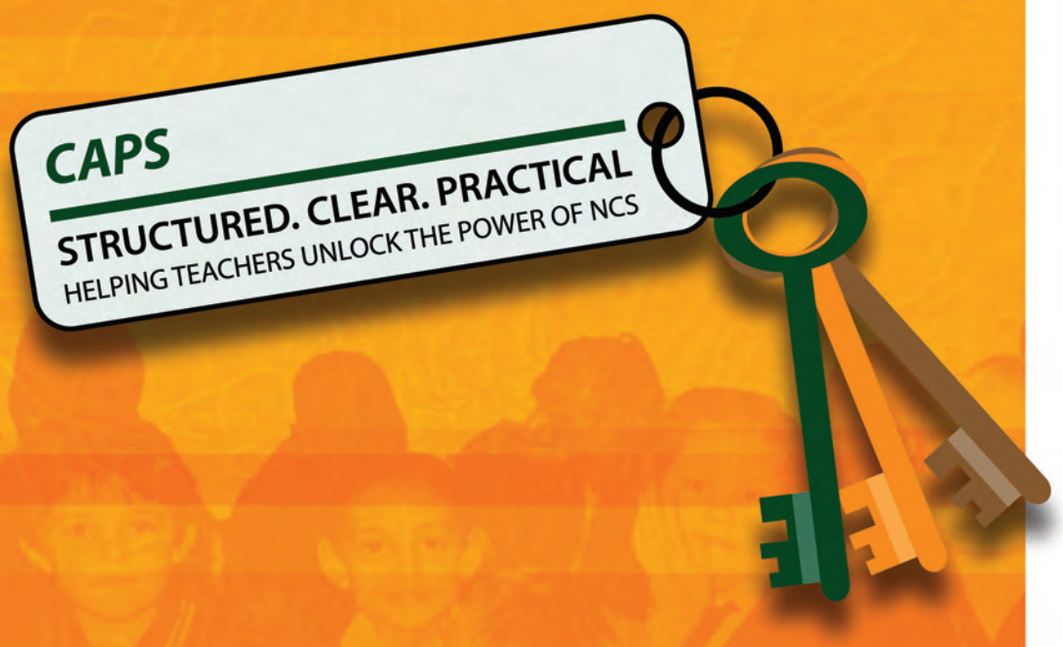
SISWATI MATHEMATICS

National Curriculum Statement (NCS)

Curriculum and Assessment Policy Statement



Foundation Phase
Grade R

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SITATIMENDE SENCHUBOMGOMO YEKHARIKHULAMU NEKUHLOLA

EMABANGA R

TIBALO

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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

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SIBANGA 1: ISINGENISO NESENDLALELO

1.1 SENDLALELOLWATI

Sitatimende seKharikhulamu yaVelonkhe emaBanga R-12 (i-NCS) sinika inchubomgomo yekharikhulamu nekuhlola etikolweni.

Kute kwentiwe ncono kusebenta kwaso leSitatimende seKharikhulamu yaVelonkhe sichitjiyelwe, kwentelwa kutsi letichibiyelo ticale kusebenta ngaBhimbidvwane 2012. Kwakhiwe umculu munye weNchubomgomo yeKharikhulamu neKuhlola kwaleso naleso sifundvo lotawusebenta esikhundleni seTitatimende Tetifundvo, Ticondziso Tetinhlelo Tekufundza neTicondziso Tekuhlolwa Kwetifundvo kumaBanga R-12.

1.2 SIBUTSETELO

(a) *LeSitatimende seKharikhulamu Savelonkhe emaBanga R-12 (Bhimbidvwane 2012)* simele sitatimende senchubomgomo yekufundza nekufundzisa etikolweni taseNingizimu Afrika, kantsi sicuketse loku lokulandzelako:

(i) Sitatimende seNchubomgomo yeKharikhulamu neKuhlola leso naleso sifundvo lesisemtsetfweni;

(ii) Umculu wenchubomgomo i-*National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12* kanye

(iii) Nemculu wenchubomgomo, i-*National Protocol for Assessment Grades R-12 (Bhimbidvwane 2012).*

(b) *LeSitatimende seKharikhulamu yaVelonkhe emaBanga R-12 (Bhimbidvwane 2012)* singena esikhundleni saleTitatimende teKharikhulamu yaVelonkhe letimbili lekungito letisebenta nyalo, letatiwa ngekutsi:

(i) *Sitatimende Lesibuketiwe seKharikhulamu yaVelonkhe emaBanga R-9 lesishicilelwe kuGazethi yaHulumende nombolo 23406 mhlaka - 31 Inkhwekhweti 2002, kanye ne-*

(ii) *Sitatimende seKharikhulamu yaVelonkhe emaBanga 10-12 lesishicilelwe kuGazethi yaHulumende Nombolo 25545 mhlaka - 6 Imphala 2003 kanye nakuGazethi yaHulumende Nombolo 27594 mhlaka - 17 Inkhwekhweti 2005.*

(c) Letitatimende tekharikhulamu yavelonkhe letibekwe ngalokucacile endzinyaneni (b) (i) na (ii) ngenhla tifaka ekhatsi letinchubomgomo letilandzelako lokutawuya ngekuya kwandze kutikhweshisela eceleni *Sitatimende seKharikhulamu yaVelonkhe emaBanga R-12 (Bhimbidvwane 2012)* emkhatsini waleminyaka 2012-2014:

(i) Titatimende teTinkhundla teKufundza,/teTifundvo, Ticondziso Tetinhlelo Tekufundza neTicondziso Tekuhlolwa kweTifundvo temaBanga R-9 nemaBanga R-12 ;

(ii) Umculu wenchubomgomo, i-*National Policy on Assessment and Qualifications for schools in the General Education and Training Band, leyashicilelwa emculwini weSatiso saHulumende Nombolo 124 kuGazethi yaHulumende Nombolo 29626* yashicilelwa mhlaka-12 Indlovana 2007.

(iii) Umculu wenchubomgomo, i-*National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), leyashicilelwa kuGazethi yaHulumende Nombolo 27819 mhlaka* 20 Kholwane 2005;

(iv) Umculu wenchubomgomo, *An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), regarding learners with special needs, leyashicilelwa kuGazethi yaHulumende Nombolo 29466* mhlaka-11 Ingongoni 2006, ifakwe kumculu wenchubomgomo, i-*National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12; kanye ne-*

(v) Umculu wenchubomgomo, *An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), regarding the National Protocol for Assessment (Grades R-12)*, leshicilelwe *emculwini weSatiso saHulumende Nombolo 1267* kuGazethi *yaHulumende Nombolo 29467* mhlaka-11 Ingongoni 2006.

(d) Umculu wenchubomgomo, *i-National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*, netigaba teSitatimende seNchubomgomo yeKharikhulamu nekuHlola njengobe tibukisisiwe kuTehluko 2, 3 na-4 talomculu, leticuketse timiso nemigomo *yeSitatimende seKharikhulamu yaVelonkhe emaBanga R-12.* Ngako-ke, kutawutsi *ngekwesigaba 6A semtsetfo i-South African Schools Act, 1996 (Act No. 84 wa-1996)* Indvuna Yetemfundvo Lesisekelo ikwati kubona bungako bemiphumela nemacophelo kanye netindlela netinchubo tekuhlola imphumelelo yemfundzi etikolweni tembuso naleto letitimele.

1.3 TINHLOSOJIKELELE TEKHARIKHULAMU YASENINGIZIMU AFRIKA

(a) *Sitatimende seKharikhulamu Yavelonkhe emaBanga R-12* sinika inchazelo yaloko lokumele kufundvwe etikolweni taseNingizimu Afrika ngalokuphatselene nelwati, emakhono nemagugu ekuphila. Lekharikhulamu itawucinisekisa kutsi bafundzi batfola babuye basebentise lwati nemakhono ngetindlela letitawubonakala etimphilweni tabo. Ngaloko-ke lekharikhulamu igcugcutela lwati ngesimongcondvo semmango wangakubo, ibe icikelela loko lokumcoka lokwentiwa emhlabeni jikelele.

(b) *Sitatimende seKharikhulamu yaVelonkhe emaBanga R-12* siphumelelisa letinhloso letilandzelako:

- kuhlomisa bafundzi ngelwati, emakhono nemagugu ekuphila lafanele, kute banetiseke baphindze babambe lichaza emmangweni njengetakhamuti telive lelikhululekile. Loku kutawentiwa ngaphandle kwekunaka simonhlalo setemnotfo, buve, bulili, simo semtimba, nobe likhono lekuhlakanipha labanalo;
- kutsi batfole imfundvo lephakeme;
- kulungiselela bafundzi kutsi bakwati kumela timo letehlukile kuleto tasetikolweni temfundvo lephakeme naleto tasemsebentini; kanye
- nekunika bacashi imininingwane leyenele mayelana nemakhono ebafundzi.

(c) *Sitatimende seKharikhulamu yaVelonkhe emaBanga R-12* senganyelwe ngulemigomo lelandzelako:

- Ingucuko kutenhlalo: kucinisekisa kutsi kungafani kwemfundvo lokwakwentiwa esikhatsini lesengca kuyalungiswa, nekutsi tonkhe takhamuti titfola ematfuba emfundvo lalinganako kuto tonkhe tigaba.
- Kufundza gekutimisela nangalokujulile: kugcugcutela tindlela tekufundza ngekutimisela nangalokujulile kunekutsi bafundze ngekuhlabelela ngaphandle kwekuvisisa loko labafundziswa kona.

- Lwati lolusetulu nemakhono lasetulu: linanincane lemacophelo elwati nemakhono lekumele azuzwe kulelo nalelo Banga amisiwe abuye abekwa ezingeni lelisetulu lekungenteka kutsi azuzwe bafundzi kuto tonkhe tifundvo.

- Inchubekelembili: lokucuketfwe kanye nesimongcondvo saleso naleso sifundvo kukhombisa inchubekelembili kusuka kulokulula kufika kulokulukhuni.

- Emalungelo ebantfu, khukhulelangoco, bulungiswa betemvelo netenhlalo: kungeniswa kwemitsetfomgomo nenchubo yebulungiswa betenhlalo netemvelo kanye nemalungelo ebantfu njengekubekwa kweMtsetfosisekelo waseNingizimu Afrika. *Sitatimende seKharikhulamu yaVelonkhe emaBanga R-12 (Jikelele)* sibonisa luvelo esimeni sekwehlukahlukana njengebuphuya, kungalingani, buve, bulili, lulwimi, budzala, kukhubateka, naletinye timo.

- Kuhlonipha lwati lwendzabuko: kwemukela umlandvo lonotsile nemagugu emdzabu alelive lokungito tintfo letibalulekile ekuphumeleliseni emagugu ekuphila lamiswe kuMtsetfosisekelo; kanye ne-

- Kwetsembeka, lizinga lelifanele, nelikhono lekwenta: kunika imfundvo lenelizinga lelicatsanisekako neyalamanye emave ngebubanti nangekujula.

(d) *Sitatimende seKharikhulamu yaVelonkhe emaBanga R-12* sihlose kukhicita bafundzi labakhona ku-

- bona nekusombulula tinkinga bese batsatsa tincumo ngekutakhela imicabango lejulile

- sebenta ngekubambisana nalabanye njengelilunga lelicembu, lenhlangano nelemmango ngemphumelelo;

- hlelembisa, nekutiphatsa ngalokunetibopho kuko konkhe labakwentako ngendlela lenemphumelelo;

- gcogca, hlatiya, hlela nekuhlola lwati ngalokujulile

- chumana ngemphumelelo ngekusebentisa tibonwa, timphawu ne /nobe bugagu bekusebentisa lulwimi ngetindlela letinyenti;

- sebentisa isayensi nebuchwepheshe ngemphumelelo nangalokujulile bakhombise kutibophelela kutendzawo netemphilo yalabanye; kanye neku-

- khombisa kuvisisa umhlaba njengeluchungechunge lwetehlakalo ngekubona kutsi timongcondvo tekusonjululwa kwetinkinga atihambi todvwa.

(e) *Khukhulelangoco* kufanele kube ngiyo incenye lemcoka kulomkhakha, ngekuhlela nekufundzisa kuleso naleso sikolo. Loku kungenteka kuphela uma bonkhe bafundzisi bangaba nekuvisisa ngalokujulile indlela yekubona tihibe tekufundza kanye nendlela yekutivikela kanye nendlela yekuhlelela kwehlukahlukana.

Lokuhamba embili ekulawuleni khukhulelangoco kwenta siciniseko sekutsi tihibe tibonwe, kuliwe nato, kuto tonkhe tinhlaka tekwesekela ummango wesikolo, lokufaka ekhatsi bafundzisi, Emacembu Ekwesekela Latinte Etigodzini *(District-based)*, Emacembu laSesigabeni Sekwesekela Tikhungo, batali, kusetjentiswe Tikolo Letikhetsekile kutsi tibe Tikhungo letinguMtfombo welusito. Nangabe bafundzisi bafuna kulwa netihibe eklasini bafanele basebentise emasu lehlukene ekwehlukanisa ikharikhulamu, lafana nalawo latfolakala emculwini weLitiko Letemfundvo Lesisekelo lowatiwa ngekutsi i-*Guidelines for Inclusive Teaching and Learning (2010).*

1.4 KWABIWA KWESIKHATSI

1.4.1 Sigaba Sabokhewane

(a) Sikhatsi sekufundzisa tifundvo eSigabeni saboKhewane sendlalwe kulelithebula lelingentasi:

SIFUNDVO	LIBANGA R (EMA-AWA)	LIBANGA 1-2 (EMA-AWA)	LIBANGA 3 (EMA-AWA)
Lulwimi Lwasekhaya	10	7/8	7/8
Lulwimi Lwekucala Lwekwengeta		2/3	3/4
Tibalo	7	7	7
Emakhono eKuphila • Lwatinchanti • Tebuciko Bekuticambela • Sifundvo Sekutivocavoca • Sifundvo Senhlalomphilo lenhle	**6** (1) (2) (2) (1)	**6** (1) (2) (2) (1)	**7** (2) (2) (2) (1)
SAMBA	**23**	**23**	**25**

(b) Sikhatsi sekufundzisa emaBanga R, 1 na 2 ngema-awa lange-23. Libanga 3, ngema-awa lange-25.

(c) Etilwimini, lishumi (10) lema-awa labelwe emaBanga R-2, ema-awa la-11 abelwa liBanga lesitsatfu (3). Linanikhulu lema-awa lasiphohlongo (8) nelinanincane lema-awa lasikhombisa (7) abelwe Lulwimi Lwasekhaya, kwatsi linanincane lema-awa lama-2 nelinanikhulu lema-awa lamatsatfu (3) abelwa Lulwimi Lwekucala Lwekwengeta emaBangeni 1-2. Ebangeni lesitsatfu (3) linanikhulu lema-awa lasiphohlongo (8) nelinanincane lema-awa lasikhombisa (7) abelwe Lulwimi Lwasekhaya, nelinanincane lema-awa lamatsatfu (3) nelinanikhulu lema-awa lamane (4) abelwa Lulwimi Lwekucala Lwekwengeta.

(d) Esifundvweni Semakhono Ekuphila Lwatinchanti lwabelwe li-awa linye (1) emaBanga R - 2, kantsi Libanga le-3 lona labelwe ema-awa lamabili (2) lokungawo lafakwe kubakaki.

1.4.2 Sigaba Lesisemkhatsini

(a) Sikhatsi sekufundzisa Esigabeni Lesisemkhatsini simiswe ngalendlela lelandzelako:

SIFUNDVO	EMA-AWA
Lulwimi Lwasekhaya	6
Lulwimi Lwekucala Lwekwengeta	5
Tibalo	6
Isayensi yeTemvelo neThekhnoloji	3,5
Isayensi yeTenhlalo	3
Emakhono eKuphila • Tebuciko Bekuticambela • Sifundvo Sekutivocavoca • Sifundvo Senhlalompmhilo lenhle	**4** (1,5) (1) (1,5)
SAMBA	**27,5**

1.4.3 Sigaba Lesiphakeme

(a) Sikhatsi sekufundzisa Sigaba Lesiphakeme sime ngalendlela lelandzelako

SIFUNDVO	EMA-AWA
Lulwimi Lwasekhaya	5
Lulwimi Lwekucala Lwekwengeta	4
Tibalo	4,5
Isayensi yeTemvelo	3
Isayensi yeTenhlalo	3
Ithekhnoloji	2
Isayensi YekuphatsaTemnotfo	2
Tekuphila	2
Buciko bekuticambela	2
SAMBA	**27,5**

1.4.4 EmaBanga 10-12

(a) Sikhatsi sekufundzisa emaBanga 10-12 sihleleke ngalendlela lelandzelako:

SIFUNDVO	KWABIWA KWESIKHATSI NGELIVIKI (EMA-AWA)
Lulwimi Lwasekhaya	4.5
Lulwimi Lwekucala Lwekwengeta	4.5
Tibalo	4.5
Tekuphila	2
Linanincane lanobe ngutiphi tifundvo letintsatfu latikhetsile **Ecenjini B** Sichibiyelo B, Emathebula B1-B8 emculwini wenchubomgomo, i-*National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R-12*, lokutawuya ngekwetimiso letibekwe endzimeni 28 yalomculu wenchubomgomo loshiwo ngenhla	12 3x4 ema-awa

Sikhatsi lesibekelwe liviki ngalinye simiselwe kutsi sisetjentiselwe kuphela ngekwelinanincane kuleto tifundvo letibalwe ku-NCS njengobe kushiwo lapha ngenhla, empeleni akukafaneli kutsi sisetjentiselwe kufundzisa nobe ngutiphi tifundvo letengetiwe kuloluhla lwelinanincane letifundvo. Nangabe kwenteka kutsi umfundzi afise kwenta tifundvo letengetiwe, kumele kwengetwe sikhatsi sekwenta leto tifundvo.

SIGABA2: INCHAZELO, TINJONGO, EMAKHONO NALOKUCUKETFWE

2.1 SINGENISO

Kusahluko 2, Sitatimende Senchubomgomo Yavelonkhe Yekharikhulamu Nekuhlola yeSigaba Sabokhewane inika bothishela inchazelo yetibalo, tinhlosongco, emakhonongco, imikhakha yalokucuketfwe lekugcilwe kuyo, sisindvo semikhakha yalokucuketfwe, tinsita letiphakanyisiwe tetifundvo teTibalo teSigaba Sabokhewane, ticondziso letiphakanyisiwe tekusekela bafundzi labahlangabetana netihibe ekufundzeni-tibalo, tibalo tenhloko nekugcugcutela emakhono etibalo ebangeni R.

2.2 TIYINI TIBALO?

Tibalo lulwimi lolusebentisa timphawu netinkhomba kuchaza budlelwane betinombolo, be-Jomethri nemagrafu. Ngulokwentiwa bantfu lokufaka kubuka, kumela nekuphenya emaphethini nebunjalo bebudlelwane besimo semtimba nesimonhlalo emkhatsini wetintfo tetibalo ngekwato. Kuyasita kutfutfukisa inchubo yengcondvo lengeta kucabanga lokuhlelekile nalokuhlolisisako, lokucikelelako nalokucatulula inkinga lengasita ekutsatseni tincumo.

2.3 TINJONGONGCO

Kufundzisa nekufundza Tibalo kuhlose kutfutfukisa loku lokulandzelako kumfundzi:

- Kwati kabanti kutsi budlelwane beTibalo busetjentiswa njani tikwebudlelwane betenhlalo; temvelo, emasiko kanye netemnotfo.
- Kuba nekutetsemba kubukana netimo tetibalo ngaphandle kwekwesaba kuhlulwa tibalo;
- Kuba nemoya wekufuna kwati nekutsandza Tibalo;
- Kubona buhle beTibalo;
- Kwati kutsi Tibalo tiyincenye yemsebenti webantfu wekusungula;
- Kuba nelwati lolujulile lwekuvisisa tibalo;
- Kutfola lwati ngco nemakhono lafanele ku:
  - sebentisa Tibalo etinkingeni letiphatselene netemtimba, tenhlalo neTibalo.
  - fundza lokuphatselene naletinye tifundvo;
  - chubeka netifundvo teTibalo.

2.4 EMAKHONONGCO

Kutfutfukisa emakhono eTibalo labalulekile umfundzi kufanele:

- atfutfukise kusebenta lokungiko kwelulwimi lwetibalo;
- atfutfukise silulumagama setinombolo, lwati wetinombolo, kubala nemakhono ekutisebentisa tinombolo;
- afundze kulalela, kuchumana, kucabanga nekucabangisisa lokuhlelekile nekusebentisa lwati lwetibalo lolutfolakele;

- afundze kucwaninga, kuhlatiya, kubhala nekuhumusha lwati;
- afundze kwetfula nekucatulula tinkinga tetibalo;
- abone kubaluleka kwendzima ledlalwa Tibalo emphilweni kufaka ekhatsi kutfutfuka kwemfundzi loku-condzene naye.

2.5 IMIKHAKHA YALOKUCUKETFWE LEKUTAWUGCILWA KUKO

Tibalo teSigaba Sabokhewane ticuketse tihloko letisihlanu. Sihloko ngasinye sisita ekutfoleni emakhono latsite. Lithebula lelingentasi likhombisa lokutawugcilwa kuko lokuphatselene nemikhakha yalokucuketfwe kanye nemcondvojikelele nemcondvongco walokutawufundziswa nalekufanele kugcilwe kuko eSigabeni Sabokhewane.

Lithebula 2.1 Imikhakha yalokucuketfwe yetibalo teSigaba Sabokhewane

LWATI LOLUCUKETFWE LWETIBALO		
Imikhakha yolokucuketfwe	**Imicondvo jikelele lokugcilwe kuyo**	**Lokucuketfwe lokutawugcilwa kuko esigabeni sabokhewane**
Tinombolo, timphawu tekubala nebudlelwane	Kutfutfukisa lokuphatselene netinombolo kufaka loku lokulandzelako: • Kutsi tinombolo letehlukene tisho kutsini; • Kutsi tinombolo letehlukene tihlobene njani; • Bukhulu betinombolo letehlukene; • Kutsi tinombolo tingakhonjiswa njani ngetindlela letehlukene • Umtselela wekusebenta ngetinombolo.	Linani letinombolo lekumele libe litfutfukile ekupheleni kweliBanga 3 lifaka ekhatsi tinombolo letiphelele letifika kulokungenani ku-1000 netincetu letetayelekile. Kulesigaba, lwati lwetinombolo lutfutfikiswa ngekusebenta ngetintfo lucobo lwato kubala tintfo leticokelelwe, kuhlukanisa nekuhlanganisa linani, kubala ngekweca ngetindlela letinyenti, kusombulula tibalo temagama, kwakha nekubhidlita tinombolo • Kubala kutfutfukisa lwati lwetinombolo, tibalo tenhloko, kucombela, emakhono ekubala nekubona emaphethini. • Kutfutfuka kwelwati lwetinombolo kusita bafundzi kutsi bafundze ngetimphawu tetinombolo nekutfutfukisa emasu langenta kubala kube malula. • Kusombulula tinkinga tetibalo ngekwengcikitsi kusita bafundzi kutsi bachumanise lebakucabangako ngemlomo nangekubhala ngemidvwebo nangetimphawu • Bafundzi bavisisa timphawu tekubala letisisekelo: kuhlanganisa, kususa, kuphindzaphindza nekuhlukanisa. • Lwati lwetincetu lutfutfukiswa ngekusombulula tinkinga tetibalo letifaka kwabelana tintfo lucobo nangekusebentisa imidvwebo. Tinkinga tetibalo kufanele tibe netisombululo letitinombolo letiphelele, tinsalela noma tincetu. Kwabelana kufaka ekhatsi kubona incenye yalokuphelele kanye nekutfola tincenye tetintfo letigcogciwe. Bafundzi balesigaba abakafaneli kufundza nekubhala timphawu tetincetu.

Emaphethini, emafangishini ne-Aljebra	I-Aljebra lulwimi lwekucubungula nekuchumanisa lokunyenti kweTibalo ingasetjentiswa futsi kufundza imisebenti nalobunye budlelwane emkhatsini wetinombolo. Ingcikitsi yalokutawufundvwa kutsi bafundzi bagogodze emakhono abo ekusebentisa i-Aljebra. Ibuye igcile: • Kuchaza emaphethini nebudlelwane ngekusebentisa kuvetwa kwetimphawu, emagrafu nemathebula. • Kubona nekuhlatiya kuntjintja kwemaphethini nebudlelwane lobenta bafundzi bakwati kucombela nekusombulula tinkinga tetibalo.	Kulesigaba bafundzi basebenta ngaloku lokubili • Emaphethini etinombolo (sib. Kubala wece) • Emaphethini e-Jomethri (sib. Titfombe) Bafundzi kufanele basebentise tintfo cobo, imidvwebo netimphawu kutsatsela, kungeta, kuchaza nekwakha emaphethini. Kutsatsela emaphethini kusita bafundzi kutsi babone indlela leyakheke ngayo iphethini Kungeta iphethini kusita umfundzi kutihlola kutsi uvisise kahle kulandzelana kwephethini. Kuchaza iphethini kusita kutfutfukisa emakhono elulwimi lwemfundzi. Kugcila ekulandzelaneni kwemaphethini kwenta sisekelo sekutfutfuka kwemakhono e-Aljebra Emaphethini etinombolo asekela kutfutfuka kwelwati lwetinombolo nekusetjentiswa kwato lekwakhelwe kutinombolo, emafangishini nebudlelwane. Emaphethini e-Jomethri afaka ekhatsi imigca lelandzelanako, bobunjwa, tintfo nemaphethini laseveni. Kumaphethini e-Jomethri bafundzi basebentisa lwati sikhala nabobunjwa.
Sikhala nabobunjwa (iJomethri)	Kufundza ngesikhala nabobunjwa kwengeta kwati nekutsandza emaphethini, kwenta kahle, kuzuza nebuhle bemvelo nemasiko. Kugcila ku: • timphawu, budlelwane; • kuma, indzawo; • kugucuka kwabobunjwa labangemada-yimenshini lamabili (2-D) netintfo letingemadayimenshini lamatsatfu (3-D)	Kulesigaba bafundzi bagcila kutintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D), kuma nenkhombandlela. • Bafundzi bacubungula timphawu tetintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa laba lamabili (2-D) ngekutihlunga, kutihlelembisa, kutichaza nekutibala. • Bafundzi badvweba babuye bakhe bobunjwa ngetintfo. • Bafundzi babona babuye bachaze bobunjwa labasendzaweni yabo labafana nabobunjwa netintfo teTibalo. • Bafundzi bachaza kutsi tintfo tikuphi ngekusebentisa silulumagama lesifanele. • Bafundzi balandzela babuye banikete tinkhombandlela.
Silinganiso	Kukala kucondzise ekukhetseni nasekusetjentisweni kwetintfo letifanele nemafomula kubala timphawu tetehlakalo, bobunjwa, tintfo nendzawo. Kuhlobene ngco nelikhono lemfundzi kuteSayensi, ithekhinoloji netemnotfo. Kusita umfundzi: • Kucombela • Kwati kahle ngeKukala nemiphumela yako.	• Kulesigaba umcondvo wesilinganiso utfutfukiswa ngekusebenta ngetintfo letiphatsekako nabobunjwa, kufundza timphawu tebudze, umtsamo, sisindvo, bungakondzawo nesikhatsi. • Bafundzi balinganisa timphawu tabobunjwa netintfo ngekusebentisa tinsita letingakahleleki lakufanele khona njengetandla, tinyatselo, tintfo tekuphatsa njll. • Bafundzi bacatsanisa linani ngekusebentisa emagama ekucatsanisa njenga (-dze kuna/ -fisha kuna, -sindza kuna/ -lula kuna njll) • Bafundzi bangeniswa kutinsita letihlelekile njengemagremu, emekhilogremu, emamililitha, emalitha, emasentimitha nemamitha. Imisebenti lephatselene nesikhatsi kufanele ihleleke ngekunaka kutsi kuhamba kwesikhatsi kufanele kutfutfukiswe kucala ngembi kwekutsi bafundze ngesikhatsi.
Kusebenta ngedatha	Kufundza ngekusebenta ngedatha kutfutfukisa likhono lemfundzi le: • kugcogca • kuhlela • kubukisa • kuhlatiya nekuhumusha idatha leniketiwe	Lekugcilwa kuko nakufundziswa noma kufundvwa ngekusebenta kwedatha eSigabeni Sabokhewane; kuhlela tintfo nedatha ngetindlela letehlukene ngekubuka timphawu letehlukene tentfo noma idatha. • Bafundzi balindzeleke kutsi bahumushe babuye bakhe emagrafutitfombe nemabhagrafu lakhombisa 1 ku 1 kucondzanisa emkhatsini wetintfo nekuvetwa kwato basebentisa idatha leniketiwe.

2.6 SISINDVO SEMIKHAKHA YALOKUCUKETFWE

Sisindvo semikhakha yalokucuketfwe sisebenta tinhloso letimbili letibalulekile: kwekucala lesisindvo sicondzisa ngebungako besikhatsi lesidzingekako kufundzisa lokucuketfwe kumkhakha ngamunye ngalokunelisako; kwesibili lesisindvo sicondzisa ngekusabalaliswa kwalokufundvwako eluhlolweni. Sisindvo semikhakha yalokucuketfwe asifanani kuliBanga ngalinye eSigabeni Sabokhewane.

Lithebula 2.2 Sisindvo semikhakha yalokucuketfwe esigabeni sabokhewane

SISINDVO SEMIKHAKHA YALOKUCUKETFWE			
Lokucuketfwe	**LiBanga 1**	**LiBanga 2**	**LiBanga 3**
Tinombolo, timphawu tekubala nebudlelwane*	65%	60%	58%
Emaphethini, emafangishini ne-Aljebra	10%	10%	10%
Sikhala nabobunjwa (lJomethri)	11%	13%	13%
Silinganiso	9%	12%	14%
Kusebenta ngedatha (Sitatistiki)	5%	5%	5%
	100%	**100%**	**100%**

*Emabangeni R-3, kubalulekile kwati kutsi Tibalo tigcile kulomkhakha wetinombolo, timphawu tekubala nebudlelwane. Bafundzi kufanele baphume esigabeni sabokhewane banelwati lobanti ngetinombolo nekutisebentisa ngalokushelelako. Inhloso kutsi bafundzi baphumelele babuye babe nekutetsemba ngetinombolo nangekubala. Ngalesizatfu sikhatsi sekufundza lesabelwa Tinombolo, emafangishini nebudlelwane sengetiwe. Umsebenti lomnyenti wemaphethini kufanele ugcile kumaphethini etinombolo kuchubeka kwengeta likhono letinombolo.

2.7 TIBALO ESIGABENI SABOKHEWANE

Tibalo teSigaba Sabokhewane takha kuchumana kwemphilo yemntfwana yasenkhulisa nemphilo yakhe sekangaphandle kwesikolo, netibalo letilukhuni temabanga latawuchubeka awafundze. Emabangeni ekucala bafundzi kufanele bahlangabetane netimo letitabanika ematfuba ekwenta, kukhuluma nekurekhoda imicabango yabo ngetibalo.

Sikhatsi lesisetjentiswa nakwentiwa tibalo sinemtselela loncumako ngekutfutfuka kwemakhono nelwati lwetibalo. Imisebenti lebayentako bafundzi kufanele ingabi nguleyo yekucitsa nje sikhatsi kepha kufanele igcile ngalokucacile kutibalo njengoba kuhlelekile kukharikhulamu.

2.7.1 Ticondziso letiphakanyisiwe tekuphatsa indlu yekufundzela

Ngelilanga linye Tibalo tibekelwe sikhatsi lesincunyiwe. Ngesikhatsi seTibalo lesincunyiwe kufanele kwenteke loku lokulandzelako:

- Umsebenti weliklasi lonkhe
  - Tibalo tenhloko
  - Kuhlanganiswa kwelwati
  - Kuphatfwa kweliklasi (kunika umsebenti ngekutimela njll)
- Kufundzisa emacembu lamancane
  - Kubala
  - Kutfutfukisa lwati lwetinombolo (imisebenti yetemlomo nekwenta)

- Kusombulula tinkinga tetibalo (imisebenti yetemlomo nekwenta)
- Kubhala
- Kutfutfukisa emasu ekubala (imisebenti yetemlomo nekwenta)
- Emaphethini
- Sikhala nabobunjwa
- Kukala
- Kusebenta ngedatha

• **Umsebenti lebawenta ngekutimela**

Bafundzi balolonga babuye bahlanganise lwati lolutfutfukisiwe ngalesikhatsi bafundza bonkhe nangalesikhatsi bafundza ngemacembu lamancane.

*Umsebenti weliklasi lonkhe***:** uma kugcilwe etibalweni tenhloko, kuhlanganiswa kwelwati nekunika imisebenti yemfundzi ngamunye kutsatsa lokungenani emaminithi la 20 ngelilanga ekucaleni kwesifundvo seTibalo. Kuso lesikhatsi thishela angabuye asebente nelikilasi lonkhe kutfola nekurekhoda ligama lelilanga leliviki, lusuku, linani lebafundzi labakhona nalabangekho, nesimo selitulu. Tibalo tenhloko tifaka ekhatsi tibalo tenhloko letisheshisako (sib. Inombolo lesemuva/ ngembi Kwe 8; njll). Thishela angabuye ahlanganise nelwati loluya ngekushuba. Kubalulekile futsi kutsi thishela anikete bafundzi imisebenti jikelele nemisebenti lebayenta ngamunye uma yena asachubeka nemacembu lamancane.

Imisebenti legcile emacenjini lamancane: Imisebenti leba yimphumelelo nguleyo letsatsa licembu lelincane lebafundzi (8-12) labanemakhono lafanako ahlale nabo esiyilweni noma ematafuleni abo ngalesikhatsi labanye bafundzi batisebentela ngamunye. Thishela usebenta nebafundzi **ngemlomo nangekwenta**, benta imisebenti yekubala, kucombela, kutfutfukisa lwati lwetinombolo, imisebenti yekusombulula tinkinga tetibalo nemisebenti lephatselene nemaphethini, sikhala nabobunjwa, silinganiso nekusebenta ngedatha.Lemisebenti kumele ihlelwe ngekucophelela.

Umsebenti lobhalwako (incwadzi yekusebentela, emaphepha ekusebentela, emakhadi emsebenti njll) kufanele ube yincenye yemsebenti welicembu lapho kungenteka khona kute kusekelwe kufundza. Bafundzi kufanele babe netintfo tekubhala (emabhuku emsebenti wasekilasini, njll) kute babhale imisebenti yekusombulula tinkinga tetibalo. Tikhatsi temacembu kufanele tibe nekusebentisana lokukhulu, bafundzi kufanele bagcugcutelwe kwenta, kukhuluma, kukhombisa nekurekhoda imicabango yabo ngetibalo.

Bothishela kufanele bangabatsatseli phansi bafundzi labatsatsa kancane, kufanele nabo babanikete umsebenti lofana newalabanye. Kuba lula kumatanisa lizinga lebulukhuni bemsebenti ulicatsanisa nebafundzi, uma thishela asebenta nelicembu lebafundzi labati kwenta ngalokufanako. Emacembu lahlanganise bafundzi labenta ngetindlela letehlukene asebenta kahle kwakha, Kukala, kwakha emaphethini noma imisebenti yekuhlunga noma imidlalo.

Imisebenti lebayenta ngekutimela: Ngalesikhatsi thishela enta tifundvo letigcile emacenjini lamancane, bafundzi labanye kufanele babe batibandzakanye naleminye imisebenti leyehlukene yeTibalo legcile ekuciniseni nasekuhlanganiseni lwati nemakhono lafundzisiwe ngesikhatsi setifundvo letigcile emacenjini lamancane. Lemisebenti lebayenta ngekutimela kufanele ingafani kute bafundzi labenta tintfo ngetindlela letehlukene bakwati kwenta. Imisebenti lebayenta ngekutimela ingafaka loku lokulandzelako:

- kusebenta ngetincwadzi temsebenti
- emaphepha/emakhadi emsebenti ekubala, kusebenta ngetinombolo, tinkinga tetibalo letilula letihambisana nengcikitsi (tibalo temagama) abe ahlelwe ngetigaba.
- Imidlalo yeTibalo lefana neLudo, emadomino, emaphazili ne
- misebenti lefaka ekhatsi kwakha lokutsite, kuhlunga, emaphethini neKukala.

- Sikhatsi setibalo kufanele sisekele nebafundzi labahlangabetana netihibe tekufundza, imisebenti lesita bafundzi labahamba embili, imisebenti yeluhlolo, njll
- Imisebenti legcile kumfundzi ngamunye neyemacembu lamancane kufanele kutsi thishela ayibuke (leyenti-wako, yemlomo) ayimake abuye abuke bafundzi nababhala njengencenye yeluhlolo lolungakahleleki naloluh-lelekile.
- Kulandzelela timphendvulo letiniketwa bafundzi (ngemlomo, ngekwenta, ngekubhala) uma bafundza nobe thishela afundzisa kusita thishela kutsi akwati kuhlola bafundzi ngalokuchubekako, kulandzelela in-chubekelembili yebafundzi nekuhlela lusito lolufanele bafundzi labahlangabetana netihibe ekufundzeni.

2.7.2 Bafundzi labahlangabetana netihibe ekufundzeni Tibalo

Kubalulekile kutsi bafundzi labahlangabetana netihibe ekufundzeni Tibalo baniketwe imisebenti letsite lekumele bayente nabafundza.Kumele kusetjentiswe tibonelo labatatibona, kusetjentiswe netintfo lucobo lwato kanye nemisebenti lephatsekako sikhatsi lesidze kubafundzi labanetihibe ngobe kwenta umsebenti lolukhuni ngekusheshisa kungenta kutsi bafundzi bacakeke babuye bangachubekeli embili.Labafundzi kumele baniketwe sikhatsi lesinyenti:

- Sekucedzela umsebenti weluhlolo
- Sekutfola emakhono ekucabanga(netindlela takhe)

Linani lemisebenti lekumele icedzelwe kumele ihambisane nesimo semfundzi ngaphandle kwekulahlekelwa ngumcondvo kanye nemakhono lafundziswako.

2.7.3 Tibalo tenhloko

Tibalo tenhloko tidlala indzima lebalulekile kuKharikhulamu.Tinombolo lekumele tihlanganiswe kanye nelithebula lekuphindzaphindza, lekumele bafundzi balati nobe batikhumbule liniketiwe ebangeni ngalinye.Kungeta kuloku,tibalo tenhloko tisentjentiselwa kutfola tinombolo letisetulu letehlukene ngekutsi babale bece letinye tinombolo kanye nekutsi bente leminye imisebenti yekukhuphuka wehle sicanco setinombolo.Thishela weliBanga lesitsatfu angahle abute imibuto lelandzelanako lefana nalena:Cala ngalenombolo 796, yingete nge- 7 = 803, yehlise nge-5 = 798. Ngeta nge- 10... nga- 2... nge- 90..., yehlise nge- 5... njll. Lemisebenti lefana nalena isita bafundzi kutsi bakwati kuticambela imigcatinombolo yenhloko.

Tibalo tenhloko tivela kakhulu kusahluko semsebenti wekubala kanye newekutfutfukisa tinombolo, lophatselene nesihloko lesitsi Tinombolo kanye neMaphethini,kantsi futsi ingabuye yenteke ngesikhatsi sesilinganiso nesikhatsi semisebenti lephatselene neDatha.Nangabe benta sifundvo seTibalo tenhloko bafundzi bangacindzetelwa kutsi bente tibalo tenhloko lebangeke batikhone- tintfo tekubhala nobe tintfo tekubala kumele kutsi bafundzi labatidzingako batitfole ngaso sonkhe sikhatsi.

2.8 LIBANGA R

Indlela yekufundza tibalo kumele igcile kumgomo wekuhlanganisa tifundvo kanye nekufundza badlala. Thishela kumele kube nguye lohamba embili, angenelele lapho kufanele khona. Thishela longenelelako uveta ematfuba lamanyeti ekufundza lokungakahlelwa lokuvela ngalesikhatsi umfundzi atentela umsebenti ekhoneni lapho atakhela khona umfanekisomcondvo, ngesikhatsi sekudlala bakhululekile nobe ngesikhatsi sekudlala ngemanti nesanti kanye nangesikhatsi semsebenti loholwa nguthishela lesigcile kumagama lasetjentiswa esifundvweni seTibalo, lafana nekubala, kutfutfukisa tinombolo,sikhala nabobunjwa, emaphethini, sikhatsi kanye naleminye imisebenti yetibalo. Umbala awusiso sihloko lesitimele, kepha ungasetjentiswa nakutfutfukiswa umcondvo lotsite wetibalo, emsebentini lofana nekuhlunga, kugcogca nekuhlela tintfo ngetigaba tato.

Tonkhe tinhlangotsi ebangeni R, lokufaka ekhatsi simo seliklasi, kufundzisa nekufundza kumele kutfutfukise kukhula kwemfundzi ngalokuphelele. Kutfutfuka lokuyincenye yeTibalo letifaka ekhatsi kutfutfuka kwengcondvo (kucatulula tinkinga tetibalo, umcondvo lohlelekile kanye nekucabanga lokuhlelekile), kutfutfuka kwelulwimi (lulwimi lweTibalo) kanye nendlela labona ngayo tintfo umfundzi,kutfutfuka ngekwemoya,kutfutfuka ngetenhlalo. Tonkhe letinhlangotsi tingatfutfukiswa ngesikhatsi setindzaba, semculo,semlolotelo, ngesikhatsi semidlalo yeminwe, ngesikhatsi sekudlala ngemanti, kusebentisa emathoyizi ekufundza,lafaka ekhatsi imidlalo yembhodi,tintfo lebatakhela tona kanye nemisebenti lephatselene (nesisindvo,sikhatsi,umtsamo, silinganiso, njll), umdlalo wekutakhela umfanekiso engcondvweni,imidlalo ledlalwa ngaphandle kanye nemidlalo ledlalwa enkhundleni.Tinhlobo letihlukene temidlalo titawufaka ekhatsi tincenye letitsite teTibalo, letifana Kukala ngalesikhatsi bapheka nobe kubala ngalesikhatsi batsenga.

