimbi yesi 6 kusasa. Ufika esikolweni ngentsimbiyesi 8. **Zingaphi iiyure azichithileyo endleleni?**

____

31. **Bala inani leeyure ukusuka**

a. Kwintsimbi yesi 7 ukuya kwintsimbi ye 12 ______________.

b. Kwintsimbi ye 12 ukuya kwintsimbi yesi 7. ______________.

c. Kwicala emva kwentsimbi yesi 4 ukuya kwicala emva kwentsimbi ye 9. _____________.

d. Kwintsimbi yesi 6 ukuya kwicala emva kwentsimbi ye 12. _____________.

32. a. Loluphi usuku oluza emva kweentsuku ezi 4 emva kweCawe? __________

b. Umhla wokuzalwa kaKen ubukwiintsuku ezisi 7 emva komhla we14 kuJuni. Ubunini umhla wakhe wokuzalwa? __________.

c. Yeyiphi inyanga eza emva kwenyanga ezi 5 emva ko Agasti? ____________.

d. Yeyiphi inyanga eza phambi kwenyanga ezi 6 phambi koNovemba? ____________.

e. Bhala igama leyona nyanga imfutshane enyakeni. ____________.

33 **Umlinganiselo**

Vavanya ubude bemigca emi 5 engezantsi ukujonga ukuba umgca ngamnye umde kangakanani.

Umgca A ________

Umgca B _____________

Umgca C _____________

Umgca D __________________________

Phendula ngaphandle koku linganisa imigca.

a. Umgca ________ ngowona mde.

b. Umgca ______ ngowona mfutshane.

c. Umgca _____ nomgca _____ iyalingana.

Umthamo

34. **Biyela impendulo echanekileyo.**

Ubisi lulinganiswa ngee :

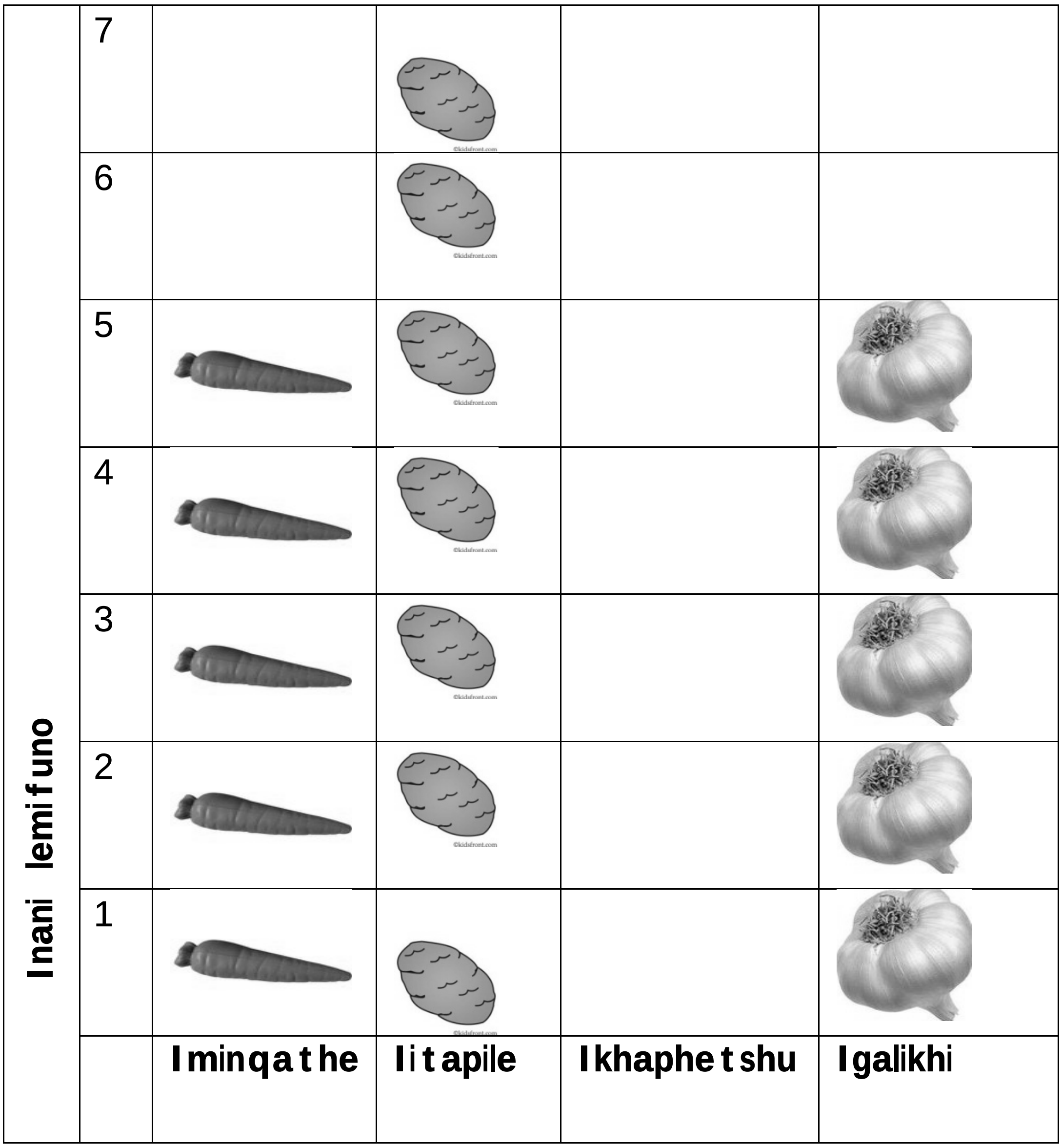
A litha B khilogrem C khilomitha

35. **Biyela impendulo echanekileyo. Isiselo silinganiswa ngee:**

A grems B mililitha C khilogrems

Ukusebenza ngolwazi.

36. Igrafu yemifanekiso ibonisa inani lemifuno ethengiswe emarikeni.



Imifuno ethengiswe ngosuku olunye emarikeni

Jonga igrafu yemifanekiso uze uphendule imibuzo

a. Yeyiphi imifuno ethengiswe kakhulu?_________________.

b. Yeyiphi imifuno engathengiswanga? _______________.

c. Zingaphi iigalikhi ezithengisiweyo? _____________.

d. Mingaphi imfuno ethengisiweyo iyonke?_____________.