



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

UVAVANYO LONYAKA NONYAKA KUZWELONKE 2015
ISIKHOKELO SOHLOLO
MATHEMATIKA: ISIXHOSA
IBANGA LESI-2

INTSHAYELELO

Umjikelo wonyaka wama 2015 wovavanyo loNyaka nonyaka kuZwelonke (ANA 2015) uza kunikezelwa uze ubhalwe kuzo zonke izikolo zikawonke-wonke nezo zizimeleyo ukusukela kuSeptemba 2015. Ngeli xesha bonke abafundi bebanga loku-1-3 baza kubhala uvavanyo lukaZwelonke loLwimi neMathematika (Izibalo). Iziphumo ziya kusetyenziswa ukunika ingxelo malunga nenkqubela enxulumene nokuphunyezwa kweenjongo ebezisekwe kwisicwangciso sokusebenza sama-2014, esibhekiselele kwimfundo yama-2025 (*Action Plan 2014 Towards Schooling 2025*).

IiMvavanyo zoNyaka nonyaka kuZwelonke (ANA) ziza kubhalwa kwikota yesithathu, ngoko ke iSebe leMfundo esisiSeko (DBE) lenze amaxwebhu asisiKhokelo soHlolo sebanga nesifundo ngasinye (uLwimi neMathematika) acacisa umxholo wekharithulam ekulindeleke ukuba ube ufundiwe ngabafundi phambi kokuba babhale uvavanyo. IziKhokelo zoHlolo zicacisa umyinge womsebenzi ekufanele ukuba ugqityiwe kwibanga ngalinye nesifundo ngasinye. Isikhokelo soHlolo seeMvavanyo zoNyaka nonyaka kuZwelonke 2015 (ANA 2015) silungiselelwe ukuba sihambelane nekharithulam esetyenziswa kwesi sigaba.

ISIGABA ESISISEKO

Kwibanga loku-1-3, iimvavanyo ziya kuquka umsebenzi omiselwe ukwenziwa kwikota ezintathu zokuqala zonyaka. IziKhokelo zoHlolo zicwangcise ngokweekholam ezintathu: Umandla womxholo ufumaneka kwikholam yokuqala, izihloko kwikholam yesibini, izakhono/Ubuchule obuHlolwayo kwikholam yesithathu.

Kubalulekile ukuqaphela ukuba isikhokelo soHlolo seeMvavanyo zoNyaka nonyaka kuZwelonke 2015 (ANA 2015) asithethi kuthi lo myinge uncitshisiweyo kukuphela kwekharithulam ekufanele ukuba mayifundiswe ngonyaka. Endaweni yoko, izikhokelo zoHlolo zinika umlinganiselo omncinane weemfuneko zekharithulam ekufanele ukuba ugqityiwe ekupheleni kwikota yesithathu esikolweni.

Kulindeleke ukuba ootitshala basebenzise ezi ziKhokelo zoHlolo kunye nezinye izixhobo xa befundisa naxa besebenzisa iinkqubo zokuhlola ukuze abafundi baqhelane neendlela ngeendlela zohlolo.

UMMANDLA WOMXHOLO	IZIHLOKO	IZAKHONO/UBUCHULE OBUHLOLWAYO ukuvavanya ukuba abafundi banako:
AMANANI, IOPAREYISHINI NOLWALAMANO	Bala usiya phambili nasemva	Ukubala usiya phambili nasemva nge: <ul style="list-style-type: none"> • Nge1s, 10s, 5s, 2s, 3s kunye ne-4s nakweliphi inani phakathi kuka 1 kunye no-180
	Iisimboli zamanani namagama amanani	Bhala iisimboli zamanani ukusuka ku 0-180 Bhala amanani ngamagama ukusuka ku 0-75
	Ukuchaza, uthlekise noku landelelanisa amanani	ukuthlekisa amanani apheleleyo ukuya ku-75 usebenzisa incinci kune, inkulu kune, ngaphezu kune, ngaphantsi kune kunye nozilingana. ukulandelelanisa amanani apheleleyo ukusuka kwelona lincinane ukuya kwelona likhulu kwakhona ukusuka kwelona likhulu ukuya kwelona lincinane.
	Ixabiso lendawo elimi kuyo inani	Ukwahlula ngamacandelo amanani amalungu mabini abe ziziphindwa zeshumi nemivo/oonye. ukuchonga nokuxela ixabiso ledijithi nganye.
	Ukudibanisa nokuthabatha	Sebenzisa iisimboli ezichanekileyo (+, -, =) <input type="checkbox"/> Dibanisa ukuya ku-75 Thabatha ukusuka ku-75
	Ukudibanisa okuphindaphindiweyo okukhokelela kuphindaphindo	Ukuphinda-phinda amanani u-1 ukuya kwi- 10 nge- 2, 5 ne-4 ukusebenzisa iisimboli ezichanekileyo (+, -, = ,) <input type="checkbox"/>