Ngalamanye emagama kucala kufundza Tibalo kanye nebudlelwane lobukhona emkhatsini welwati lweTibalo kumele kuhambisane nemigomo yekufundza lapho bafundzi batawudlula etigabeni letintsatfu tekufundza letifana naleti:

- Sigaba lapho bafundzi basebentisa kunyakata kwemtimba kanye nemiva
- Sigaba lapho basebentisa tintfo lucobo lwato, sib.timbonyo temabhodlela kanye naletinye tintfo letikhona endzaweni lebakuyo
- Sigaba lapho bakhombisa umsebenti ngekubhala basebentisa liphepha nepeniseli,(sib.kusebentisa imidvwebo, nekufananisa emakhadi)

Ebangeni R luhlelo lwetikhatsi tekufundzisa lubitwa ngekutsi **luhlelo lwemalanga onkhe** (*buka* Umfanekiso 1) kantsi futsi lucuketse tincenye letintsatfu letifana naleti:

- Imisebenti leholwa nguthishela
- Imisebenti yemalanga onkhe
- Imisebenti umntfwana laticalela yona nobe kudlala lokukhululekile

Umfanekiso 1: LiBanga R Luhlelo lwemalanga onkhe

(Kusuka ku: ± 7:30-13:00)

Kufika nekudlala ngekukhululeka

36 emaminithi	Kubingelela, Lusuku lwekutalwa, Kubhalisa, Tindzaba, Lishadi lesimo selitulu
	KUFUNDZA BASITWA NGUTHISHELA Lulwimi, Tibalo, Emakhono ekuphila
50 emaminithi	• Imisebenti yebuciko (emalanga onkhe) kukhululeka ngekhatsi • Umdlalo lokhululekile waseklasini • Kukhweta liklasi
30 emaminithi	Kufundza Lulwimi basitwa nguthishela Emakhono ekuphila Tibalo
10 ema-minithi	Sikhatsi sendlu lencane Lulwimi, Tibalo, Emakhono ekuphila
20 ema-minithi	Sikhatsi sekudla Lulwimi, Tibalo, Emakhono ekuphila
60 emaminithi	Sikhatsi sekudlala ngekukhululeka ngaphandle Kukhweta emathoyizi
10 emaminithi	Tikhatsi tekuya endlini lencane Tibalo, Lulwimi, Emakhono ekuphila
30 emaminithi	IMISEBENTI YEKUSITA THISHELA Tibalo, Lulwimi, Emakhono ekuphila
30 emaminithi	Tindzaba temalanga onkhe

Sikhatsi sekuphumula kanye nesikhatsi sekuhamba uye ekhaya

LulwimiTibalo Emakhono ekuphila

- Umdlalo- wekulingisa
- Kulingisa
- Kwakha lokutsite
- Umdlalo lofundzisako
- Kudlala
- Emabhuloki
- Emathoyizi- ekufundza
- Imidlalo yekucondza
- Emaphazili
- Likhona letincwadzi
- Sikhatsi sekubindza
- Indzawo lethulile

- Emanti ekudlala
- Isanti yekudlala
- Kulingisa\
- Emabhola
- Umjinko
- Emavili ekudlala
- Emathoyisi ekufundza
- Tinsita tekutivocavoca
- Emavili etimoto
- Sifundvo Sekutivocavoca
- Imidlalo

TIBALO

Imisebenti lesuselwa eSitatimendeni Senchubomgomo yaVelonkhe yeKharikhulamu Nekuhlola (Tibalo)

- Imisebenti yetingoma nemculo
- Imisebenti yekucondza
- Imilolotelo yekubala
- Tingcikitsi tekucoca
- Kulinga kweSayensi
- Kudlala ngekukhululeka
- Lokwentiwa ngalokuvamile

LULWIMI

Imisebenti lesuselwa eSitatimendeni Senchubomgomo yaVelonkhe yeKharikhulamu Nekuhlola (Lulwimi Lwasekhaya)

- Tindzaba leticocwako
- Kwenta samdlalo
- Tincwadzi/ titfombe
- Kufundza titfombe
- Kucoca ngetitfombe
- Imisebenti yekucondza
- Iphosta yebatali
- Incwadzi yebatali
- Tindzaba
- Tinkondlo/ imilolotelo
- Umculo/tingoma/imilolotelo
- Emathephu
- Tingcikitsi tekucoca
- Imisebenti yekunyakatisa-umtimba
- Lokwentiwa ngalokuvamile
- Kudlala ngekukhululeka

EMAKHONO EKUPHILA

- Imisebenti lesuselwa eSitatimendeni Senchubomgomo yaVelonkhe yeKharikhulamu Nekuhlola (Emakhono)
- Imisebenti yekunyakatisa umtimba
- Tingoma nemaculo
- Tinkondlo nemilolotelo
- Tingcikitsi tekucoca
- Lusuku lwekutalwa
- Lokwentiwa ngalokuvamile
- Kudlala ngekukhululeka

Lokumele kugcizelelwe ngasosonkhe sikhatsi akube kusetjentiswa kwetincenye teluhlelo lwemalanga onkhe kute kutfutfukiswe kucala kufundza Tibalo ngendlela lejabulisako naletentakalelako.Sib. ematfuba ekufundza tibalo babe baholwa nguthishela ayaniketwa ngesikhatsi saleminye imisebenti.Tikhatsi letinyenti kumele tigcile esifundvweni seTibalo.Esikhatsini sasekuseni ngalesikhatsi bafundzi babingelelwa, bahlolwa kutsi bakhona yini esikoleni, kuvela ematfuba ekudlala ngetinombolo, sib.kubala. Letinye tikhatsi letifana nesikhatsi seTibalo, sikhatsi lapho umfundzi aveta indlela labona ngayo tintfo, sikhatsi sekunyakatisa umtimba, sikhatsi semculo, sikhatsi seteSayensi nato tingagcila etibalweni.

Imisebenti lephatselene nebuciko bekuticambela nayo ingagcizelela tifundvo teTibalo, sib.bobunjwa be-Jomethri njengendilinga nesikwele, kwenta ikholagi nekutakhela emaphethini laphatselene nesitfombe.Lishadi lesimo selitulu, ikhalenda kanye nesikhatsi sekubungata lusuku lwekutalwa, konkhe loku kubanika ematfuba ekufundza Tibalo.Sib. lwati lwathishela ngulo lolungenta kufundza kube yimphumelelo.

- *Tintfo letenteka malanga onkhe*, lapho bafundzi babamba lichaza ngesikhatsi sekudla, ngesikhatsi sekufika, ngesikhatsi sekuya ekhaya kanye nesikhatsi sekuya endlini lencane,sonkhe lesikhatsi singasetjentiswa kugcilwe eTibalweni.Bafundzi labagcoke lokubovu, sib.batawuba bokucala kuya endlini lencane (ungasebentisa umbala kanye netinombolo letitayelekile), umntfwana ngamunye utawutfola indishi nesinkhwa (1 ku 1 kuhambelana kwetintfo), Thandi utawufuna sinkhwa sesibili,Sipho yena akasakufuni lokunye.Loku kusho kutsi thishela kufanele abone abuye asebentise ematfuba lavelako ekufundzisa njengoba angumcumanisi wekufundza.

- Ngalesikhatsi semdlalo lokhululekile thishela angatfutfukisa sikhatsi sekucala kufundza Tibalo ngekutsi ahlele kahle indzawo yekudlala bakhululekile.Kudlala ngaphandle lokukhululekile lokufana nekucanca luhlaka lolwakhiwe ngetingodvo nobe kugibela libhayisikili, kungatfutfukisa kusetjentiswa kwesilulumagama setibalo lesibalulekile lesifana nalesi, etulu/ phasi, ngekusheshisa/ kancane, kuphakeme/kuphasi, njll. Kudlala ngemanti nangesanti kutawenta bafundzi kutsi bavisise emagama lafana nalawa, sisindvo, bungako kanye nemtsamo. Yonkhe lemisebenti lekukhulunywe ngayo itawutfutfukisa emakhono endlela yekubona tintfo letitawuba yincenye letawuphumelelisa kufundvwa kweLulwimi kanye neTibalolokuhlelekile.Tibonelo talamakhono nguleti:

  - Kutfutfukisa kuvisisa indzawo yakho esikhaleni, sib.ngemuva, ngaphambili, ngaphasi, dvutane nentfo (loku singakuchumanisa nesimelibungako eTibalweni.

  - Tinkhombandlela kanye netinhlangotsi (loku singakuchumanisa netinombolo kanye nekwakhiwa kwetinhlavu, nekufundza ucale esandleni sesancele uye esandleni sekudla)

Lendlela lechazwe ngenhla, indlela lekumele ilandzelwe ebangeni R letawutfutfukisa kucatululwa kwetinkinga tetibalo, kucabanga lokuhlelekile kanye nekucabangisisa, kanye nekufundzisa ngebuve bakho ngobe igcile ekufundziseni, nasekucocisaneni ngekubambisana.Ngekutsi basebentise ematfuba ekufundzisa lokungakahlelwa, thishela angakwati kugcugcutela bafundzi kutsi bavete tinchumo tabo babuye bacombele ngaloko lokungenteka, sib.Ngabe bacabanga kutsi sitja lebasisebentisa ngalesikhatsi badlala ngemanti singamumatsa emanti lamanyenti kudlula lesinye.

Ngekwenta tiphakamiso letilusito kanye nekucela bafundzi kutsi bacabange ngaletinye tindlela tekucatulula tinkinga tetibalo, thishela angakwati kugcugcutela bafundzi kutsi bacabange ngalokujulile bese banika tizatfu letifanele letiphatselene netincumo lebatitsetse.Loku akusho Tibalo kuphela kodvwa kutfutfuka ngalokuphelele nako kuyabukwa, tindzawo letibalulekile letiphatselene neSitatimende Senchubomgomo yaVelonkhe yeKharikhulamu neKuhlola nato tiyabukwa.

Inchubo yekuhlola ebangeni R kumele ibe ngulengakahleleki kantsi bafundzi kumele bangabi sesimeni sekubhaliswa sivivinyo.Ngalesizatfu lesi imsebenti yekuhlola ayikafakwa eSitatimendeni Senchubomgomo yaVelonkhe yeKharikhulamu neKuhlola seliBanga R. Umsebenti ngamunye lotawusetjentiselwa kuhlola kumele uhleleke kahle kute uhlanganise tinhlobo letihlukene temakhono.

Ebangeni R kuhlola lokunyenti kwenteka ngekutsi bafundzi bacashelwe, lapho thishela arekhoda imiphumela yekuhlola asebentisa tinhla tekutikhumbuta. Uma umnyaka uchubeka, sitfombe lesiphelele semfundzi ngamunye, tinkinga tetibalo lanato kanye nalapho aphumelela khona kuyakheka kancane kancane. Loko kunika litfuba lekusombulula tinkinga tetibalo letikhona kanye nekukhulisa loko lakwati kukwenta.

Luhlelo lwekufundza loluhlelekile lwakadzeni lolugcile eklasini, lolwenta umntfwana afundze angakakhululeki kufanele balugweme ngobe kwenta umfundzi weliBanga R angatifundzi ngalokufanele tibalo.

Liklasi leliBanga R kumele lingafani neliklasi leliBanga 1.Linetimphawu talo letihlukile letiphatselene nekutsi bafundzi labanaleminyaka balivisisa njani live lebakulo kanye nekutfola lwati, emakhono kanye nemagugu latabavumela kutsi bangete ematfuba labaniketwe wona eminyakeni yekufundza ngalokuhlelekile

2. 9 TINSITA LETIPHAKANYISIWE TELIKLASI LETIBALO TESIGABA SABOKHEWANE

- Tibali
- Lidayizi lelikhulu
- Ifulemu lenkhulu yekubala
- Lishadi lebudze
- 1-100 kanye na 101-200 iphosta yetinombolo lenkhulu (100 wemashadi)
- Tinhlobo letihlukene temugcatinombolo
- Emakhadi lakhulisako
- Imali yekudlala-imali lebuhehlu kanye nemali yemaphepha
- Ikhalenda yangalowomnyaka
- Liwashi letinsi laselubondzeni lelikhulu
- Sikali sekusimamisa
- Emabhuloki ekwakha
- Lubumba lwekudlala
- Tinhlobo letihlukene temabhokisi labobunjwa labahlukene lababuya ekhaya
- Tinhlobo letihlukene temabhodlela eplasitiki kanye netintfo letitawuchaza nobe ticatsanise umtsamo
- Sibonelo lesihle lesiyimbulungu (ibhola), iphrizimu lengucalandze (libhokisi), ikyubhu, ikhoni, iphiramidi kanye nesilinda.Thishela angatentela loku.
- Linani lemaplasitiki nobe emabhodi lasikwele, indilinga, tinhlobo letihlukene tabocalantsatfu letingemasayizi lahlukene.
- Imidlalo yeTibalo,emaphazili, emathanigramu, nalokunye
- Loku kubalulekile eBangeni R kanye naseBangeni 1:
    - Indzawo yekudlala ngesanti nemanti
    - Tinsita tekucanca, tekusima, tekujinka kanye nekuzuba
    - Sitolo sekudlala lesinetintfo lekumele batitsenge kanye nemali yekudlala
    - Tinhlobo letihlukene temidlalo lefanele
    - Emabhuloki

SIGABA 3: LOKUCONDZENENGCO NALOKUCACISAKO KWALOKUCUKETFWE

3.1 SINGENISO

Tibalo ka-GET ticuketse letihlokwana letilandzelako:

- Tinombolo, timphawu and budlelwane
- Emaphethini, emafangishini ne-Aljebra
- Sikhala nabobunjwa (iJomethri)
- Kulinganisa
- Kusebenta ngedatha

Ngakunye kwaloko lokucuketfwe kuyahlukaniswa kube tihloko etibalweni, sib.sikhala netibunjwa emabangeni abokhewane sihloko sinye singubobunjwa labangu-2-D. Lwati nemakhono aniketiwe esihlokweni ngasinye. Sahluko 3 seSitatimende Senchubomgomo Yekharikhulamu Nekuhlola (SISEYENE) seTibalo sesigaba sabokhewane sinika sibuye sichaze lokucuketfwe kwetibalo

3.2 KUNIKA LOKUCUKETFWE KUKHONJISWE INCUBELEMBILI

Lelithebula lalesigaba likhombisa tihlokwana nemakhono laniketiwe nekutfutfuka kusukela eBangeni R -3. Lelithebula lesibutsetelo seliBanga sikhombisa kutfutfuka kwelwati nemakhona kuwo omane emathemu emnyaka

Kodvwa-ke kuletinye tihloko letihlokwana/imicondvvo nemakhono kuyafana emabangeni lamabili lalandzelanako. Lokuchazwa kwalokucuketfwe kutawunika ticondziso kwekutsi kutfutfuka kungentiwa kanjani kulesimo. Lokuniketwa kwalokucuketfwe kumele kufundvwe kanye nekuchazwa kwalokucuketfwe.

Sibutsetelo sesiGaba sabokhewane saloko lokucuketfwe; timphawu nebudlelwane, emaphethini, emafangishini ne-Aljebra, sikhala nabobunjwa, kulinganisa nekusebenta ngedatha emabangeni R-3 njengoba kucacisiwe kulelithebula lelingentasi:

SIBUTSETELO SESIGABA SABOKHEWANE

1. TINOMBOLO, TIMPHAWU TEKUBALA NEBUDLELWANE

Kutfutfuka kwetinombolo, timphawu tekubala nebudlelwane

- Kutfutfuka lokumcoka etinombolweni, kutimphawu tekubala nebudlelwane kwenteka ngetindlela letintsatfu:
  - Kungenteka kuhleleka kwetinombolo.
  - Kungeniswa tinhlobo letehlukene tetinombolo.
  - Kugucuka kwetindlela tekubala.
- Njengoba linani lekuhleleka kwetinombolo lingeteka kufika eBangeni 3, bafundzi kumele batfutfukise tindlela letisebentisekako tekubala .
- Tinkinga tetibalo tesimongcondvo kumele ticaphele kuhleleka kwetinombolo talelobanga kanye nendlela bafundzi labakhona ngayo kubala

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
KUTFUTFUKISWA KWEBALA TINOMBOLO: Bala ngetinombolo letiphelele				
1.1 **Bala tintfo**	**Bala tintfo letiphatsekako** Combela ubuye ubale ngekwetsembeka. lokungenani tintfo leti -10 temalanga onkhe	**Bala tintfo letiphatsekako** Combela ubuye ubale ngekwetsembeka. lokungenani tintfo leti -50 temalanga onkhe Kubala ngetincumbi kuyakhutsatwa.	**Bala tintfo letiphatsekako** Combela ubuye ubale ngekwetsembeka. lokungenani tintfo leti -200 temalanga onkhe Kubala ngetincumbi kuyakhutsatwa.	**Bala tintfo letiphatsekako** Combela ubuye ubale ngekwetsembeka. lokungenani tintfo leti -1000 temalanga onkhe Kubala ngetincumbi kuyakhutsatwa.
1.2 **Bala uye phambili nasemuva**	**Bala uye phambili nasemuva ngakunye nga -1 kusukela ku -1 uye-10.** Kusebentisa imilolotelo nemaculo etinombolo	**Bala uye phambili nasemuva ngabo-1 kusukela kunobe nguyiphi inombolo emkhatsini we -0 ne -100** **Bala uye phambili:** • ngema-10 kusukela kunobe nguyiphi imalithiphuli ye -10 emkhatsini we-0 ne -100 • ngeti -5 kusukela kunobe nguyiphi imalithiphuli ye -5 emkhatsini we-0 ne -100 • ngabo -2 kusukela kunobe nguyiphi imalithiphuli ye -2 emkhatsini we-0 ne -100	**Bala uye phambili nasemuva nge**: • ngabo-1 kusukela nobe kuyiphi inombolo emkhatsini we 0 ne 200 • ngema-10 kusukela kunobe nguyiphi imalithiphuli ye -10 emkhatsini we-0 ne -200 • ngeti -5 kusukela kunobe nguyiphi imalithiphuli ye -5 emkhatsini we-0 ne -200 • ngabo -2 kusukela kunobe nguyiphi imalithiphuli ye -2 emkhatsini we-0 ne -200 • ngabo -3 kusukela kunobe nguyiphi imalithiphuli ye -3 emkhatsini we-0 ne -200 • ngabo -4 kusukela kunobe nguyiphi imalithiphuli ye -4 emkhatsini we-0 ne -200	**Bala uye phambili nasemuva nge**: • ngabo-1 kusukela nobe kuyiphi inombolo emkhatsini we 0 ne 1000 • ngema-10 kusukela kunobe nguyiphi imalithiphuli ye -10 emkhatsini we-0 ne -1000 • ngeti -5 kusukela kunobe nguyiphi imalithiphuli ye -5 emkhatsini we-0 ne -1000 • ngabo -2 kusukela kunobe nguyiphi imalithiphuli ye -2 emkhatsini we-0 ne -1000 • ngabo -3 kusukela kunobe nguyiphi imalithiphuli ye -3 emkhatsini we-0 ne -1000 • ngabo -4 kusukela kunobe nguyiphi imalithiphuli ye -4 emkhatsini we-0 ne -1000 • ngema 20,25,50,10 lokungenani uye kuye kulokungenani e-1000

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
KUTFUTFUKA KWELWATI LWETINOMBOLO: Kuveta tinombolo letiphelele				
	Shano ubuye usebentise emagama etinombolo engcikitsini leyetayelekile.			
1.3 **Tinombolo nemagama etinombolo**	**Bona, utfole ubuye ufundze tinombolo** • Bona, utfole ubuyeufundze tinombolo -1 uye eli-10. • Bona, utfole ubuye ufundze emagama etinombolo -1 uye eli-10.	**Bona, utfole ubuye ufundze tinombolo** • Bona, utfole ubuye ufundze tinombolo -1 uye e-100. • Bhala tinombolo -1 uye -20 • Bona, utfole ubuye ufundze emagama etinombolo -1 uye -10 • Bhala emagama etinombolo etinombolo -1 uye -10	**Bona, utfole ubuye ufundze tinombolo** • Bona, utfole ubuye ufundze tinombolo -0 uye 200. • Bhala tinombolo -0 uye -100 • Bona, utfole ubuye ufundze emagama etinombolo -0 uye -100 • Bhala emagama etinombolo -0 uye e-100	**Bona, utfole ubuye ufundze tinombolo** • Bona, utfole ubuye ufundze tinombolo -0 uye 1000. • Bhala tinombolo -0 uye -1000 • Bona, utfole ubuye ufundze emagama etinombolo -0 uye -1000 • Bhala emagama etinombolo -0 uye-1 000
KUTFUTFUKA KWELWATI LWETINOMBOLO: Chaza, catsanisa bese uhlela tinombolo letiphelele				
1.4 **Chaza, catsanisa ubuye uhlele tinombolo**	**Chaza, catsanisa ubuye uhlele tintfo letigcogciwe tifike -10.** • Chaza tinombolo letiphelele tifike eli-10 • Catsanisa kutsi nguyiphi yetintfo kuleti letimbili letigcogciwe lenkhulu, lencane, lencane kuna, lenkhulu kuna, lenyenti kuna, kulingana na, lokunyenti, llokuncayane, letimbalwa ufike eli-10. • Hlela tintfo letindlula kuletimbili ticale kulokuncane kakhulu kuye kulokukhulu kakhulu ufike eli-10 **Sebentisa tinombolo te-odinali, indzawo nobe kubekeka** • Tfutfukisa lwati lwetinombolo te -odinali, sib. Kwekucala, kwesibili, kwesitsatfu kuye kukwesitfupha nekwekugcina	**Chaza, catsanisa ubuye uhlele tintfo tifike -20.** • Chaza ubuye ucatsanise tintfo letigcociwe ngalokunyenti, lokuncane nalokufana nje. • Chaza ubuye uhlele tintfo letigcogciwe ticale kulokunyenti kuye kulokuncane nakulokuncane kuye kulokunyenti **Chaza, catsanisa ubuye uhlele tinombolo uye -20** • Chaza ubuye ucatsanise tinombolo letiphelele naloku ncane kuna, lokukhulu kuna, nalokunyenti kuna, kuncane kuna, kulingana. • Chaza ubuye uhlele tinombolo kusuka kulencane kakhulu uye kulenkhulu kakhulu nalkulenkhulu kakhulu uye kulekuncane kakhulu. **Sebentisa tinombolo te-odinali, indzawo nobe kubekeka** • Beka tintfo emgceni ticale ngeyekucala tifike kuyelishumi nobe ekucala uye ekugcineni, sib. Yekucala, yesibili, yesitsatfu … yelishumi.	**Chaza, catsanisa ubuye uhlele tinombolo uye -99** • Chaza ubuye ucatsanise tinombolo letiphelele ufike -99 usebentisa lokuncane kuna, lokukhulu kuna, lokunyenti kuna, nakulingana. • Chaza ubuye tinombolo letiphelele ufike -99 kusuka kulencane uye kulenkhulu nekusuka kulenkhulu uye kulencane. **Sebentisa te-odinali, indzawo nobe kubekeka** • Beka tintfo emgceni ticale ngeyekucala tifike kuyelishumi nobe ekucala uye ekugcineni, sib. *yekucala, yesibili, yesitsatfu … yemashumi lamabili*	**Chaza, catsanisa ubuye uhlele tinombolo uye -999** • Chaza ubuye ucatsanise tinombolo letiphelele ufike -999 ngekusebentisa lokuncane kuna, lokukhulu kuna, lokunyenti kuna, nakulingana. • Chaza ubuye tinombolo letiphelele ufike -999 kusuka kulencane uye kulenkhulu nekusuka kulenkhulu uye kulencane. **Sebentisa tinombolo te-odinali,, indzawo nobe kubekeka** • Sebentisa, ufundze ubuye ubhale tinombolo te-odinali ngalendlela Yekucala, yesibili, yesitsatfu ufike emashumini lamatsatfu nakunye.

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
KUTFUTFUKA KWELWATI LWETINOMBOLO: Simelibungako				
1.5 **Simelibungako**		**Cala kubona lokungenani simelibungako setinombolo letingemadijithi lamabili uye- 20** • Hlahlela tinombolo letingemadijithi la-2 tibe ngema malithiphuli e -10 nemivo/emayunithi	**Cala kubona lokungenani simelibungako setinombolo letingemadijithi lamabili uye- 99** • Hlahlela tinombolo letingemadijithi la-2 tibe ngema malithiphuli e -10 nemivo ifike -99 tibe ngema malthiphuli e -10 nemivo/ emayunithi • Tfola ubuye unike bungako bedigithi ngayinye.	**Cala kubona lokungenani simelibungako setinombolo letingemadijithi lamabili uye- 999** • Hlahlela tinombolo letingemadijithi la-3 tufike -999 tibe ngema maltiphuli e -100, emamalthiphuli e -10 nemivo/emayunith • Tfola ubuye unike bungako bedijithi ngayinye
SOMBULULA TIBALO ENGCIKITSINI				
1.6 **Emasu ekusombulula tinkinga tetibalo.**	**Sebentisa lamasu lalandzelako uye e- 10**: • Tinsita letiphatsekako sib. tibali • Sicanco lesibonakalako setinombolo	**Sebentisa lamasu lalandzelako nangabe kusonjululwa tinkinga tetibalo nekuchaza tisombululo taletinkinga tetibalo:** • Tinsita letiphatsekako, sib. Tibali • Kusebentisa titfombe kwetfu latibalo tendzaba. • Kwakha nekuhlahlela tinombolo • Kuphindza nekuhhafula • Umugcatinombolo	**Sebentisa lamasu lalandzelako nangabe kusonjululwa tinkinga tetibalo nekuchaza tisombululo taletinkinga tetibalo:** • Imidvwebo nobe tinsita letiphatsekako, sib. Tibali • Kwakha nekuhlahlela tinombolo • Kuphindza nekuhhafula • Umugcatinombolo	**Sebentisa lamasu lalandzelako nangabe kusonjululwa tinkinga tetibalo nekuchaza tisombululo taletinkinga tetibalo:** • Kwakha nekuhlahlela tinombolo • Kuphindza nekuhhafula • Umugcatinombolo • Kusondzeta eshumini
1.7 **Kuhlanganisa nekususa**	Sombulula tinkinga tetibalo temagama (tibalo tetindzaba) ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuhlanganisa nekususa etimphendvulweni ufike -10.	Sombulula tinkinga tetibalo temagama (tibalo tetindzaba) ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuhlanganisa nekususa etimphendvulweni ufike -20.	Sombulula tinkinga tetibalo temagama (tibalo tetindzaba) ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuhlanganisa nekususa etimphendvulweni ufike -99.	Sombulula tinkinga tetibalo temagama (tibalo tetindzaba) ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuhlanganisa nekususa etimphendvulweni ufike -999
1.8 **Phindza kuhlanganisa lokutawuholela ekuphindzaphindzeni**		Sombulula tinkinga tetibalo temagama ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuphindza nekuhlanganisa lekuholela ekuphindzaphindzeni netimphendvulo letifika -20	Sombulula tinkinga tetibalo temagama ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuphindza nekuhlanganisa lekuholela ekuphindzaphindzeni nekuphindzaphindza ngetimphendvulo letifika -50	Sombulula tinkinga tetibalo temagama ngengcikitsi bese uchaza tisombululo tenkinga tabo kufaka ekhatsi kuphindza nekuhlanganisa lekuholela ekuphindzaphindzeni nekuphindzaphindza ngetimphendvulo letifika -100

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
1.9 **Kugcogcela ndzawonye lokuholela ekwahlukaniseni**	Sombulula ubuye uchaze tisombululo tetinkinga tetibalo temagama (tibalo tetindzaba) engcikitsini lekufaka ekhatsi kwabelana ngalokulinganako, kugcogcela ndzawonye ngetinombolo letiphelele ufike -10 netimphendvulo letingatifaka tinsalela.	Sombulula ubuye uchaze tisombululo tetinkinga tetibalo temagama (tibalo tetindzaba) engcikitsini lekufaka ekhatsi kwabelana ngalokulinganako, kugcogcela ndzawonye ngetinombolo letiphelele ufike -20 netimphendvulo letingatifaka tinsalela.	Sombulula ubuye uchaze tisombululo tetinkinga tetibalo temagama (tibalo tetindzaba) engcikitsini lekufaka ekhatsi kwabelana ngalokulinganako, kugcogcela ndzawonye ngetinombolo letiphelele ufike -50 netimphendvulo letingatifaka tinsalela.	Sombulula ubuye uchaze tisombululo tetinkinga tetibalo temagama (tibalo tetindzaba) engcikitsini lekufaka ekhatsi kwabelana ngalokulinganako, kugcogcela ndzawonye ngetinombolo letiphelele ufike -100 netimphendvulo letingatifaka tinsalela.
1.10 **Kwabelana lokuholela etincetwini**			Sombulula ubuye uchaze tisombululo tetinkinga tetibalo letifaka ekhatsi kwabelana lokulinganako lokuholela etisombululweni letifaka tincetu letihamba ngakunye	Sombulula ubuye uchaze tisombululo tetinkinga tetibalo letifaka ekhatsi kwabelana lokulinganako lokuholela etisombululweni letifaka tincetu letihamba ngakunye.
1.11 **Imali**	Cikelela kutfutfukisa lwati lwemali lebuhhehlu neyemaphepha yaseNingizimu Afrika.	• Bona ubuye utfola imali lebuhehlu yaseNingizimu Afrika (5c, 10c, 20c, 50c, R1, R2, R5) neyemaphepha (R10 ne R20) • Sombulula tinkinga tetibalo temali lefaka emanani nentjintji uye R20 nesenti lafinyelela ku-20c	• Bona ubuye utfola imali lebuhehlu yaseNingizimu Afrika (5c, 10c, 20c, 50c, R1, R2, R5) neyemaphepha (R10 ne R20) • Sombulula tinkinga tetibalo temali lefaka emanani nentjintji uyeR99 nesenti lafinyelela ku .90c.	• Bona ubuye utfola imali lebuhehlu neyemaphepha yaseNingizimu Afrika • Sombulula tinkinga tetibalo temali lokufaka samba nentjintji ngemarandi nangemasenti.
KUTIBALELA NGEKUKHULULEKA				
1.12 **Emasu** **(Tindlela nobe tindlelanchubo)**		Sebentisa lamasu lalandzelako nangabe ubala: • Imidvwebo nobe tinsita letiphatsekako, sib. tibali • Kwakha nekuhlahlelea • Kuphindza nekuhhafula • Umugcatinombolo losekelwe tintfo letiphatsekako	Sebentisa lamasu lalandzelako nangabe ubala: • Imidvwebo nobe tinsita letiphatsekako, sib. tibali • Kwakha nekuhlahlela • Kuphindza nekuhhafula • Umugcatinombolo	Sebentisa lamasu lalandzelako nangabe ubala: • Imidvwebo nobe tinsita letiphatsekako, sib. tibali • Kwakha nekuhlahlela • Kuphindza nekuhhafula • Umugcatinombolo • Kusondzeta elishumini
1.13 **Kuhlanganisa nekususa**	Sombulula tinkinga tetibalo tekuhlanganisa nekususa ngemlomo letinetisombululo letifika e-10	• Hlanganisa uye-20 • Susa kusukela-20 • Sebentisa timphawu letifanele (+,–, =, ☐) • Kutetayeta ngekuhlanganisa tinombolo uye-10	• Hlanganisa uye-99 • Susa kusukela-99 • Sebentisa timphawu letifanele (+,–, =, ☐) • Kutetayeta ngekuhlanganisa tinombolo uye-20	• Hlanganisa uye 999 • Susa kusukela 999 • Sebentisa timphawu letifanele (+,–, =, ☐) • Kutetayeta ngekuhlanganisa tinombolo uye-30

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
1.14 **Kuphindza kuhlanganisa lekuholela ekuphindzaphindzeni**		• Hlanganisa inombolo yinye ngalokuphindzaphindziwe uye -20 • Sebentisa timphawu letifanele (+, =, ☐)	• Phindzaphindza tinombolo-1uye-10 nga 2, 5, 3 na 4 uye kusamba sema-50. • Sebentisa timphawu letifanele (+, x, =, ☐)	• Phindzaphindza nobe nguyiphi inombolo nga 2, 3, 4, 5, 10 kwente samba seli100 • Sebentisa timphawu letifanele (x, ☐)
1.15 **Kuhlukanisa**				• Hlukanisa tinombolo tifike e-100 nga-2, 3, 4, 5, 10 • Sebentisa timphawu letifanele (+, =, ☐)
1.16 **Tibalo tenhloko**	**Lwati lwetinombolo: Kuhleleka-10** Umsebenti ngamunye ucala ngetibalo tenhloko • Kubala tintfo letisetjentiswa malanga onkhe • Kubala uye phambili nasemuva • Kubala ngetinombolo te-odinali • Shaya tandla tikhatsi letinyenti/ letimbalwa • Ngukuphi kushaya lokunyenti/ lokuncane • Nguyiphi inombolo leta kucala/ ngemuva/emkhatsini	**Lwati lwetinombolo: Kuhleleka-20** • Shano inombolo lengembi kwaleniketiwe naletangemuva kwaleniketiwe • Hlela luhla lwetinombolo letikhetsiwe letiniketiwe • Catsanisa tinombolo ufike ema-20 ubuye usho kutsi nguyiphi lenkhulu nobe lencane ngaku-1 nobe ku-2 **Khumbula ngekusheshisa:** • Emaciniso ekuhlanganisa nekususa u ye-10	**Lwati lwetinombolo: Kuhleleka -99** • Hlela luhla lwetinombolo letikhetsiwe letiniketiwe • Catsanisa tinombolo ufike-99 usho kutsi nguyiphi lenkhulu nobe lencane ngaku-1,2,3,4,5 nobe li-10 **Khumbula ngekusheshisa:** • Emaciniso ekuhlanganisa nekususa u ye -20 • Hlanganisa nobe ususa emamalthiphuli e -10 kusuka -0 kuye -100	**Lwati lwetinombolo: Kuhleleka -1000** • Hlela luhla lwetinombolo letikhetsiwe letiniketiwe. • Catsanisa a tinombolo ufike-1000 bese utsi nguyiphi lenkhulu nobe lencane ngaku-1,2,3,4,5 nobe li-10 **Khumbula ngekusheshisa:** • Emaciniso ekuhlanganisa nekususa u ye -20 • Hlanganisa nobe ususa emamalthiphuli e -10 kusuka - 0 uye -100 • Emaciniso ekuphindzaphindza tinombolo: - Lithebula lekuphindzaphindza ngaku -2 netimphendvulo ufike -20 - Lithebula lekuphindzaphindza ngaku-10 netimphendvulo ufike -100 - Emaciniso ekuhlukanisa tinombolo: - Hlukanisa ngaku -2 ufike -20 - Hlukanisa ngeli 10 ufike -100

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
1.16 **Tibalo tenhloko**		**Tindlela tekubala** Sebentisa tindlela tekubala yekuhlanganisa nekususa letihle: • Cala ngekubeka inombolo lenkhulu kute uchubeke ubale nobe ubale uye emuva. • Umugcatinombolo • Kuphindza nekuhhafula • Kwakha nekuhlahlela tinombolo • Kuphindza nekuhhafula	**Tindlela tekubala** Sebentisa tindlela tekubala yekuhlanganisa nekususa letihle: • Cala ngekubeka inombolo lenkhulu kute uchubeke ubale nobe ubale uye emuva. • Umugcatinombolo • Kuphindza nekuhhafula • Kwakha nekuhlahlela tinombolo • Kuphindza nekuhhafula • Sebentisa budlelwane emkhatsini wekuhlanganisa nekususa	**Tindlela tekubala** Sebentisa tindlela tekubala yekuhlanganisa nekususa letihle: • Cala ngekubeka inombolo lenkhulu kute uchubeke ubale nobe ubale uye emuva. • Umugcatinombolo • Kuphindza nekuhhafula • Kwakha nekuhlahlela tinombolo • Kuphindza nekuhhafula • Sebentisa budlelwane emkhatsini wekuhlanganisa nekususa • Sebentisa budlelwane emkhatsini wekuphindzaphindza nekuhlukanisa
1.17 **Tincetu**			• Sebentisa nekuphimisa tincetu letingemayunithi engcikitsini leyetayelekile kufake ekhatsi bohhafu, emakota, kunye kulokutsatfu, kunye kulokusihlanu • Bona tincetu esimeni semidvwebo • Bhala tincetu tibe nguhhafu-1	• Sebentisa nekuphimisa tincetu letingemayunithi naletingewona emayunithi engcikitsini leyetayelekile kufake ekhatsi bohhafu, emakota, kunye kulokutsatfu, kunye kulokusiphohlongo, kunye kulokusitfupha,kunye kulokusihlanu • Bona tincetu esimeni semidvwebo • Bona tincetu letisesimeni semdvwebo • Kucala kubona kwekutsi emahhafu lamabili nobe kunye kulokutsatfu kube kutsatfu kwenta lokugcwele nekwekutsi ihhafu nemakota lamabili kuyalingana. • Bhala tincetu tibe nguhhafu -1, kunye kulokutsatfu 2

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2. EMAPHETHINI, EMAFANGISHINI NE-ALJEBRA

Kutfutfuka kwemaPhethini, Emafangishini ne-Aljebra

- KumaPhethini, Emafangishini ne-Aljebra, bantfwana batfola ematfuba eku:
  - Cedzela babuye bachubekisele phambili emaphethini lavela ngetimo letehlukene; ne
  - Bona ubuye uchaze emaphethini.
- Kuchaza emaphethini kwenta sendlalelo sekutsi bantfwana labaseSigabeni lesiseMkhatsini bachaze imitsetfo yemaphethini. Loku kuye kutfutfukiswe ku- Aljebra eSigabeni leSiphakeme.

TIHLOKO	LIBANGA R	LIBANGA1	LIBANGA2	LIBANGA 3
2.1 **Emaphethini e-Jomethri**	**Tsatsela ubuye uchubekisele phambili** Tsatsela uchubekisele phambili emaphethini lalula usebentisa tintfo letiphatsekako nemidvwebo (sibonelo: usebentisa imibala nabobunjwa)	**Tsatsela, uchubekisele phambili bese uyachaza** Tsatsela, chubekisela phambili ubuye uchaze ngemagama • Emaphethini lalula lentiwe ngetintfo letiphatsekako • Emaphethini lalula lentiwe ngemidvwebo yemigca, bobunjwa nobe tintfo. **Takhele emaphethini** Takhele emaphethini e-Jomethri • Ngetintfo letimbambekako • Ngekudvweba imigca, bobunjwa, netintfo letiphatsekako. **Emaphethini ndzawotonkhe** Tfola, chaza ngemagama ubuye utsatsele emaphethini e-Jomethri • emvelweni • emphilweni yemalanga onkhe, • kumagugu emasiko etfu	**Tsatsela, uchubekisele phambili bese uyachaza** Tsatsela, chubekisela phambili ubuye uchaze ngemagama • Emaphethini lalula lentiwe ngetintfo letiphatsekako • Emaphethini lalula lentiwe ngemidvwebo yemigca, bobunjwa nobe tintfo. **Takhele ubuye uchaze emaphethini** • Ngetintfo letimbambekako • Ngekudvweba imigca, bobunjwa, netintfo letiphatsekako. **Emaphethini ndzawotonkhe** Tfola, chaza ngemagama ubuye utsatsele emaphethini e-Jomethri • emvelweni • emphilweni yemalanga onkhe, • kumagugu emasiko etfu	**Tsatsela, uchubekisele phambili bese uyachaza** Tsatsela, chubekisela phambili ubuye uchaze ngemagama • Emaphethini lalula kakhulu lentiwe ngetintfo letiphatsekako • Emaphethini lalula lentiwe ngemidvwebo yemigca, bobunjwa nobe tintfo. **Takhele ubuye uchaze emaphethini** • Ngetintfo letimbambekako • Ngekudvweba imigca, bobunjwa, netintfo letiphatsekako. **Emaphethini ndzawotonkhe** Tfola, chaza ngemagama ubuye utsatsele emaphethini e-Jomethri • emvelweni • emphilweni yemalanga onkhe, • kumagugu emasiko etfu
2.2 **Emaphethini etinombolo**		**Tsatsela, chubekisela phambili ubuye uchaze** Tsatsela, chubekisela phambili ubuye kulandzelana kwetinombolo lokulula kufika ku-100 **Takhele emaphethini ubuye uwachaze.**	**Tsatsela, chubekisela phambili ubuye uchaze** Tsatsela, chubekisela phambili ubuye kulandzelana kwetinombolo lokulula kufika ku-200 **Takhele emaphethini ubuye uwachaze.**	**Tsatsela, chubekisela phambili ubuye uchaze** Tsatsela, chubekisela phambili ubuye kulandzelana kwetinombolo lokulula kufika ku-999 **Takhele emaphethini ubuye uwachaze.**

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3. SIKHALA NABOBUNJWA (IJOMETHRI)

Kutfutfuka ngekwesikhala nabobunjwa

Kutfutfuka lokumcoka ngekwesikhala nabobunjwa kutfolakala ngeku:

- Kugcila kutimphawu tabobunjwa netintfo letitsite kuleso naleso sigaba;
- Kuyekela kufundza lulwimi loluphatselene nendzawo nekumatanisa imibono lehlukene yetintfo letifanako nekufundza ulandzele tinkhombandlela telibalavemcondvo.

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
3.1 **Kubekeka, kutetayeta nekubukeka**	**Lulwimi lwekubekeka** Chaza kubekeka kwentfo letsite nawuyicatsanisa nalenye, (sibonelo: etukwe, ngembi kwe, ngasesancele se, sekudla se, etulu, phasi, eceleni ne. **Kubekeka netinkhombandlela** • Landzela tinkhombandlela nawuhambahamba eklasini.	**Lulwimi lwekubekeka** Chaza kubekeka kwentfo letsite nawuyicatsanisa nalenye, sibonelo: etukwe, ngembi kwe, ngasesancele se, sekudla se, etulu, phasi, eceleni ne. **Kubekeka nekubukeka** • Bona umatanise emacala lahlukene entfo lefanako yamalanga onkhe **Kubekeka netinkhombandlela** • Landzela tinkhombandlela nawuhambahamba eklasini. • Landzela ticondziso kubeka intfo letsite ihambisane nalenye, sibonelo; beka ipeniseli ngemuva kwelibhokisi	**Lulwimi lwekubekeka** Chaza kubekeka kwentfo letsite nawuyicatsanisa nalenye, sibonelo: etukwe, ngembi kwe, ngasesancele se, sekudla se, etulu, phasi, eceleni ne. **Kubekeka nekubukeka** • Bona umatanise emacala lahlukene entfo lefanako yamalanga onkhe **Kubekeka netinkhombandlela** Landzela tinkhombandlela nawuhambahamba eklasini.	**Lulwimi lwekubekeka** Chaza kubekeka kwentfo letsite nawuyicatsanisa nalenye, sibonelo: etukwe, ngembi kwe, ngasesancele se, sekudla se, etulu, phasi, eceleni ne. **Kubekeka nekubukeka** • Bona umatanise emacala lahlukene entfo lefanako yamalanga onkhe • Nika ligama lentfo lesetjentiswa malanga onkhe nakukhonjiswa licele lelingaketayeleki layo • Fundza, chaza bese udvweba libalavemcondvo nome licala langetulu lelicoco letintfo. • Tfola tintfo kubalavemcondvo. **Kubekeka netinkhombandlela** • Landzela tinkhombandlela nawuhambahamba eklasini. Nasesikolweni • Landzela tinkhombandlela kusuka endzaweni tsite kuya kulenye kubalavemcondvo. • Nika tinkhombandlela tekuhamba eklasini nasesikolweni.

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
3.2 **Tintfo letingemaday-imenshini lamatsatfu (3-D)**	**Kuhleleka kwetintfo** Bona wati emabito etintfo letingemadayimenshini lamatsatfu(3-D) eklasini • Bobunjwa labayibhola, • Bobunjwa bemabhokisi **Timphawu tetintfo** Chaza, hlunga ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) ngekubuka loku: • Isayizi • umbala • tintfo letigicikako • tintfo letishelelako **Imisebenti leyentiwako** • Sebentisa tintfo letingemadayimenshini lamatsatfu (3-D) njengemabhuloki ekwakha, kusetjentiswa kabusha, njll kwacha tintfo letitsite, sibonelo: imibhoshongo, emabhuloho, njll	**Kuhleleka kwetintfo** Bona wati emabito etintfo letingemadayimenshini lamatsatfu(3-D) eklasini nasetitfombeni • Bobunjwa labayibhola, • Bobunjwa bemabhokisi **Timphawu tetintfo** Chaza, hlunga ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) ngekubuka loku: • Isayizi • umbala • tintfo letigicikako • tintfo letishelelako **Imisebenti leyentiwako** • Bona ubuye wakhe tintfo letingemadayimenshini lamatsatfu (3-D) usebentisa tintfo letifana nemabhuki ekwakha, kuvuselela kabusha, tinsita tekwakha.	**Kuhleleka kwetintfo** Bona wati emabito etintfo letingemadayimenshini lamatsatfu(3-D) eklasini nasetitfombeni • Bobunjwa labayibhola, (tindilinga) • Bobunjwa bemabhokisi • (emaphrizimu) • Emasilinda **Timphawu tetintfo** Chaza, hlunga ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) ngekubuka loku: • Isayizi • tintfo letigicikako • tintfo letishelelako **Imisebenti leyentiwako** • Bona ubuye wakhe tintfo letingemadayimenshini lamatsatfu (3-D) usebentisa tintfo letiphatsekako njengabobunjwa labangemada-yimenshini lamabili (2-D), emabhiloki, kuvuselela tintfo kabusha, tinsita tekwakha naletinye tintfo letingemadayimenshini lamatsatfu (3-D)	**Kuhleleka kwetintfo** Bona wati emabito etintfo letingemadayimenshini lamatsatfu(3-D) eklasini nasetitfombeni • Bobunjwa labayibhola, (tindilinga) • Bobunjwa bemabhokisi • (emaphrizimu) • Emasilinda • emaphiramidi • emakhoni **Timphawu tetintfo** Chaza, hlunga ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) ngekubuka loku: • bobunjwa labangemada-yimenshini lamabili-(2-D) labenta buso bentintfo letingemadayimnshini lamatsatfu (3-D) indzawo lendlalekile nalegobekile **Imisebenti leyentiwako** • Bona ubuye wakhe tintfo letingemadayimenshini lamatsatfu (3-D) usebentisa tintfo letiphatsekako njengabobunjwa labangemada-yimenshini lamabili (2-D), lubumba,luvungulo, simunyangaso,letinye tintfo letingemadayimenshini lamatsatfu (3-D) te-Jomethri

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
3.3 **Bobunjwa labangema-dayimenshini lamabili (2-D),**	**Bona, utfola abuye anike emagama abobunjwa bemadayimenshini lamabili eklasini nasetitfombeni kufaka ekhatsi:** • Timphawu tebafundzi • Ligama leliklasi	**Kuhleleka lwabobunjwa** Bona ubuye unike bobunjwa letingemadayimenshini lamabili (2-D) • Indilinga • Calantsatfu • sikwele **Timphawu tabobunjwa** Chaza, hlunga ubuye ucatsanise bobunjwa labangemada-yimenshini lamabili (2-D) ngekubuka loku: • isayizi • umbala • emacala lacondzile • emacala layindilinga	**Kuhleleka lwabobunjwa** Bona ubuye unike bobunjwa letingemadayimenshini lamabili (2-D) • indilinga • calantsatfu • sikwele • calandze **Timphawu tabobunjwa** Chaza, hlunga ubuye ucatsanise bobunjwa labangemada-yimenshini lamabili (2-D) ngekubuka loku: • isayizi • umbala • emacala lacondzile • emacala layindilinga	**Kuhleleka lwabobunjwa** Bona ubuye unike bobunjwa letingemadayimenshini lamabili (2-D) • indilinga • calantsatfu • sikwele • calandze **Timphawu tabobunjwa** Chaza, hlunga ubuye ucatsanise bobunjwa labangemada-yimenshini lamabili (2-D) ngekubuka loku: • kubunjwa • emacala lacondzile • emacala layindilinga **Dvweba bobunjwa** • indilinga • calantsatfu • sikwele • calandze
3.4 **Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako**	**Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako** • Bona lokuhlukana emkhatsini kulingane kufanane emtimbeni wakho	**Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako** • Bona lokuhlukana emkhatsini kulingane kufanane emtimbeni wakho • Bona ubuye udvwebe umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako kubobunjwa be-Jomethri nalabo labangasibo be-Jomethri labangemada-yimenshini lamabili (2-D)	**Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako** • Bona ubuye udvwebe umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako kubobunjwa be-Jomethri nalabo labangasibo be-Jomethri labangemada-yimenshini lamabili (2-D)	**Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako** • Bona ubuye udvwebe umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako kubobunjwa be-Jomethri nalabo labangasibo be-Jomethri labangemada-yimenshini lamabili (2-D) • Tfola umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako ngekugoca liphepha nekukhomba

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4. SILINGANISO

Kutfutfuka ekulinganiseni

- Kutfutfuka lokusemcoka ekulinganiseni kuto tonkhe tiigaba kuphumeleliswa singeniso saloku:
  - Tindlela letinsha tekulinganisa;
  - Emathulusi lamasha ekulinganisa, ucala ngemathulusi langakahleleki bese uya kulahlelekile ebangeni lesibili nelesitsattfu;
  - Emayunithi lamasha ekulinganisa, latfolakala emaBangeni lesi-2 nelesi -3.
- Kubala nesombulula tinkinga tetibalo ngekulinganisa kufanele kucaphele umsebenti wetinombolo lesewentiwe.

TIHLOKO	LIBANGA R	LIBANGA1	LIBANGA 2	LIBANGA 3
4.1 **Sikhatsi**	**Kundlula kwesikhatsi** Khuluma ngekundlula kwesikhatsi • Khuluma ngetintfo letentekako emini naletenteka ebusuku. • Bafundzi balandzelanisa tigameko letenteka kubo emini. • Hlela tigameko letivamile temphilo yabo.	**Kundlula kwesikhatsi** Khuluma ngekundlula kwesikhatsi • Hlela tigameko letivamile temphilo yabo. • Catsanisa budze besikhatsi ngekusebentisa lulwimi sib. lokudze, lokufisha, lokugijimako, lokuhamba kancane. • Landzelanisa tigameko usebentisa lulwimi sib.itolo, namuhla, kusasa **Kusho sikhatsi** • Chaza kwenteka kwetintfo ngekusebentisa lolulwimi sib. ekuseni, emini, ntsambama ebusuku, ngesikhatsi, nasemuva kwesikhatsi. • Nika ngekulandzelanisa emalanga eliviki netinyanga temnyaka. • Faka emalanga ekutalwa ekhalendeni.	**Kusho sikhatsi** • Nika ubuye ulandzelanise emalanga eliviki netinyanga temnyaka. • Faka emalanga ekutalwa, imigidvo yetenkholo, emaholide esive, tigameko lemlandvo, tigameko tesikolo ekhalendeni. • Shano sikhatsi sema-awa lalishumi nakubili ngema-awa, ngema-awa lahhafu, ngekota yeli-awa nangemaminithi.	**Kusho sikhatsi** • Fundza tinsuku ekhalendeni. • Faka emalanga ekutalwa, imigidvo yetenkholo, emaholide esive, tigameko lemlandvo, tigameko tesikolo ekhalendeni. • Shano sikhatsi sema-awa lalishumi nakubili nge: - ma-awa - hhafu yema-awa - kota yema-awa - maminithi usebentisa liwashi letintsi neliwashi letinombolo naletinye tinsita letikhombisa sikhatsi ngetinombolo njengabomakhalekhikhini.

TIHLOKO	LIBANGA R	LIBANGA1	LIBANGA 2	LIBANGA 3
			Bala budze nekundlula kwesikhatsi • Sebentisa ikhalenda kubala nekuchaza budze besikhatsi: - ngemalanga, - ngemaviki • Sebentisa liwashi kubala budze besikhatsi: - ngema-awa. - ngehhafu yeli-awa	**Bala budze nekundlula kwesikhatsi** • Sebentisa ikhalenda kubala budze besikhatsi. - ngemalanga, - ngemaviki - ngetinyanga • Gucula emkhatsini wemalanga nemaviki • Gucula emkhatsini wemaviki netinyanga • Sebentisa liwashi kubala budze besikhatsi: - ngema-awa. - ihhafu yema-awa . - ikota yema-awa.
4.2 **Budze**	**Kukala lokungakahleleki** • Catsanisa ubuye uhlole budze, kuphakama nobe bubanti, betintfo letimbili nobe letinyenti ngekutibeka edvute nalenye. Sebentisa lulwimi kukhuluma ngekucatsanisa sib. lokudze, lokufisha, lokuphakeme, lokubanti.	**Kukala lokungakahleleki** • Catsanisa ubuye uhlole budze, kuphakama nobe bubanti, betintfo letimbili nobe letinyenti ngekutibeka edvute nalenye. Sebentisa lulwimi kukhuluma ngekucatsanisa sib. lokudze, lokufisha, lokuphakeme, lokubanti. • Combela, linganisa, catsanisa, landzelanisa ubuye ubhale budze besilinganiso lesingakahleleki sib. Impama, lizinga lekwenta, ipeniseli lendze netintfo tekubala. • Chaza budze betintfo ngekubala usho budze ngemayunithi langakahleleki.	**Kukala lokungakahleleki** • Combela, linganisa, catsanisa, landzelanisa ubuye ubhale budze besilinganiso lesingakahleleki sib. Impama, lizinga lekwenta, ipeniseli lendze netintfo tekubala. • Chaza budze betintfo ngekubala usho budze ngemayunithi langakahleleki.	**Kukala lokungakahleleki** • Combela, linganisa, catsanisa, landzelanisa ubuye ubhale budze besilinganiso lesingakahleleki sib. Impama, lizinga lekwenta, ipeniseli lendze netintfo tekubala. • Chaza budze betintfo ngekubala usho budze ngemayunithi langakahleleki.

TIHLOKO	LIBANGA R	LIBANGA1	LIBANGA 2	LIBANGA 3
			Kungenisa kukala lokuhlelekile Combela, kala, catsanisa, hlela ubuye urekhode budze usebentisa emamitha (kungaba yindvuku leyimitha, tintsambo letilingana imitha) njengeyunithi lehlelekile yekukala budze.	**Kungenisa kukala lokuhlelekile** Combela, kala, catsanisa, hlela ubuye urekhode budze usebentisa emamitha (kungaba yindvuku leyimitha, tintsambo letilingana imitha) njengeyunithi lehlelekile yekukala budze. • Combela ubuye ukale budze ngemasentimitha. (Awuntjintji emasentimitha uwayise emamitheni).
4.3 **Sisindvo**	**Kukala lokungakahleleki** • Catsanisa ubuye uhlele sisindvo setintfo letimbili noma letinyenti ngekutiva nobe usebentisa sikali sekulinganisa. • Sebentisa lulwimi kukhuluma ngekucatsanisa sib. Kulula, kuyasindza nobe kusindza kakhulu.	**Kukala lokungakahleleki** • Combela, kala, catsanisa, hlela ubuye urekhode sisindvo usebentisa sikali sekulinganisa netilingalinganiso letingakabekelwa umtsetfo sib. titini, nemabhuloki. • Chaza sisindvo setintfo ngekubala nekusho sisindvo ngemayunithi langakahleleki. • Sebentisa lulwimi kukhuluma ngekucatsanisa sib. Kulula, kuyasindza nobe kusindza kakhulu.	**Kukala lokungakahleleki** • Combela, kala, catsanisa, hlela ubuye urekhode sisindvo usebentisa sikali sekulinganisa netilingalinganiso letingakabekelwa umtsetfo sib. titini, nemabhuloki. • Chaza sisindvo setintfo ngekubala nekusho sisindvo ngemayunithi langakahleleki. • Sebentisa lulwimi kukhuluma ngekucatsanisa sib. Kulula, kuyasindza nobe kusindza kakhulu. **Kungenisa kukala lokuhlelekile** • Catsanisa uhlele ubuye urekhode sisindvo setintfo letipakelwe kutsengiswa letiveta sisindvo ngemakhilogremu sib. Emakhilogremu lama -2 elayisi, ikhilogremu yafulawa. • Kala sisindvo sakhe ngemagremu asebentisa sikali sasendlini lencane.	**Kukala lokungakahleleki** • Combela, kala, catsanisa, hlela ubuye urekhode sisindvo usebentisa sikali sekulinganisa netilingalinganiso letingakabekelwa umtsetfo sib. titini, nemabhuloki. • Chaza sisindvo setintfo ngekubala nekusho sisindvo ngemayunithi langakahleleki. • Sebentisa lulwimi kukhuluma ngekucatsanisa sib. Kulula, kuyasindza nobe kusindza kakhulu. **Kungenisa kukala lokuhlelekile** • Catsanisa uhlele ubuye urekhode sisindvo setintfo letipakelwe kutsengiswa letiveta sisindvo - ngemakhilogremu sib. Emakhilogremu lama -2 elayisi, ikhilogremu yafulawa. - ngemagremu sib. 500 emagremu asawoti • Kala sisindvo sakhe ngemagremu asebentisa sikali sasendlini lencane. (Awuntjintji emasentimitha uwayise kumamitha)

TIHLOKO	LIBANGA R	LIBANGA1	LIBANGA 2	LIBANGA 3
4.4 **Umtsamo/Bungako**	**Kulinganisa lokungakahleleki** • Catsanisa ubuye uhlele umtsamo walokusamanti (bungako) etintfweni tekuphatsa letimbili letihlalelene. Bafundzi bahlola ngekutsela entfweni yekuphatsa yesitsatfu nakudzingekile. • Catsanisa ubuye uhlele umtsamo walokusamanti longatfwalwa tintfo tekuphatsa letimbili natigcwalisiwe (umtsamo) • Sebentisa lulwimi kukhulume ngekucatsanisa sib. Kukhulu kuna, kuncane kuna, kugcwele, akunalutfo.	**Kulinganisa lokungakahleleki** • Catsanisa ubuye uhlele umtsamo walokusamanti (bungako) etintfweni tekuphatsa letimbili letihlalelene. Bafundzi bahlola ngekutsela entfweni yekuphatsa yesitsatfu nakudzingekile. • Catsanisa ubuye uhlele umtsamo walokusamanti longatfwalwa tintfo tekuphatsa letimbili natigcwalisiwe (umtsamo) • Sebentisa lulwimi kukhuluma ngekucatsanisa sib. Kukhulu kuna, kuncane kuna, kugcwele, akunalutfo. • Combela, kala, catsanisa, hlela ubuye urekhode umtsamo wetintfo tekuphatsa ngekusebentisa tilinganiso letingakabekelwa umtsetfo sib. tipunu netinkomishi. • Chaza umtsamo wentfo yekuphatsa ngekusho kutsi mangaki emayunithi langakahleleki longawasebentisa nawugcwalisa lentfo yekuphatsa sib. Libhodlela lelinemtsamo wetinkomishi letine.	**Kulinganisa lokungakahleleki** • Combela, kala, catsanisa, hlela ubuye urekhode umtsamo wetintfo tekuphatsa (letingakumumatsa uma tigcwalisiwe) ngekusebentisa tilinganiso letingakabekelwa umtsetfo sib. tipunu netinkomishi. • Chaza umtsamo wentfo yekuphatsa ngekusho kutsi mangaki emayunithi langakahleleki longawasebentisa nawugcwalisa lentfo yekuphatsa sib. Libhodlela lelinemtsamo wetinkomishi letine.	**Kulinganisa lokungakahleleki** • Combela, kala, catsanisa, hlela ubuye urekhode umtsamo wetintfo tekuphatsa (letingakumumatsa uma tigcwalisiwe) ngekusebentisa tilinganiso letingakabekelwa umtsetfo sib. tipunu netinkomishi. • Chaza umtsamo wentfo yekuphatsa ngekusho kutsi mangaki emayunithi langakahleleki longawasebentisa nawugcwalisa lentfo yekuphatsa sib. Libhodlela lelinemtsamo wetinkomishi letine.

TIHLOKO	LIBANGA R	LIBANGA1	LIBANGA 2	LIBANGA 3
			Kungenisa kulinganisa lokuhlelekile • Combela, kala, catsanisa, hlela ubuye urekhode umtsamo wetintfo ngekukala usebentisa emalitha • Catsanisa, hlela ubuye urekhode umtsamo wetintfo letipakelwe kutsengiswa lovetwe ngemalitha sib. emalitha lama -2 elubisi, ilitha yesinatfo lesibandzako, emalitha la -5 ependi.	**Kungenisa kulinganisa lokuhlelekile** • Combela, kala, catsanisa, hlela ubuye urekhode umtsamo wetintfo ngekukala usebentisa emalitha, ihhafu yelitha, nekota yelitha. • Catsanisa, hlela ubuye urekhode umtsamo wetintfo letipakelwe kutsengiswa lovetwe ngemalitha sib. Emalitha lama -2 elubisi, ilitha yesinatfo lesibandzako, emalitha la -5 ependi nobe kuvetwe ngemamililitha sib. 500 emamililitha elubisi, 340 emamililitha esinatfo lesibandzako, 750 emamililitha e-oyila. • Yati kutsi inkomishi lelingene ingemamililitha la -250 • Yati kutsi ithisipunu lelingene ingemamililitha la -5 (Awuntjintji emasentimitha uwayise kumamitha)
4.5 **Ipherimitha nebungako bendzawo**				**Ipherimitha** Cwaninga libanga nawujikeleta bobunjwa labangemada-yimenshini lamabili (2-D) netintfo letingemadayimenshini lamatsatfu (3-D) usebentisa kucatsanisa lokucondzile nobe emayunithi langakahleleki. **Bungako bendzawo** Cwaninga bungako bendzawo ngekuyifaka emathayilisi.

SIBUTSETELO SESIGABA SABOKHEWANE

5. KUSEBENTA NGEDATHA

Kutfutfuka eKusebenteni ngeDatha

- Kutfutfuka lokumcoka ekusebenteni ngedatha emabangeni onkhe kwentiwa nguloku:
  - Kwedlula ekusebenteni ngetintfo kufinyelele ekusebenteni ngedatha, ne
  - Kusebenta ngetimo letisha letimele idatha/imidvwebo
- Bafundzi kumele basebente ngedathaa lejikeletako lephelele lokungenani kanye ngemnyaka-loku kufaka kugcogca nekuhlela idatha, kuveta idatha ngemdvwebo, kuhlatiya idatha, kuhumusha idatha nekwetfula umbiko.
- Letinye taletintfo letingenhla tekusebenta ngedatha tingabuye tisetjentwe tibe imisebenti leyehlukene.

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
5.1 **Gcogca ubuye uhlunge tintfo**	**Gcogca ubuye uhlela tintfo** Gcogca ubuye uhlunge tintfo letiphatsekako temalanga onkhe.	**Gcogca ubuye uhlela tintfo** Gcogca ubuye uhlunge tintfo letiphatsekako temalanga onkhe.		
5.2 **Veta lugcogco lwetintfo letihlungiwe**	**Veta lugcogco lwetintfo letihlungiwe** Dvweba sitfombe setintfo letigcogciwe	**Veta lugcogco lwetintfo letihlungiwe** Kudvweba sitfombe setintfo letigcogciwe		
5.3 **Coca ubuye ubike ngetintfo letigcogcwe tabuye tahlungwa**	**Coca ubuye ubike ngetintfo letigcogcwe tabuye tahlungwa** **Kuphendvula imibuto mayelana naloku** Phendvula imibuto ngaloku • Kuhlungwe njani lokugcogciwe • Umdvwebo walokugcogciwe	**Coca ubuye ubike ngetintfo letigcogcwe tabuye tahlungwa** • Nika tizatfu kwekutsi kuhlungwe njani lokugcogciwe • Phendvula imibuto ngaloku: - Kuhlungwe njani (indlelancubo) - Loko lokugcogciwe kwahlungwa kunjengani (umkhicito) • Chaza ngalokugcogciwe na/ umdvwebo • Chaza kutsi lokugcogciwe kwahlungwa njani		

TIHLOKO	LIBANGA R	LIBANGA 1	LIBANGA 2	LIBANGA 3
5.4 **Gcogca ubuye uhlele idatha**		**Gcogca ubuye uhlele idatha** • Gcogca idatha mayelana neliklasi nobe nesikolo kute uphendvule imibuto lebutwe nguthishela.	**Gcogca ubuye uhlele idatha** • Gcogca idatha mayelana neliklasi nobe nesikolo kute uphendvule imibuto lebutwe nguthishela	**Gcogca ubuye uhlele idatha** • Gcogca idatha mayelana neliklasi nobe nesikolo kute uphendvule imibuto lebutwe nguthishela • Hlela idatha lenikwe nguthishela nobe libhuku lemsebenti/incwadzi yemfundzi • Hlela lwati nge: - Tinhla - Timphawu - Temathali - emathebula
5.5 **Veta idatha**		**Veta idatha** • Veta idatha ngegrafutitfombe • Kwenteka kuphela kumagrafutitfombe lanekucondzana kwalokunye nalokunye	**Veta idatha** • Veta idatha ngegrafutitfombe • Kwenteka kuphela kumagrafutitfombe lanekucondzana kwalokunye nalokunye	**Veta idatha** Veta idatha nge: • Ngegrafutitfombe (Kwenteka kuphela kumagrafutitfombe lanekucondzana kwalokunye nalokunye) • i-bha grafu
5.6 **Hlatiya ubuye uhumushe idatha**		**Hlatiya ubuye uhumushe idatha** Phendvula imibuto lemayelana nedatha lesegrafinititfombe • Kwenteka kuphela kumagrafutitfombe lanekucondzana kwalokunye nalokunye	**Hlatiya ubuye uhumushe idatha** Phendvula imibuto lemayelana nedatha lesegrafinititfombe • Kwenteka kuphela kumagrafutitfombe lanekucondzana kwalokunye nalokunye	**Hlatiya ubuye uhumushe idatha** Phendvula imibuto lemayelana nedatha lesegrafinititfombe • Kwenteka kuphela kumagrafutitfombe lanekucondzana kwalokunye nalokunye

3.3 KUCHAZA LOKUTAWUFUNDVWA

Kulesahluko lesitawuchaza lokutawufundvwa, bothishela batawuniketwa loku lokulandzelako:

- Sibutsetelo sethemu yeliBanga R kuya ku-3
- Tihloko letilandzelanako letiphakanyisiwe letihlukaniswe ngetigamu: Akusito tonkhe tincenye taletihloko letitawufundziswa ngethemu ngayinye; letinye tincenye taletinye tihloko tindzinga kufundziswa ngembikwal-etinye ticenye taletotihloko.
- Kuhleleka kahle kwetihloko letiphakanyisiwe ngekwemnyaka.Tihloko talokucuketfwe letinye tidzinga sikhatsi lesinyenti kwengca letinye, ngako-ke letinye tihloko tidzinga sikhatsi lesinyenti kunaletinye
- Emanotsi lachaza lokutsite kanye netindlela tekufundzisa letihamba netibonelo lapho kudzingeke khona.

Loko lokutawufundziswa ngakunye kuhlukaniswe ngetihloko.Loko lokutawufundziswa kumele kufundziswe kutotonkhe tigamu.Kulandzelaniswa kwetihloko ngekwemathemu kusinika umbono wekutsi tihloko tingasabalaliswa njani tibuye tibuketwe umnyaka wonkhe. Akukabaluleki kufundzisa tonkhe tihloko letiphatselene neSikhala nabobunjwa, Silinganiso kanye nekusebentisa Idatha kutotonkhe tigamu.Ngako- ke tonkhe tihloko kumele tifundziswe ekhatsini wemnyaka.

Esahlukeni sesibili (sicephu 2.6) sisindvo semikhakha yalokucuketfwe siniketiwe.Uma loku kungahlanganiswa nema a-awa lakhona emnyakeni umuntfu angakhona kubala ema-awa emkhakha walokucuketfwe ngamunye.

Bothishela bangakhetsa kulandzelanisa kanye nekuhlela sikhatsi salokucuketfwe ngendlela lehlukile kuletiphakamiso letikhona kulesahluko.Bothishela bangakhetsa kuhlela sikhatsi salokucuketfwe ngendlela lehlukile kuletiphakamiso letikhona kulesahluko.Noma kunjalo kumele bangakhohlwa sisindvo kanye nema a-wa laphatselene nemkhakha walokucuketfwe kweTibalo tesigaba Sabokhewane.

- Tibalo letifundvwa **ebangeni R** tisesimeni setibalo leticala kufundvwa ngako-ke atikahlukaniswa ngekwesikhatsi setifundvo.Thishela weliBanga R kumele ahlanganise tibalo naleminye imisebenti yemntfwana yemalanga onkhe, nanobe sikhatsi kumele sibekwe eceleni lapho thishela atawugcila emsebentini wetibalo ngelilanga. Nangabe sikhatsi singeke sibekwe eceleni bafundzi angeke bacaphele nobe babe nelutsandvo lwelwati kanye nemakhono.
- Sikhatsi lesiniketiwe emabangeni 1-3 singalendlela:
  - **Ema-awa langu-7 kumele asetjentiselwe Tibalo ngeliviki** (10 wemaviki x 4 wethemu x 7 wema-awa = 280 wema awa ngemnyaka
  - Sifundvo seTibalo kumele sibe **li-awa linye nemaminithi langema-24 ngelilanga emabangeni 1- 3**
  - Loku kusho kutsi kunetigamu letine temaviki lalishumi kanye netifundvo letisihlanu ngeliviki

(NgeMsombuluko kuya kulesihlanu)

- Kumele kube neliviki lokubetayeta kanye nekuhlanganisa lokutawufundvwa ekucaleni kwethemu, njengoba bafundzi baye bakhohlwe lokunyenti lokufundziwe ngesikhatsi semaholide. Ekupheleni kwethemu ngayinye kumele kube neliviki lapho kutawuhlanganiswa lokufundziwe.Loku kutasinika tifundvo letingu 160, 8 x 4 x 5 = 160

3.4 KULANDZELANISA TIHLOKO KANYE NEKUHLELA TIHLOKO NGEKWESIKHATSI

Lamathebula lalandzelako aniketiwe esigabeni ngasinye kusigaba R -3:

- Kuhlelwa kwetihloko ngekwesikhatsi umnyaka wonkhe (loku kukhombisa kusabalalisa tihloko kutotonkhe tigamu bese kubekwa bungako besikhatsi lokumele sicitfwe esihlokweni ngasinye lesiphatselene nemkhakha walokucuketfwe.

- Kulandzelanisa tihloko ngekwemnyaka (loku kukhombisa kutsi tihloko tabiwe njani kuthemu ngayinye kanye nekutfutfuka kwelwati nemakhono kuwo onkhe emathemu).

- Emanotsi lachaza lokutsite ngekwesihloko ngasinye-lamathebula asinika lwati lolucacisiwe kanye netindlela tekufundzisa tesihloko ngasinye njengoba tilandzelana kuwo onkhe emathemu.

Luhlelo Sifundvo-Kwabiwa kwetihloko ethemini ngayinye

Tinombolo sihloko lesibalulekile esifundvweni seTibalo esigabeni saboKhewane.Esikhatsini lesinyenti evikini ngalinye, kuthemu kanye nasemnyakeni wonkhe kusuke kugcilwe kuTinombolo,Timphawu tekubala kanye Nebudlelwane. Tifundvo tetibalo letintsatfu nobe letingetulu evikini ngalinye kumele tigcile esifundvweni seTinombolo,Timphawu tekubala kanye Nebudlelwane.Sikhatsi lesisele kumele sihlukaniselwe leminye imikhakha yalokucuketfwe.

Sikhala naBobunjwa kanye neSilinganiso kudzinga sikhatsi lesinyenti kanye nekunakwa kwendlula Kusebenta ngeDatha kanye nemaPhethini, eMafangishini kanye ne Aljebra.Lamathebula langentasi asinika lwati lwekutsi tingaki tifundvo lekumele sitabele umkhakha walokucuketfwe ngamunye kanye netihloko ebangeni ngalinye kuMaphethini,eMafangishini kanye ne-Aljebra,Sikhala nabobunjwa,Silinganiso kanye nekusebentisa Idatha.

Kwabiwa kwemikhakha yalokucuketfwe kanye netihloko tetifundvo eBangeni R

Njengoba Tibalo teliBanga R tisesimeni setibalo leticala kufundvwa, leSikhatsi lesiphakanyisiwe sekufundza lesitawabiwa lesilandzelako sitawusetjentiselwa sifundvo seTibalo lekugcilwe kuso kanye nemisebenti lengakahlelwa. Loku kutawenta siciniseko sekutsi wonkhe umsebenti lokhona wentiwe.Umsebenti wetibalo leticala kufundvwa, ungaba kubala linani letindishi kanye netinkomishi labatatisebentisa ngesikhatsi sekudla, kubala linani lemidlalo ledlalwe ngaphandle, imidlalo ledlalwe ngekhatsi endlini yekufundzela, lefana nemaphazili, emadominosi, njll. Thishela kumele ahlele imisebenti yakhe ngekwetidzingo tebafundzi bakhe kanye netinsita letikhona endlini yakhe yekufundzela.

- **Bobunjwa kanye nesikhala** yincenye lebalulekile yekutfutfuka kwetibalo temfundzi losemncane, lekumele isabalaliswe liviki lonkhe, kanye naleminye imisebenti lekugcilwe kuyo lesesandleni sathishela, kanye nematfuba ekwakha tintfo letitsite, kudlala ngemanti nesanti kwebafundzi.

- **Silinganiso** kumele sihlanganiswe nemisebenti yekubala, kucombela nekubala nangabe ulinganisa budze ngetandla, ngetinyawo kanye netinyatselo.

- Irejista yeliklasi kanye nelishadi lesimo selitulu kusinika sikhatsi lesanele sekusebenta ngeDatha.

Lithebula 3.1: Sikhatsi lesiniketiwe semkhakha walokucuketfwe ngeliviki

Umkhakha walokucuke tfwe	Sihloko	Sikhatsi lesiphakanyisiwe
Tinombolo, timphawu tekubala nebudlelwane	Kubala Kubona tinombolo Kubona nekuchaza tinombolo letiphelele Kwati tinombolo Kucatulula tinkinga tetibalo	**120 emaminithi**
Emaphethini,emafangishini ne-Aljebra	kutsatsela, kucedzela nekutakhela emaphethini akhe	**80 emaminithi**
Sikhala nabobunjwa (iJomethri)	Kubona nekubita bobunjwa 2-D netitfombe Bobunjwa be-Jomethri Kwakha tintfo letingemadayimenshini lamatsatfu (3-D) usebentisa tintfo letiphatsekako Budlelwane bendzawo Inkhombandlela	**80 emaminithi**
Silinganiso	Sikhatsi Budze Siindvo Umtsamo	**80 emaminithi**
Kusebenta ngeDatha	Kugcogca, kuhlunga, kudvweba, kufundza nekukhombisa idatha	**60 emaminithi**
SAMBA		**420 emaminithi** **7 ema-awa ngeliviki**

- **Kwabiwa kwemkhakha walokucuketfwe netihloko etifundvweni teLiBanga 1 kuye ku -3**

Ngalokulingene, tifundvo letintsatfu (emkhatsini wa 4 na $4\frac{1}{2}$ wema-awa) ngeliviki tisetjentiswa kutinombolo, timphawu tekubala nebudlelwane emaBangeni 1, 2 na 3. Tifundvo letimbili letisele (sib. Emkhatsini wa $2\frac{1}{2}$ na 3 wema-awa) tihlukaniswa emkhatsini wetihloko taleminye imikhakha yalokucuketfwe ngendlela lephakanyiswe ngentasi.

Lithebula 3.2: Linani letifundvo letiphakanyisiwe temkhakha walokucuketfwe ngethemu yeLiBanga 1

UMKHAKHA WALOKUCUKETFWE	SIHLOKO	Inombolo yetifundvo				
		Ithemu 1	Ithemu 2	Ithemu 3	Ithemu 1	Linani
Tinombolo, timphawu tekubala nebudlelwane	Tonkhe tihloko tetinombolo, imisebenti nebudlelwane	**22**	**30**	**28**	**25**	**105**
Emaphethini, emafangishini ne-Aljebra	Emaphethini etinombolo	**3**	**3**	**3**	**3**	12
	Emaphethini e-Jomethri	**1**	**1**	**1**	**1**	4
Sikhala nabobunjwa (iJomethri)	Bobunjwa be 2-D		**3**		**3**	6
Tintfo letingemadayimenshini lamatsatfu (3-D)		**3**		**2**	**1**	6
	Indzawo, kubekeka nemacala	**2**			**1**	3
	Kuhlukanisa emkhatsini kulingane, kufanane			**1**	**1**	2
Silinganiso	Sikhatsi	**2**				2
	Budze	**2**		**2**		4
	Sisindvo	**2**			**2**	4
	Umtsamo	**1**	**2**		**1**	4
Kusebenta ngedatha	Kugcogca, kuhlunga, kuveta nekuhluta tintfo	**2**	**1**			3
	Umjikeleto wedatha legcwele			**3**		3
	Tincenye temjikeleto wedatha				**2**	2
	Linani letifundvo	**40**	**40**	**40**	**40**	**160**

Lithebula 3.3: Linani letifundvo letiphakanyisiwe temkhakha walokucuketfwe ngethemu yeLiBanga 2

UMKHAKHA WALOKUCUKETFWE	SIHLOKO	Inombolo yetifundvo				
		Ithemu 1	Ithemu 2	Ithemu 3	Ithemu 4	Linani
Tinombolo, timphawu tekubala nebudlelwane	Tonkhe tihloko tetinombolo, imisebenti nebudlelwane	24	25	24	26	99
Emaphethini, emafangishini ne-Aljebra	Emaphethini etinombolo	3	3	3	3	12
	Emaphethini e-Jomethri	1	1	1	1	4
Sikhala nabobunjwa (iJomethri)	Bobunjwa labangemadayi-menshini lamabili (2-D)		3		3	6
	Tintfo letingemadayimenshini lamatsatfu (3-D)	3		2	1	6
	Indzawo, kubekeka nemacala		2	1		3
	Kuhlukanisa emkhatsini kulingane, kufanane		1		1	2
Silinganiso	Sikhatsi	3	1	3	1	8
	Budze	3			1	4
	Sisindvo		3		1	4
	Umtsamo			3	1	4
Kusebenta ngedatha	Umjikeleto wedatha legcwele	3		3		6
	Tincenye temjikeleto wedatha		1		1	2
	Linani letifundvo	**40**	**40**	**40**	**40**	**40**

Lithebula 3.4: Linani letifundvo letiphakanyisiwe temkhakha walokucuketfwe ngethemu yeLiBanga 3

UMKHAKHA WALOKUCUKETFWE	SIHLOKO	Inombolo yetifundvo				
		Ithemu 1	Ithemu 2	Ithemu 3	Ithemu 4	Linani
Tinombolo, timphawu tekubala nebudlelwane	Tonkhe tihloko tetinombolo, imisebenti nebudlelwane	26	22	19	27	94
Emaphethini, emafangishini ne-Aljebra	Emaphethini etinombolo	3	3	3	3	12
	Emaphethini e-Jomethri	1	1	1	1	4
Sikhala nabobunjwa (iJomethri)	Bobunjwa be 2-D	2		2		4
	Tintfo letingemadayimenshini lamatsatfu (3-D)		3	3	1	7
	Indzawo, kubekeka nemacala		2	3		5
	Kuhlukanisa emkhatsini kulingane, kufanane		2		1	3
Silinganiso	Sikhatsi	3	2	3	2	10
	Budze		2	2		4
	Sisindvo		2		1	3
	Umtsamo	2			1	3
	Ipherimitha			1		1
	Bungako bendzawo				2	2
Kusebenta ngedatha	Umjikeleto wedatha legcwele	3		3		6
	Tincenye temjikeleto wedatha		1		1	2
	Linani letifundvo	**40**	**40**	**40**	**40**	**40**

- **Sibutsiselo sethemu Libanga R**

SIBUTSETELO SELIBANGA R 1. TINOMBOLO, TIMPHAWU TEKUBALA NEBUDLELWANE				
KUBALA				
Tihloko	**ITHEMU 1**	**ITHEMU 2**	**ITHEMU 3**	**ITHEMU 4**
1.1 **Bala tintfo** Combela ubuye ubala tintfo kutfutfukisa lwati lwetinombolo	**Kuhleleka kwetinombolo: 1-5** • Kucondzana emkhatsini wetintfo nekuvetwa kwato **Kwetfula lishadi lemsiti nendlela lokukwewetwa ngayo, ngekulandzelana** • Bala ngakunye - Tinsita letiphatsekako - Titfo temtimba - Shaya tandla - Shaya phasi ngelunyawo - Canca titepisi • Bala ngenhloko - imilolotelo netingoma tetinombolo	**Kuhleleka kwetinombolo: 1-7** • Kucondzana emkhatsini wetintfo nekuvetwa kwato • Tfutfukisa lishadi leMsiti malanga onkhe • Bala ngakunye - Tinsita letiphatsekako - Titfo temtimba - Shaya tandla - Shaya phasi ngelunyawo - Canca titepisi • Bala ngenhloko - imilolotelo netingoma tetinombolo • Shaya tandla kanyenti / shaya sikhashana	**Kuhleleka kwetinombolo: 1 to 10** • Kucondzana emkhatsini wetintfo nekuvetwa kwato • Tfutfukisa lishadi leMsiti malanga onkhe • Bala ngakunye - Tinsita letiphatsekako - Titfo temtimba - Shaya tandla - Shaya phasi ngelunyawo - Canca titepisi • Bala ngenhloko - imilolotelo netingoma tetinombolo • Shaya tandla kanyenti / shaya sikhashana Ngutiphi tinombolo letincane/ letinyenti nakushaywa tandla	**Kuhleleka kwetinombolo: 0- 10** • Kucondzana emkhatsini wetintfo nekuvetwa kwato Tfutfukisa lishadi leMsiti malanga onkhe • Bala ngakunye - Tinsita letiphatsekako - Titfo temtimba - Shaya tandla - Shaya phasi ngelunyawo - Canca titepisi • Bala ngenhloko - imilolotelo netingoma tetinombolo • Shaya tandla kanyenti / shaya sikhashana Ngutiphi tinombolo letincane/ letinyenti nakushaywa tandla
1.2 **Bala** uye embili nasemuva	**Kuhleleka kwetinombolo: 1** Bala lokungakahleleki usebentisa imilolotelo netingoma tetinombolo, tibali, tintfo letiyi 3-D, kubala ngekunyakata kwemtimba **Bala nga:** • kunye	**Kuhleleka kwetinombolo: 1 kuye ku- 4** Balalokungakahleleki usebentisa imilolotelo netingoma tetinombolo, tibali, tintfo letiyi 3-D, kubala ngekunyakata kwemtimba **Bala nga:** • kunye	**Kuhleleka kwetinombolo: 1 kuye ku- 7** Bala lokungakahleleki usebentisa imilolotelo netingoma tetinombolo, tibali, tintfo letiyi 3-D, kubala ngekunyakata kwemtimba nesicanco setinombolo **Bala nga:** • kunye	**Kuhleleka kwetinombolo: 0 kuye kuli- 10** Bala lokungakahleleki usebentisa imilolotelo netingoma tetinombolo, tibali, tintfo letiyi 3-D, kubala ngekunyakata kwemtimba nesicanco setinombolo **Bala nga:** • kunye • kubili

Tihloko	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
1.3 **Timphawu tetinombolo nemagama etinombolo** (Kubona ubuye wati timphawu tetinombolo nemagama etinombolo)	**Kuhleleka kwetinombolo** • Timphawu tetinombolo ku-1 • Tinombolomagama: one - Kunyakata kwemtimba - (lokwentiwa ngemtimba) - Lokuphatsekako lokutintfo letima 3-D letifaka ekhatsi inombolo ku-1. - Lokubonakalako ungeke ukuphatse lokunemakhadi titfombe lokufaka ekhatsi inombolo ku-1 - Lokubonakalako ungeke ukuphatse lokunemakhadi emacashati lanetinombolo ku-1. • Tutfukisa lwati lolutfoliwe lolufaka ekhatsi inombolo ku-1	**Kuhleleka kwetinombolo** • Timphawu tetinombolo: 2 kuye ku-4 • Tinombolomagama: kubili, kutsatfu,kune - Kunyakata kwemtimba - (lokwentiwa ngemtimba) - Lokuphatsekako lokutintfo letima 3-D letifaka ekhatsi tinombolo 2, 3 na 4. - Lokubonakalako ungeke ukuphatse lokunemakhadi titfombe lokufaka ekhatsi tinombolo 2, 3 na 4 - Lokubonakalako ungeke ukuphatse lokunemakhadi emacashati lanetinombolo 2, 3 na 4. • Tfutfukisa lwati lolutfoliwe lolufaka ekhatsi tinombolo ku-1 kuye ku-4	**Kuhleleka kwetinombolo** • Timphawu tetinombolo: 5 kuye ku-7 • Tinombolomagama: sihlanu, sitfupha, inkhotsa - Kunyakata kwemtimba - (lokwentiwa ngemtimba) - Lokuphatsekako lokutintfo letima 3-D letifaka ekhatsi tinombolo 5, 6 ne 7. - Lokubonakalako ungeke ukuphatse lokunemakhadi titfombe lokufaka ekhatsi tinombolo 5,6 ne 7 - Lokubonakalako ungeke ukuphatse lokunemakhadi emacashati lanetinombolo 5, 6, ne 7. • Tutfukisa lwati lolutfoliwe lolufaka ekhatsi tinombolo ku-1 kuye ku-7	**Kuhleleka kwetinombolo** • Timphawu tetinombolo: 5 kuye ku-7 • Tinombolomagama: licandza, siphohlongo, imfica,lishumi - Kunyakata kwemtimba - (lokwentiwa ngemtimba) - Lokuphatsekako lokutintfo letima 3-D letifaka ekhatsi tinombolo 0, 8, 9 ne 10. - Lokubonakalako ungeke ukuphatse lokunemakhadi titfombe lokufaka ekhatsi tinombolo 0, 8, 9 ne 10. - Lokubonakalako ungeke ukuphatse lokunemakhadi emacashati lanetinombolo 0,8,9 ne 10 • Tfutfukisa lwati lolutfoliwe lolufaka ekhatsi tinombolo li 0 kuye e 10