UMMANDLA WOMXHOLO	IZIHLOKO	IZAKHONO/UBUCHULE OBUHLOLWAYO ukuvavanya ukuba abafundi banako:
	Ukudibanisa okuphindaphindiweyo okukhokelela kuphindaphindo.	ukubala usebenzisa ukudibanisa okuphinda-phindiweyo neempendulo ukuya ku-40 (iingxaki zezibalo zamazwi) Ukusombulula izibalo ezithethayo ezibandakanya ukwahlula ngokulinganayo namanani apheleleyo ngokwamaqela ukuya ku-40 obandakanya iimpindulo ezinentsalela.
	Amaqela nokwahlula	Sombulula izibalo ezithethayo ubandakanya ukwahlula ngokulinganayo kunye namanani apheleleyo ngokwamaqela ukuya ku-40 obandakanya iimpindulo ezinentsalela.
		Ukusombulula izibalo zamazwi kwimeko ethile nokucacisa indlela osombulule ngayo okubandakanya ukwahlula ngokwamaqela nangokulinganayo iimpindulo zingedluli kuma- 40 ezinokuquka iintsalela.
	Amaqhezu	ukunakana amaqhezu akwimo yomzobo ukusebenzisa nokubiza amaqhezu abandakanya iziqingatha, iikota, isinye kwisithathu, nesinye esihlanwini bhala amaqhezu njengesiqingatha esi-1, izinye ezithathwini ezi-2 esithathwini
	Imali	ukusombulula izibalo zemali ezibandakanya imali yonke netshintshi ngeesenti ukuya kwi-75 neerandi ezingama-75 Ukunakana nokuchonga imali eziinkozo yaseMzantsi Afrika: 5c, 10c, 20c, 50c, R1, R2, R5, nemali engamaphepha R10, R20, R50
lipateni, ilfankshini ne Aljibra	lipateni zejijometri	ukukopa bandise iipateni ezilula ezenziwe ngokukrwela imigca ukwenza imilo okanye into.

UMMANDLA WOMXHOLO	IZIHLOKO	IZAKHONO/UBUCHULE OBUHLOLWAYO ukuvavanya ukuba abafundi banako:
	lipateni zamanani	<p>ukukopa bandise ukulandelelana kwamanani alula ukuya ebuncinaneni kwi-180 ngokubala usiya phambili nokubuya umva :</p> <ul style="list-style-type: none"> - kono-1 ukusuka kulo naliphi na inani phakathi kwe-0 ne 180 - kwi-2 ukusuka nakwesiphi isiphindwa sesi-2 phakathi kwe-0 ne 180 - kwisi-3 ukusuka kuso nasiphi na isiphindwa sesi-3 phakathi kwe-0 ne 180 - kwisi-4 ukusuka kuso nasiphi na isiphindwa sesi-4 phakathi kwe-0 ne-180 - kwisi-5 ukusuka kuso nasiphi na isiphindwa sesi-5 phakathi kwe-0 ne-180 - kwi-10 kusuka kuso nasiphi na isiphindwa se-10 phakathi kwo-0 ne-180
Isithuba nemilo	Indawo-bumilo, ukufumana indawo nembonakalo.	landela imiyalelo ukuhamba apha kWigumbi lokufundela
	Izinto ezinokwakheka kuka 3-D	<p>ukunakana nokubiza ngamagama izinto ezinokwakheka kuka 3-D emifanekisweni.</p> <ul style="list-style-type: none"> - iimilo ezifana nebhola, (ezingqukuva) - iimilo ezinjengebhokisi (iiprizimu) - iisilinda <p>chonga izinto zejiyometri nezemihla ngemihla ngokuxela ukuba zimile njengebhola, njengebhokisi okanye njengesilinda.</p> <p>Ukuthelekisa izinto ezinokwakheka kuka 3-D ngoko: bungakanani, izinto eziqengqelekayo nezinto ezitshibilizayo.</p>

UMMANDLA WOMXHOLO	IZIHLOKO	IZAKHONO/UBUCHULE OBUHLOLWAYO ukuvavanya ukuba abafundi banako:
	<p>limilo ezinokwakheka kuka 2-D</p>	<p>ukunakana nokubhala iimilo ezinokwakheka kuka 2-D</p> <ul style="list-style-type: none"> - izangqa - oonxantathu - izikwere - uxande <p>ukuthelekisa iimilo ezinokwakheka kuka 2-D ngoko: ubungakanani, umbala, imilo, amacala angqalileyo (straight) namacala angqukuva (round).</p>
	<p>Umgca wolingano-macala (isimetri)</p>	<p>ukunakana baze bazobe umgca ngokolingano-macala kwiimilo zejiyometri nezingeyiyo ijiyometri enokwakheka kuka 2-D.</p>
Umlinganiselo	<p>Ixesha</p>	<p>ukubiza nokulandelelanisa iintsuku zveeki. ukubiza nokulandelelanisa iinyanga zonyaka. ukuxela ixesha leeyure ezili- 12, ngeeyure neziqingatha kunye neekota zeeyure usebenzisa iwotshi yosiba. ukubala ubude bexesha nokudlula kwexesha.</p>
	<p>Umthamo/Ivolumu</p>	<p>ukuthatha umlinganiselo, ukuthelekisa, ukulandelelanisa nokurekhoda umthamo wezikhongozeli (umthamo onokuthwalwa zizikhongozeli) esebenzisa imilinganiselo enjengamacephe neekomityi. ukuthatha umlinganiselo, ukuthelekisa, ukulandelelanisa nokurekhoda umthamo wezikhongozeli ngeelitha usebenzisa:</p> <ul style="list-style-type: none"> - iibhotile ngomthamo welitha enye - umlinganiselo wejagi enamaqoqo omlinganiselo angeelitha ngaphandle.

UMMANDLA WOMXHOLO	IZIHLOKO	IZAKHONO/UBUCHULE OBUHLOLWAYO ukuvavanya ukuba abafundi banako:
	Umthamo (Ubunzima)	ukuthatha umlinganiselo, ukuthelekisa, ukulandelelanisa nokurekhoda ubunzima esebenzisa isikali nemilinganiselo engekho sesikweni umz. iibhloko, izitena. ukusebenzisa ulwimi olusulungekileyo ethelekisa, umz. ilula, inzima, ilula kunenye ,inzima kunenye.
Ukusebenza ngolwazi oluqokelelweyo	Ukubonisa, ukucalula nokutolika ulwazi	ukubonisa ulwazi usebenzisa imifanekiso etshatisiweyo ukuphendula imibuzo malunga nolwazi lokutshatisa imifanekiso.