Tihloko	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
LWATI LWETINOMBOLO (BUDLELWANE)				
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo** (Sebentisa tinombolo kutimo letetayelekile)	**Sebentisa tinombolo kutimo letetayelekile** • Umfundzi kufanele ayati iminyaka yakhe. • Gcwalisa irejista yemalanga onkhe. Sebentisa tindlela letehlukene uma usebenta ngerejista sib. - Ngabe umfundzi loneluphawu/ sitfombe se-ayisikhilimu ukhona yini namuhla? - Ngabe umfundzi lonelibito lelinguSipho ukhona yini namuhla? - Ngabe umfundzi lonelibito lelinguSipho Alexander nesibongo sakaMatlola ukhona yini namuhla? • Bona tinombolo kumakhadititfombe nakumakhadi emacashati. • Dlala imidlalo yemakhaditinombolo.	**Sebentisa tinombolo kutimo letetayelekile** • Umfundzi kufanele ayati inombolo yendlu nelikheli lakubo. • Tfutfukisa kusetjentiswa kwetinombolo ngekugcwalisa irejista yemalanga onkhe njengakuthemu yekucala sib. - Ngabe umfundzi lohlala endlini lengunombolo 123 ukhona yini namuhla? - Ngabe umfundzi lohlala esitaladini lesingeWendy kunombolo 123. - Ngabe umfundzi lonenombolo yelucingo/ makhalekhikhini 0821234567 ukhona yini namuhla. • Bona tinombolo kumakhadititfombe nakumakhadi emacashati. • Dlala imidlalo yemakhaditinombolo. • Bona tinombolo letitfolakala kutikhangisi/emafulaya, nemakhadi ekutalwa lamadzala njll.	**Sebentisa tinombolo kutimo letetayelekile** • Umfundzi kufanele ayati inombolo yelucingo/yamakhelekhukhwini yakubo (inombolo yekuchumana nebatali) • Tfutfukisa kusetjentiswa kwetinombolo ngekugcwalisa irejista yemalanga onkhe njengakuthemu yekucala sib. Ngabe umfundzi logubha lusuku lwakhe lwekutalwa mhlaka 16 Indlovulenkhulu ukhona yini namuhla? • Bona tinombolo kumakhadititfombe nakumakhadi emacashati. • Dlala imidlalo yemakhaditinombolo. • Bona tinombolo letitfolakala kutikhangisi/emafulaya, nemakhadi ekutalwa lamadzala njll.	**Sebentisa tinombolo kutimo letetayelekile** • Tfutfukisa lwati mayelana nemnyaka wekutalwa, inombolo yendlu, likheli, lucingo lwasekhaya/inombolo yamakhalekhukhwini. (inombolo yekuchumana) • Tfutfukisa kusetjentiswa kwetinombolo ngekugcwalisa irejista yemalanga onkhe njengakuthemu yekucala sib. Bangaki bafundzi; labalovile namuhla? Singakutfola kanjani? Bafundzi bacocisana ngaloku bona ngekwabo. - Combela; - Bala emalokha langenalutfo; - Bala titulo letingenalutfo njll. • Bona tinombolo kumakhadititfombe nakumakhadi emacashati. • Dlala imidlalo yemakhaditinombolo. • Bona tinombolo letitfolakala kutikhangisi/emafulaya, nemakhadi ekutalwa lamadzala njll. • Bona tinombolo letitfolakala kubomagazini

Tihloko	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
LWATI LWETINOMBOLO (BUDLELWANE)				
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo** (Bona ubuye uchaze tinombolo letiphelele) Ucatsanisa kutsi ngukuphi kwaletintfo letimbili letigcogciwe letiniketiwe leti: a) nkhulu naletincane b) letikhudlwane naletimbalwa c) letincane kakhulu naletinkukhulu kakhulu Ucatsanisa kutsi ngukuphi kwaletintfo letimbili letigcogciwe letiniketiwe leti: a) Lokunyenti kuna b) Lokuncane kuna c) Lokulingana na (lokulinanako) Tinombolo te-odinali	**Kuhleleka kwetinombolo: 1** **Bona ubuye uchaze** tinombolo letiphelele kuye ku-1	**Kuhleleka kwetinombolo: 1 kuye 5** • **Bona ubuye uchaze** tinombolo letiphelele, 2, 3 na 4 • Tfutfukisa tinombolo 1 kuye ku-4	**Kuhleleka kwetinombolo: 1 kuye 7** • **Bona ubuye uchaze** tinombolo letiphelele 5, 6 na 7 • Tfutfukisa tinombolo 1 kuye ku-7	**Kuhleleka kwetinombolo: 0 kuye10** • **Bona ubuye uchaze** tinombolo letiphelele 8, 9, 10 ne 0 • Tfutfukisa tinombolo 0 kuye e 10
	Ucatsanisa kutsi ngukuphi kwaletintfo letimbili letigcogciwe letiniketiwe leti: • nkhulu naletincane • letikhudlwane naletimbalwa • letinkukhulu kakhulu letincane kakhulu (ngenisa lolwati) • Hlela tintfo letigcogciwe letingetulu kwaletimbili ticale kulokuncanekakhulu kuye kulokukhulu kakhulu nakulokukhulu kakhulu kuye kulokuncane kakhulu			
	• Lokunyenti nalokumbalwa Sib. Kushaya tandla lokungakahleleki	• Kunyenti kuna, kuncane kuna, kulingana na • Lokunyenti nalokumbalwa sib. Kushaya tandla lokungakahleleki	• Kunyenti kuna, kuncane kuna, kulingana na • Lokunyenti nalokumbalwa sib. Kushaya tandla lokungakahleleki. Kubuta umbuto lobewuvamile/ ubutwe kancane	• Kunyenti kuna, kuncane kuna, kulingana na • Lokunyenti nalokumbalwa sib. Kushaya tandla lokungakahlelekii. Kubuta umbuto lobewuvamile/ ubutwe kancane
	Cikelela kutfutfukisa kwetinombolo te-odinali **letingakahleleki**, sib. Kwekucala, kwesibili, kwesitsatfu... kwekugcina, lokusedvute. • Ngenisa ngesikhatsi **Sekudla lokulula / netintfo letentiwa malanga onkhe** kanye **nekuya** endlini lencane kwamalanga onkhe-kwekucala, kwesibili, kwekugcina, nalokulandzelako	**Cikelela kutfutfukisa** kwetinombolo te-odinali **letingakahleleki**, sib. Kwekucala, kwesibili, kwesitsatfu, kwesine...kwekugcina, lokusedvute.	**Cikelela kutfutfukisa** kwetinombolo te-odinali **letingakahlelek**i, sib. Kwekucala, kwesibili, kwesitsatfu,kwesine, kwesihlanu,kwekugcina, lokusedvute.	**Cikelela kutfutfukisa** kwetinombolo te-odinali **letingakahleleki**, sib. Kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha,kwekugcina, lokusedvute. • Ngenisa tinombolo te-odinali - kwekucala, kwesibili, kwesitsatfu kuye kukwesitfupha

Tihloko	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
LWATI LWETINOMBOLO (BUDLELWANE)				
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**		• Tfutfukisa tinombolo te-odinali letingakahleleki ngekusebentisa tintfo letentiwa malanga onkhe nawuya endlini lencane • Kwentiwe nangesikhatsi sekutfutfukisa imisebenti yemaKhono ekuPhila. • nangesikhatsi semisebenti yekwenta buciko (nangabe kufanele)	• Tfutfukisa tinombolo te-odinali letingakahleleki ngekusebentisa tintfo letentiwa malanga onkhe nawuya endlini lencane • Kwentiwe nangesikhatsi sekutfutfukisa imisebenti yemaKhono ekuPhila	• Tfutfukisa tinombolo te-odinali letingakahleleki ngekusebentisa tintfo letentiwa malanga onkhe nawuya endlini lencane • Kwentiwe nangesikhatsi sekutfutfukisa imisebenti yemaKhono ekuPhila
1.6 **Emasu ekusombulula tinkinga tetibalo** (usebentisa lamasu netindlela letilandzelako)	Usebentisa lamasu letilandzelako • Tintfo letiphatsekako sib. tibali	Usebentisa lamasu letilandzelako • Tintfo letiphatsekako sib. tibali	Usebentisa lamasu letilandzelako • Tintfo letiphatsekako sib. Tibali • Sitepisi setinombolo	Usebentisa lamasu letilandzelako • Tintfo letiphatsekako sib. Tibali • Sitepisi setinombolo
1.7 **Kuhlanganisa nekususa** (Sombulula tibalo temagama ngekutisho[tibalo tendzaba] uchaze tisombululo tekubala • Kuhlanganisa nekususa netimphendvulo letifika e -10). **1.9** **Kugcogcela ndzawonye nekwaba lokuholela ekuhlukaniseni** (kwabelana ngalokulinganako nekugcogcelandzawonye ngetinombolo tetiphelele letifika e 10 letinetimphendvulo letifaka ekhatsi tinsalela)		• Sebentisa tibali bese usombulula tinkinga tetibalo ngekusho letifaka ekhatsi tinombolo 2, 3 na- 4 • Tfutfukisa kusombulula tinkinga tetibalo letifaka ekhatsi tinombolo 1 kuya ku- 4	• Sebentisa tibali bese usombulula tinkinga tetibalo ngekusho letifaka ekhatsi tinombolo 5,6 ne- 7 • Tfutfukisa kusombulula tinkinga tetibalo letifaka ekhatsi tinombolo 1 kuya ku- 7	• Sebentisa tibali bese usombulula tinkinga tetibalo ngekusho letifaka ekhatsi tinombolo 8, 9 ne- 0 • Tfutfukisa kusombulula tinkinga tetibalo letifaka ekhatsi tinombolo 1 kuya e- 10

Tihloko	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
1.11 **Imali**		**Imali** • Tfutfukisa lwati ngemali yebuhhehlu yase Ningizimu Afrika. 20c, 50c, R1, R2, R5 • Bona umbala nekusho kutsi ngusiphi silwane lesivela emalini ngayinye yebuhhehlu • Bona lokufanako nalokwehlukile emkhatsini wemali yebuhhehlu sib. Hlunga imali yekudlala ngekwemibala nebukhulu • Niketa imali yekudlala ekhoneni lekudlala	**Imali** • Tfutfukisa lwati ngemali yemaphepha yemamabhange aseNingizimu Afrika. R10, R20, R50, R100, R200, • Bona lokufanako nalokwehlukile emkhatsini wemali yemaphepha sib. Hlunga imali yekudlala • Niketa imali yekudlala ekhoneni lendlu.	**Imali** • Niketa imali yekudlala ekhoneni lendlu.
KUBALA USEBENTISA				
1.13 **Kuhlanganisa nekususa** (Usombulula tinkinga tetibalo tekuhlanganisa nekususa letiniketwe ngemlomo letinemphendvulo letifika e-10)		Usombulula ngemlomo tinkinga tetibalo tekuhlanganisa nekususa lokunetimphendvulo letifika ku-4	Usombulula ngemlomo tinkinga tetibalo tekuhlanganisa nekususa lokunetimphendvulo letifika ku -7	Usombulula ngemlomo tinkinga tetibalo tekuhlanganisa nekususa lokunetimphendvulo letifika e -10

Tinhlobo tetinkinga tetibalo teliBanga R

Tinkinga tetibalo letiba khona kubafundzi beliBanga R tifaka ekhatsi intfo yinye kuleti letikhona eklasini sib.tibali, bantfwana, ticatfula hhayi emaswidi, ligundvwane, timbali njll. Akusibo bonkhe bantfwana labancane labangavuma kutsi tibali noma tingalo tingemagundvwane, badzinga kubona lentfo.Thishela angasebentisa titfombe nasekulthemu lesincane. Tintfo letiphatsakeko kumelwe tigcinwe-titfombe tekungetelela hhayi kuvala tintfo letiphatsekako.

Tindvuku tekubala tingasetjentiswa nangabe thishela angenato tinsita

Letinhlobo tetinkinga tetibalo letivetiwe kumele tibe sezingeni lemntfwana kute akhone kutivisisa

Kugcogcela ndzawonye

Kunemakokisi lasiphohlongo. (Thishela ubeka tibali letisiphohlongo, noma abakhombe titfombe temakokisi lasiphohlongo) Teddy utfola emakokisi lamabili onkhe emalanga. Mangaki emalanga latawutfola ngawo emakokisi.

Kwaba

Kunemakokisi lasiphohlongo. (Thishela ubeka tibali letisiphohlongo noma abakhombe titfombe temakokisi lasiphohlongo) BoTeddy labatsatfu (3) bonkhe batfole emakokisi lalinganako. Munye utawutfola emakokisi mangaki ?

Kuhlanganisa, kususa nekuphindza kuhlanganisa

Mangaki emehlo ebantfwana lababili sekawonkhe?
Tingaki tindlebe tebantfwana labane setitonkhe?
Tingaki tingalo esandleni sinye?
Tingaki tingalo talelesinye sandla?
Linda unetibali letisitfupha, uniketa Colane tibali letimbili utawusala natingaki?

Bothishela bafanele bahlanganise tinhlobo tetinkinga tetibalo ngawo onkhe emalanga. Kumele bangete kancane tisayizi tetinombolo lebatisebentisako etinkingeni, singatsatsi malula sitsi umntfwana angeke asebente ngetinombolo letinkhulu.

SIBUTSETELO SELIBANGA R 2. EMAPHETHINI NEMAFANGISHINI				
TIHLOKO	**ITHEMU 1**	**ITHEMU 2**	**ITHEMU 3**	**ITHEMU 4**
2.1 **Emaphethini e-Jomethri** (Tsatsela ubuye uchubele embili emaphethini lalula usebentisa tintfo letibonakalako nemidvwebo) (Kutakhela emaphethini latiphindzako)	• Tfola emaphethini lasetimphahleni, etintfweni, nasendzaweni letsite. • Tsatsela ubuye ucedzele emaphethini. • Tsatsela emaphethini ngekusebentisa umsindvo lowentiwa kushayisana kwetitfo temtimba umtimba. • Tsatsela, cedzela ubuye utakhele emaphethini.	• Tsatsela, chubela phambili ubuye utakhele emaphethini. • Tsatsela iphethini loniketwe yona usebentisa imali lebuhhehlu.	• Tsatsela, chubela phambili ubuye utakhele emaphethini lanetitfombe.	• Tsatsela, chubela phambili ubuye utakhele emaphethini etimviwa. • Tsatsela emaphethini emsindvo. • Dlala umdlalo ngephethini yekudlala sikoshi.

SIBUTSETELO SELIBANGA R 3. SIKHALA NABUNJWA (IJOMETHRI)				
TIHLOKO	**ITHEMU 1**	**ITHEMU 2**	**ITHEMU 3**	**ITHEMU 4**
3.1 **Kubekeka, kutetayeta nekubukeka** Kuchaza intfo lengemadayimenshini lamatsatfu (3-D) uyihlobanisa nalenye (sib. 'phambili nangemuva)	**Budlelwane bentfo nendzawo** **Kusebentisa tintfo letimbili nobe letinyenti umfundzi lanebudlelwane nato** • Embikwe- nangemuva • Ngetulu nangaphasi • Ngekhatsi nangaphandle • Etulu naphasi • Edvute nasemkhatsini **Umdlalo wangaphandle ubalulekile. Ijangilijimu ingasetjentiswa kutfutfukisa, sib.** • Lwati lwetibalo • Buciko bekwenta • Kutfutfukisa kutivocavoca	**Budlelwane bentfo nendzawo** **Kusebentisa tintfo letimbili nobe letinyenti umfundzi lanebudlelwane nato** • Ngetulu nangaphandle	**Budlelwane bentfo nendzawo** **Kusebentisa tintfo letimbili nobe letinyenti umfundzi lanebudlelwane nato** • Embikwe- nangemuva • Ngetulu nangaphasi • Edvute ne • Emkhatsini • Sancele nesekudla • Umsebenti webhodi yekunamatselisa **Chaza tintfo etimeni letehlukene, sib. umdoli, indlu lesphambili, lesemuva, lesemaceleni kuye ngekutsi ume njani**	**Budlelwane bentfo nendzawo** **Kusebentisa tintfo letimbili nobe letinyenti umfundzi lanebudlelwane nato** • Embikwe- nangemuva • Ngetulu nangaphasi • Edvute ne, emkhatsini nemkhatsi • Sencele nesekudla **Kubekeka kwetintfo letimbilili nobe letinyenti letinebudlelwane kulenye nalenye** • Ibhodi yekunamatsisela • Embikwe nangemuva • Ngetulu nangaphasi nobe ngentasi • Edvute ne, emkhatsini nemkhatsi • Sencele nesekudla
Ulandzela tinkhombandlela (ayedvwa nobe/na njengelilunga lelicembu nobe licembu) ahambe/ eme endzaweni letsite (tinkhomba)	• Tinkhomba- phambili/ nasemuva • Imidlalo njengelandzela sitimela • Indlela yetihibe- kulandzela tinkhombandlela • Sifundvo sekutivocavoca nemisebenti yemculo		• Phambili/ emuva • Lishadi lemicibisholo	• Phambili nasemuva • Etulu naphasi • Sencele nesekudla • Ubuyaphi umsindvo?

TIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
3.2 **Tintfo letingemadayimenshini lamatsatfu (3-D)** (Ubona, atfole abuye anikete tintfo letingemadayimenshini lamatsatfu eklasini) a) Emabhola b) Emabhokisi:	• **Emabhola:** kwetfula nekufundzisa kabanti ngemabhola • **Emabhokisi:** kwetfula nekusebenta kabanti ngemabhokisi			
3.2 **Tintfo letingemadayimenshini lamatsatfu (3-D)** **Uchaza, ahlunge, bese ucatsanisa tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngekulandzela loku:** a) Isayizi (kuncane/kukhulul) b) Umbala(lobovu, loluhlata kwesibhakabhaka, loluphuti, loluhlata njengetjani) c) Bunjwa (indilinga, calantsatfu, sikwele, calandze) d) Tintfo letigicikako e) Tintfo letishelelako	• **Ngenisa lishadi lekukhweta** (kuhlunga emathoyisi) • **Isayizi:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) ngekwesayizi yato • **Umbala:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngekwemibala • **Bunjwa:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngekubumbeka kwabo. • **Tintfo letigicikako** - Buka uhlatiye tintfo letigicikakol - Tfutfukisa tintfo letigicikako • **Tintfo letishelelako** - Tfola uhlatiye tintfo letishelelako. - Bona uhlatiye tintfo letigicikako naletishelelako	• Hlunga ngekubuka kufana nemehluko • **Isayizi:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) ngekwesayizi yato - **Umbala:** Buka uhlunge tibali ngekwemibala, loluhlata, lobovu, lophuti naloluhlata satjani. • **Bunjwa:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngekubumbeka kwabo.	• **Isayizi:** Hlunga letingemadayimenshini lamatsatfu (3-D) ngekwesayizi yato - **Umbala:** Buka uhlunge tibali ngekwemibala • **Bunjwa:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngekubumbeka kwabo.	**Isayizi:** Hlunga letingemadayimenshini lamatsatfu (3-D) ngekwesayizi yato - **Umbala:** Buka uhlunge tibali ngekwemibala. • **Bunjwa:** Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngekubumbeka kwabo.

TIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
Yakha tintfo letingemadayimenshini lamatsatfu (3-D) usebentise tintfo letiphatsekako (sib. emabhuloki ekwakha**).**	**Kuyachubeka** • Nika emabhuloki ekwakha ngesikhatsi sekudlala ngekhatsi njalo njalo • Dlala ngemabhuloki ekwakha	**Kuyachubeka** • Nika emabhuloki ekwakha ngesikhatsi sekudlala ngekhatsi njalo njalo • Dlala ngemabhuloki ekwakha	**Kuyachubeka** • Nika emabhuloki ekwakha ngesikhatsi sekudlala ngekhatsi njalo njalo • Bantfwana bayakha basusela kusibonelo lesitsite sesakhiwo • Tsatsela lesakhiwo lesisesitfombeni nobe likhadisitfombe • Tfutfukisa kukopa sakhiwo lesifanako sisuselwe esitfombeni nobe likhadisitfombe	**Kuyachubeka** • Nika emabhuloki ekwakha ngesikhatsi sekudlala ngekhatsi njalo njalo • Kuyachubeka ngesikhatsi sekudlala lo • kukhululekile

TIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)** Ubona, atfole, asho emagama abobunjwa labangemada-yimenshini lamabili (2-D) eklasini nasetitfombeni, lokufaka ekhatsi: a) Timphawu tebafundzi b) Ligama leliklasi	• Vumela umfundzi ngamunye akhetse emakhadi abo etimphawu ngelusuku lwekucala • Bukisa kuphela **luphawu/ sitfombe** semfundzi etinyangeni letintsatfu tekucala emnyakeni • Ngenisa ligama leliklasi sib. kusebentisa sitfombe-liklasi lelibhele lelingu Teddy • Faka ilebuli lenelibito lathishela esivalweni/ emnyango weliklasi • Lebula ukhombise liklasi leliBanga R	Bukisa **luphawu/sitfombe** sebafundzi nemabito abo etinyangeni letintsatfu letilandzelako Kuyachubeka	Bukisa emabito ebafundzi kuphela etukwelebuli yetinyanga letisitfupha tekugcina temnyaka Kuyachubeka	Bukisa emabito ebafundzi kuphela etukwelebuli yetinyanga letisitfupha tekugcina temnyaka Kuyachubeka
Akhiwa njani emaphazili Linani nane: a) (Ithemu 1: tincetu leti -6) b) (Ithemu 2: tincetu leti -12) c) (Ithemu 3: tincetu leti -18) d) (Ithemu 4: tincetu leti -24) **Kukhona kubona intfo lefihlakele** **Bobunjwa be-Jomethri** a) indilinga b) calantsatfu c) sikwele d) calandze e) Kugcinwa kwabobunjwa (kungagucuki kwesimo)	**Emaphazili** • **Ngenisa emaphazili** ubuye unikete lusito kwekutsi akhiwa kanjani • Coca ngesitfombe sephazili kugcilwe kumininingwane lefana nemibala, bantfu/ tilwane, tintfo,tikhundla tebantfu/netilwane netintfo • Bafundzi bamele bacedze **iphazili lokungenani lenetincetu leti-6** ekupheleni kwethemu yekucala • Ngenisa takhiwo tetintfo letifihlakele • (Tfola tintfo “ngiyakwati kufunisisa ngemehlo ami ngemehlo ami lamancane”) • Tfutfukisa indilinga • Tfutfukisa calantsatfu • Tfutfukisa sikwele • Tfutfukisa calandze	**Emaphazili (ayachubeka)** • Nika emaphazili latinhlobonhlobo ngesikhatsi sekudlala lesikhululekile sangekhatsi eklasini malanga onkhe • Bafundzi bamele bacedze **iphazili lokungenani lenetincetu leti-12** ekupheleni kwethemu yesi -2 • Kwakha ubuye ucedze iphazili yakho lenetincetu le-4 • Tfutfukisa kubona lokufihlakele ngekuhlunga,kumatanisa nekugcogcela ndzawonye imisebenti nemkhuba wekukhweta • Tfutfukisa calantsatfu a) Gcina simo sabobunjwa labafundzisiwe singagucuki kufika lomuhla(kungagucuki kwesimo sacalantsatfu)	**Emaphazili (ayachubeka)** • Niketa emaphazili latinhlobonhlobo ngesikhatsi sekudlala lesikhululekile sangekhatsi eklasini malanga onkhe • Bafundzi bamele bacedze **iphazili lokungenani lenetincetu leti-18** ekupheleni kwethemu yesi -3 • Kwakha ubuye ucedze iphazili yakho lenetincetu le-5 • Tfutfukisa kubona lokufihlakele ngekuhlunga,kumatanisa nekugcogcela ndzawonye imisebenti nemkhuba wekukhweta. • Tfutfukisa sikwele a) Gcina bobunjwa (simo sabobunjwa labafundzisiwe singagucuki kufika lomuhla)	**Emaphazili (ayachubeka)** • Niketa emaphazili latinhlobonhlobo ngesikhatsi sekudlala lesikhululekile sangekhatsi eklasini malanga onkhe • Bafundzi bamele bacedze **iphazili lokungenani lenetincetu leti-24** ekupheleni kwethemu yesi -4 • Tfutfukisa kubona lokufihlakele ngekuhlunga,kumatanisa nekugcogcela ndzawonye imisebenti nemkhuba wekukhweta • Tfutfukisa: indilinga, calantsatfu, sikwele. • Ngenisa calandze • Gcina bobunjwa (simo sabobunjwa labafundzisiwe singagucuki kufika lomuhla)

TIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
3.4 **Umugca lohlukanisa emkhatsini kulingane kufanane** • (Ubona umugca lohlukanisa emkhatsini kulingane kufanane emtimbeni wakhe)	• Tfola titfo temtimba (ngekubala) • Inhloko,emehlo,umkhono,imphumulo, • Umlomo,silevu,intsamo,emahlombe, • iminwe,sifuba,umlente, • Lidvolo,lunyawo,lutwane • Umtimba wemuntfu munye unemacala lamabili • Tfutfukisa kucikelela kutsi umtimba wemuntfu munye unemacala lamaabili sib.”licala linye” nalicala”lalomunye umhlubulo”kuholela kuya”esencele nesekudla” • Kweca umugca lowehlukanisa emkhatsini kulingane kubuye kufane kuhambisana nekubala. • Kungentiwa ngesikhatsi sekutfutfukisa kutivocavoca • Kusebentisa Imilolotelo netingoma • Ngesikhatsi seBuciko Bekwenta.	• Kweca umugca lowehlukanisa emkhatsini kulingane kubuye kufane –iminyakato yekwenta • Kweca umugca lowehlukanisa emkhatsini kulingane kubuye kufane ngesikhatsi semakhono ekuphila (kutfutfukisa kutivocavoca) • Imilolotelo nemaculo • Imisebenti yebuciko bekwenta	• Kweca umugca lowehlukanisa emkhatsini kulingane kubuye kufane-imisebenti yasebhodini • Yeca umugca lowehlukanisa emkhatsini kulingane kubuye kufane ngesikhatsi Semakhono Ekuphila (Kutfutfukisa Kutivocavoca)	• Tfutfukisa kucikelela kutsi kunemugca lowehlukanisa emkhatsini kulingane kubuye kufane etintfweni. • Yeca umugca lowehlukanisa emkhatsini kulingane kubuye kufane ngesikhatsi Semakhono Ekuphila (Kutfutfukisa Kutivocavoca)

SIBUTSETELO SELIBANGA R 4. SILINGANISO				
SIHLOKO	**ITHEMU 1**	**ITHEMU 2**	**ITHEMU 3**	**ITHEMU 4**
4.1 **Sikhatsi:** Uchaza sikhatsi selusuku asebentisa imini nebusuku. **Landzelanisa tigameko letenteka malanga onkhe emphilweni yakho**	• Ngenisa lwati "lwemini nebusuku"ne "kukhanya / bumnyama" • Ekuseni, ntsambama, ntsambama (kufundza lokungakahleleki eluhlelweni lemalanga onkhe neshadi lesimo selitulu.			
a) Luhlelo lwemalanga onkhe	**Ngenisa luhlelo lwemalanga onkhe** - Bafundzi babona kulandzelaniswa kwetigameko talelosuku. - Titfombe tikhonjiswa kusukela kusencele kuye kusekudla kutfutfukiswa kufundza kulandzela inkhombandlela. - Umholi walelolanga uhambisa Inkhomba yekukhombisa kuchubekel embili kwemisebenti yeluhlelo lwalelolanga.	**Luhlelo lwemalanga onkhe** **(ngalokuchubekako)** - Tfutfukisa kulandzelana kwetigameko letichubekako telilanga ngekusebentisa luhlelo lwemalanga onkhe.	**Luhlelo lwemalanga onkhe** **(ngalokuchubekako)** - Tfutfukisa kulandzelana kwetigameko letichubekako telilanga ngekusebentisa luhlelo lwemalanga onkhe.	**Luhlelo lwemalanga onkhe** **(ngalokuchubekako)** - Tfutfukisa kulandzelana kwetigameko letichubekako telilanga ngekusebentisa luhlelo lwemalanga onkhe.
b) Lishadi lesimo selitulu	• **Ngenisa lishadi lesimo selitulu** (malanga onkhe) - Thishela uhola bafundzi kutsi bakwati kutfola ligama lelilanga,nenyanga ngekucula ingoma nekwenta umlolotelo, ifleshikhadi, nekubukisa ngemalebuli netimphawu ekhalendeni yeliviki. - Tfutfukisa lwati lwesikhatsi - Khombisa tinsuku tekutalwa, kutikhipha, emalanga lakhetsekile, emaholide evikini. - Landzelanisa tinyanga temnyaka ngeliculo	• **Lishadi lesimo selitulu** (malanga onkhe) - Thishela uhola bafundzi kutsi bakwati kutfola ligama lelilanga,nenyanga ngekucula ingoma nekwenta umlolotelo, ifleshikhadi, nekubukisa ngemalebuli netimphawu ekhalendeni yeliviki.	• **lishadi lesimo selitulu** (onkhe emalanga) - Bafundzi batfola ligama lelilanga, lusuku nenyanga ngefleshikhadi, nekubukisa ngemalebuli netimphawu ekhalendeni yeliviki.	• **lishadi lesimo selitulu** (onkhe emalanga) - Bafundzi batfola ligama lelilanga, lusuku nenyanga ngefleshikhadi, nekubukisa ngemalebuli netimphawu ekhalendeni yeliviki.

SIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
4.1 **Sikhatsi:** **Landzelanisa tigameko letenteka malanga onkhe emphilweni yakho** c) Emalanga eliviki d) Lishadi letikhatsi temnyaka	• **Emalanga eliviki** - Thishela ufundzisa bafundzi ingoma nemlolotelo ngemalanga eliviki. Phindza onkhe malanga njengobe lishadi lesimo selitulu lisho. - Kulandzelanisa emalanga eliviki ngeliculo • **Lishadi letikhatsi temnyaka** - Ngenisa lelishadi ukhombise letikhatsi temnyaka letine: o Lihlobo o Likwindla o Busika o Intfwasahlobo	• **Emalanga eliviki** **(ngalokuchubekako)** - Thishela ufundzisa bafundzi ingoma nemlolotelo ngemalanga eliviki. Phindza onkhe malanga njengobe lishadi lesimo selitulu lisho. • **Lishadi letikhatsi temnyaka** - Umcibisholo lokhombisa sikhatsi semnyaka lekungiso uyahanjiswa njengobe tikhatsi temnyaka tintjintja - Ngelusuku lwekucala lwekuvula kwetikolo thishela ubuta bafundzi kutsi bebentani ngemaholide. - Tfutfukisa kucikelela kwalokwentiwa ngumfundzi kusukela ngesikhatsi lavuka ngaso kute kube sikhatsi laya ngaso esikoleni. - Tfutfukisa kucikelela kwalokwenteka kusukela ngesikhatsi sekudla kwakusihlwa nesekulala.	• **Emalanga eliviki** **(ngalokuchubekako)** • **Lishadi letikhatsi temnyaka** - Umcibisholo lokhombisa sikhatsi semnyaka lekungiso uyahanjiswa njengobe tikhatsi temnyaka tintjintja - Ngelusuku lwekucala lwekuvula kwetikolo thishela ubuta bafundzi kutsi bebentani ngemaholide.	• **Emalanga eliviki** **(ngalokuchubekako)** • **Lishadi letikhatsi temnyaka** - Umcibisholo lokhombisa sikhatsi semnyaka lekungiso uyahanjiswa njengobe tikhatsi temnyaka tintjintja - Ngelusuku lwekucala lwekuvula kwetikolo thishela ubuta bafundzi kutsi bebentani ngemaholide.

SIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
4.1 **Sikhatsi (siyachutjwa) Ngenisa lishadi letinsuku tekutalwa**	• Ngenisa **lishadi letinsuku tekutalwa** • Bafundzi bamele bati iminyaka yabo yebydzala • Tfutfukisa lwati lwekufundza tinkhombandlela • Bafundzi kumele bati tinsuku tabo tekutalwa (lusuku nenyanga)	• Kuyachubeka nangabe kulusuku lwekutalwa kwemfundzi • Ngalokuchubekako	• Kuyachubeka nangabe kulusuku lwekutalwa kwemfundzi • Ngalokuchubekako	• Kuyachubeka nangabe kulusuku lwekutalwa kwemfundzi • Ngalokuchubekako
4.2 **Budze** Catsanisa ngetintfo letiphatsekako ubuyeusebentise silulumagama lesingiso kuchaza budze. • Ngenisa Lishadi Lebudze - Kala ngetandla (Ngekubona nangalokungakahleleki) - Kala ngetinyatselo telunyawo (ngekubona nalokungakahleleki) - Kala ngethephu (ngekubona nalokungakahleleki) - Kudze,kufisha - kudzana, kufishana, - kudze, kudze kakhudlwana/ kudze kakhulu (kubona) - Combela	**Budze** • Lokudze nalokufisha, kudze,kudze kakhudlwana, kudze kakhulu • **(**kubona) • Ngenisa lwati lwebudze • Lishadi lebudze lelinetandla / tinyawo	**Budze** • Lokudze kakhulu nalokufisha kakhulu, lokudze kancane nalokufishanyana (yandzisa lwati lwebudze) • Gcizelela lwati lwebudze • Bafundzi batfola kutsi bakhulile yini kusukela ethemini leyengcile ***(Bafundzi bangacatsanisa budze babo ngentfo letsite eklasini, sib. likhabethi)***	**Budze** • Combela budze betintfo letehlukene. • Combela ukale budze betintfo letehlukene ngekusebentisa lunyawo, tandla, intsambo indvuku njll.	**Budze** • Kala budze bebafundzi ngethephu ***(esikhundleni setandla sebentisa ithephu)***

SIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
4.3 **Sisindvo** Usebenta ngetintfo letiphatsekako acatsanisa abuye ahlele tintfo asebentisa silulumagama lesingiso kuchaza loku lokulandzelako: a) Kulula, kuyasindza b) Kulula kakhudlwana, kuyasindza kusindza kakhudlwana c) Kuyachubeka ngesikhatsi sekudlala ngemanti nesanti.			**Sisindvo** • Ngenisa lwati lwesisindvo ngekucatsanisa sisindvo setintfo letehlukene sib. - Kulula/kuyasindza - Kuludlana/kuyasindza kakhudlwana • Gcizelela lwati lwesisindvo (kulula kakhulu, kusindza kakhulu)	
4.4 **Umtsamo/ bungako** Usebenta ngetintfo letiphatsekako acatsanisa abuye ahlele tintfo asebentisa silulumagama lesingiso kuchaza loku lokulandzelako a) Akunalutfo, kugcwele b) kunyenti, kuncane c) kuncane kuna, kunyenti kuna, d) Kuyachubeka ngesikhatsi sekudlala ngemanti nesanti.			**Umtsamo/ bungako** • Ngenisa lwati lwesilinganiso semtsamo ngekucatsanisa kutsi tintfo tekutsela letehlukene timumatsa kanganani sib. - “Akunalutfo/ kugcwele” - lokunyenti, lokuncane • Kuyachubeka ngesikhatsi sekudlala ngemanti nesanti	

SIBUTSETELO SELIBANGA R 5. KUSEBENTA NGEDATHA				
SIHLOKO	**ITHEMU 1**	**ITHEMU 2**	**ITHEMU 3**	**ITHEMU 4**
5.1 **Gcogca ubuye uhlunge tintfo** **Gcogca idatha** Gcogca tintfo letiphatsekako letifanako (uwedvwa noma njengelilunga lelicembu) sib. emacembe lalishumi, bobunjwa labalishumi.	• Ngenisa lwati lwekusebenta ngedatha ngekugcogca idatha lemayelana nekutsi bangaki bafana nemantfombatane eklasini.	• Gcogca tintfo (tintsi letingemasayizi lahlukene)	• Buta umbuto: “Ngabe avamile yini emagama lanetinhlavu letisitfupha?” • Gcogca idatha kute uphendvule imibuto usebentisa emakhadigama ebantfwana.	• Sebentisa Lishadi Letinsuku tekutalwa kubuka kutsi tinsuku tabobani tekutalwa nekutsi ngutiphi tinyanga. • Gcogca idatha kubafundzi kukhombisa umbala wenhlama yekudlala yeliviki lelilandzelako sib. loluhlata njengesibhakabhaka, lomtfubi, loluhlata njengetjani. (Gcogca idatha (Nguluphi luhlobo lwesitfutsi lolusetjentiswa bafundzi nabeta esikolweni?)
Hlunga idatha Hlunga tintfo letiphatsekako ngekufana kwato sib. Isayizi yemacembe.	• Hlunga idatha ngekumisa bafundzi ngemigca yebafana bodvwa nemantfombatane emgceni wawo.	• Hlunga tintfo letigcogciwe (tintsi letingemasayizi lahlukene)	• Hlunga emakhadimagama ngekwelinani letinhlavu egameni ngalinye.	• Hlunga idatha ngekwetinyanga tekutalwa temfundzi ngamunye. • Umfundzi ngamunye ukhetsa ibhuloki lemele umbala wenhlama yekudlala lawutsandzako ngalelo viki. • Hlunga idatha yalokugcogciwe (labahamba ngetinyawo, ngetimoto tebatali, ithekisi nobe ibhasi).
5.2 **Veta tintfo letigcogciwe tahlungwa** **(Dvweba igrafu kuveta idatha** Dvweba sitfombe lnjengebufakazi betintfo lotigcogcile).	• Yakha igrafu usebentisa emabhuloki nobe bobunjwa kuveta idatha	• Dvweba igrafu yetintfo letigcogciwe (tintsi letingalingani)	• Dvweba igrafu ngekunamatsisela likhadigama ngalinye ngentasi kwemakholamu lafanele.	• Dvweba igrafu leveta tinsuku tekutalwa tebafundzi tenyanga ngayinye. • Sebentisa tintfo mbamba kwenta i-grafu njengemabhuloki, emakhiyubhi lapakelene, ligo nobe emabhuloki e-duplo dipulo kuveta imibala yenhlama lohlele kuyenta sib. loluhlata njengesibhakabhaka, lomtfubi naloluhlata njengetjani.
				• Dvweba igrafutitfombe kuveta bafundzi labahamba ngetinyawo, labeta ngethekisi, ngetimoto tebatali nalabafika ngebhasi

SIHLOKO	ITHEMU 1	ITHEMU 2	ITHEMU 3	ITHEMU 4
5.3 **Coca ubuye ubike ngetintfo letigcogciwe tabuye tahlungwa** **Fundza ubuye uhumushe emagrafu** Phendvula imibuto lecondziswe etitfombeni nobe etintfweni lotihlungele tona. (Mangaki emacembe lamakhulu lowadvwebile? Nguwaphi lamanyent ngabe ngulamakhulu nobe ngulamancane?)	• Fundza ubuye uhumushe idatha ngekusebentisa inhlama yekudlala kuveta inombolo yemantfombatane nebafana.	• Fundza ubuye uhumushe emagrafu usebentise imibuto	• Fundza ubuye uhumushe idatha ngekubala emakhadinombolo ekholamini ngayinye ubuye ufinyelele esiphetfweni.	Fundza ubuye uhumushe igrafu ngekusebentisa imibuto kutfola kutsi nguyiphi tinyanga lenetinsuku tekutalwa letinyeti. • Ngekwekukhetsa kwebafundzi umbala wenhlama yekudlala waleliviki, njengesibonelo, utawuba ngulomtfubi. • Fundza ubuye uhumushe emagrafu (bangaki bafundzi labeta ngeti nyawo, labeta ngethekisi, ibhasi njll.)

3.5 EMANOTSI LACACISA LOKUCUKETFWE NETINKHOMBANDLELA TEKUFUNDZISA

Tibalo teliBanga R ITHEMU 1			
Liviki 1	**Sikhatsi lesiphakanyisiwe sekufundzisa:**		
Kwetayeta	**Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.1 Sikhatsi	Kulandzelanisa tigameko letenteka emphilweni yemalanga onkhe • Ngenisa luhlelo lwemalanga onkhe - Enta tigameko tilandzelane ngelilanga. - Titfombe tibekwa kusuka esencele nesekuda. - Umholi walelolanga uhambisa Inkhomba kusuka esencele kuye esekudla njengoba imisebenti leseluhlelweni lwemalanga onkhe ichubeka. - Bafundzi batfola lwati ngekulandzelana kwetigameko telilanga.	Luhlelo lwemalanga onkhe luvetwe ngetitfombe.	Emalanga onkhe, emva kwekungeniswa.

LUHLELO LWEMALANGA ONKHE LOLUPHAKANYISIWE










Sikhatsi sekufika kwebafundzi	Irejista, tinsuku tekutalwa, lishadi lesimo selitulu, tindzaba	Umsebenti weliklasi loholwa nguthishela; Buciko Bekubona wente nemdlalo Lokhululekile wangekhatsi.	Kukhweta emathoyizi	Umsebenti weliklasi loholwa nguthishela	Sikhatsi lesetayelekile sekuya endlini lencane

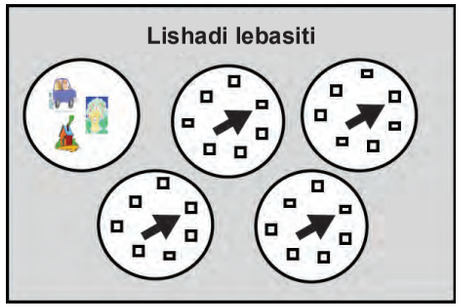







Sikhatsi sekudla	Umdlalo lokhululekile wangaphandle nekukhweta emathoyizi.	Sikhatsi sekuya endlini lencane	Umsebenti weliklasi loholwa nguthishela	Sikhatsi sekuphumula	Sikhatsi sekuya ekhaya

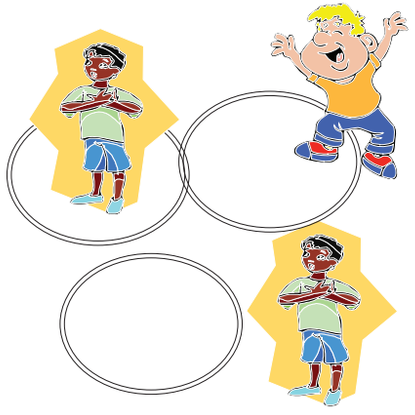
<table>
<tr><th>Sihloko</th><th>Emanotsi lacacisako</th><th>Tinsita letiphakanyisiwe</th><th>Budze besikhatsi lesilinganisiwe</th></tr>
<tr><td colspan="4">Emanotsi:
• Kwetfula lokucuketfwe kwelusuku kuvetwa sikhatsi lesiseLuhlelweni lwemalanga onkhe.
• Luhlelo lwelilanga lukhululekile sibonelo. Sikhatsi sekuya endlini lencane singayiswa noma kusiphi sikhatsi ngekwetimo netidzingo tesikolo.
• Beka onkhe emashadi emva kwekuba sewuwangenisile.
• Ikholamu yemanotsi ayikabhaleki ngeluhlelo lwekulandzelana ngelilanga kodvwa kuya ngekwemkhakha walokucuketfwe. Ngakoke kumele ukhetse kutsi nguliphi lilanga lokufanele kwentiwe ngalo umsebenti lokhetsekile.
• Kulamanye emaviki kunemisebenti leyengca kulesihlanu. Loko kwentelwe kutsi ube nemisebenti leyenele longakhetsa kuyo ngaloko akusho kutsi kufanele uyente yonkhe imisebenti lefakiwe.</td></tr>
<tr><td>1.4
Chaza, ucatsanise ubuye uhlele tinombolo</td><td>• Ngenisa luhlelo lwekuya endlini lencane (sebentisa tinombolo te-odinali kukhobisa kuhleleka, indzawo nobe kubekeka)
- Tfutfukisa lwati lwekulandzelana/kuhleleka kweluhlelo lwekuya endlini lencane(kwekucala sebentisa indlu lencane, geza tandla, vala impompi bese usula tandla njll.)
- Tfutfukisa lwati lwetinombolo te-odinali sib. Lunga wekucala, Juda wesibili njll.</td><td>Insipho, lithawula
Indlu lencane
Emanti asempompini.</td><td>Emva kwekungenisa luhlelo lwekuya endlinil lencane, lomsebenti wenteka malanga onkhe.</td></tr>
<tr><td>3.2
Tintfo letingemada-yimenshini lamatsatfu (3-D)</td><td>• Ngenisa Lishadi Lekukhweta
- Yenta emacembu lamancane ekusebenta.
- Tfutfukisa kulandzelana nekuhlunga tinsita.
Hlukanisa linani lebafundzi eklasini lakho baye etindzaweni tekukhweta letisiphohlongo. Licembu ngalinye kumele libambe lichaza ekuhlobiseni indzawo bantjintjane, ngemaviki.
Chaza, uhlunge ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) macondzana naloku:
• Isayizi
• Umbala
• Tintfo letigicikako
• Tintfo letishelelako</td><td>Lishadi Lekukhweta
<table><tr><td></td><td>Washa tintfo tekuphatsa ipende nemabhulashi</td><td></td></tr><tr><td></td><td>Khweta ekhoneni lemabhuku</td><td></td></tr><tr><td></td><td>Gcogca emabhuloki</td><td></td></tr><tr><td></td><td>Tsanyela phasi</td><td></td></tr><tr><td></td><td>Khweta ekhoneni lendlu</td><td></td></tr><tr><td></td><td>Gcogca emaphazili</td><td></td></tr><tr><td></td><td>Khweta etafuleni lebuciko</td><td></td></tr><tr><td></td><td>Sula litafula lihlobe</td><td></td></tr></table></td><td>Emva kwekuba luhlelo lwekuya endlinil lencane selungenisiwe, lomsebenti wenteka onkhe malanga.</td></tr>
</table>

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
1.1 **Bala tintfo** **Sikhatsi sekudla**	• **Ngenisa Yishadi Lebasiti nendlela lekuwetwa ngayo kudla.** **Combela ubuye ubale tintfo kute utfutfukise lwati lwetinombolo ngeku:** - Sebentisa lishadi lebasiti kutfola umsiti lekunguye losita litafula ngalelolanga ngesikhatsi sekudla. - Tindilinga letisihlanu eshadini lebasiti timele emacembu lasihlanu lohlukanise ngawo bafundzi bakho sib. Licembu lelibovu, licembu lelilulhlata kwesibhakabhaka, licembu lelimtfubi, licembu lelilulhlata kwetjani nalelilulphuti. Ungaphindza usebentise netitselo letehlukene/ tilwane/titfutsi njll. - Luphawu lwemfundzi ngamunye lufakwa ngekhatsi kwendilinga yelicembu layincenye yalo. - Kuhambisa Inkhomba lesemkhatsini wayinye indilinga kuveta umholi walelocembu. Umholi welicembu uyantjintjwa onkhe emalanga kwenta siciniseko sekutsi wonkhe umfundzi uyalitfola litfuba. - Umholi welicembu ubala linani lebafundzi netindishi ngekwelinani lebafundzi lebakhona ecenjini lakhe ngalelolanga (kucondzanisa kunye kulokunye)		Emva kwekuba lishadi lebasiti selingenisiwe kudla kwewetwa ngalendlela emalanga onkhe.
3.3 **Bobunjwa labangema-dayimenshini lamabili (2-D)**	**Kubona, kutfola nekusho bobunjwa labangemada-yimenshini lamabili na/nobe titfombe eklasini** **-Timphawu tebafundzi** • **Vumela umfundzi ngamunye akhetse likhadi lelineluphawu lwakhe.** - Lungiselela umbukiso wemabhuloki ebuciko bekuticambela ngeluphawu lwemfundzi ngamunye (sitfombe nobe igrafutitfombe). - Namatsisela luphawu elokheni yemfundzi ngamunye. - Vumela umfundzi abone ilokha yakhe lehambelana neluphawu lwakhe. - Fasa luphawu loluneligama etimphahleni tebafundzi. - Bafundzi babona timphawu tabo netebangani kute bakhutsatwe kutsi batfole emakhadi etimphawu letehlukene, sib. Bafundzi bahlala bente indilinga, thishela andlale tonkhe timphawu bese ucela bafundzi kutsi batfole timphawu tabo. - Titfombe letincane tebafundzi tingasetjentiswa njengemakhadi etimphawu, nangabe tikhona. • **Ligama leliklasi** • **Tfutfukisa lwati lwekutsi bafundzi bangemalunga elicembu linye lelikhulu ngekwetfula ligama leliklasi sib.ngekusebentisa sitfombe –liklasi “lemabhele laboThedi”.** Bafundzi bamele balati ligama laThishela wabo.	Emakhadi lanetimphawu temfundzi ngamunye. Yenta emasinephukhadi ngetimphawu tetitfombe. Emalokha, emabhokisi nobe emahhuka laselubondzeni lamakwe ngetimphawu. Emalebuli eLiBanga R Sitfombe seligama leliklasi lesisho umnyango Emalebuli laneligama nesibongo sathishela	Njengalesikhatsi bafundzi bafika kwekucala

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
Emanotsi: • Beka kuphela luphawu/sitfombe semfundzi etinyangeni letintsatfu tekucala emnyakeni. • Beka luphawu/sitfombe neligama lemfundzi etinyangeni letintsatfu letilandzelako. • Beka kuphela ligama lemfundzi elebuline etinyangeni letisitfupha tekugcina. • Kugcine esivalweni umnyaka wonkhe. • Ilebuli leneligama lathishela. • Ilebuli lekhomba liklasi leliBanga R .			

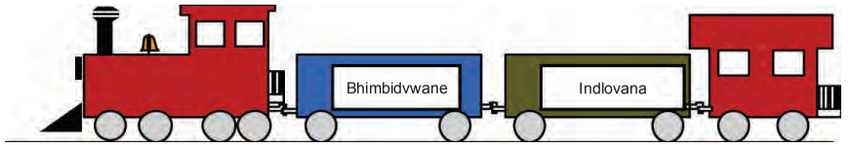
Liviki 2 Kwetayeta	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo)emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Combela ubuye ubale tintfo temalanga onkhe ngekwetsembeka** **Kubala malanga onkhe** • Kubala ngenhloko/ngesigci kusuka ku-1-5. • Kucula emaculo nemilolotelo yetinombolo Nanobe bafundzi bangenalo lwati lwenombolo nabacala LiBanga R kumele bakhutsatwe kutsi bacule emaculo nemilolotelo yetinombolo babuye babale ngenhloko malanga onkhe.	Emaculo nemilolotelo yetinombolo	Onkhe emalanga

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	**Catsanisa kutsi ngutiphi tintfo letincane naletinkhulu kuleligcogco leliniketiwe.** • **Ngenisa bukhulu nebuncane** **Umnyakato** - Bafundzi batfola lwati lwalokuncane nalokukhulu ngekugoca imitimba yabo ibemincane baphindze bayilule ibe mikhulu kufika lapho ingafinyelala khona. - Vumela bafundzi bafananise tandla tabo netebangani babo kute babone kutsi tabani tandla letinkhulu nobe letincane. - Catsanisa sandla sathishela nesemfundzi. - Catsanisa umkhono wathishela newemfundzi. **Chaza, uhlunge ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) mayelana nesayizi** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bumba emabhola lamakhulu nalamancane ngenhlama yekudlala. - Tfola tintfo letinkhulu naletincane eklasini.Maka tintfo letinkhulu ngesitikha lesibovu naletincane ngesitikha lesimtfubi. Khuluma ngemasayizi etintfo letehlukene. - Hlunga tintfo letinkhulu naletincane ngekwesayizi. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Sebentisa lwati letintfo letinkhulu naletincane ngesikhatsi semsebenti webuciko ngeku. - Kubuka titfombe tetintfo letinkhulu naletincane bese bayatijuba. - Bafundzi batsatsela tandla tabo bese bayatijuba. Tibeke ngetulu kwalesinye. Buka kutsi tabani tandla letikhulu nekutsi tabani letincane nalesincane. - Hlukanisa liphepha kabili. - Namatsisela tonkhe tintfo letincane ehlangotsini linye leliphepha netintfo letinkulu ehlangotsini lelinye leliphepha.	Bafundzi Inhlama yekudlala Tintfo letinkhulu naletincane Emaphephabhuku Emaphephandzaba Tikhangisi, Tikelo Emaphepha e-A3, Emakhilayoni	Lilanga -1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.1 Kubekeka, kutetayeta nekubukeka	• **Kubekeka kwetintfo letimbili nobe letinyenti macondzana nemfundzi: ekhatsi nangaphandle** **Umnyakato** - Nika umfundzi ngamunye ihhulahhubhu (Thishela ukhomba bafundzi ngekwenta nabo lomdlalo bese usho lamagama (ekhatsi nangephandle). Kufanele bazube bangene ekhatsi nangaphandle kwemahhulahhubhu balandzela ticondziso tathishela. - Mani ngelunyawo lunye ngekhatsi kwehhulahhubu bese lolunye luba ngaphandle kwehhulahhubhu. - Tsatsa libhokisi bese uvumela bafundzi bazubele ngekhatsi /ngephandle. - Zubela ngekhatsi nangephandle kwemasondvo njengencenye yemsebenti wekukhula kwetitfo temtimba. - Zuba ungene ekhatsi nangaphandle kwehhubhu uvale emehlo. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** **Bafundzi:** - Babeka umdoli (umntfwana) ngekhatsi ekhothini /embhedeni babuye bamkhiphele ngephandle. - Baphosa ibhola/ibhini bhegi ngekhatsi kwehhulahhubhu/esondvweni. - Basebentisa lubumba balugicite lwente ibhola bese bayalucindzetela luze lundlaleke (sidleke setinyoni); bagicita bente emabhola lamancane ledlula kuyinye (emacandza) bese bawafaka ngekhatsi/ngephandle kwesidleke balandzele sicondziso sathishela. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Babuka sitfombe kutsi bangatitfola yini tintfo lletikhombisa ngekhatsi nangephandle. - Bayatidvweba ekhatsi nangaphandle kwemahhulahhubhu/kwelibhavu lelikhulu lekugeza njll.	**Emahhulahhubhu** 	Lilanga - 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Yakha tintfo letingemadayimenshini lamatsatfu (3-D)** **ngetinsita letiphatsekako.Tfola tindlela letinyenti tekwakha ngemabhulokhi ngesikhatsi semdlalo lokhululekile wasekhatsi endlini.** - Umsebenti wathishela kubona kutsi umdlalo uyachubeka. - Tfola ematfuba lamanyenti ekwakha emabhuloki ngekusita bafundzi kutsi bakhe takhiwo temafulethi, letiphakeme kakhulu naletiphasi. - Hlunga ubuye uhlele emabhuloki lehlukene ngekumatanisa bobunjwa labafanako. - Hlunga ubuye uhlele bobunjwa labehlukene ngematanisa ngekwesayizi lefanako. - Hlunga emabhuloki ngebukhulu nebuncane. - Umfundzi uba ngamunye uba nemabhuloki lamatsatfu labocalantsatfu bese uwahlela ngetindlela letinyenti sib. uwabeka awalandzelanise, uwapaka ngetindlela letehlukile. Bafundzi bangacatsanisa babuye bente lokwentiwa ngulomunye nekwabelana emabhuloki ngababili kute babe nelwati lolungetekile ngekubekeka. - Tfutfukisa kugcogcwa kwemabhuloki ekwakha ngendlela leniketiwe ngemuva kwelishelufu ngekucondzanisa macondzana nalendlela leniketiwe.	Emabhuloki kumele apakwe emashelufini kute ukhone kuwhlukanisa ngemuva emashelufini. Tintfo letingetiwe njengetintfo letincane (titfombe/busol obunamatseliswe etimphahleni ngemaphekisi) timo tekudlala, tilwane tasepulazini, timphawu temgwanco njll.kumele tibe khona.	Malanga onkhe.

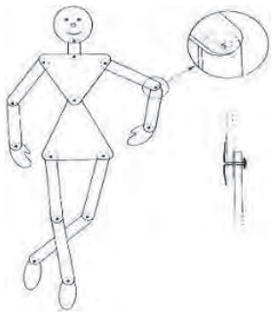
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Chaza, hlunga, bese ucatsanisa tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngemibala yemvelo, lokuluhlata kwesibhakabhaka, lobovu nalomtfubi.** Khombisa umbala munye ngesikhatsi sinye. Ungachumanisis umbala munye nabunjwa munye. Hlukanisa bafundzi ngemacembu lasihlanu. Nika licembu ngalinye incumbi yetintfo letinembala letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) - Thishela wetfula umbala ngekuphakamisa likhadi lelinembala lafuna kutsi bafundzi bawati sib.loluhlata kwesibhakabhaka.Phindza ngembala ngamunye. Bafundzi abahlunge tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ngelikhadi lelahlukele lelikhonjisiwe. **Umnyakato** - Fasa tindilinga letinemibala leyehlukene (lobovu, loliphuti, loluhlata kwesibhakabhaka) esifubeni semfundzi ngamunye letijutjwe emabhokisini. - Vumela bafundzi batihlele ngekwalemibala leyehlukene **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela ubita bafundzi labasihlanu bete phambili bese unika umfundzi ngamunye intfo lengemadayimenshini lamatsatfu (3-D) kutsi ayibambe ngesandla. - Liklasi lonkhe ligcineka lihleti emacenjini alo nencumbi yetintfo letingemadayimenshini lamatsatfu (3-D) emkhatsini wematafula abo. - Umfundzi wekucala phambili uphakamisa intfo yakhe lengemadayimenshini lamatsatfu (3-D) sib.ibhuloki yeyunifiksi leluhlata kwesibhakabhaka nobe indilinga lemtfubi yelogi nobe emaphazili njll. - Bafundzi ematafuleni bahlunga tintfo letehlukene letingemadayimenshini lamatsatfu (3-D) kuye ngaloko umfundzi lakuphakamisile.	Tinhlobo tetintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D)/ titfombe eklasini sib.tivalo temabhodlela, emabhuloki eLego, bobunjwa belogi labanemibala njll. Tinhlobonhlobo tabobunjwa labangemada-yimenshini lamabili(2-D) netintfo letingemadayimenshini lamatsatfu (3-D) Emakhadi emibala leluhlata kwesibhakabhaka, labovu, lamtfubi Tinhlobonhlobo tetintfo letingemadayimenshini lamatsatfu (3-D) letigcogcwe ngaphambilini tabekwa emkhatsini wemfundzi ngamunye.	Lilanga 1
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Thishela ulungiselela ipende yekupenda ngemunywe. - Bafundzi badvweba bobunjwa ngeminwe kulependi. - Tsatsisela bobunjwa labangemada-yimenshini lamabili (2-D) ubuye ubafake imibala.	**Iresiphi yepende yekupenda ngetingalo** inkomishi yafulawa-1 inkomishi yashukela-1 ematfonsi etitsako tekupenda kudla/ pende loyimphuphu la-3 tinkomishi temanti labilako le-5 (tsela emanti kancanane kancane utamatise)	

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
4.1 **Sikhatsi**	**Kulandzelanisa tigameko temphilo yabo.** - Tinyanga temnyaka - Sikhatsi **Ngenisa lishadi letinsuku tekutalwa** - Enta likhadi letinsuku tekutalwa leligcamile, sib.sitimela lesinematilokisi -12 (enyanga ngayinye)-tinyanga atilanzelane kusukela esencele kuye kusekudla ematilokisini. Faka ligama neluphawu/sitfombe semfundzi ngamunye enyangeni lenelusuku lekutalwa kwakhe. - Tfutfukisa lwati lwesikhatsi sib.kucula tinyanga temnyaka bakhomba emagama ato. - Tfutfukisa lwati tekufundza tinkhombandlela sib. Bukisa ngelebuli yenyanga ngayinye yemnyaka emugceni munye usuke esancel uye esekudla. - Bafundzi abatfole luphawu/sitfombe sabo babuye babambe ngenhloko kutsi lusuku lwabo lwektalwa lungayiphi inyanga. - Bakhutsate kutsi bati iminyaka yabo. - Phindza lomsebenti njalonjalo. **Lishadi letinsuku tekutalwa** lelinetinyanga temnyaka letilishumi nakubili letindlalwe kusukela esancele kuye kusekudla Umchele nobe sitfombe selikhekhe lesikhomba tinsuku tekutalwa letendlulile. *Liculo: Cala liculo lakho, ngeshuni yakho.* *“Bhimbidvwane, Indlovane, Indlovulenkhulu.* *Mabasa, Inkwekhweti, Inhlaba, Kholwane.* *Ingci, Inyoni, Imphala, Lweti, Ingongoni.* Umnyaka wonkhe nangabe kunelusuku lwekutalwa  .		

Emanotsi:

- Lusuku lwekutalwa lwemfundzi ngumgidvo lomcoka ngako kumele lubekelwe sikhatsi eceleni lapho kubitwa khona labanye bafundzi kutsi bacule ingoma yelusuku lwekutalwa,”Ukhulile”babuye bashaye tandla kanyenti, bakhombise iminyaka yekutalwa kwebafana/mantfombatane.
- Umfundzi ngamunye angadvweba sitfombe bese thishela uhlanganisa yonkhe imidvwebo ebhukwini letinsuku tekutalwa talomfundzi logubha lusuku lwakhe lwekutalwa
- Thishela angenta umchele walentfombatane nobe umfana logubha lusuku lwakhe lwekutalwa nebafundzi bangawuhlobisa ngetintfo tekholaji.
- Lomsebenti kumele uphindvwe umnyaka wonke nangabe kunelusuku lekutalwa.

Liviki 3 Kwetayeta	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Combela ubuye ubale tintfo temalanga onkhe ngekwetsembeba** • **Kubala ngemlomo malanga onkhe** - Bala ngenhloko/ ngesigci kusuka ku-1-5. - Cula emaculo nemilolotelo yetinombolo. Nanobe bafundzi bangenalo lwati lwenombolo nabacala LiBanga R kumele bakhutsatwe kutsi bacule emaculo nemilolotelo yetinombolo babuye babale ngenhloko malanga onkhe. **Tfola ubuye ubale titfo temtimba letehlukene** Kubala ngenhloko malanga onkhe uphimisa kusuka ku-1-5 **Umnyakato (Hlanganisa nemakhono ekuphila –Laphatselene nebuwena)** - Tfutfukisa lwatsi lwelinani lwetitfo temtimba ngekutibala. - Ngikhombe imphumulo yakho bese uyayibala. Unatingaki timphumulo? - Ngikhombe tindlebe takho bese uyatibala. Ngabe tinyenti ngayinye? Asichubeke sibale? - Ngikhomba tandla tandla takho. Tingaki? Asitibale? Yini lenye longayibona etandleni takho? Iminwe! Ungayibala? Asibale iminwe yesandla sinye 1, 2,3,4,5. - Mangaki emehlo? Bala tindlebe nemehlo akho. Bamba tindlebe nemehlo akho ngalesikhatsi ubala ucale ngetindlebe. - Hlala ubukane nemngani wakho ubale titfo temtimba wakhe ucale utibambe. Thishela utawusita asho kutsi benteni sib. Bamba indlebe yinye yemngani wakho, bamba lenye indlebe yakhe; tibale: 1, 2, tiyalingana netakho? Chubeka ngalomsebenti. - Bona titfo temtimba letihamba ngasinye emtimbeni wemuntfu sib. Imphumulo yinye, umlomo munye, silevu sinye njll. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Batibuka esibukweni bese bayatitsatsela/bayatidvweba. - Badvweba kubukeka kwemitimba yabo ephephandzabeni bese bayihlobisa ngendlela lefanele. Badvweba umugca emkhatsini walesitfombe. - Juba titfombe letehlukene emaphephabhukwini bese ucedzela buso - Juba buso ephephabhukwini bese udvweba titfo temtimba	Emaculo nemilolotelo yetinombolo Liculo/umlolotelo lonemnyakato Emaphazili/imidlalo leveta tinhlobo letehlukene tebantfu nesimo semtimba. Imidlalo yemakhadi Bafundzi Sibuko lesidze Liphepha le A4, emakhilayoni Emaphephabhuku, tikhangisi, emafulaya, tikelo	Malanga onkhe Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.4 **Umugca lohlukanisa emkhatsini kulingane, kufanane**	**Bona umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako.** **Tfutfukisa lwati lwekutsi umtimba wemuntfu unetinhlangotsi letimbili** **Umnyakato** Gcizelela lwati lwemacala emtimba “linye nalelinye” Thishela ukhuluma nebafundzi ngeluhlangotsi lwemtimba lwaphambili nelwasemuva, incenye yemtimba yangenhla neyangentasi. **Bafundzi:** - Batibuka esibukweni labatawukhona kubuka imitimba yabo yonkhe. - Batfola kutsi ngutiphi titfo temtimba letitfolakala etihlangotsini letmbili. - Bamba titfo temtimba njebongoba kushiwo sib. “Tsintsa tintwane takho, tsintsa tinyawo takho, tsintsa imilente yakho” Bafundzi bangawenta lomsebenti bavale emehlo. - Bamba sinye sitfo semtimba ngalesinye sitfo semtimba sib. “Bamba emadvolo akho ngemphumulo njll” (nemsebenti lofaka kweca umugca lowehlukanisa emkhatsini	Bafundzi  Sibuko lesidze Thishela angakha umtimba lohlukaniswa ngetipeneti ngelibhokisi/umfanekiso welikhadibhodi	Lilanga 1
3.2 **Tintfo madayimenshini lamatsatfu (3-D)**	• **Kubona usho emagama emabhola** - Bafundzi badlala ngemabhola bakhombise bese basho emagama ato tonkhe tintfo lebangatenta . Thishela uhola lokucocisana ngemibuto. - Buka tonkhe tintfo letingagicikasib.khomba emabhuloki bese ubuta imibuto ‘Ucabanga kutsi ibhuloki ingagicika? asibone “ - Gicita tonkhe letinsita bese uyabuka kutsi tigicika njani sib. Tikotela tigicika ngelicele linye. - Sebentisa inhlama kwakha emabhola langagicika ngesikhatsi semisebenti yemakhono (Imidlalo lekhululekile ngekhatsi) - Ngesikhatsi semnyakato bafundzi bangagicika phasi njengebhola.	Tintfo letitfolakala edvute sib. Emawolintji, emahhabhula, emabhola, emabhola emaphephandzaba nemabhola lafakwe emakhezeni Tinsita letilingene sib. emabhuloki Umdlaolo wekubhaka: 1 inkhomishi yafulawa **½ inkhomishi yasawoti** 1 inkhomishi yemanti 2 ithisipunu yemafutsa Ematfonsi ekupenda kudla } Hlanganisa tonkhe tinongo	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.3 Bobunjwa labangemada-yimenshini lamabili (2-D)	**Kubona, kutfola bese usho emagama abobunjwa labangemada-yimenshini lamabili lekhona eklasini nasetitfombeni**. - Indilinga • **Ngenisa indilinga** **Nangabe utfula indilinga kwekucala lensita letawusetjentiswa kumele yefane (ngemasayizi, ubala lofanako, kufana ngesimo)** **Umnyakato** Thishela udvweba indilinga ebhodini naphasi. Bafundzi abahambe kulendilinga bakhuluma batsi “ngihamba endilingeni ngiyajikeleta,ngiyajikeleta” **Bafundzi aba** - Bamba tandla nente indilinga. - Yentani indilinga ngemitimba yenu. - Hamba endilingeni ucula ingoma ‘Naku ngihamba ehlatsini lemgumence” - Hlalani endilingeni niketanani tintfo kusuka kulomunye iye kulomunye kube bacula “‘lizambane lashisako, undlulisele kulomunye”. ”Umfundzi lobambe lentfo nabathula ungene emkhatsi wendilinga.	Liculo, “Naku ngihamba ehlatsini lemgumence”. Umdlalo ‘lizambane lashisako, undlulisele kulomunye”.	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) **Thishela ukhomba bafundzi emahhulahhubhu bese uyachaza kutsi yindilinga ayinamakhona.** **Bafundzi aba:** - Ababambe emahhulahhubhu emadayimenshini lamatsatfu ngeminwe yabo. - Tfola bobunjwa labangema emadayimenshini lamatsatfu (3-D) eklasini labafana nendilinga. **Hlunga ucatsanise tintfo** Thishela akanikete bafundzi bobunjwa labangemada-yimenshini lamatsatfu (3-D) nalabangemada-yimenshini lamabili (2-D) ngekuhlukana kwemasayizi (kukhulu, kuncane nangembala (lobovu, loliphuti naloluhlata kwesibhakabhaka) njengethenisi, emabhola, emamabuli, nemabhaluni, njll. **Bafundzi ba:** - Bahlunga tintfo letinkhulu naletincane - Babeka tincumbi tetintfo ngemibala	Emahhulahhubhu Tintfo letinyenti letibobunjwa bemadayimenshini lamatsatfu (3-D) njenge thenisi, emabhola, emamabuli, nemabhaluni, njll. Bobunjwa lebangemadayimenshini lamabili (2-D) njengemaplastiki layindilinga.	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
4.1 **Sikhatsi**	• **Tfula Simo selitulu nekhalenda** a) Sikhatsi b) Emalanga eliviki c) Kulandzelanisa tigameko d) Kubala - Simo selitulu asibe seliviki (5 emalanga) usebentise likhadi letimphawusib. Emalanga lasihlanu eliviki kusuka esancele uye esekudla (ngekusebentisa timphawu ngephasi - Simo selitulu ukhuluma ngaso onkhe emalanga. - Thishela usita bafundzi kusho lilanga, lusuku nenyanga ngemakhadigama njengoba aseshadini lesimo selitulu, kamuva bafundzi batatifunela batibekele emashadigama. - Umholi walelolanga utawubuka simo selitulu ngaphandle bese ucoca nelicembu lakha sebayasho kutsi kunjani. Sib. liyana, kunemafu, libalele nobe kuyashisa. - Thishela ubukisa loku lebakutfolile ngemakhadigama njengasehadini (kamuva bese bafundzi bayatentela). - Ngaloko bafundzi bafundza emalanga elifiki. - Bafundza ngalamuhla, itolo, kusasa njll. Ngalokungakalindzeleki. - Bafundzi baniketwa ematfuba lamanyenti ekubala uyofika ku-5 kubala emalanga lebelishisa ngawo, emalanga lokumakhata ngawo, emalanga lebekunemoya njll - Bukisa timphawu tebafundzi nangabe kunalogubha lusu lwekutalwa ngaleloviki. - Bukisa nobe ngumuphi umsebenti lotawentiwa kuleloviki sib. kuya e Zoo (ngekuveta titfombe tetilwane)	**Lishadi lesimo selitulu** lesimele liviki sib. emalanga eliviki ngekulandzelana kusukela esancele uye kusekudla ngetinyanga letisitfupha tekucala,usebente ngato onkhe emalanga. Emakhadigama aloku: - Emalanga layinkhotsa eliviki - Tinombolo 1-31 - Emagama etinyanga temnyaka - Umnyaka sib. 2012 - Emakhadi lakhombisa simo selitulu sib.  kunemoya  liyashisa/libalele  liyana  kunemafu	Emva kwekwetfula simo selitulu lomsebenti utawentiwa malanga onkhe. Fundzisa bafundzi liculo lekukhumbula emalanga eliviki.

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
	Sibonelo selishadi lesimo selitulu	**Lishadi lesimo selitulu** Inhlaba 2012	

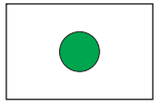
Lisontfo	Umsombuluko	Lesibili	Lesitsatfu	Lesine	Lesihlanu	Umgcibelo
12	13	14	15	16	17	18
						

4.1 **Sikhatsi**	**Kulandzelanisa tigameko emphilweni yamalanga onkhe** • **Emalanga eliviki** Thishela ufundzisa tingoma nemilolotelongemalanga eliviki week. Phindza onkhe emalanga njengoba lishadi lesimo selitulu sisho. *Liculo:* *"Kunemalanga layinkotsa ngeliviki, kunemalana layinkhotsa ngeliviki, "*Lisontfo, Umsombuluko, Lesibili, Lesitsatfu, Lesine, Lesihlanu, Umgcibelo.*" (X2)*	Liculo: Emalanga eliviki nobe ucale liculo lakho lelikhuluma ngemalanga eliviki	
	• **Ngenisa lishadi letikhatsi temnyaka ngekukhombisa tikhatsi temnyaka letine ngemcibisholo** - Sikusiphi sikhatsi semnyaka? - Ngusiphi sikhatsi semnyaka lesindlulile? - Ngusiphi sikhatsi semnyaka lesilandzelako? - Bukisa sikhatsi semnyaka lesikuso sihambisane nenyanga lesikuyo - Bhimbidvwane kuya kuNdlovulenkhulu titfombe telihlobo. - Khombisa sitfombe lesinesikhatsi semnyaka lesikuso kanye netinyanga letihambisana naso.sib.Bhimbidvwane kuye kuNdlovulenkhulu ungakhombisa sitfombe sasehlobo.	Emakhadi lamane lahlukene lanetitfombe tasinye sikhatsi semnyaka. **T**ikhatsi temnyaka  Lihlobo Likwindla Intfwasahlobo Busika	Lungisa nangabe tikhatsi temnyaka tintjintja

Emanotsi:

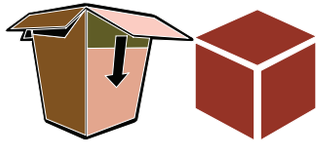
Lonkhe lwati kumele lwetfulwe ngekwetigaba.

- Tigaba temnyakato (Tetayete kutfola lwati ngemtimba nangemiva)
- Tigaba tetintfo letiphatsekako (sebentisa tintfo letinabobunjwa labangemada-yimenshini lamatsatfu (3-D)
- Tigaba tetintfo letingabambeki (kuveta bunjwa longemadayimenshini lamatsatfu (3-D) ephepheni sib. imidvwebo, kufananisa titfombe, emakhadi ekudlala, lishiti lekusebentela njll.) Bonkhe " bobunjwa labasicaba babitwa ngekutsi bobunjwa labangemada-yimenshini lamabili (2-D).

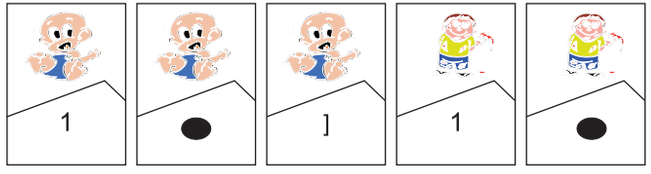
Liviki 4 Cala ngekutfula etinombolweni	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sekufundza)emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Tfola ubuye uchaze tinombolo letiphelele.** • **Tfula inchazelo yenombolo 1** Kubala kusukela ku-1-5 **Umnyakato** Bafundzi ba: - Babuke titfo temtimba sib. Liso linye. - Bavuma ngenhloko kanye, shaya phasi kanye, zuba kanye njll. - Phakamisa lugalo lunye, sinye sandla, lunye lunyawo njll. - Babhala inombolo 1 emoyeni naphasi emhlabatsini. - Bashaya tandla kanye	Liculo nemilolotelo yetinombolo Bafundzi	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi: - Ababuke nobe nguyiphi intfo yinye eklasini. Sib.linye libhuloki lekwakha. - Akha inombolo 1 ngenhlama.	Tintfo eklasini nangaphandle	
	Tintfo longatibona longeke utibambe ngekusebentisa bobunjwa labangemada-yimenshini lamabili (2-D) **nobe titfombe** Bafundzi aba: - Kubona titfombe tentfo yinye emakhadinigama lehlukene. - Condzanisa sitfombekhadi nayinye intfo ekhadini lelinelicashata. - Ngasosonkhe sikhatsi condzanisa likhadisitfombe nelicashata enombolweni yinye yekubala sib.Incumbi yetinombolo tekubala letifananako ecashatini linye. - Emva kwekutfula inombolo yeku-1 thishela ubukisa ngemakhadigama ekhumbinikutsi bafundzi batibonele onkhe emalanga.	**Sitfombe sentfo yinye**  1 Sibali samunye umfundzi. Titfombe letehlukene tetitfombemagama Emakhadigama emacashata	

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
2.1 **Emaphethini e-Jomethri**	• **Bona emaphethini emvelo etimphahleni tebafundzi** Bafundzi aba: - Bafundzi abkhulume ngemaphethini lebawabonako tikwemvelo nase - timphahleni tabo. - Nguwaphi emaphethini lanemigca nalanemabhuloki? - Ayafana yini onkhe emaphethini, yini umehluko nalokufanako? - Yini leyenta emaphethini? - Iphethini iyaphindzaphindzeka-imigca/ emabhuloki / nabobunjwa. **Tsatsela ubuye uchubela embili emaphethini** **Umnyakato** - Thishela ubopha iribhoni leluhata kwesibhakabhaka emkhonweni webafundzi labane.Wenta iphethini ngekubeka ebafundzi labaneribhoni lebovu embikweliklasi besekuta labaneribhoni leluhlata kwesibhakabhaka kubuye kulandzele labaneribhoni lebovu futsi. Batjele bacedzele lephethini..	   Emaribhoni labovu nalaluhlata kwesibhakabhaka.	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Thishela wakha emaphethini ngetivalo temabhondlela 3 letibovu na 4 letiluhlata kwesibhakabhaka. - Bafundzi abatsatsele iphethini yathishela.	Tivalo temabhodlela letibovu na letiluhlata kwesibhakabhaka.	

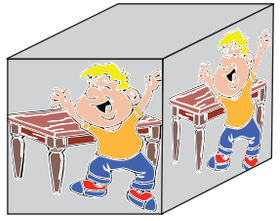
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)** **3.2** **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Kubona, kutfola ubuye usho emagama abobunjwa labangemada-yimenshini lamabili lekhona eklasini nasetitfombeni Kuba nelikhono lekuhlukanisa tintfo letingembili naletingemuva** **Tfutfukisa likhono lekubona phakatsi kwetintfo letingaphambili naletisemuva** **Lokubambekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** Thishela ubeka tintfo letehlukene eklasini nangaphandle. Bafundzi ba: - Bakhombise tintfo letehlukene eklasini sib. Tintfo tesigodvo, tintfo letibovu, tintfo letimapulasitiki njll. - Babuka tintfo letitsite eklasini ngekulandzela lokushiwo nguthishela sib. Ibhola etitfweni tekuphatsa letimalojini, timoto temathoyizi ekhabethini, emapeniseli ethinini njll. - Babuka tintfo letifananako sib. Tinkinobho letiyindilinga kulesitikwele emamabula labovukulanemibala njll. - Bahlunga tintfo ngekufana sib.isayizi, umbala, bungiyo nobe kubunjwa. - Badlala umdlalo, “Ngikuphica ngemehlo lamancane, intfo leyindilinga.”	Tintfo letinyenti eklasini nasendzaweni	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
	- Babuka tintfo letitsite ngaphandle ngekulandzela lokushiwo nguthishela sib. Inyoni isesihlahleni, iribhoni isesihlahleni, imbali lenhle, Incangosi lehamba ecembeni njll. - Ekhaya bafanele bagcugcutelwe kukhipha tonkhe tipunu, emafologo, imikhwa emashelufini.		
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Khomba bafundzi sitfombe ubuye ubabuta imibuto ngesitfombe Sibonelo: - "Ibambeni ntfombatana esandleni?" - "Bangaki bantfu lebasemkhunjini?" njll. - Kwakha emaphazili nekudlala titfombe temadominosi kuyindle yekutfutfukisaindlela yekubona kubafundzi.	Nobe ngusiphi sitfombe kuchaza(Iposta) **Emaphazili** 	
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Bona, tfola ubuye unike emagama etintfo ngekutetayeta bobunjwa nemasayizi emabhokisi** • **Kutetayeta bobunjwa nemasayizi emabhokisi** **Umnyakato** Bafundzi: - Abangene baphume emabhokisini - Batetayete lingekhatsi kwelibhokisi ngekucoca ngaloku lebakubona ekhatsi kwelibhokisi sib.libhokisi linaphasi/ ngaphasi/ emacala lamane likhumbi nesivalo. - Vula libhokisi utowukhona kubona bobunjwa **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Sebentisa emabhokisi kwakha takhiwo sib. indlu, ligalaji (kusebentise ngesikhati semakhono ekubona kwakha ngemabhokisi lanemasayizi letehlukene) - Nika bafundzi tinsita letinyenti njengetinkinobho, emabhuloki langakahlanganiswa, tivalo temabhodlela, emaklipu yemapulastiki yetinkwa. Bafundzi: - Abahlunge tinsita ngemacembu lafananako - Bafola lwati ngetinsita letehlukene. - Batfola kutsi ngutiphi tikwelw netindilinga. - Bahlunga tinsita ngekufana kwembala	 Tinhlobo temabhokisi lamakhulu nalamancane (sicandzisi lesinganalutfo nesitovu selibhokisi)  Emabhuloki langakahlanganiswa,tivalo temabhodlela,emaklipu yemapulastiki yetinkwa. (bafundzi bangabuya nato emakhaya)	Lilanga 1

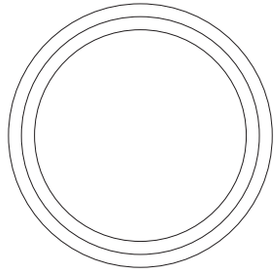
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.3 **Bobunjwa labangemada-yimenshini lamabili(2-D)**	**Bona, tfola abuye anike emagama abobunjwa bemadayimenshini lamabili (2-D) eklasini nasetitfombeni** **Tfula Calantsatfu** Nawe yetfula calantsatfu kwekucala lensita loyisebentisako ifanele ifane naye ngato tonkhe tindlela (isayizi yinye, umbala lofanako, nebunjalo). Calantsatfu unemacala lamatsatfu **Umnyakato** Bafundzi: - Bakha /Benta bobunjwa ngemitimba yabo sib.bafundzi labatsatfu bakha calatsatfu ngemitimba yabo. - Benta calantsatfu ngetingalo. - Bakha /Bente calantsatfu ngewulu nobe ngeinhlama lokudlala. - Bahamba kubunjwa calantsatfu. Nabahamba bacule batsi, 'Ngihamba kucalantsatfu,kunye, kubili, kutsatfu macala lamatsatfu nobe batsi emakhona lamatsatfu - Batsintsa bobunjwa. Sebentisa bobunjwa labakhulu nobe ubeke bobunjwa labehlukene" esikhwameni seboya." Bafundzi batsintsa bobunjwa ekhatsi esikhwameni babuye babacondzanisa nelisethi lemakhadi ekucondzanisa (emakhadi abobunjwa ladvwetjwe kuwo). - Badvweba calantsatfu emoyeni, phasi, emhlabatsini (ngeshoki) ubuye ubhale ephepheni. Uchaza, ahlunge abuye acatsanise tintfo temadayimenshini lamatsatfu (3-D) nabobunjwa bemadayimenshini lamabili (2-D) **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi aba: - Hlunga bobunjwa belogi ngebombujwa (indilinga nacalantsatfu) isayizi (bukhulu nebuncane) nembala (lobovu, loluphuti, loluhlata kwetjani) Buka bobunjwa lababocalantsatfu eklasini nasendzaweni lebakuyo.	Emakhadimdlalo lattfutfukisa kubonwa kwabombujwa Intsontfo nenhlama yekudlala "Sikhwama sefeli" (Sikhwama sendvwangu lesifakwe ireki etulu) lesinabobunjwa labatfolakala endzaweni lebakuto. Condzanisa lisethi lemakhadi nabobunjwa labadvwebiwe kuwo Liphepha leA4 nemakhilayoni Bobunjwa belogi Tinsita eklasini nangaphandle.	Lilanga 1

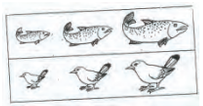
Liviki 5	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Sikhatsi lesibekiwe**
1.1 **Bala tintfo**	**Chaza ubuye utfole tinombolo letiphelele.** **Gcizelela lwati lebalutfole evikini 4 leliphatselene nenombolo 1** **Temlomo:** Kubala ngenhloko usuke 1 uye ku-5 **Umnyakato** Bafundzi: - Basebentisa kushayisana kwetitfo temtimba sib. Shaya tandla kanye. - Thishela ukhombisa likhadigama lelinenombolo 1 bese bafundzi baphakamisa umunwe munye, sandla sinye nelunyawo lunye njll.	Emaculo nemilolotelo yetinombolo **Sitfombe sentfo yinye** ● **1** **kunye**	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) **Bafundzi:** - Batfola yinye intfo eklasini. - Babala sinye sibali.	Yinye intfo. Sinye sibali.	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe - Matanisa tinhlobonhlobo tetitfombe letihamba ngasinye nemakhadi lanelicashati linye. - Matanisa tinhlobonhlobo tetitfombe nemakhadi emacashati lanenombolo 1. - Matanisa luphawu lwenombolo neligama lenombolo yemafleshikhadi. - Enta emaphazili etinombolo kute bafundzi bawamatanise sib.  	Emafleshikhadi latinhlobonhlobo lanesitfombe sinye nelicashati linye. Emafleshikhadi lanetimphawu nemagama etinombolo. **Sitfombe sentfo yinye** ● **1** **kunye**	

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.4 Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako	**Gcizelela lwati lwekutsi umtimba wemuntfu unetinhlangotsi letimbili sib. "Luhlangotsi lunye" "neluhlangotsi lolunye" lokuholela esancele nesekudla.** **Umnyakato** Thishela uchaza ngetinhlangotsi letimbili temtimba wemuntfu. Bafundzi: - Bema ngelunyawo lunye babuye beme ngalolunye lunyawo lunyawo. - Banyakata balandzele sigci sesikotjokotjo eceleni linye leliklasi. Baya kulinye licala eklasini ngekushaya kwesingci Nangabe kubindza baye kulelinye licala. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Munye umfundzi uniketwa ibhinibhegi. Bafundzi**:** - Babeka emabhinibhegi edvute nabo. - Bahambisa ibhinibhegi ngetintwane nangesandla iye kulelinye elicala njll. - Babeka emabhinibhegi phasi eceleni nemitimba yabo babuye bayayihambi iya kulelinye licala. - Ngeta lwati ngekuhlanganisa nebuciko bekubona intfo uyikhiphe njengobe injalo ngekuvumela bafundzi bente sitfombe seluvevane. (Goca liphepha emkhatsini; faka imibala yemapende ephepheni leligociwe goca sitfombe emkhatsini ufake ipende ngekushikisha sitfombe vula ubuke livivane bese ujuba kulomlayini-**luvevane selinetincenye letimbili letifanako.**	Ishekha ingentiwa ekhaya-intfo yekuphatsa, legcwaliswe ematje Ibhinibhegi yamunye umfundzi	Lilanga 1
3.2 Tintfo letingemada-yimenshini lamatsatfu (3-D)	**Bona, tfola ubuye unikete emagama etintfo letingemadayimenshini lamatsatfu (3-D)** **Ngenisa ubuye utfole tintfo letigicikako** - Chaza "bundilinga" betintfo. Faka tintfo letiyindilinga "esikhwameni seboya" (sikhwama sendvwangu) Bafundzi batsatsa yinye intfo bachaze bundilinga bayo. - Bafundzi bakhombisa kutsi tintfo letinyenti tigicika njani. Silophu lesiphakamisa litafula ngetitini letimbili.	"Sikhwama sefeli (sikhwama sendvwangu lesinereki etulu) Ekhatsi kwesikhwama kunemabhola lehlukene ngemasayizi timabuli, emasilinda, tikotela letingenalutfo tetinatsatfo letibandzako, bobunjwa bepulasitiki labayindilinga nobe timbonyo temabhodlela temapulasitiki.	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.1 Kubekeka, kutetayeta nekubukeka	**Kubekeka kwetintfo letimbili nobe letinyenti macondzana nemfundzi** - Ngaphambili/ ngemuva **Umnyakato** Thishela ukhetsa bafundzi lababili ngemlolotelo wekubala: - Beka titulo letimbili embikweliklasi. - Labafundzi lababili bakhombisa lwati “ngaphambili, ngemuva” ngekulalela sicondziso sathishela. o Sipho mani ngaphambi kwesitulo o Carl mani ngemuva kwesitulo - Nasebakhona, thishela uphakamisa ifleshikhadi bese bafundzi benta umnyakato basebentisa titulo tabo. - “Loku kungakhonjiswa ngekusebentisa bafundzi labatsatfu. o Amy ume ngemuva kwaSipho, kodvwa Carl ume ngaphambi kwa-Amy. - Thishela unikete bafundzi lidayizi lelikhulu lelinetitfombe letehlukene letikhombisa “ngaphambili, ngemuva” kubhalwe emacaleni sib. Mani ngaphambi kwemuntfu lonetinwele letindze, mani ngemuva kwemuntfu logcoke libhuluko, hlala ngemuva kwalomunye njll. - Bafundzi abadlale umdlalo emacenjini abo ngekuphosa lidayizi babuye bente umnyakato walapho liwele ngakhona.	Titulo Bafundzi Emafleshikhadi laneminyakato “ngaphambili, ngemuva”  	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Catsanisa kutsi nguyiphi intfo kuletimbili letiniketiwe:** **lenkhulu nalencane.** • **Gcizelela lwati lwalokukhulu kuna- nalokuncane kuna-.** **Umnyakato** Bafundzi: - Benta imitimba ibe mikhulu ngekulula tandla tabo ngetulu kwenhloko. - Benta imitimba ibe mincane ngekugobeka batigoce. - Batfola kutsi ngabe inja yinkhulu kuneligundvwane. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Khombisa tintfo letimbili ngasosonkhe sikhatsi nawucatsanisa. - Catsanisa emasayizi lehlukene eluhlobo lunye lwemabhuloki, emabhola, emapuleti, emakinobho, litafula situlo njll. Ubuye utfole kutsi ngutiphi tintfo letinkhulu/letincane, letinkhudlwana, letimbalwa, letinkhulu kakhulu/letincane kakhulu. - Yakha takhiwo ngemabhuloki ekwakha bafundzi babye bacatsanisa sabani sakhiwo lesikhulu kakhulu nekutsi sabani lesincane kakhulu. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe** - Catsanisa titfombe letikhombisa lokukhulu/lokuncane na lokukhudlwana/ lokumbalwa. - Sebentisa lwati" lwalokukhulu /nalokuncane" ngesikhatsi Sebuciko bekuticambela.	Sitfombe seligundvwane nenja (kucinisekisa kutsi sitfombe senja sikhulu kunesitfombe seligundvwane) Tinsita eklasini njenge mabhuloki, emabhola, emapuleti, emakinobho, buhlalu, tindvuku, emaphekisi, emabhokisi emetjiso, tikotela, ematje lamancane, emakhokho, emagobolondvo, timbonyo temabhodlela njll. Titfombe letiveta "lokukhulu /nalokuncane"	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Catsanisa kutsi nguyiphi intfo kuletimbili letiniketiwe:** - **Kukhulu nakuncane** - **Kukhudlwana nakumbalwa** - **Kukhulu kakhulu nalokuncane kakhulu** **Umnyakato** Thishela udvweba indilinga lencane esantini/esiyilweni/phasi - Bafundzi bahamba endilingeni ledvwetjiwe. Thishela udvweba indilinga lenkhudlwana ngaphandle kwendilinga. - Bafundzi bahamba endilingeni lenkhudlwana ledvwetjiwe. - Thishela uyabuta: o Nguyiphi indilinga lencane kakhulu?” o “Nguyiphi indilinga lenkhulu kakhulu?” o “Hamba endilingeni lencane” o Hamba endilingeni lenkhulu Thishela udvweba lenye indilinga lenkhulu kakhulu ngaphandle kwendilinga. - Bafundzi bahamba nasendilingeni lenkhulu kakhulu ledvwetjiwe. - Thishela ubuta imibuto lenjengale: o “Ngutiphi tindilinga letinkhulu kakhulu?” o “ Ngutiphi tindilinga lencane kakhulu?”	Tindilinga letinkhulu naletincane letidvwetjwe esantini/esiyilweni/phasi 	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi bayahlunga babuye bacatsanisa tintfo letehlukene ngekwesayizi (kukhulu, kuncane) sib. - Emakinobho lamakhulu kulamancane. - Tipunu letinkhulu kuletincane. - Emabhokisi lamakhulu kulamancane. Lomsebenti ungachutjekiselwa emdlalweni wangaphandle (umdlalo wasemhlabatsini nemdlalo wasemantini) lapho bafundzi bangacatsanisa tintfo babuye bakhulume ngekutsi nguyiphi intfo lembalwa/lenkhulu, lenkhulu kakhulu nalencane kakhulu. Kungahlaniswa neBuciko bekubona wente-yenta ikholaji usebentisa tintfo letinkhulu naletincane. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe** Bafundzi**:** - Abadlale imidlalo yemakhadi babuye batfola lokuncane/lokukhulu/lokukhulu kakhulu - Buta imibuto lenjengale: “Nguyiphi inhlanti yekucala nobe nguyiphi inhlanti yekugcina?” “Nguyiphi inhlanti lesemkhatsini?”  - Chubekela kutinhlavu kute bafundzi babone kutsi titfombe timele emagama. Bafundzi abakalindzeleki kutsi bafundze tinhlavu.. 	Emabhuloki ekwakha nemabhola langemasayizi lehlukene. Emakinobho, tipunu, emabhokisi emutsi, emabhokisi eticatfula, emakhathoni elubisi langenalutfo, tintfo tekuphatsa umutsi letingenalutfo. 	

Liviki 6	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Sikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Combela ubuye ubale tintfo temalanga onkhe ngekwetsembeka.** **Kubala onkhe emalanga** - **Temlomo:** Kubala ngenhloko/ngesigci kusuka ku-1 - 5. - Cula emaculo nemilolotelo yetinombolo	Tingoma tetinombolo nemilolotelo Bafundzi	Onkhe emalanga Lilanga 1
2.1 **Emaphethini e-Jomethri**	**Kopa ubuye uchubele embili iphethini usebentisa kushayisana kwetitfo temtimba.** **Umnyakato:** - Thishela ukhombisa bafundzi iphethini yekushayisana kwetitfo temtimba bafundzi babuye bayitsatsele sib. shaya tandla, shaya tandla, gidza; shaya tandla, shaya tandla, gidza;....khalisa tingalo, cwabita, cwabita, khalisa tingalo njll. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Kopa iphethini ngetintfo sib. - Usebentisa tinhobo letehlukene temacembe. - Usebentisa bobunjwa sib. indilinga, indilinga, calantsatfu, indilinga,..... - Usebentisa tintfo sib. liphekisi lelibovu, liphekisi leliluhlata kwesibhakabhaka, liphekisi lelimtfubi, liphekisi lelibovu.....	 Bobunjwa beLogi Emaphekisi ephegibhodi	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe Bafundzi: - Batakhela emaphethini ngemakhadititfombe sib. imbali, licembe, licembe imbali... - Batakhela emaphethini ngemakhadi emibala sib. lobovu, loluhlata kwesibhakabhaka, lobovu, loluhlata kwesibhakabhaka, lobovu..... - Ngesikhatsi seBuciko bekuticambela bafundzi benta emaphethini basebentisa sipontji lesijutjwe saba bobunjwa.	Niketa bafundzi amakhadititfombe Emakhadi emibala. Thishela angajuba bobunjwa etipontjini.	

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesilinganisiwe
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, utfole ubuye unike ligama lesikwele** **Ngenisa sikwele** Nangabe ungenisa sikwele kwekucala letintfo letisetjentisiwe kumele tifanane ngayo yonkhe indlela (isayizi lefanako, umbala lofanako, nebunjalo). Sikwele sinemacala lamane. Loku kubitwa ngekutsi sikwele. **Umnyakato** - Liklasi lonkhe lakha sikwele. - Bafundzi abahambe esikweleni lesakhiwe ngentsambo ekhaphethini ngalesikhatsi batsi “ngiyahamba esikweleni- licala linye, emacala lamabili, emacala lamatsatfu, emacala lamane onkhe emacala ayafanana” - Emacembu ebafundzi akakhe tikwele letincane. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela ukhomba umehluko emkhatsini wendilinga nesikwele ngekuphakamisa simbonyo sesikotela nelithayilisi lelisikwele. - Simbonyo siyindilinga kantsi lithayilisi linemingcengcema nemakhona. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe** - Thishela udvweba atungeletele simbonyo nelithayilisi - Lesimbonyo simele indilinga, lithayilisi limele sikwele. - Bafundzi batsatsisela simbonyo nelithayilisi basebentisa emakhilayoni.	Bafundzi Intsambo Simbonyo sesikotela Lithayilisi lelisikwele Tinhlobonhlobo tetimbonyo letisikwele naletitindilinga Imibhalo yemaphepha Emakhilayoni	Lilanga 1
	Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) netitfombe Hlukanisa bafundzi ngemacembu. Bafundzi: - Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) lebaniketwe nguthishela ngekwesayizi nembala. - Gcizelela bobunjwa ngekudlala imidlalo nemakhadimdlalo ngesikhatsi semdlalo lokhululekile ekhatsi endlini.	Emakhadi abobunjwa Tintfo letingemadayimenshini lamatsatfu (3-D) njengemabhuloki, emabhuloki eLego. Bobunjwa labangemada-yimenshini lamabili (2-D) njengemidlalo legcizelela bobunjwa njengekutsi “Yini lesesikweleni?”	

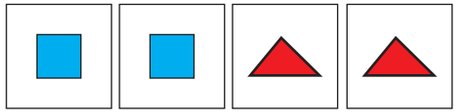
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesilinganisiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Bona, tfola ubuye unikete emagama etintfo letingemadayimenshini lamatsatfu (3-D) letishelelako** • **Ngenisa tintfo letishelelako** Niketa bafundzi tinhlobo letehlukene tetintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) njengemabhuloki, emabhokisi, emabhlola, njll. - Vumela bafundzi bahlole ngendlela yekudlala kutsi ngutiphi tintfo letingashelela naletingagicika. - Bafundzi bangasebentisa mshelelezane enkundleni yekudlala nobe thishela angasebentisa litafula ente silayidi ngekubeka titini letimbili ngephasi. - Tikhona yini tintfo letingashelela tiye etulu? - Ngutiphi tintfo letishelela tiye phasi? - Yini leyenta kutsi letintfo tikhone kushelela?	Emabhuloki Emabhola Emabhokisi Silayidi/ Litafula lelinemabhuloki	Lilanga 1

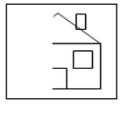
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesilinganisiwe
3.1 **Kubekeka, kutetayeta nekubukeka**	**Chaza intfo yinye lengemadayimenshini lamatsatfu 3-D macondzana nalenye** • **Tfutfukisa lwati lwa etukwe/ngaphasi/ngentasi/etulu kwe** **Umnyakato** - Umfundzi ngamunye uhlala esitulwini sakhe. - Bafundzi balalela ticondziso tathishela bayalandzela ngalesikhatsi benta iminyakato sib.hlala esitulwini, lala ngaphasi kwesitulo sakho. - Mani etulu kwesitulo sakho, hlala ngaphasi kwelitafula. - Beka tandla takho enhloko yakho. - Beka tandla takho ngaphasi kwetinyawo takho. - Faka ibhinibhegi ekhwapheni lakho. - Hlala etukwe bhinibhegi. - Bamba ihhulahhubhu ngaphasi kwemadvolo akho. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi lababili ababambe intsambo yekuzuba liklasi lonkhe bese laba labanye bafundzi bakhasa ngaphasi kwentsambo. - Funa intfo ngaphasi kwekhaphethi/litafula/libhokisi njll. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe** - Thishela uniketa bafundzi tinhlobonhlobo tetitfombe lapho lwati lwemagama: etukwe, ngaphasi, ngentasi lukhonjisiwe sib. Umuntfu lohleti ehhashini, umntfwana lolele ngaphasi kwengubo njll. Bafundzi: - Abatfole lwati lwabo: etukwe, ngaphasi etitfombeni.	 Situlo samunye umfundzi Etulu kwelitafula  ngaphasi /phasi	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesilinganisiwe
4.1 Sikhatsi	**Chaza sikhatsi selilanga ngekwemini/nebusuku, kukhanya/nebumnyama** • **Ngenisa lwati lwaletintfo letimbili "imini/busuku" "kukhanya/bumnyama"** Hlanganisa lolwati netihloko teLwati lwekucala kuMakhono Ekuphila. **Umnyakato** - Yati bumnyama ngekutsi uhlale ngaphasi kwelitafula netitulo letimbonywe ngengubo. - Yenta liklasi libe mnyama ngekuvala emakhethini ubuye ucishe gezi. - Bafundzi bakhuluma ngalebakuvile/lebakubonile ngalesikhatsi liklasi limnyama nangalesikhatsi likhanyisiwe. - Banikete lithoshi balikhanyise ngaphasi kwetingubo. - Khuluma ngemisebenti leyenteka emini naleyenteka ebusuku. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Thishela ulungisa iphosta yelilanga nenyanga abuye uniketa titfombe kutsi kwentekani emini nasebusuku. - Bafundzi bafaka titfombe tabo phasi kwelilanga nangaphasi kwenyanga.	Titulo netingubo  Lithoshi Iphosta yemini nebusuku. Titfombe temisebenti yasemini neyasebusuku. 	Lilanga 1

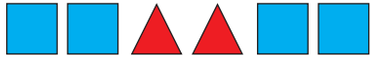
Liviki 7	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Sikhatsi lesibekiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, tfola ubuye unike emagama abobunjwa labangemada-yimenshini lamabili (2-D) laseklasini** • **Ngenisa emaphazili ubuye uniketa teluleko ngekutsi akhiwa njani.** - Cocisanani ngesitfombe sephazili ngekucaphelisisa imininingwane lefana nembala, bantfu/tilwane, tintfo, kubekeka kwebantfu/tilwane netintfo. - Bona, utfole ubuye umatanise tinhlobo letehlukene tetincetu temaphazili sib. o Tincetu tasemakhoneni. o Tincetu letinelicala linye lelicondzile  o Tincetu letite emacala lacondzile. o Kubala tincetu temaphazili. **Akhiwa njani iphazili:** - Paka tonkhe tincetu tephazili tibuke etulu. - Tfola tincetu tasemakhoneni ubuye umatanisa imibala, tintfo njll letikuto nemakhona ephazili. - Yakha emacala lamane (ifulemu) usebentisa tonkhe tincetu letinelicala linye lelicondzile. - Nangabe bafundzi behluleka, bafundzi bangakha lephazili etukwesitfombe. - Onkhe emaphazili kufanele aphelele ngembi kwekutsi abekwe.	**Tinhlobonhlobo temaphazili-lanetincetu letifiks ku -6**.	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.1 **Kubekeka, kutetayeta nekubukeka**	**Chaza intfo yinye lengemadayimenshini lamatsatfu (3-D) macondzana nemfundzi** **Kubekeka kwetintfo letimbili nobe letinyenti macondzana nemfundzi** **- ekhatsi/ngaphandle** **Umnyakato** - Thishela usebentisa isalothephu lenkhulu nobe intsambo yekuzuba kwenta imigca lemibili esiyilweni. - Bafundzi bonkhe bema ecaleni linye kanye na thishela uyamemeta utsi: “ngenani ngekhatsi emfuleni” (Bonkhe bafundzi kumele bazube emkhatsini wemigca sewuyamemeta utsi ‘”phumani ngaphandle”. bafundzi baphume emfuleni ngala nangala kwemigca yomibili. - Bafundzi lebangalandzeli ticondziso ngendlela lengiyo bayaphuma, abachubeki nemdlalo.	Umdlalo: Ekhatsi emfuleni (emkhatsini wemigca lemibili), ngaphandle kwemfula (ngaphandle kwemigca lemibili) Tintsambo letimbili tekuzuba	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D): Bafundzi: - Bema bucalu nemantji/libhakede - Baphosa emabhinibhegi emantjini. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Bafundzi badvweba sitfombe lesikhombisa tintfo letingekhatsi nangephandle.	Libhakede nobe imantji Liphepha nemakhilayoni	

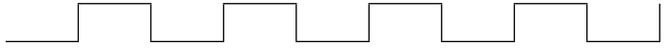
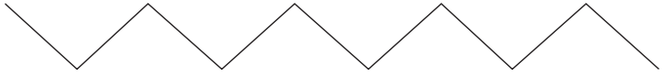
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.1 **Kubekeka, kutetayeta nekubukeka**	**Kubekeka kwetintfo letimbili nobe letinyenti letingemadayimenshini lamatsatfu (3-D) macondzana nemfundzi: etulu/ngaphasi/ngentasi** **Umnyakato** Bafundzi balandzela ticondziso njengekutsi: - Beka ibhuloki lebovu enhloko yemngani wakho. - Beka ibhuloki lemtfubi ngaphasi kwelitafula lakho. - Beka lebhuloki enhloko yakho bese ugibela etulu etafuleni. - Khasa ngaphasi kwelitafula uvale emehlo **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Paka bocalantsatfu balekanyane. - Paka tikwele letiluhlata kwesibhakabhaka tilekanyane. - Beka indilinga lebovu ngaphasi kwesikwele lesimtfubi. - Beka indilinga lemtfubi nacalantsatfu lobovu ngaphasi kwe sikwele lesiluhlata kwesibhakabhaka. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) netitfombe.** - Thishela ulungisa emakhadi lanetitfombe nemakhadi lanabobunjwa ngekwehlukana. - Bafundzi kumele babeke bobunjwa etulu/ngaphasi kwe titfombe njengekusho kwathishela Sib. Beka bunjwa loluhlata kwesibhakabhaka etulu kwemantji yetitselo.	Emabhuloki ekwakha/*emabhuloki eyunifiksi langakahlanganiswa* Bobunjwa beLogi Titfombe letehlukene  Emakhadi abobunjwa 	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.4 **Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako**	• **Gcizelela lwati lwemugca lohlukanisa emkhatsini kulingane kufanane kubo (emitimbeni yabo)** **Umnyakato** Bafundzi**:** - Basho titfo temtimba yabo. - Bacula nobe nguliphi liculo letitfo temtimba lelinemnyakato. Thishela ukhombisa umugca lohlukanisa emkhatsini ngekulengisa intsambo embikwembi kwemfundzi.  **Bafundzi kumele babenesitfombe sekutsi imitimba yabo ihlukaniswe kabili.** Thishela uchaza indlela lewuhlukaniswe ngayo umtimba waba tinhlangotsi letimbili lekutsiwa ngumugca lohlukanisa emkhatsini. - Tonkhe titfo temtimba umuntfu lanato letihamba ngaletimbili tikhona kuletinhlangotsi totimbili temtimba sib. emehlo, tindlebe, tandla, imilente njll. - Sitfo semtimba lesisinye sisemkhatsini wemugca lohlukanisa emkhatsini sib imphumulo, umlomo, inkhaba. Kulawula umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako. Bafundzi: - Bayamasha, baphakamise emadvolo etulu. - Bamasha “njengelisotja.” - Baphambanisa tandla netinyawo ngalesikhatsi bamasha. Hlanganisa lebakwentako neBuciko bekwenta kuMakhono Ekuphila **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Dvweba titfombe letingakapheleli ephepheni bese ucela bafundzi kutsi baticedzele.	Liculo “Inhloko, emahlombe, emadvolo netintwane” Intsambo yinye yekukhombisa Imitimba yebafundzi. Titfombe letingakapheleli  	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Sikhatsi lesibekiwe
3.1 **Kubekeka, kutetayeta nekubukeka**	• **Kubekeka kwetintfo letimbili nobe letinyenti letingemadayimenshini lamatsatfu (3-D) macondzana nemfundzi** - **etulu na phasi.** **Umnyakato** Bafundzi**:** - Bakhombisa “etulu” na “phasi” ngekuhambisa imitimba yabo iye etulu naphasi ngekwesicondziso sathishela. - Bagibela titepisi letimbili ngalesikhatsi babala titepisi. - Behla letitepisi letimbili ngalesikhatsi babala. - Bagibela babuye behle entfweni lengaphandle. - Bagibela babuye behle esitepisini lesakhiwe ngentsambo nangabe sikhona esikolweni. - Babuka etulu naphasi. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemadayimenshini lamabili (2-D) nobe titfombe.** - Thishela uniketa bafundzi titfombe letehlukene letikhombisa kuya etulu naphasi. • sib. Umuntfu logibela intsaba, ibhaloni leya etulu naphasi emoyeni, umuntfu lowehla titepisi njll. Bafundzi**:** - Batfola lwati lwekuya etulu/kukhuphuka wehle etitfombeni.	Cula liculo Sebentisa titepisi esikoleni Ijangilijimu (tintfo tekugibela) Sitepisi sentsambo Titfombe letiveta kwehla sib. titepisi 	Lilanga 1

Liviki 8	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(lmisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.4 **Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako**	• **Kuwela umugca lohlukanisa emkhatsini lokufaka kubala** **Umnyakato** Bafundzi**:** - Bantjikita bazube ngesigci ngalesikhatsi babala. - Bema babukane babuye bashaye tandla batiphambanise (sandla sesencele semfundzi siphambana nesalomunye sekudla) bacula liculo nemlolotelo wetinombolo. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Baphosa ibhola kubangani ngalesikhatsi babala. - Bahamba entsanjini letjekile ucula liculo sib. “Indlovu yinye lencane iyasima” - Bakhahlela ibhola isukekulomunye iye kulomunye. Lomsebenti longenhla ungahlanganiswa neMakhono Ekuphila.	Bafundzi Emaculo nemilolotelo yetinombolo  Ibhola, intsambo	Lilanga 1
2.1 **Emaphethini e-Jomethri**	• **Ticambele emaphethini** **Umnyakato** Bafundzi abacambe iphethini basebentisa: - Imitimba yabo sib. yinye infombatane nelilogo, bafana lababili nemabhuluko **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Kusebentisa bobunjwa lababovu sib. tikwele leti -2 letiluhlata kwesibhakabhaka, bocalantsatfu laba -2 lababovu, tikwele leti -2 letiluhlata kwesibhakabhaka… - Sebentisa iphethini ngesikhatsi semsebenti webuciko ngekusebentisa ipendi lebovu naleluhlata kwesibhakabhaka netimbonyo temabhodlela.	Bobunjwa bemapulasitiki lababovu nalabaluhlata kwesibhakabhaka.  Kusebentisa timbonyo temabhodlela nependi lebovu naleluhlata kwesibhakabhaka  	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Bafundzi: - Basebentisa titfupha kwenta imingcengcema yemibala ngependi sib. Loluhlata kwetjani, loluphuti, loluhata kwetjani…… ngetulu kwemngcengcema weliphepha (**umsebenti ungentiwa ngesikhatsi seBuciko bekubuka wente)**	Liphepha le - A4 Ipendi leluhlata naleluphuti nobe leminye imibala lekhona	

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Bona, tfola ubuye unike emagama etintfo letingemadayimenshini lamatsatfu (3-D)** • **Gcizelela lwati lwetintfo letigicikako** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Badlala ngemabhodlela epulasitiki, tikotela, emabhola, li wolintji, njll babuye batfola tintfo letingagicika. Thishela uyabuta: - Nguwaphi emabhuloki langagicika ekhoneni lemabhuloki? - Emabhuloki angeke agicike ngobe anemacala lacondzile. - Gicita tintfo ubone letingagicika naletingeke tigicike. - Bafundzi batawati kwekutsi tintfo letiyindilinga tingagicika.	Emabhodlela epulasitiki Emabhuloki, emabhuloki eLego Tikotela, tinkhomishi temapulasitiki, emabhokisi eliphepha lasendlini lencane, emakhandlela, liwolintji, emabhola njll.	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.1 **Kubekeka, kutetayeta nekubukeka**	• **Tfutfukisa lwati letinkhombandlela ngekungenisa lwati lwetintfo letimbili "embili/emuva" na"phambili/nasemuva"** **Umnyakato** Bafundzi: Balandzela tinkhombandlela tathishela (ayedvwa /nobe njengelilunga lelicembu) babuye bema etindzaweni letinyenti ekhatsi eklasini. sib. - "Mani phambili "kweliklasi.(phambili kweliklasi akube ngulapho kunemnyango ngakhona) - "Mani emuva" kweliklasi. - Hamba uye emuva naphambili. - Khasa uye emuva naphambili. - Zuba uye emuva naphambili.	Bafundzi	Lilanga 1
	Thishela udvweba iphethini esiyilweni ngeshoki nobe emhlabatsini sib.  nobe  Bafundzi: - Abahambe/bakhase emalayinini ephethini. - Faka liphepha lelibovu ekhoneni lelimele tibane tasemgwacweni. Nangabe bafundzi baya ekhoneni kumele bagucuke kute babone indlela.	Lokudvwetjwe phasi emhlabatsini. Liphepha lelibovu	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi: - Benta umgwaco ngemabhuloki ekwakha. - Bahambisa imoto yemathoyizi iye phambili nasemuva "emgwacweni" wemabhuloki ekwakha. - Bahambisa imoto yemathoyizi ngekujikela eceleni lelinye "lemgwaco" wemabhuloki ekwakha.	Emabhuloki ekwakha	

<table>
<tr><th>Sihloko</th><th>Emanotsi lacacisako</th><th>Tinsita letiphakanyisiwe</th><th>Budze besikhatsi lesilinganisiwe</th></tr>
<tr>
<td>5.1
Gcogca ubuye uhlunge tintfo

5.2
Veta ligcogco letintfo letihlungiwe

5.3
Coca ubuye ubike ngetintfo letigcogcwe tabuye tahlungwa</td>
<td>• Ngenisa lwati lwekusebenta ngedatha ngekusebentisa (imitimba yabo) kugcogca tintfo eklasini ngekwetimphawu letiniketiwe sib.

Umnyakato

Hlukanisa bafundzi babe ngemacembu

- Kulinye licembu bonkhe bafana abeme emgceni bese onkhe emantfombatane ema emgceni edvute nebafana.

- Bafundzi ababale linani lebafana nelemantfombatane ecenjini ngalinye.

- Ngaloko ungenta igrafu yemtimba yebafana nobe yemantfombatane licembu ngalinye.

Dvweba igrafu kuveta idatha

Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)

- Bafundzi bangasebentisa lwati lolusetulu kutfutfukisa emagrafu etintfo letingemadayimenshini lamatsatfu (3-D) ngekusebentisa emabhuloki/ bobunjwa njll labamele umfundzi ngamunye.

Fundza ubuye uvete idatha kugrafu

Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe

- Bafundzi benta emagrafu ngekusebentisa inhlama kwenta emabhola lamancane lamele loku lebakuchazako emsebentini londlulile.

- Niketa bafundzi emaphepha lanesitfombe semfana nentfombatane etulu kwelikhasi ngalinye lemfundzi.

- Bafundzi abagicite emabhola lamele linani lemantfombatane nebafana emacenjini abo.

- Bafundzi babeka linani lemabhola ngaphasi kwesitfombe lefanele.</td>
<td>Bafundzi labeme emigceni lemibili

<table><tr><th>Emantfombatane</th><th>Bafana</th></tr><tr><td>□
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Inhlama

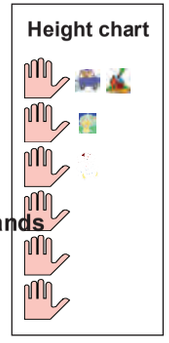
Liphepha le-A4</td>
<td>Lilanga 1</td>
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Liviki 9	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	• **Bona ubuye usebentise tintfo letigicikako naletishelelako.** Thishela ubamba ibhola abuye ayibhampise. Uyayikela igicike phasi. Thishela utsatsa libhokisi aphindze ente njalo. Thishela ubuta bafundzi imibuto: - Nguyiphi intfo letingagicika? - Kungani libhokisi lingagiciki? - Ngutiphi intfo letingashelela? Thishela ukhomba bafundzi kutsi libhokisi lelinecala lamane (emakhona) ngaloko angeke ligicike, kodvwa ibhola ayinamakhona, ingagicika. - Gcugcutela bafundzi kutsi batfole tintfo eklasini letingagicika tibuye tishelele. - Buta bafundzi kutsi bangatitfola tintfo letingashelela tibuye tigicike	 **ibhola** **libhokisi** 	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, tfola ubuye unike emagama abobunjwa labangemada-yimenshini lamabili (2-D) eklasini nasetitfombeni** - **indilinga** **Umnyakato** Bafundzi: - Bakha indilinga ngekusebentisa iminwe yabo. - Bakha indilinga ngekusebentisa tandla totimbili. - Bahlala ekhaphethini, bente indilinga babambene ngetandla. - Bahamba endilingeni lenkhulu, leyentiwe ngentsambo ekhaphethini. - Badlala umdlalo lapho bafundzi bahlala endilingeni bacule liculo. o Munye umfundzi nangabe ngaphandle kwendilinga uyagijima atungeletele indilinga abambe ibhola ngetandla. o Umfundzi ukhetsa kubeka ibhola emva kwalabanye bafundzi lebahleli endilingeni. o Umfundzi lokhetsiwe utsatsa ibhola ayiphose kulabanye agijima endilingeni kute akhone kuyohlala esikhaleni lesivulekile. o Nangabe ibhola itsintsa umfundzi logijimako, uhamba ayohlala emkhatsini wendilinga umdlalo uchubeke **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Batfola tintfo leyindilinga eklasini. - Batfola bobunjwa labamele indilinga. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Tishela ubala tintfo ngemagama ato bese bafundzi batfola kutsi nguyiphi tintfo letiyindilinga sib. liwolintji, lihhabhula, litafula. ibhola, imabuli, libhuku, libhokisi, njll.	Bafundzi Intsambo Ibhola yetinyawo, ithenisi, Ibhola yegalufu, lihhabhula, liwolintji, ihhulahhubhu, njll Liwolintji, lihhabhula, litafula,ibhola, emamabula, libhuku, libhokisi	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.1 **Kubekeka, kutetayeta nekubukeka**	**Kubekeka kwentfo yinye nobe letimbili macondzana nalenye** • **Ligama edvute na/ emkhatsini-tihlanganiswe nemibala** **Umnyakato** Thishela ubita bafundzi labatsatfu Ukhombisa lwati lwabo edvute ne- nasemkhatsini ngekuhlela bafundzi ngetindlela letinyenti. - Craig ume edvute na Steve. - Mel ume emkhatsini waCraig na Steve. Lomsebenti ungaphindvwa ngalabanye bafundzi. Thishela unika bafundzi emabhuloki ekwakha lanemibala lehlukene abuye abaniketa ticondziso njengekutsi: - Beka ibhuloki lebovu edvute kwalemtfubi - Beka ibhuloki leluhlata kwesibhakabhaka emkhatsini walebovu nalemtfubi. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Kusebentisa emabhinibhegi lanemibala lehlukene (lobovu, loluhlata kwesibhakbhaka, lomtfubi, loluhlata kwetjani), niketa bafundzi ticondziso: - Beka ibhinibhegi leluhlata kwesibhakabhaka edvute nebhinibhegi lemtfubi - Beka ibhinibhegi lebovu emkhatsini webhinibhegi leluhlata kwesibhakabhaka nalemtfubi. Lomsebenti ungahlanganiswa NeMakhono Ekuphila.	Emabhuloki emibala Emabhinibhegi emibala	Lilanga 1

Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	• **Hlela tintfo letengca kuletimbili kusukela kulokuncane uye kulokukhulu kakhulu** **Umnyakato:** Niketa bafundzi inhlama kutsi bente emabhola. - Emacenjini bafundzi bahlela emabhola enhlama lamancane kusuka kulencane uye kulenkhulu kakhulu nekusuka kulenkhulu kakhulu uye kulencane. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Lilunga ngalinye lelicembu kumele litfole intfo eklasini. - Bafundzi abahlele tintfo labatitfolako eklasini kusukela kulencane uye kulenkhulu kakhulu emacenjini abo. Thishela uniketa bafundzi emabhuku lamadzala etinombolo telucingo. Bafundzi: - Badzabula emaphepha emabhukwini etinombolo telucingo babuye bawafohlote bakhe emabhola emacenjini abo. - Bafundzi kumele bacatsanise kutsi nguyiphi ibhola lenkhulu kakhulu nalencane kakhulu. **Lokubambekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D) netitfombe** - Niketa bafundzi liphepha lelinetitfombe tetintfo letinkhulu naletincane. - Bafundzi bangafaka umbala etintfweni letinkhulu babuye bafake indilinga etintfweni letincane.	Inhlama yekudlala Noma nguyiphi intfo eklasini. Emabhuku lamadzala etinombolo telucingo Liphepha le- A-4 lelinetitfombe	Lilanga 1

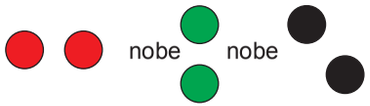
Sihloko	Emanotsi lacacisako	Tinsita letiphakanyisiwe	Budze besikhatsi lesilinganisiwe
4.2 **Budze**	**Catsanisa ubuye uhlela tintfo ngendlela lelula ngekusebentisa silulumagama lesifanele kucaza budze** - **Lokudze kakhulu /Lokufisha kakhulu** **Umnyakato** - Thishela ubita bafundzi labane abuye acele liklasi likusite kubahlela ngebudze nebufisha. - Bafundzi abatihlele ngebudze nebufisha emacenjini. - Munye umfundzi nangabe anamatsele ekhumbini labanye bakale budze bakhe ngetandla.	 Lishadi lebudze	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Thishela ubeka tintfo letinyenti etafuleni kumacembu njengerula, emapeniseli, emakhilayoni, iraba, njll. - Hlunga tonkhe tintfo letindze naletimfisha ndzawonye. - Bafundzi bahlela tintfo ngebudze ngalokudze kakhulu. **Lishadi lebudze** - Thishela unelishadi lebudze elubondzeni lapho bafundzi batikala khona. - Sebentisa emakhadi etimphawu tebafundzi kukhombisa budze bamunye eshadini lebudze. - Thishela kanye nebafundzi batawufika esiphetfweni sekutsi Sipho mudze ngetandla letisitfupha na Abby mudze ngetandla letisihlanu ngobe mfisha.	**Irula, Emakhilayoni Ipeniseli, Iraba, njll** **Sipho ulingana netandla le -6** **Abby ulingana netandla le -5 hands** 	

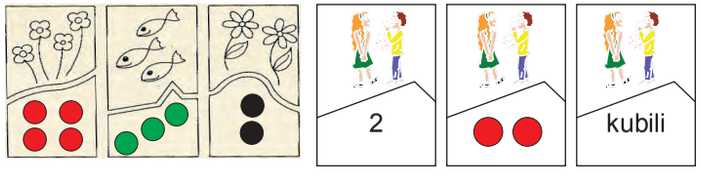
Liviki 10	Sebentisa liviki le -10 kusebenta ngebulikhuni betintfo na/nobe utfole loko lokutihibe ekufundzeni	
LOKUCUKETFWE	**SIHLOKO**	**UMGOMO WEKUHLOLA**
Tinombolo, timphawu tekubala nebudlelwane	**1.1** **Bala tintfo**	Ucombela abuye abale ngenhloko kufika ku -5 (Emaculo nemilolotelo yetinombolo lefakelwe kutfutfukisa lwati lwetinombolo)
		Ubona tinombolo kutingcikitsi letetayelekile - sib iminyaka, irejista
		Uvisisa kuhleleka kwetinombolo (sib. Ngesikhatsi sekuya endlini lencane)
		Uvisisa kucondzana kwakunye kulokunye (lishadi lebasiti ngesikhatsi sekudla)
		Utfola titfombe tetinombolo nemakhadi emacashati lafaka inombolo -1
		Wati inombolo -1
		Ubona ligama lenombolo -1
	1.6 **Emasu ekusombulula tinkinga tetibalo**	Usebentisa tinsita letiphatsekako Uchaza lakucabangako ngemagama nangemidvwebo nobe tintfo letiphatsekako.
Emaphethini nemafangishini	**2.1** **Emaphethini e-Jomethri**	Ubona emaphethini endzaweni
		Utsatsela,achubekisele embili abuye atakhele emaphethini

Liviki 10 Sebentisa liviki le -10 kusebenta ngebulikhuni betintfo na/nobe utfole loko lokutihibe ekufundzeni		
LOKUCUKETFWE	**SIHLOKO**	**UMGOMO WEKUHLOLA**
Sikhala nabunjwa (Jomethri)	**3.1** **Kubekeka, kutetayeta nekubukeka**	Wati phambi kwe/emuva
		Wati etukwe, etulu, ngaphasi, ngentasi
		Wati ekhatsi, ngaphandle
		Wati etulu, phasi
		Ukhombisa lwati lwekuhlukanisa emkhatsini wetintfo “tasembili nasemuva”
	3.2 **Tintfo te-Jomethri letingemadayimenshini lamatsatfu (3-D) na 3.2 Bobunjwa labangemada-yimenshini lamabili (2-D)**	Ubona, atfole abuye anike emagama emabhola
		Ubona, atfole abuye anike emagama emabhokisi
		Ubona, atfole abuye anike ligama leluphawu lwakhe, timphawu tebangani neligama leliklasi
		Uhlanganisa iphazili lenetincetu leti -6
		Ukhombisa likhono lekuhlukanisa tintfo letisemuva naphambili esitfombeni
		Utfola abuye abone indilinga
		Utfola abuye abone calantsatfu
		Utfola abuye abone sikwele
		Ucatsanisa kutsi nguyiphi intfo kuletimbili letigcogciwe lenkhulu, lencane, lenkhulu kakhulu, lencane kakhulu.
		Uhlunga tintfo ngekwesayizi: lokukhulu nalokuncane
		Umbala- imibala yemvelo (lobovu, lomtfubi, loluhlata kwesibhakabhaka
		Bunjwa- indilinga, calantsatfu nesikwele
		Tintfo letigicikako
		Tintfo letishelelako
	3.4 **Umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako .**	Utfola umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganakokuye.
Silinganiso	**4.1** **Sikhatsi**	Usebentisa emagama lafana nalawa: imini, busuku, kukhanya nebumnyama, ekuseni, ntsambama, ebusuku nakachaza sikhatsi selilanga
		Uhlela tigameko letilandzelanako emphilweni yakhe yemalanga onkhe
		Wati emalanga eliviki, tigaba temnyaka nesimo selitulu
		Wati lusuku lwakhe lwekutalwa

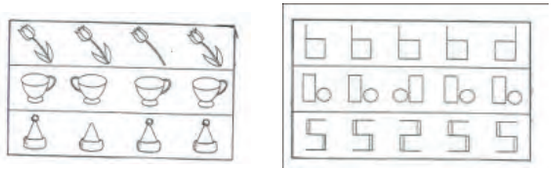
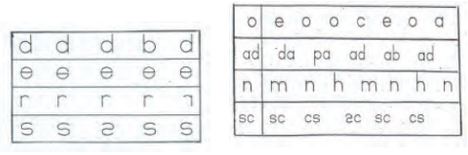
Liviki 10	Sebentisa liviki le -10 kusebenta ngebulikhuni betintfo na/nobe utfole loko lokutihibe ekufundzeni	
LOKUCUKETFWE	**SIHLOKO**	**UMGOMO WEKUHLOLA**
	4.2 **Budze**	Uhlukanisa emkhatsini walokudze, lokudzana nalokudze kakhulu, lokufisha, lokufishanyana, nalokufisha kakhulu (lishadi lebudze)
Kusebenta ngedatha	**5.1** **Gcogca ubuye uhlunge tintfo**	Ukhona kugcogca, ahlunge, advwebe, afundze abuye avete (ahlatiye) tintfo ngekweluphawu lunye.
	5.2 **Veta tintfo letigcogciwe**	
	5.3 **Cocisana ubuye wetfule umbiko ngeligcogco lelihlungiwe**	

Liviki 11	ITHEMU 2 TIBALO LIBANGA R **Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Ngenisa inshokutsi yenombolo -2** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku -2 Bala uye phambili nasemuva ufike ku- 2 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene nalokunyenti nalokumbalwa** Shaya tandla kanyenti……. Mani Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 2	Titfombe letimbili tetinyoni lebatatisebentisela liculo lekubala “Tinyoni letimbili “	Lilanga -1
	Umnyakato Bafundzi: - Bita bafundzi lababili bete phambili. Babale - Babala titulo timbili, ematafula, njll - Babona titfo temtimba letihamba ngatimbili njengemehlo, tindlebe, tandla, imilente, tinyawo, emadvolo, nemahlombe njll. - Abente umsindvo wekushaya ngesitfo semtimba, sib bashaya tandla kabili, banyakatisa tinhloko kabili, bashaya kabili ngelunyawo phasi nobe kuzuba kabili, njll - Baphakamisa iminwe le -2, tandla le-2, tinyawo -2	Imitimba yebafundzi	

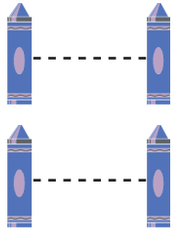
Liviki 11	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Batfola tintfo letimbili letifanako ekilasini, sib. Ticatfulo letimbili, emakhilayoni lamabili, njll. - Batfutfukisa lwati lwekubekeka kwenombolo ngekuvumela bafundzi bapake tibali letimbili nobe letinye tintfo ngetindlela letihlukene, sib.  - Nangabe babala, linani letintfo alitsikanyetwa ngemasayizi ato, kubekeka nobe teluhlobo lunye lolufanako. Sib. - Hlela tinkinobho le -2, emapeniseli la -2, emahhulahhubhu la -2, bafundzi la -2 njll - Wabale ngetindlela letihlukene, sib. bala uwasabalalise, bala uwasondzete ndzawonye, wabale asemgceni nobe uwapake aya etulu	Tibali le -2 nobe tintfo letimbili umfundzi ngamunye	Lilanga -1

Liviki 11	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Kwati tinombolo nekubona em**agama etinombolo lafaka ekhatsi inombolo - 2 **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Kumatanisa emakhadi etitfombe lanetitfombe letimbili nemakhadi lamabili lanemacashati lamabili - Kukhombisa emafleshikhadi lanetitfombe letinelinani letintfo letikhetsiwe, sib. ticatfulo letimbili, emakhilayoni lamabili, njll - Bafundzi ababuke linani letintfo letifanako ekilasini - Batfola emafleshikhadi lanetinombolo letehlukene tetitfombe - Batfola emafleshikhadi lanenombolo - 2 - Babona emafleshikhadi lanemagama etinombolo - Bahumanisa inombolo -2 nelinani letintfo kanye nelinani lemacashati - Bahumanisa ligama lenombolo nelikhadi lelinenombolo, linani letitfombe nelinani lemakhadi lanemacashati. - Bangeta emafleshikhadi lanenombolo -1 ucele bafundzi batfole inombolo lengu -1 na -2 - Bewenta emaphazili etinombolo nekucela bafundzi bawamatanise 	Linani lemakhadigama lelinetintfo letimbili Tintfo letiseklasini naletisendzaweni letsite **Sitfombe setintfo letimbili**  Emakhadigama lanetitfombe letimbili, emacashata, inombolo neligama lenombolo **Sitfombe setintfo letimbili**  **2** **kubili**	Lilanga 1

Liviki 11	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D) kanye**	• **Chaza, hlunga ubuye ucatsanise tintfole tingemadayimenshini lamatsatfu(3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ;ngekufana kwato nangekwehluka kwato** **Umnyakato** - Khetsa emantfombatane lamabili usebentise umlolotelo wekubala. - Labanye bafundzi abasho kutsi lamantfombatane lamabili afana ngani? - Khetsa umfana nentfombatana usebentise umlolotelo wekubala - Labanye bafundzi abasho kutsi lomfana nentfombatane behluke ngani? - Ngababili munye umfundzi “nangabe ngendlela letsite” bese lolomunye umfundzi ulingisa “lendlela letsite yekuma” sib. - Umfundzi munye utawuma ngelunyawo lunye atfwale tandla enhloko, lolomunye umfundzi utawulingisa lomngani. - Hlunga bafundzi ngekwebulili, labo labagcoke ticatfulo, labo labagcoke masandazi, nalabo labangakagcoki ticatfulo. - Bita labafundzi labalandzelako bete phambili o Bafana nemantfombatane labagcoke emabhulukwe, intfombatane legcoke lilogo. o Bonkhe bantfwana labagcoke ticatfulo, nalabo labangakagcoki ticatfulo - Buta imibuto lefana nale**: ‘’Ngumuphi umfundzi longacatsaniseki nalabanye?” ‘’Ngumuphi umfundzi lohlukile?”**		Lilanga- 1

Liviki 11	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	• **Chaza, hlunga ubuye ucatsanise tintfole tingemadayimenshini lamatsatfu(3-D) nabobunjwa labangemada-yimenshini lamabili (2-D) ;ngekufana kwato nangekwehluka kwato** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi lababili bashayisa emabhola phasi: ibhola lenkhulu nebhola lencane - Bafundzi labanye batawusho kutsi emabhola ahluke ngani, afana ngani - Umfundzi munye ugicita liwolintji, lomunye ugicita ibhola - Bafundzi labanye batawusho kutsi ibhola neliwolintji kuhluke ngani, kufana ngani - Bafundzi batawubukisisa ticatfulo tebafana nemasandasi emantfombatana - Bafundzi labanye batawusho kutsi ticatfulo tihluke ngani, tifana ngani - Bafundzi batawubuka batfole tintfo letifanako eklasini	Yenta emakhadi emidlalo wekumatanisa njengalesibonelo lesingentasi 	Lilanga 1
3.3 **Nabobunjwa labangemada-yimenshini lamabili (2-D)** **nangekuhluka kwato**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Nika emakhadi ekudlala lafanako kute utfutfukise kufanana nemehluko, sib.  - Batawuchubekela emakhadini lalukhuni **ngekuhamba kwemnyaka**. Bafundzi akukalindzeleki kutsi bafundze letinhlavu. Sib. 	Emakhadi emidlalo wekumatanisa	

Liviki 11	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Hlela ubuye ucatsanise tintfo letigcogciwe usebentise ‘’kulingana’’ nobe ‘’kuyafana’’** **Umnyakato** Bafundzi: - Batfutfukisa lwati lwekufana nekwehluka - Bacatsanisa iminwe netintwane. Nanobe tinelinani lelifanako tibukeka tingafani. - Bacatsanisa iminwe, tintwane nemehlo. Kubukeka kungafani. Sinelinani lelifanako letingalo netintwane, loku-10 kodvwa sinemehlo lamabili. - Bacatsanisa tindlebe, imikhono, imilente netinyawo. Kubukeka kungafani kodvwa kunelinani lelifanako, lokungukutsi kuhamba ngakubili. - Thishela udvweba phasi tindilinga letimbili nobe wenta tindilinga letimbili phasi ngentsambo. tjela bafundzi batihlukanise ngendlela yekutsi kube nelinani lelilinganako endilingeni ngayinye. Bala linani lebafundzi. Veta kutsi emacembu ayalingana futsi ayafana.		Lilanga -1

Liviki 11	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - tfutfukisa lwati lwekufana nekwehluka - Beka isethi yetimphawu tebafundzi emkhatsini wekhaphethi. - Nika umfundzi ngamunye likhadi lwelumphawu lakhe. Bafundzi bazama kumatanisa timphawu tabo naleto letisekhaphethini. - Beka inchumbi yetintfo etafuleni, utihlukanise tibe tinchumbi letilinganako (kunye kwakho, kunye kwami) **Tibonelo:** 1. Beka tintfo letimbili letiluhlobo lunye, sib. Emakhilayoni labekwe emgceni etafuleni. Cela umfundzi ngamunye amatanise likhilayoni lathishela ngalinye nelakhe. Bafundzi batawutsatsa emakhilayoni lamabili bawamatanise nelinani lemakhilayoni athishela. ''Nyalo sinelinani lelifanako/lelilinganako lemakhilayoni'' 2. Phindza ukwente loku lokwente ngenhla usebentise tintfo le- 4 nale- 6 kute bafundzi bavisise ''ngekufana'' / nekulingana'' 3. Thishela ubeka emabhuloki lama- 2 emugceni losetafuleni. Unika bafundzi lababili ibhuloki ngamunye. Ucela umfundzi ngamunye amatanise ibhuloki yakhe neyathishela. (Umfundzi ngamunye utawulandza lenye ibhuloki atoyimatanisa nemabhuloki lamabili athishela.) "Nyalo sinemabhuloki lamabili ngamunye. Sinelinani lelifanako lemabhuloki''  **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Bafundzi bacatsanisa emafleshikhadi etitfombe newemacashati. Tfola emakhadi lafanako.  - Banike emakhadi emidlalo yekumatanisa ngesikhatsi sekudlala bakhululekile ngekhatsi endlini lapho bafundzi bangahlukanisa emkhatsini walokufanako nalokungafani.	 emabhuloki	Lilanga -1

Liviki 11	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Hlela ubuye ucatsanise tintfo letigcogciwe usebentisa ‘’lokunyenti kuna”** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku- 2 **Gcizelela lwati loluphatselene ‘’nalokunyenti nalokumbalwa”** Shaya tandla kanyenti……Mani Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -2 **Umnyakato** Bafundzi batawusho kutsi ngutiphi taletintfo letimbili letiniketiwe “letinyenti kuna” Bafundzi: - Babala emehlo abo neminwe yabo. Babute imibuto: Ngukuphi lokunyenti kunalokunye? - Bakhomba iminwe lemibili esandleni sinye nemuno munye kulesinye sandla. Ngusiphi sandla lesineminwe leminyenti? - Bakhetsa bafundzi la-3 basebentisa umlolotelo wekubala. Bahlele babe licembu lebafundzi lababili nelamunye  - Babala kutsi bangaki bafundzi ecenjini ngalinye. bacatsanisa lamacembu lamabili abuye babuta imibuto lefana nale: “Nguliphi licembu lelinebafundzi labanyenti?” “Nguliphi licembu lelingetulu kwakunye?”		Lilanga -1

Liviki 11	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	**Lokuphatsekako ngekusebentisa tintfo leti-3** - Beka tikelo letihamba ngatimbili, tibali le -3 nemakhilayoni langu 4 etafuleni. Bala tintfo telicembu ngalinye.  - Buta imibuto lefana nale: ''nguwaphi emacembu lanetintfo letinyenti''? ''Nguliphi licembu lelinetintfo letinyenti kakhulu?'' ''Nguliphi licembu lelinetintfo letinyenti kudlula tikelo?'' ''Nguliphi licembu lelinalokungetulu kwendlula lokutsatfu?'' - Beka tintfo letihlukene letiphatsekako etafuleni (emagobolondvo aselwandle, ematje, emakhokho ekuvala emabhodlela)Tihlunge ngemacembu (emakhokho onkhe ndzawonye), ababale linani letintfo ecenjini ngalinye, basho kutsi nguliphi licembu lelinalokunyenti, lokuncane, lokulinganako. Banikete litfuba lekusebenta ngetibali tabo. Cala ngetinombolo letincane. - Kuhlangana: Tintfo tekuphatsa lokutsite kumele batitfole bafundzi ngesikhatsi sekudlala ngemanti nesanti kute batfole litfuba lekutitfolela lwati loluphatselene naloku: ''kunyenti kuna'', ''kuncane kuna'', ''kulingana''	Nobe ngutiphi tintfo letisekilasini	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Bafundzi abacatsanise titfombe nemakhadi lanemacashata. Kubona emakhadi lanetimbolo letingetulu kunaleto lebatiniketwe nguthishela, sib. - Thishela utawutsi: tfola likhadi lelinetitfombe temacashati letingetulu Kwa- 2? Matanisa emakhadi lanelinani letintfo letifanako nobe tibali. (Paka tibali kulelicashati ngalinye nobe sitfombe) 	Titfombe nemakhadi lanemacashati Tibali	

Liviki 12	Sikhatsi lesiphakanyisiwe sekufundzisa Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Bona ubuye utfole timphawu nemagama etinombolo lafaka ekhatsi inombolo -2** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku- 2 Bala uye phambili nasemuva ufike ku- 2 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene nalokunyenti nalokumbalwa** Shaya tandla kanyenti……Mani Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -2	Emaculo nemilolotelo yetinombolo	
	Umnyakato Bafundzi: - Bashaya ibhola kanye, ngalamanye emagama phindza kanye. - Bashaya ibhola kabili, ngalamanye emgama phindza kabili - Badvweba inombolo - 2 phasi emhlabatsini abuye acela bafundzi bahambe etulu kwalenombolo - Badvweba inombolo- 2 esantini, emoyeni, ekhaphethini, njll. - Bakha inombolo - 2 ngenhlama yekudlala - Tfola bangani la -2 labagcoke ticatfulo	Emabhola Inhlama yekudlala	
	Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi: - Phakamisa sibali sinye - Phakamisa tibali letimbili	Tibali	

Liviki 12	**Sikhatsi lesiphakanyisiwe sekufundzisa** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Babona emafleshikhadi lanetitfombe bawachumanise nelinani lelifanako letintfo. - Babona emafleshikhadi lanemacashati lamabili bawachumanise nelinani lelifanako letintfo. - Babona emafleshikhadi etimphawu nemagama etinombolo bawacumanise nelinani lelifanako letibali - Babona inombolo- 2 etitfombeni lebatinikwe nguthishela - Ungayibona kuphi eklasini inombolo lengu 2 - Hlukanisa liklasi ngemacembu. Nika bafundzi litfuba lekudlala umdlalo wetinombolo tedominos ngemacembu.	Emakhadi lanetitfombe letimbili, emachashata, timphawu nemagama etinombolo **Sitfombe setintfo leti - 2**  **2** **kubili** Tibali Titfombe letinenombolo - 2	- Lilanga 1

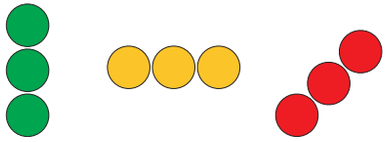
Liviki 12	Sikhatsi lesiphakanyisiwe sekufundzisa Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Sombulula ngemlomo ubuye uchaze tisombululo tetinkinga tetibalo temagama (tibalo tetindzaba) letifaka ekhatsi inombolo- 2** **Umnyakato** **Sibonelo:** 1. Thishela ubita 1 umfundzi aye phambili. Bafundzi bayabala. Thishela ubita lomunye 1 umfundzi: bangaki bafundzi sebabonkhe?" 1 na 1 → 2. (thishela utawutsi: 1 na 1 kulingana na 2) 2. Thishela ubeka 1 situlo. Ngeta 1 lesinye. Tingaki titulo nyalo? 1 na 1 → 2. 3. Thishela uphakamisa iminwe lemibili. Abuye atsi: "Balani iminwe yami" . Nangabe ngifihla umuno munye, mingaki iminwe loyibonako? 2 ngisusa 1 → 1. 4. Thishela uphakamisa iminwe lemibili. Abuye atsi: "Balani iminwe yami. Nangabe ngingasusi nobe nguwuphi umuno, mingaki iminwe loyibonako? 2 ngisusa 0 → 2. 5. Kunemntfwana munye ekhaya. Munye umntfwana uyafika utodlala. Bangaki bantfwana labakhona nyalo? 6. Kunebantfwana lababili etafuleni. Umntfwana ngamunye ufuna situlo sakhe. Sindzinga titulo letingaki? **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** **Tibonelo**: (Sebentisa tibali) 1. Nangabe unelikukisi linye, make akunike lelinye, utawuba nemakukisi mangaki? 2. Thishela unetibali letimbili esandleni sinye kulesinye sandla akanato tibali. Unetibali tingaki setitonkhe? 3. Cayisa unemabhola lamabili, ibhola yinye yalahleka. Usele nemabhola lamangaki Cayisa? 4. Nangabe unemabhuloki- 2, unike umngani ibhuloki 1, nitawuba nemabhuloki lamangaki ngamunye?	Emaculo nemilolotelo yetinombolo Tibali (nangabe ungenawo emakukisi) Tibali Emabhola Emabhuloki	Lilanga 1

Liviki 12	**Sikhatsi lesiphakanyisiwe sekufundzisa** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (lmisebenti yetibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Hlela ubuye ucatsanise tintfo letigcogciwe usebentisa ‘’lokuncane kuna”** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku- 2 **Gcizelela lwati loluphatselene nalokunyenti nalokumbalwa** Shaya tandla kanyenti……Mani Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze- 2	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Umnyakato (kuhlangana nebuciko bekwenta kuMakhono Ekuphila- umdanso) - Cula leliculo: ‘inhloko emahlombe, madvolo netintwane’’ kwekucala cula onkhe emagama - Kwesibili cula ushiye ligama linye, sib. Inhloko emahlombe, emadvolo ne....., emadvolo ne.....’’ - Cula ushiye lamanye emagama, sib. Inhloko,emahlombe ...ne....., ...ne ..... - Thishela utawusho kutsi batawucula bahhafule emagama aze aphele onkhe. **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** Thishela wenta tintsambo tebuhlalu letine Beka buhlalu bu- 3 entsanjeni yekucala, buhlalu bu- 2 entsanjeni yesibili, bunye buhlalu entsanjeni yesitsatfu na -3 buhlalu entsanjeni yesine. Bafundzi abatfola kutsi: - Nguyiphi intsambo lenebuhlalu lobuncane? - Nguyiphi intsambo yebuhlalu lenyenti nga -1 kunalentsambo lenebuhlalu -2? - Nguyiphi intsambo yebuhlalu lenalokuncane ngakunye kunalentsambo lenebuhlalu lo-3?	Liculo: “Inhloko nemahlombe, emadvolo netintwane” Tintsambo letine letinelinani lelehlukene lebuhlalu.	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Bafundzi abacatsanise titfombe nemakhadi lanemacashati. Kubona emakhadi lanetintfo letinyenti kunaletinye, letincane kunalenombolo leniketwe nguthishela, sib. Nguliphi likhadi lelinalokunyenti kuna- 2? - Nguliphi likhadi lelinalokuncane kuna -4? 	Kutakhela sitfombe sakho nemasethi emakhadi lanemacashati	

Liviki 12	Sikhatsi lesiphakanyisiwe sekufundzisa Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Gcizelela kucatsanisa kwetintfo letimbili letigcogciwe letiniketiwe usebentisa:** **- letinyenti kuna** **- letincane kuna (lokuncane kakhulu)** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku- 2 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene nalokunyenti nalokumbalwa** Shaya tandla kanyenti……Mani Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 2	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Thishela wenta tintsambo letimbili tebuhlalu. Beka buhlalu lo 3 entsanjeni yekucala, buhlalu lo 2 entsanjeni yesibili Bafundzi abatfola kutsi: - Nguyiphi intsambo yebuhlalu lenebuhlalu lobuncane? - Nguyiphi intsambo yebuhlalu lenebuhlalu lobunyenti? - Nguyiphi intsambo yebuhlalu lenebuhlanu lobunyenti nga- 2? - Nguyiphi intsambo yebuhlalu lencane ngebuhlalu lo- 3? Kuhlangana ngebuciko bekubona intfo uyakhe lapho bafundzi batfunga emasitrozi, bajuba bobunjwa labanesikhala emkhatsini, emacembe njll **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Beka incumbi yetintfo etafuleni Abuye uyihlukanise ngalendlela: - Tinchumbi letilinganako (lena yakho, lena yami) - Tinchumbi letingalingani (catsanisa, ubuke kutsi nguyiphi inchumbi lenyenti, lencane nalefanako) - Nangabe kunetinchumbi letimbili letingafani, kumele senteni kute tilingane?	Tintsambo letimbili letinelinani lelihlukene lebuhlalu	

Liviki 12	Sikhatsi lesiphakanyisiwe sekufundzisa Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)** **3.3** **Nabobunjwa labangemada-yimenshini lamabili (2-D)** **nangekuhluka kwato**	• **Chaza, hlunga ubuye ucatsanise tintfoletingemadayimenshini lamatsatfu(3-D) nabobunjwa labangemada-yimenshini lamabili (2-D)** **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Bahlunga tinhlobo letehlukene tetintfo ngekwemasayizi - Bahlunga bacatsanise emabhuloki ekwakha lahlukene ngekwemasayizi (lokukhulu nalokuncane) - Bahlunga emabhuloki ngabobunjwa labafanako **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Hlukanisa bafundzi ngemacembu lasihlanu. Nika licembu ngalinye tinhlobo letihlukene tabobunjwa. - Bafundzi abahlunge bobunjwa ngekwe: o mbala o ngabobunjwa (nanobe bafundzi bangabati bobunjwa) o Sayizi - Sebentisa imidlalo yemakhadi letawutfutfukisa umbala, isayizi nabobunjwa	Tinhlobo letihlukene tetintfo letinkhulu naletincane letiseklasini, sib.ibhola, umdoli, imoto yekudlala, ibhuloki yelego, njll Emabhuloki ekwakha nemabhola emasayizi lahlukene Bobunjwa belogi nobe bobunjwa bemibalabala labatfolakalako	Lilanga 1

Liviki 13	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo** **Chaza ubone tinombolo letiphelele**	• **Ngenisa lokushiwo yinombolo ku-3** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku -3 Bala uye phambili nasemuva ufike ku -3 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene nalokunyenti nalokumbalwa** Shaya tandla kanyenti……Mani. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -3	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Umnyakato - Thishela udlala tigubhu nobe umculo. Ngalesikhatsi umculo uphela, bafundzi bakha emacembu lahamba ngebafundzi labatsatfu - Buta bafundzi kutsi ngubani lonemndeni lonemalunga lamatsatfu - Bafundzi bema emgceni; ‘’Thishela uyabuta, ngubani wesitsatfu kulomugca?’’ Hlukanisa bafundzi ngemacembu langu ±5 Bafundzi: - Badzabula emakhasi lamatsatfu ebhukwini lelidzala letinombolo telucingo - Bashwabanisa emaphepha lamatsatfu, bente emabhola lamatsatfu lacinile. Kute kubelula kutfola umkhatsi, sebentisa sandla lesisebenta kakhulu. Umfundzi angahlala ngasesandleni lesingasebenti kakhulu - Bavula lamabhola bawashwabanise futsi - Ngesikhatsi ubala phosa lamabhola omatsatfu emantjini lebekwe emkhatsini welicembu Lomsebenti ungawuhlanganisa nesifundvo sekutivocavoca kuMakhono Ekuphila.	Bafundzi ngekwabo Tibali Libhuku lelidzala letinombolo telicingo Imantji	

Liviki 13	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo** **Chaza ubone tinombolo letiphelele**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Babona tintfo le- 3 eklasini. - Baphakamisa iminwe le -3 - Babeka tintfo le -3 etafuleni. Umfundzi ngamunye uta etafuleni abale intfo ngayinye. Umfundzi utsintsa intfo ngayinye ngalesikhatsi abala. Abakuphindze loku kuletinye tintfo. - Kutfutfukisa lwati lwekubekeka kwetinombolo ngekuvumela bafundzi bapake tibali letintsatfu nobe ngabe ngutiphi tintfo ngetindlela letehlukene, sib.  Ngalesikhatsi ubala, linani letinombolo alitsikanyetwa isayizi, nobe indzawo, nobe ngabe teluhlobo lunye lolufanako, sibonelo: - Hlela tinkhinobho le- 3, emapeniseli la -3, emahhulahhubhu la -3, ebafundzi la -3 njll. - Bala ngeluhlelo lolwehlukile, sib. Wabale uwasabalalise, wabale asondzelene, wabale asemgceni nobe uwapakile.	Tibali nobe tintfo	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Khombisa sitfombe “selibhodo lensimbi lelinetinyawo letintsatfu” - Bala tinyawo telibhodo - Bafundzi abacabange nanobe yini lenetinyawo letintsatfu. - Khombisa emakhadititfombe lanetintfo le -3. Bafundzi babala linani letibali lelihambelana netitfombe - Baphindze bente loko ngemakhadi emacashati - Bafundzi bamatanisa emakhadi emacashati nemakhadi etitfombe	Titfombe temakhadigama Emafleshikhadi emacashati Tibali **Sitfombe setintfo le- 3** 	

Liviki 13	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	**Kwati tinombolo nekubona emagama etinombolo lafaka ekhatsi inombolo - 3** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku- 3 Bala uye phambili nasemuva ufike ku -3 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene nalokunyenti nalokumbalwa** Shaya tandla kanyenti……Mani Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -3 **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Niketa umfundzi ngamunye emakhiyubhu eyunifiksi - Thishela ukhombisa licashata, sitfombe, likhadi lelineligama lenombolo lelifaka ekhatsi tinombolo -1 kuya ku -3 - Bafundzi babala inombolo lebanikwe yona babeke inombolo lefanako yemakhiyubhu eyunifiksi eminweni yabo.	Emakhiyubhi eyunifiksi Likhadinombolo lelifaka ekatsi tinombolo 1 kuye ku- 3 **Sitfombe setintfo le- 3**  **3** **Kutsatfu**	Lilanga -1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Bafundzi: - Babona emafleshikhadi lanelinani lelihlukene letitfombe - Babona emafleshikhadi lanombolo - 3 - Bachumanisa inombolo lengu -3 nelinani letintfo kanye nelinani lemacashata - Bachumanisa ligama lenombolo nenombolo lesekhadini - Bachumanisa ligama lenombolo nelikhadi lenombolo nelikhadi lemacashati - Niketa umfundzi ngamunye likhadinombolo lelifaka ekhatsi tinombolo -1 kuye ku -3. Thishela uphakamisa likhadi lemacashati nobe letitfombe. Bafundzi baphakamisa likhadi lelihambelana nelikhadinombolo.	Emafleshikhadi lehlukene lanetitfombe letinelinani lelehlukene ngalinye. Emafleshikhati lanenombolo -3 Emafleshikhadi lafakwe emacashati la -3 **Sitfombe setintfo le- 3**  **3** **Kutsatfu**	

Liviki 13	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Sombulula inkinga yekuhlanganisa nekususa lekhulunyiwe lenesisombululo lesifika ku -3** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkhe ufike ku- 3. Bala uye phambili nasemuva ufike ku- 3. **Umnyakato** **Sibonelo:** 1. Thishela ubita bafundzi labahili bete phambili. Bafundzi bababale. Thishela ubita lomunye umfundzi mu -1 ubuye ubute: “bangaki bafundzi nasebaphelele?” 2 na 1 → 3. (thishela utsi: 2 na 1 kwenta 3) 2. Thishela upaka titulo le 3. Akamange atengete ngaletinye. Kunatingaki titulo nyalo? 3 ne 0 → 3. 3. Thishela ubita bafundzi labatsatfu bete phambili. Ababale, uncandza ba- 2 bafundzi. Bangaki bafundzi labasele? 3 ususe 2 → 1 **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Niketa umfundzi ngamunye tibali le -3. Ngesikhatsi thishela “acoca indzaba” bafundzi bapaka tibali. **Tibonelo:** 1. Anne unemawolintji la- 2 na Pele wamnika lelinye -1. Unamangaki emawolintji Anne nyalo? 2 na 1 → 3 (Thishela utsi: -2 na -1 kwenta -3). 2. Kuneligala -1 esihlahleni nemagala- 2 lasahluma. Sinemagala lamangaki lesihlahla nyalo? -1 na -2 → 3. **Tibonelo:** 1. Ingobiyane inemabhanana la- 3 yase idla -1. Isele namangaki emabhanana? -3 ususe -2 → 1. 2. Kunemahhabhula la -2 lamnandzi esihlahleni semhhabhula. Lihhabhula -1 lawa. kusele mangaki emahhabhula esihlahleni? 2 ususe -1 kulingana → 1.	Emaculo nemilolotelo yetinombolo. Titulo Tibali le -3 umfundzi ngamunye	Lilanga -1

Liviki 13	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	• **Takhele emaphethini latiphindzako usebentise tintfo letimbili** **Umnyakato** Bafundzi bahlala bakhe indilinga. Bacula emagama lahambelana nesigci sibonelo: *libalele, sibhakabhaka, lilanga, sibhakabhaka* *Bhanana, lihhabhula, pere, bhanana, lihhabhula, pere.* *Nomsa, Jona, Abela, Susu, Jobe, Amosi* *kubovu, kuluhlata njengesibhakabhaka, kubovu, kuluhlata njengesibhakabhaka, njengesibhakabhaka njl.* *Waka, waka, eh, eh, waka, waka, eh, eh* **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** bafundzi: - Bagcogca tintfo le -3 letifanako eklasini sib. emakhilayoni -3 - Bagcogca letinye tintfo le-3 letifanako eklasini sib. Emabhuloki elego la-3 - Bafundzi batakhela emaphethini basebentisa tintfo letimbili sib. - Likhilayoni linye, ibhuloki yeLego yinye, likhilayoni linye……. - Emakhilayoni lamabili, libhuloki leLego yinye, Emakhilayoni lamabili, libhuloki leLego yinye ….. - Batentela emaphethini ngendlela lehlukile. - Bantjintjana ngetintfo nemngani babuye bakuphindze futsi loko.	emakhilayoni sinamatselisi nobe nguyiphi lenye intfo	Lilanga- 1

Liviki 13	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, utfole ubuye unikete bobunjwa labangemada-yimenshini lamabili (2-D) eklasini lokufaka ekhatsi titfombe** - **Calantsatfu** • **Gcizelela lwati lolutfole evikini 4 kute ubone, utfole ubuye unike lacalantsatfu** **Umnyakato** Dvweba, nobe usebentise intsambo kute utakhele sakhiwo sabunjwa wacalantsatfu lomkhulu. Bafundzi**:** - Bahamba batungelete lobunjwa babuke kwakheka kwacalantsatfu. Basahamba bafundzi abatsi: “ngihamba eceleni kwacalantsatfu. Linye,mabili, lamatsatfu nobe linye licala, mabili, lamatsatfu emakhona - Baveta kutsi calantsatfu “unemakhona” la- 3 nemacala lamatsatfu. - Badvweba calantsatfu emoyeni/emhlabatsini - Bakha calantsatfu ngelubumba **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Babona babuye batfole tintfo letinesakhiwo sabunjwa longucalantsatfu eklasini. - Babona babuye batfole tintfo letinesakhiwo sabunjwa longucalantsatfu kutemvelo. - Babeka tinhlobonhlobo letehlukene tetindilinga nabocalantsatfu “esikhwameni sefili”. Tfola calantsatfu kulabanye bobunjwa.  **Hlunga tintfo letingemadayimenhini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili (2-D)** - Hlunga tinhlobonhlobo tetintfo ngekubumbeka nangembala.	Lubumba nobe inhlama yekudlala Tintfo letibocalantsatfu eklasini nakutendzawo Takhele emakhadi lanetindilinga, bocalantsatfu netikwele le -5 letehlukene.	Lilanga -1

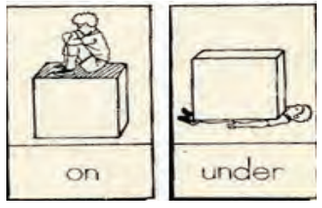
Liviki 13	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Batfola bunjwa longucalantsatfu etitfombeni. - Badvweba calantsatfu ephepheni. - Batsatsela calantsatfu losekhadini lebaniketwe lona. - Badvweba indilinga itungelete tonkhe tindilinga letisephepheni lekusebentela. - Benta titfombe basebentise bocalantsatfu ngesikhatsi sebuciko bekubona nekwenta. - Badlala imidlalo yemakhadi leyelekelela kugcizelela bobunjwa.	Titfombe lokungatfolwa kuto calantsatfu. Imidlalo yemakhadi letfutfukisa kubona bobunjwa nje nga “kunani esikweleni” Bobunjwa belogi njll.	Lilanga -1

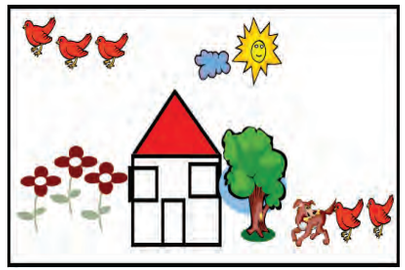
Liviki 14	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfoliwe lolufaka ngekhatsi inombolo 3** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 3. Bala uye phambili nasemuva ufike ku -3 Bala ngenhloko kusukela ku-1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -3	Emaculo nemilolotelo yetinombolo.	Lilanga- 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi: - Batfola tintfo le -3 eklasini letibovu. - Benta inombolo- 3 ngelubumba. - Bagicita emabhola la -3 lamakhulu ngelubumba. - Bagicita emabhola la -3 lamancane ngelubumba - Batfola bafundzi la -3 labagcoke umbala lofanako eklasini .	Tintfo letibovu. Lubumba	

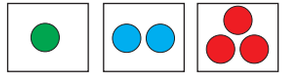
Liviki 14	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Sombulula ubuye uchaze tinkinga tetibalo temagama (tibalo letitindzaba) letifaka ekhatsi inombolo -3** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku -3. Bala uye phambili nasemuva ufike ku -3. **Umnyakato** **Tibonelo:** 1. Thishela ubita bafundzi la -2 bete ekhaphethini abuye abite lomunye umfundzi -1. Bangaki bafundzi lasababitele ekhaphethini thishela? Thishela utsi: 2 na -1 kukuniketa -3. 2. Kunebafundzi labatsatfu.munye umfundzi ufuna likhilayoni lakhe. Sinamangaki emakhilayoni? 3. Bantfwana labatsatfu bema ndzawonye. Munye uyaphuma endlini. Kusele bangaki? **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** **Tibonelo:** 1. Thishela ubeka tibali le -3 etafuleni. Ususa tibali le- 2 kusele tingaki tibali etafuleni? Thishela utsi ku -3 ususe -1 kwenta -2. 2. Phumi unabokati la- 2 wabuye watfola lomunye kati- 1 ku Busi. Unamangaki emakati Phumi nasewaphelele? 1 na -2 → 3. Thishela utsi -1 na- 2 kwenta- 3. 3. Nangabe likati -1 linemsila -1, emakati lamatsatfu atakuba nemisila lemingaki nayihlangene? 1 na -1 na -1 → 3	Bafundzi Tibali	Lilanga -1

Liviki 14	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	• **Cedzela iphethini leniketiwe ngetintfo le -2** **Umnyakato** - Bafundzi batsatsela iphethini yemnyakato sib. zuba, zuba,zuba, zuba, zupa,zuba,zuba..... - Bafundzi bacedzela emaphethini basebentisa sib .bema edvute nalomunye bantjintjana tandla enhloko, tandla ematsangeni, tandla enhloko..... **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi batsatsela iphethini yentfo sib. Buhlalu, buhlalu, indvuku, buhlalu, buhlalu, indvuku.....	Nobe ngutiphi tintfo	Lilanga -1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Thishela unika bafundzi tinhlobonhlobo tetitfombe letijutjiwe tetintfo letifanako. (juba titfombe ngesikhatsi semsebenti webuciko bekubuka intfo uyente) - Thishela ucala iphethini bese bafundzi kumele bakope lephethini leniketiwe sib. Sitfombe selikhofi, litiya, shukela… - Bafundzi abacedzele iphethini a: - Imbali, licembe, imbali..... - Indilinga leluhlata njengesibhakabhaka, indilinga lebovu, Indilinga leluhlata njengesibhakabhaka..... njll.	Titfombe letiphuma kusikhangisi. Emaphepha e -A4 Nemakhilayoni	

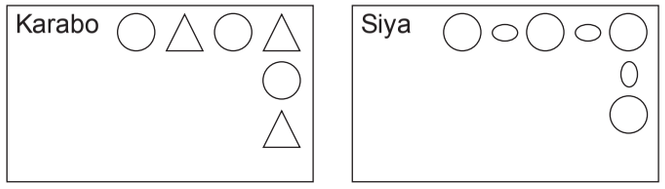
Liviki 14	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	• **Uhlunga abuye acatsanise tintfo letingemadayimenshini lamatsatfu(3-D) nabobunjwa labangema 2-D ngekwetimphawu letitsite** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Hlukanisa bafundzi babe macembu la 5. - Thishela ugcogca tintfo letinyenti kute licembu linye litihlunge ngalokungenani ngetimphawu letimbili (tingaba tinyenti). - Niketa licembu linye tintfo letinetimphawu letimbili kutsi batihlunge. - Bafundzi: - Hlunga letintfo utibeke ngekufana nekwehluka kwato. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Gcina bafundzi emacenjini abo. - Catsanisa ubuye uhlunge titfombe letehlukene letigcogcwe nguthishela sib. Titfombe tetinhlobonhlobo tetimphahla, kudla, ifenisha, titfutsi njll. - Bafundzi bacedzela lishithi lekusebentela lelimatanisa titfombe letimbili sib. Umutsi wekugeza ematinyo nesicubho, indvwangu yekugeza nensipho.	Tintfo letinjenge: Tintfo tekugcoka letehlukene Titselo letehlukene Tilwane temapulastiki letehlukene tasepulasini Bobunjwa be-Jomethri labehlukene Emabhuloki ekwakha lehlukene Emabhuloki elego lehlukene Tintfo letehlukene temvelo njenge macembe, tindvuku, ematje njll. Emakinobho lehlukene njll. Timbonyo temabhodlela letinemibala leyehlukile Emakhilayoni lehlukene Gcogca titfombe emaphephabhukwini nakumafulya. Juba ubuye unamatselise emakhadini.	Lilanga 1

Liviki 14	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	• **Kubekeka kwetintfo letimbili nobe letinyenti macondzana nemfundzi** - Kugcizelela lwati lolufaka “ngetulu/ ngephasi” na “ngetulu kwe” **Umnyakato** Umfundzi ngamunye uhlala esitulwini. - Bafundzi bakhombisa ngetulu nangephasi balandzela ticondziso tathishela sib. Hlala ngetulu ebhokisi, lala ngephasi kwelibhokisi nobe kwelitafula. - Hlala ngephasi kwelitafula. Tente ube mncane ngephasi kwelitafula. - Mani esitulweni sakho ubuye utilule ufike etulu ngendlela lokhona ngayo. - Gibela etafuleni ubuye ujikisa imikhono yenta tindilinga letinkhulu/letincane. chubekisela phambili usebentise lokukhudlwane/lokumbalwa. - Beka ibhuloki enhloko yakho bese ugibela etafuleni. - Khetsa bafundzi labasihlanu usebentise umlolotelo wetinombolo. - Hlebela umfundzi ngamunye sicondziso. o Hlala ubeke tandla takho ngephasi kwetinyawo o Mani ubeke tandla takho ematsangeni o Mani ubeke tandla takho ngemuva emhlane o Hlala ubeke tandla takho emahlombe o Mani ugoce tandla takho ngembi kwakho Bafundzi bema ngaphambili ngesikhatsi labanye balelicembu bahleti ekhaphethini. Buta bafundzi loku: - Wentani umfundzi wekucala? *(yena uhleli)* - Tikuphi tandla takhe? *(tandla takhe tingephasi kwemilente yakhe)* - Kuphindze nakulabanye bafundzi usebentisekwesibili, kwesitsatfu, kwesini nekwekugcina. - Khetsa licembu lelisha lente leticondziso letifana naleletingenhla - Khiphela bafundzi ngaphandle bese bakhombisa lokumelwe ngulamagama etulu, ngaphasi, nangetulu ngekukhombisa likhono labo.	Bafundzi Libhokisi  	

Liviki 15	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfoliwe lolufaka ngekhatsi inombolo 1, 2 na 3** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku -3. Bala uye phambili nasemuva ufike ku- 3 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -3	Emaculo nemilolotelo yetinombolo	Lilanga- 1
	Umnyakato Gcugcutela bafundzi batfole - Sitfo1 semtimba lengakhona kuya etulu nobe phasi, ehlangotsini linye nasehlangotsini lelinye ngekwalo sib. Lulwimi. - Titfo temtimba le -2 letisetjentiselwa kuzuba sib. imilente	Imitimba yebafundzi. Kucula ubuye ulingise liculo sib. 'Bekunabatsatfu embhedeni na .....' Umlolotelo wekubala sib. "Kunye kubili, ngibopha ticatfulo".	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi batfutfukisa lwati lwetinombolo nge: - Kusebentisa emabhuloki la -3 kwakha sakhiwo lesidze kakhulu. - Kutfola tintfo letintsatfu eklasini letibovu. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Thishela udvweba sitfombe lesilula - Thishela ubuta imibuto lemayelana nelinani letintfo letisetitfombeni sib. Mangaki emafasitelo lowabonako? njll.	Emabhuloki Tintfo letibovu 	

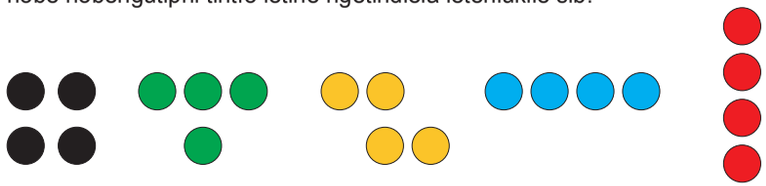
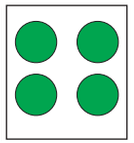
Liviki 15	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.2 **Bala uye phambili nasemuva**	• **Sebentisa tinombolo 1, 2 naku- 3 kutimongcodvo letetayelekile** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku -3. Bala uye phambili nasemuva ufike ku -3 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 3 - Khutsata bafundzi kutsi bati tinombolo tetindlu ne likheli lesitaladi **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Babuka titfombe letimele letinombolo 1, 2 na 3 letitfolakala emaphephabhukwini nakumaflaya babuye bawanamatsisele ephepheni.(hlanganisa nebuciko bekubuka wente) - Bamatanisa inombolo yetintfo nenombolo yemacashati lesekhadini. - Bakhombisa likhadi lemacashati.bafundzi bajiba inombolo yemabhini bhegi lefananako ngekhatsi ebhokisini - Badlala umdlalo webhodi "tinyoka netitepisi" nemadomino.	Emaculo nemilolotelo yetinombolo emaphephabhuku, tikhangisi emakhadi emacashati  emabhini bhegi "tinyoka netitepisi" umdlalo webhodi Idomino	Lilanga 1
Emanotsi: tinombolo tindzawo tonkhe: - Indlu ngayinye inenombolo - Sonkhe sinetinombolo telucingo letehlukene - Siyatibona tinombolo emafasitelweni esitolo. - Sibona tinombolo emikhicitweni leyehlukene nangabe sitsenga - Sibona tinombolo etimotweni			

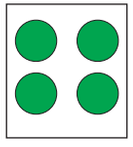
Liviki 15	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo:**	• **Hlela ubuye ucatsanise tintfo letigcogciwe 'kunyenti kuna-, kuncane kuna-" na "kulingana na kufike enombolweni ye -3** **Umnyakato** Bita bafundzi lababili bete ngaphambili. Abahlale bente indilinga. - Bafundzi lababili abeme. Bangaki labahleli? Babaleni. bangaki labemile? Babaleni. Nguyiphi inombolo lenyenti, nguyiphi inombolo lencane? - Bafundzi labatsatfu abeme. Babaleni., nguyiphi inombolo lenyenti/ lencane? Akusukume lomunye munye. Babaleni. Ngabe bafundzi labahleli banyenti kunalabo labemile? - Phindza ngetinombolo -1 kuye ku -3. - Bala emantfombatane. Bala bafana. Ngabe kunebafana labanyenti kunemantfombatane? **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Hlukanisa bafundzi ngemacembu la -5 Niketa licembu ngalinye siceshana sensntfo netintfo leti ±5. Bafundzi bakha sikhehle ngesontfo. - Thishela uhlebela licembu ngalinye alicele kutsi lente incumbi yetintfo le -3 nobe- 2 nobe -1 "etidlekeni" tabo - Bafundzi kumele batfole kutsi nguliphi licembu lelinetintfo letinyenti kuna- 1 - Nguliphi licembu lelinetintfo letincane kuleti- 3? - Nguliphi licembu lelinetinombolo tetintfo letifanako?	Insontfo tintfo leti-5 ngelicembu	Lilanga -1

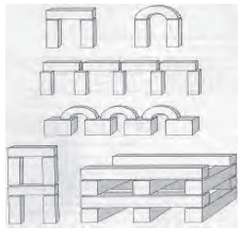
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	• **Tsatsela ubuye ucedzele emaphethini laniketiwe ngekwemibala, lobovu' loluhlata njengesibhakabhaka' lomtfubi** **Umnyakato** - Thishela ulingisa iphethini. Uyayiphindza abuye alandzele sigci sib. o Shaya tandla, khalisa(iminwe), shaya tandla,khalisa o Khalisa iminwe, shaya tandla, shaya phasi ngelunyawo, khalisa iminwe, shaya tandla, shaya phasi ngelunyawo, o shaya tandla, khalisa iminwe, khalisa iminwe, shaya tandla, khalisa iminwe, khalisa iminwe **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Thishela uniketa umfundzi ngamunye tibali nobe timbolo temabhodlela leti -3 letibovu, tintsatfu letiluhlata njesibhakabhaka natintsatfu letimtfubi Bafundzi: - **Batsatsela** iphethini labaniketwe yona ephethinini yathishela sib. lobovu, lobovu, loluhlata njengesibhakabhaka, lomtfubi, - (phindza emahlandla lamanyenti ngephethini leyehlukile) - **Cedzela** iphethini leniketiwe **sib**. Lokuluhlata njengesibhakabhaka, lokumtfubi, lokubovu…….. (phindza emahlandla lamanyenti ngephethini leyehlukile) - Bafundzi abahlunge tibali ngemibala lemitsatfu leyehlukene.	Umfundzi ngamunye utfola tiibali nobe timbonyo temabhodlela ti -3 letibovu, -3 letiluhlata njengesibhakabhaka na -3 letimtfubi	Lilanga- 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Niketa umfundzi ngamunye liphepha - Bafundzi abacedzele bunjwa wesigubhu longemadayimenshini lamabili (2-D) njengebhoda. - Cedzela lesitfombe ngesikhatsi sebuciko bekubuka wente ngekudvweba sitfombe emkhatsini. 	Emaphepha e-A4 Nemakhilayoni	

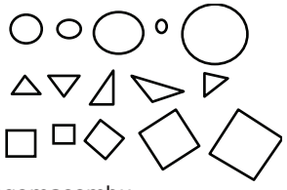
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.2 **Budze**	**Catsanisa ngalokuphatsekako ubuye uhlele tintfo usebentise lwatimagama kute uchaze budze** - **kudze, kufisha,** - **kudzenyana, kufishanyana,** - **kudze kakhulu, kufisha kakhulu,** **Umnyakato** - Umfundzi munye akalale phasi bese labanye bafundzi babeka emabhuloki ente umugca eceleni nemtimba. - Thishela ucela liklasi/licembu lonkhe kutsi lakhe lokutsite lokufisha kunebangani babo nalokudze kunebangani babo.	Emabhuloki ekwakha	Lilanga 1
	Bafundzi batfola kutsi: - Ngusiphi sakhiwo lesidze? - Ngusiphi sakhiwo lesidze kakhulu? - Ngusiphi sakhiwo lesifisha? - Ngusiphi sakhiwo lesifisha kakhulu?		
	Bafundzi abahlele tintfo letitinhlobonhlobo: - Bacala kulokudze kakhulu kuye kulokufisha kakhulu - Bacale kulokuncane kuye kulokukhulu - Bafundzi abacatsanise budze betinfo letehlukene. Thishela uniketa bafundzi siceshana sensontfo. Khutsata bafundzi kutsi bancombele ngembi kwekubala. Bafundzi abakale: - Inhloko yalomunye. - Tinyawo talomunye. - Emacakala abo. - Tihlakala tabo. - Bafundzi abacatsanise budze lobehlukene ngekubona kutsi ngusiphi siceshana sensontfo lesidze nobe lesifisha sib. Intsambo yekukala letungelete inhloko yami yidze kune ntsambo yekukala letungelete sihlakala sami. - Bafundzi abatfole kutsi ngabe kucambela kwabo kungiko/kukahle.	insontfo umtiya emakhilayoni lanebudze lobehlukile insontfo bafundzi	

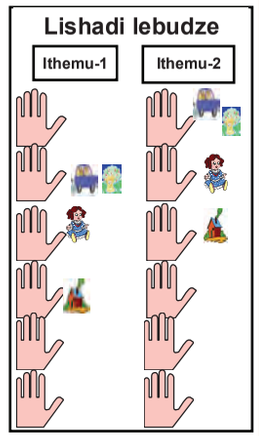
Liviki 16	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Ngenisa inshokutsi yenombolo- 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku -4 Bala ngenhloko kusukela ku 1- 7	Emaculo nemilolotelo yetinombolo Imitimba yebafundzi	Lilanga -1
	Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa" Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -3.		
	Umyakato Bafundzi: - Bagencetisa tinhloko tabo ka -4. - Benta inombolo ku- 4 basebentise imitimba yabo. Bafundzi batfola kutsi batawudzinga bantfwana labangaki. - Bafundzi bayacimeta. Thishela ushaya etafuleni ka -4. Bavula emehlo bese bayasho kutsi tandla bative tishaya kangaki. Phindza ngetinombolo -1 kuye -4.		

Liviki 16	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Yakha lenombolo -4 ngenhlama yekudlala. - Tfola bangani la 4 labagcoke ticatfulo. - Tfola tintfo le -4 letiyindilinga. - Vala bafundzi emehlo ubuye ubente bakwati kutfola tinombolo -1kuye -4 ngekutsintsa /kutfungatsa emakhadi tinombolo laphatsekako. - Tfutfukisa lwati lekugcina/lekubekeka kwetinombolo ngekutsi bafundzi bapake tibali nobe nobengutiphi tintfo letine ngetindlela letehlukile sib.  Nangabe ubala, inombolo yetintfo ayitsikabetwa yisayizi yato, nobe kubekeka, nobengabe teluhlobo lolufanako. Sibonelo: - Hlela emakinobho la- 4, emapeniseli la -4, emahhulahhubhu la-4, bafundzi la -4 njll. - Wabale ngekuhleleka lokwehlukene sib. Wabale asabalele, asondzelene, asemgceni nobe apakiwe Lokubonakalako ungeke ukuphatse usebentise bobunjwa labangemamadayimenshini lamabili (**2-D)** nobe titfombe Bafundzi: - Tfola titfombe leti- 4 ubuye unamatsisele ephepheni. - Matanisa inombolo yetintfo nenombolo yemacashati lasekhadini lekuflesha. - Tfola ifleshi khadi lenemacashati lamane.	Inhlama yekudlala Tintfo letiyindilinga Yenta isethi yemakhadi tinombolo laphatsekako ngekujuba tinombolo esayini phepheni ubuye utinamatsisele etincetwini letehlukene telibhokisi. Nangabe ulaminetha lamakhadi bafundzi bangabuye bawasebentisele kwakha inombolo yelubumba ekhadini. tibali le -4 nobe tintfo le - 4 umfundzi ngamunye emaphephebhuku, emafulaya, sikhangisi liphepha le- A4 nesinamatselisi **Sitfombe setintfo le- 4** 	Lilanga -1

Liviki 16	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Sebentisa inombolo - 4 kungcikitsi leyetayelekile** - Inombolo kune ikwenta ucabange ngani? Imoto - emasondvo lamane Situlo - tinyawo letini Inja - tidladla letine Litafula - tinyawo letine - Kutfutfukisa kubamba ngenhloko, khutsata bafundzi kutsi babambe ngenhloko tinombolo tetindlu nemakheli akubo **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Nika litfuba lekudlala umdlalo welikhadi nombolo lokhona eklasini **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Khombisa likhadi lelinanombolo -4 Dlala imidlalo lefana na: - Nangabe inombolo yendlu yakini ina -4, shaya tandla ka- 4. - Tfola umngani eklasini lonenombolo yendlu lefana neyakho eklasini. (bafundzi babuta bangani babo tinombolo tetindlu takubo) - Ngubani lonetinombolo tendlu yakubo letendlula ku -4? - Khomba bafundzi likhadi lelinemacashati lamane. - Kubona emakhadi lanetitfombe letine.	Emakheli asemakhaya ebafundzi bafundzi **4** Nobe nguwuphi umdlalo welikhadi nombolo lokhona **Sitfombe setintfo le- 4**  Emakhadi lanetitfombe le -4 nemacashati la- 4	Lilanga 1

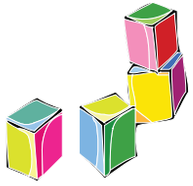
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	• **Kuveta ematfuba ekusebentisa emabhuloki ekwakha** Bafundzi: - Basebentisa nobe nguwaphi emabhuloki lamane kwakha sakhiwo. - Bakha sakhiwo lesinemabhuloki la -3 kuya etulu/budze nemabhuloki la -5 lavundlile. - Basebentisa emabhuloki lamanyenti labangawadzinga njengobe batawudzinga kwakha sitimela. - Babona kutsi ngubani lowakhe sitimela lesidze kakhulu. - Bakha sakhiwo lesikhulu kakhulu (Lesiya etulu). - Bakha sakhiwo lsiyiflathi sib. Umgwaco nobe indlu (lokuvundlile) - Babona kutsi ngubani lowakhe sakhiwo lesidze kakhulu. - Niketa emabhuloki ekwakha ngesikhatsi lesikhululekile sekudlala ngekhatsi endlini kute bafundzi bachubeke basebente ngemabhuloki ekwakha.	Emabhuloki ekwakha. 	Lilanga -1
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	• **Tfutfukisa likhono lekuhlukanisa emkhatsini wabobunjwa labasendzaweni yetfu, ngaphandle kwesayizi nobe isayizi ye-engeli** **Umnyakato** Bafundzi labasemacenjini lahamba ngaba -3: - Balala phasi bese benta calantsatfu ngemitimba yabo. Veta kutsi nanobe calantsatfu ngamunye ecenjini abonakala ehlukili, lobunjwa solo nguye calantsatfu. - Thishele udvweba bocalantsatfu labehlukene phasi/ebaleni sib.  - `Bafundzi bahamba eceleni kwemacala abobunjwa babuye batfole ema-engeli lehlukene ngemitimba yabo	Bafundzi Tintsi leti-7 umfundzi ngamunye	Lilanga -1 Khetsa umnyakato munye, usebenti lophatsekako nalocishe uphatseke

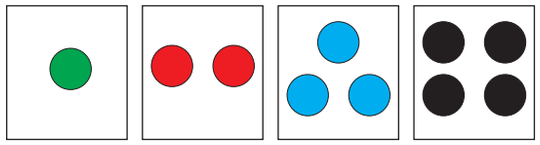
Liviki 16	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Sebentisa tintsi leti- 7 ubuye utibeka emgceni locondzile  - Sebentisa tintsi kwenta umugca lonemajiko  - Sebentisa tintsi kwenta izigizagi.  - Sebentisa tintsi kwenta calantsatfu.  - Veta kutsi bocalantsatfu bemfundzi ngamunye abefani kodvwa labobunjwa bonkhe basengibo bocalantsatfu.		
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe thishela udvweba tindilinga, bocalantsatfu netikwele leti-5 letehlukene ekhadini.  Thishela uhlukanisa bafundzi ngemacembu. bafundzi: - Tfola emakhadi labocalantsatfu ekhatsini walabanye bobunjwa	Emakhadi lanetindilinga, bocalantsatfu netikwele leti-5 letehlukene	

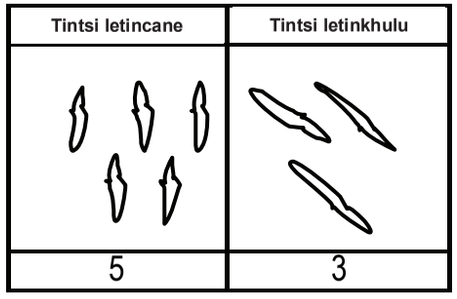
Liviki 16	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.2 **Budze** **Catsanisa ubuye uhlele tintfo ngendlela lelula usebentise lwati lonalo kuchaza budze**	**Catsanisa ubuye uhlele tintfo ngendlela lelula usebentise lwati lonalo kuchaza budze** - kudze, kufisha, - kudzana, kufishanyana, - kudze kakhulu, shortest, - kufisha, kufishanyana, kufisha kakhulu - kudze, kudzana,lokudze kakhulu **Kutfutfukisa lwati lwebudze** **Umnyakato** Bafundzi: - Batfola budze ngekucatsanisa tintfo lenye nalenye. - Babona kutsi nguyiphi intfo lenkhulu kakhulu nekutsi nguyiphi intfo lemfisha kakhulu. - Bacatsanisa budze bebafundzi lababili babuye batfole kutsi ngumuphi umfundzi lomfisha nekutsi ngumuphi lomudze - Bacatsanisa budze bebafundzi labadlula kulababili babuye babute imibuto lenjenga “ngumuphi umfundzi lomfisha kakhulu, ngumuphi futsi lomudze kakhulu.Thishele uphindze akale bafundzi asebentisa lishadi lebudze lethemu yekucala. - Thishela uyekela lokurekhodwe ngethemu leyengcile (tandla letineluphawu/sitfombe sebafundzi) kute bakwati kucatsanisa letilinganiso letimbili. - Bafundzi batfola kutsi ngabe bakhulule kusukela ethemini leyengcile. - Ngubani longakakhuli nhlobo? - Ngubani lokhule kakhulu kusukela ethemini yekucala? sib. Sipho ukhule ngebudze besilinganiso sesandla. Budze ba-Ebi solo bunjalo.	emapeniseli, insontfo, intsambo, emaphekisi, njll. silinganiso sesandla lishadi lebudze Ebi 6 tandla Sipho 6 tandla  	Lilanga 1

Liviki 17	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati loluzuziwe ngenshokutsi yenombolo 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku- 4 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 4.	Emaculo nemilolotelo yetinombolo	Lilanga -1
	Umnyakato Bafundzi: - Babhala inombolo -4 emoyeni basebentise tingalo tabo. - Hlabela liculo sib. 'Emabhodlela lamane laluhlata lalenga ebondzeni....' - Jikeleta ka- 4.		
	Lokuphatsekako usebentisa tintfo letingemadayimenshin lamatsatfu (3-D) Bafundzi batfutfukisa lwati lwetinombolo: - Dvweba inombolo- 4 esantini. - Tfola tinto le-4 letingemadayimenshini lamatsatfu (3-D) letingagicika. - Kwakha emaphazili lanetincetu le -4. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Thishela uvetsa emakhadigama la- 4. Thishela ukhombisa ligama abuye akhombise sitfombe selithoyisi nobe sesilwane. - Umfundzi lekukhonjiswe ligama lakhe utveta ngekutsi ente umsindvo lowentiwa lithoyisi lakhe. - Phindza uze ukhombise onkhe emagama lamane. - Buta kutsi mangaki emagama ebafundzi? Mangaki emathoyisi/titfombe lenitibonile?	Ithileyi/libhokisi lelinesanti Tintfo letingemadayimenshini lamatsatfu(3-D) letingagicika Emaphazili la-4 Likhadi lelinesitfombe selithoyisi Emakhadi lanetitfombe tetilwane	

Liviki 17	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Wati inombolo ubuye ubone ligama lenombolo - 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku- 4		Lilanga -1
	Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa" Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 4. **Umnyakato** - Bhala inombolo kune emoyeni. Yibhale phasi, emhlane wemngani wakho - Phakamisa iminwe le- 4 - Thishela ushaya sigubhu. Nangabe sigubhu sithula, bafundzi bakha emacembu lahamba ngabane.		
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Khombisa bafundzi likhadi lelinenombolo ku- 4. - Bona ligama lenombolo lelisekhadini lekukhombisa inombolo. - Condzanisa inombolo nenombolo yetintfo letilingana nayo.	Limakhadi lkhomba inombolo Likhadi lelineligama lenombolo kune Tintfo letingemadayimenshini la-3(3-D) **4** **Kune**	

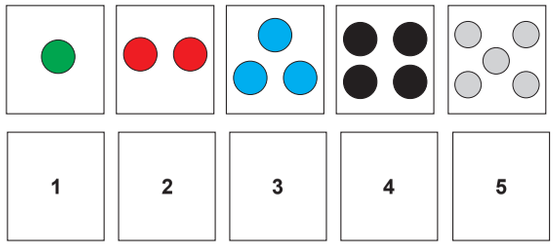
Liviki 17	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Wati inombolo ubuye ubone ligama lenombolo - 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku- 4		Lilanga -1
1.7 **Kuhlanganisa nekususa**	• **Bala ngemlomo ubuye uchaze timphendvulo tetibalo temagama (tibalo tetindzaba) lokufaka ekhatsi inombolo ku- 4** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** **Tibonelo:** 1. Thishela ukuniketa emabhuloki la- 2 kantsi bewuvele una- 2 emabhuloki. Unamangaki nangabe sewaphelele? 2. Nangabe unetindilinga le- 2letiluhlata njengesibhakabhaka netindilinga letibovu, unatingaki tindilinga nangabe setitonkhe? 3. Sipho unemakhilayoni lama- 4 bese Joyi abena- 1 likhilayoni. Ngubani lonemakhilayoni lamanyenti? 4. Nangabe Jodi anabomdoli la- 4 bese ulahlekelwa ngu- 1, utawusala nabangaki bomdoli? Hlukanisa bafundzi ngemacembu. - Niketa licembu ngalinye incumbi yetintfo sib.emapeniseli, emakhilayoni, tinkhomisi, bobunjwa.bafundzi ababelane letintfo lebatitfolile banike lilunga lelicembu ngalinye (kunye kucondzane namunye) - Buta umbuto lonjenga: “tikhona yini letisele?” - (thishela kumele acinisekise kutsi kunetintfo letinyenti letedlula inombolo yebafundzi labasecenjini. Susa tintfo kute ukhombise nekwabelana ngalokulinganako)	 Emabhuloki Emakhilayoni Tindilinga letiluhlata njenge sibhakabhaka naletibovu Bomdoli Tintfo letinyenti (yinye ngemfundzi ndamunye) njenge mapenseli, emakhilayoni, tinkomishi, bobunjwa	

Liviki 17	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Wati inombolo ubuye ubone ligama lenombolo - 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku- 4		Lilanga -1
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Hlela ubuye ucatsanise lugcogco lwetintfo usebentise ‘’lokunyenti kuna, lokuncane kuna “nalokulingana na” ufike ku-up 4** Hlukanisa bafundzi ngemacembu - Thishela unika licembu linye tibali le- 4 neticeshana letimbili tensontfo. Licembu: - Lakha tindilinga letimbili (emasethi) ngensontfo. - Lifaka tibali esethini ngayinye ngekulandzela ticondziso tathishela. - Emalunga elicembu atfola kutsi nguyiphi isethi lenetibali letinyenti kunalenye? (lokunyenti kuna) - Nguyiphi indilinga lenenombolo yenetibali letincanyana kunaletikulenye indilinga? (kuncane kuna) - Nguyiphi indilinga lenenombolo yetibali letifana naletikulenye indilinga? - Nguyiphi indilinga lenenombolo yetibali lefana nalekulenye indilinga? (kuyalingana) **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Hlela isethi yemakhadititfombe ngekulandzelana kwawo sib. **Sitfombe sentfo -1** **Sitfombe sentfo -2** **Sitfombe sentfo -3** **Sitfombe sentfo -4** Hlela isethi yemakhadi emacashatii ngekuhleleka lokungiko sib.  - Buta imibuto lenjena “nguliphi likhadi lelinetintfo/emacashati lamanyenti? - Nguyiphi inombolo lenkhulu kuna - 2 njll?	Insontfo Tibali le-4	

Liviki 17	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Wati inombolo ubuye ubone ligama lenombolo - 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku- 4		Lilanga -1
5.1 **Gcogca ubuye uhlunge tintfo**	• **Kutfutfukisa inchubo yekusebenta ngedatha** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi abagcogce tintsi le- 9. - Hlunga tintsi ngesayizi lencane nalenkhulu.	Bafundzi batentela lugcogco lwetintsi	
5.2 **Kumela ligcogco letintfo letihlungiwe**	**Dvweba emagrafu kukhombisa idatha** **Lokubonakalako ungeke ukuphatse lokubobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Yenta igrafutitfombe ngetintsi. - Bafundzi bafaka letintsi kulegrafutitfombe ngesayizi yato lokungu. letincane naletikhulu.  	Lishadi lekusebentela legrafutitfombe. Thishela wenta liphepha le- A4 lelinemakholumu lafanele lentelwe umfundzi ngamunye	
5.3 **Coca ubuye ubike ngeligcogco letintfo letihlungiwe**	**Fundza ubuye uhumushe emagrafu** • Coca ngemiphumela ngekubuta imibuto sib. “Tingaki tintsi letincane lapho? Tingaki tintsi letinkhulu? Ngutiphi letinyenti kakhulu/letincane kakhulu?		

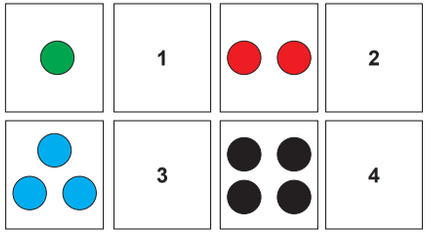
Liviki 18	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 Imisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfoliwe lolufaka tinombolo 1, 2, 3 na- 4.** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 4. Bala uye phambili nasemuva ufike ku-4 Bala ngenhloko kusukela ku-1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 3. **Umnyakato** Bafundzi: - Babhala inombolo ku- 1 emoyeni bsebentisa iminwe yabo. - Bafundzi babamba tinhloko tabo ka- 2. - Bachebula bafundzi la-4 labehlukene. - Bavala bafundzi emehlo babuye batfole tinombolo- 1 kuye ku-4 ngekutsinta/kufuna likhadinombnolo leliphatsekako. **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Badvweba lenombolo -1 esantini. - Batfola ku- 3 lokutintfo letifanako. - Zuba ka-2 ngaleso sikhatsi.(kabili) - Bakha emaphazili lane ngetincetu le- 4 naletinyenti.	Emaculo nemilolotelo yetinombolo Ithileyi/libhokisi lesanti Isethi yemakhadinombolo laphatsekako Tintfo Bafundzi Tincetu temaphazili le- 4	Lilanga- 1
1.11 **Imali**	• **Bona ubuye utfole imali yebuhhehlu yaseNingizimu Afrika** **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** - Yenta bafundzi bati ngaletilwane netitfombe letitfolakala emalini yebuhhehlu. - Kusetjetiswa kwemali kungasetjentiswa ekhoneni lemakhono ekuphila lapho bafundzi bangadlala khona umdlalo wesitolo. Ngekudlala bafundzi basebentisa imali yebuhhehlu leyehlukene.	Imali yebuhhehlu 5c,10c, 20c, 50c, R1,00, R2,00 ne R5,00 coins (imali yekudlala nobe imali mbamba)	Lilanga 1

Liviki 18	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Kubala lokushiwo ngemlomo loktibalo tekuhlanganisa nekususa lokunetimpendvulo kufike ku- 4** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku-4. Bala uye phambili nasemuva ufike ku-4 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka -3	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Umnyakato **Tibonelo:** 1. Thishela ubita umfundzi -1 ete phambili eklasini. Ubuye futsi abite labanye bafundzi la- 3. Bangaki bafundzi lababitile nangabe babonke? 2. Thishela upaka tibali le- 3. Wangeta sinye. Tingaki tibali letisetafuleni? 3. Bafundzi bema ngembikweliklasi. Thishela ucela umfundzi munye kutsi ahlale phasi. Bangaki bafundzi labaphambi kweliklasi nyalo? 4. Busi unemapeniseli la- 4. Unika Jese emapeniseli la- 2. Usele nemepenseli lamagaki Busi?	Bafundzi Tibali Emapeniseli Sebentisa tinsita letinhlobonhlobo kute ube nemcondvo wekutsi tindlelanchubo letehlukene ungatisebentisa njani.	

Liviki 18	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo:**	• **Hlela ubuye ucatsanise lugcogco lwetintfo usebentise ‘’kunyenti kuna, kuncane kuna “nakulingana na” ufike ku- 4** **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela uniketa lilunga ngalinye lelicembu inombolo letsite yemakhilayoni. - Emalunga elicembu kufanele atfole kutsi ngubaphi bafundzi labanemakhilayoni lamanyenti kunalabanye. - Ngumuphi umfundzi lonemakhilayoni lamancanyana kunalabanye? - Ngubaphi bafundzi labanenombolo lefanako yemakhilayoni? **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Hlela isethi yemakhadinombolo lefaka ekhatsi letinombolo- 1 kuye ku- 5 ngendlela lehleleke kahle sib.  - Buta imibuto lefana “nguliphi likhadi lelinetintfo/emacashati lamanyenti? - Nguyiphi inombolo lenkhulu kuna- 2? njll.	Emakhilayoni Emakhadi lanemacashati nenombolo	Lilanga -1

Liviki 18	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	• **Tsatsela ubuye ucedzele iphethini leniketiwe lenemali yebuhhehlu** **Tsatsela iphetini leniketiwe** - Thishela wakha iphethini asebentise “imali yekudlala” sib. 5c, 5c, 5c, 10c, 10c,10c, 20c, 20c, 20c - Bafundzi: - Abatsatsele emaphethini lamanyenti lentiwe nguthishela. **Cedzela iphethini leniketiwe** Bafundzi: - Abacedzele emaphethini lamanyenti lentiwe nguthishela sib. o 5c, 5c, 10c, 10c,…… o 5c, 10c,…… o 10c, 20c…….njll	Imali yekudlala nobe imali mbamba (5c,10c,20c)	Lilanga -1

Liviki 19	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele lolufaka tinombolo 1, 2, 3 na- 4.** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku -4. Bala uye phambili nasemuva ufike ku -4 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka 3. **Umnyakato** Thishela uphakamisa likhadinombolo lelinenombolo 3 bese utsi kubafundzi: - Ngidzinga bafana belinani lelingaka. - Uphakamisa inombolo -2 atsi, ngidzinga emantfombatane alelinani. - Entani emacembu abo (aphakamise inombolo -2). - Phindza lomsebenti ngemakhadi lafaka tinombolo -1-4	Emaculo nemilolotelo yetinombolo Emakhadinombolo lafaka ekhatsi tinombolo ku- 1 kuye ku- 4 sib. **3**	Lilanga -1
1.16 **Tibalo tenhloko**	**Tibalo tenhloko** Thishela uphakamisa likhadinombolo -3 abuye ubute bafundzi kutsi: - Nguyiphi lenombolo le? - Nguyiphi inombolo lefika kucala kuna ku -3? - Nguyiphi inombolo lefika ngemuva kwenombolo ku- 3? - Phindza ngetinombolo -1 kuye ku- 4 - Ningangikhomba likhadisitfombe lelinenombolo lefana naleyo yemacashati lasekhadini?	Isethi yemakhadi lanetitfombe nemacashati lafaka ekhatsi inombolo ku-1 kuye ku-4	

Liviki 19	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.16 **Tibalo tenhloko**	**Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela ushaya tandla ngalokunesigci abuye atishaye kancane kute avete inombolo. Bafundzi kufanele batsatse buhlalu belinani lelitsite abuye abakhombe. sib buhlalu lobu- 4 - Bafundzi ababeke buhlalu 1, 2, 3 nobe 4 embikwabo. - Cela bafundzi bakhombe kutsi banebuhlalu bungaki ngekucatsanisa inombolo yebuhlalu babo nenombolo lefanako lekukhadinombolo sib. Buhlalu bu-4 nenombolo ku- 4. - Abatfole umfundzi lonebuhlalu lobulingana nalenombolo. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Thishela uphakamisa likhadi lelinenombolo yemacashati lama- 2 abute loku kubafundzi: - Mangaki emacashati lakulelikhadi? - Lamacashati amele yiphi inombolo? - Nguyiphi inombolo lelandzela lenombolo? - Badvwebe inombolo yemacashati lalingana nalenombolo emaphepheni abo	Buhlalu lobu-4 umfundzi ngamunye Emakhadi lakhomba tinombolo 1,2,3 na- 4 Emakhadi lanemacashati 	Lilanga -1

Liviki 19	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Kubala lokushiwo ngemlomo lokutibalo tekuhlanganisa nekususa lokunetimpendvulo kufike ku- 4** **Umnyakato** - Bita bafundzi la- 3 bete phambili. Babale - Bita lomunye umfundzi -1.' Mangaki onkhe? Ku-3 na- 1→4 (kutsatfu nakunye kwenta -4) - Jikisa bafundzi la-3 babuyele ekhaphethini. Bangaki bafundzi labasele nyalo? 4 ususe 3→1 Hlukanisa bafundzi ngemacembu. Buta imibuto njengalena: - Tingaki timphumulo lotibona ecenjini lakho? - Mingaki imilomo? - Mingaki imitimba? - Mangaki emehlo emkhatsini webafundzi lababili? - Mingaki imilente emkhatsini webafundzi lababili? **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** Tibonelo: 1. Babe waLindiwe unemoto.imoto yakhe inamangaki emasondvo? 2. Nangabe lisondvo -1 lipontjile emotweni bese liyakhishwa, isala namangaki emasondvo? 3. Sikhukhukati sinemantjwele la- 4. Emantjwele lamabili alahleke. Sitawusala namangaki emantjwele? 4. Lesikhukhukati siwatfolile emantjwele aso lamabili lebekalahlekile. Sesinamangaki emantjwele nyalo?	Tibali Sebentisa tinsita letinhlobonhlobo kute ube nemcondvo wekutsi tindlelanchubo letehlukene ungatisebentisa njani. Tibali	Lilanga- 1

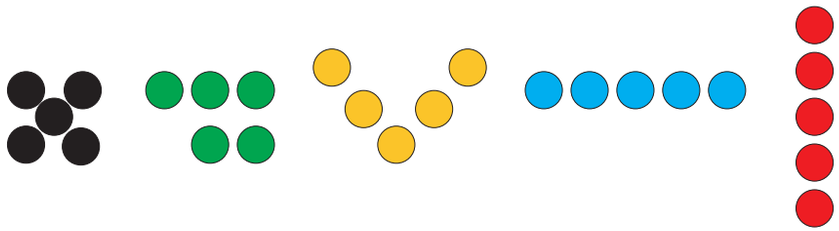
Liviki 19	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Hlela ubuye ucatsanise lugcogco lwetintfo "kunyenti kuna, "kuncane kuna" "nakulingana na" kuye ku- 4** **Umnyakato** - Thishela ubeka tintfo letehlukahlukene etafuleni sibonelo, emakhilayoni la -2, emabhuloki lafanako la -4, tikotela le-3, emabhuku la -2. Bafundzi: - Babala inombolo yemakhilayoni netikotela. Akhona yini emakhilayoni lamanyenti nobe emathini lamanyenti? - Bala inombolo yemabhuloki nemabhuku. Ngabe kunemabhuloki lamancane kunemabhuku? Ngabe kunemabhuloki lamanyenti kunemabhuku? - Bala emabhuku nemakhilayoni. Ngabe kunetintfo letilinganako nobe cha?	Emakhilayoni, emabhuloki, tikotela, emabhuku.	Lilanga -1
	Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D) - Bafundzi abahlale ekhaphethini abuye anike umfundzi ngamunye linani lelitsite letibali. - Umfundzi ngamunye utawutfola inombolo yetibali lengalingani neyalabanye. - Bafundzi babeka tibali phambi kwabo. Thishela ubuta bafundzi loku: o Ngubani lonetibali letinyenti kakhulu? o Ngubani lonetibali letincane kakhulu? o Ngubaphi bafundzi labanetibali letilinganako?	Tibali Thishela unika umfundzi ngamunye inombolo leyehlukile yetibali kufike ku- 4	
3.3 **Bobunjwa labangemada-yimenshini lamabili(2-D)**	**Bona, utfole ubuye unike bobunjwa labangemada-yimenshini lamabili (2-D) eklasini netitfombe** • **Yenta ubuye ucedzele emaphazili** (hlanganisa nebuciko bekubuka wente) Bafundzi: - Badvweba sitfombe ephepheni le- A4. - Thishela udvweba imigca ngemuva kwemidvwebo yebafundzi. - Umfundzi ujuba sitfombe sakhe ahambise emigceni ledvwetjiwe. - Umfundzi ucedzela/wakha iphazili yakhe.	Imidvwebo yebafundzi 	Lilanga -1

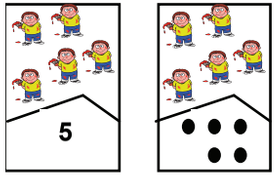
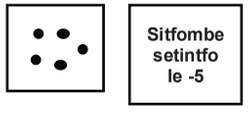
Liviki 19	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.1 **Sikhatsi**	• **Tfutfukisa lwati lwekutsi kwentekani emkhatsini wesikhatsi sekudla nesikhatsi sekulala** (hlanganisa nesihloko selwati lwekucala lesikumakhono ekuphila) Bafundzi: - Bacoca ngalabakwenta ngemuva kwekudla kudla kwantsambama. - Bacoca ngalokwenteka emakhaya ngemuva kwekudla. Thishela uyabuta: - ‘‘Ngabe esikoleni ufika ekuseni nobe ntsambama?” - Nangabe Pele afika insimbi seyishayile esikoleni, ngabe Pele ufike ngesikhatsi nobe ngemuva kwesikhatsi esikoleni? - Likuphi lilanga ebusuku?”	Titfombe letikhomba lokwenteka ngesikhatsi sekudla nesikhatsi sekulala.  	Lilanga -1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Bafundzi badvweba sitfombe kukhombisa nobe yini leyenteke emva kwesidlo santsambama. - Nika emaphazili lakhombisa kulandzelana kwetigameko	Liphepha nemakhilayoni	

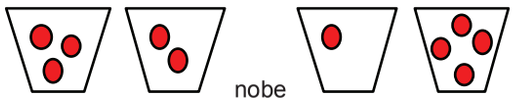
Liviki 20	Sebentisa Liviki le 20 kusebenta ngebulukhuni betintfo na/nobe utfole loko lokutihibe ekufundzeni.	
Lokucuketfwe	**Sihloko**	**Umgomo wekuhlola**
Tinombolo, timphawu tekubala nebudlelwane	**1.1** **Bala tintfo**	Combela ubuye ubale ngenhloko ufike ku -7 (emaculo tetinombolo nemilolotelo lokufaka ekhatsi kutfutfukisa lwati lwetinombolo)
		Ubala aye-emuva naphambili(1-4)
		Uvisisa lamagama “kunyenti nakuncane” (shaya tandla)
		Ubona tinombolo kungcikitsi leyetayelekile-sib. Inombolo yendlu, incwadzi yemakheli
		Ubona titfombe tetinombolo nemakhadi emacashati
		Kwati tinombolo 1, 2, 3,4
		Ubona emagama etinombolo kubili, kutsatfu na kune
		Uvisisa kucondzana kwalokunye kulokunye (Basiti bayacocisana ngesikhatsi sekudla)
		Hlukanisa emkhatsini wa kunyenti, kuncane na kuyalingana, kunyenti na kuncane kuye ku -4
		ubona imali yebuhhehlu yase-Ningizimu Afrika ngekwehlukana kwayo
	1.6 **Emasu ekusombulula tinkinga tekubala**	Usebentisa tinsita letiphatsekako Uchaza kucabanga kwakho ngemagama nangemidvwebo nobe tintfo letiphatsekako
	1.7 ne - 13 **kuhlanganisa nekususa**	Usombulula tinkinga tetibalo tekuhlanganisa nekususa ngemlomo kufike kunombolo-4
Emaphethini nemafangishini	**2.1** **Emaphethini e-Jomethri**	Tsatsela, uchubele embili abuye atakhele emaphethini akho(tintfo, bobunjwa nemali yebuhhehlu)
Sikhala nabunjwa	**3.1** **Kubekeka, kutetayeta nekubukeka**	Uvisisa kubekeka kwetintfo letimbili nobe letinyenti macondzana nemfundzi ngetulu, ngaphasi
	3.2 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	Kwakha lokungenani tincetu leti 12 tephazili
		Ukhombisa likhono lekuhlukanisa “lingemuva nelingembili letintfo” (phindza uhlole) Uvisisa kwakheka kwacalantsatfu (kugcineka kwabunjwa) Kubona, utfole ubuye usho localantsatfu Uvisisa kwakheka kwacalantsatfu(kugcineka kwabunjwa)

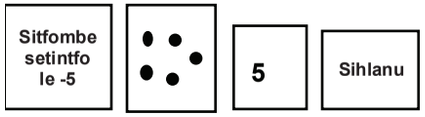
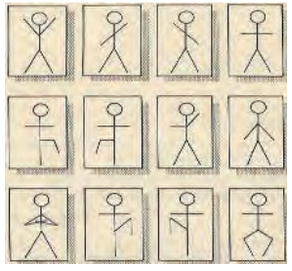
Liviki 20	Sebentisa Liviki le 20 kusebenta ngebulukhuni betintfo na/nobe utfole loko lokutihibe ekufundzeni.	
Lokucuketfwe	**Sihloko**	**Umgomo wekuhlola**
Sikhala nabunjwa	**3.2** **Tintfo letingemadayimenshini lamatsatfu (3-D)**	ucatsanisa kutsi ngukuphi kwaletinto letimbili letigcogciwe taniketwa letindze letindze kahulu, letimfisha/letimfisha kakhulu
		Uhlunga tintfo nge: isayizi -budze nebufisha
		imibala - (kubovu, kumtfubi, kuluhlata kwesibhakabhaka nakuluhlata)
		bobunjwa
		Tfola ngemabhuloki ekwakha
	3.4 **Kubona umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako:**	Ubona umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako kuwe nasendzaweni yakho
		Bakhona kwengca umugca-losemkhatsi
		Kuvisisa kubekeka kwetintfo letimbili nobe letinyenti mayelana nemfundzi- ngetulu, ngephasi.
Silinganiso	**4.1** **Sikhatsi**	Kuvisisa emalanga eliviki, tikhatsi temnyaka nelishadi lesimo selitulu (Emaculo nemilolotele-phindza uhlole)
		Kwati lusuku lwakho lwekutalwa (phindza uhlole)
	4.2 **Budze**	Kuhlukanisa emkhatsini wa lokudze kakhulu, lokufisha kakhulu. lokudze, lokufisha (lishadi lebudze)
Kusebenta Ngedatha	**5.1** **Gcogca ubuye uhlunge idatha**	Ukhona kugcogca, kuhlunga, kudvweba, kufundza nekuveta (hlatiya) tintfo ngebunjalo bato.
	5.2 **Veta tintfo letigcogcwe tahlungwa**	
	5.3 **Chaza ubuye ubike ngetintfo letigcogcwe tahlungwa**	

Liviki 21	**TIBALO TELIBANGA R ITHEMU 3** **Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• Ngenisa inshokutsi yenombolo- 5 **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku- 5. Bala uye phambili nasemuva kuye ku- 5. Bala ngenhloko 1-10 **Gcizelela kuhleleka kwetinombolo**: Bothishele upaka tintfo letintsatfu emgceni. Khomba entfweni yinye ngesikhatsi ubala kwekucala, kwesibili, kwesitsatfu. **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 5. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo tetinombolo nemilolotelo Imilolotelo yekubala neemaculo sib."Tingobiyane letisihlanu tizupha embhedeni". Tintfo le- 3	Lilanga -1
	Umnyakato Khutsata bafundzi kutsi babone inombolo -5 nge: - Kushaya tandla ka- 5. - Kutfola kutsi bangaki bafundzi eklasini labaneminyaka le -5.		

Liviki 21	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.16 **Tibalo tenhloko**	**Tibalo tenhloko** - Thishela ushaya tandla takhe ngalokunesigci abuye atishaye kancane kuveta inombolo sib. -5. Umfundzi kumele akhiphe inombolo yetibali lelingana ne (5) abuye abuye alikhombise. - Bafundzi bapaka tibali leti -5 emgceni babuye batibal. - Thishela ubuta loku: - Nguyiphi inombolo lefika ngembi kwe- 5? - Nguyiphi lefika ngemuva kwe- 4 njll. - Nangabe unemahhabhula la- 5 abuye alahle emahhabhula la. Utawusala namangaki emahhabhula? - Ngikhombe tingalo le -5. - Unatingaki tintwane enyaweni -1?	Tibali letisentfweni yekuphatsa	Lilanga -1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi batfutfukisa lwati lwetinombolo nge: - Kwenta inombolo- 5 ngelubumba lokudlala. - Kutfolela emacembe la- 5. - Kubala tintfo abuye aticatsanise netibali. - Kutfutfukisa lwati lwekubekeka kwenombolo ngekuvumela bantfwana ba - Bapake tibali letisihlanu nobe nobenguyiphi intfo ngendlela lehlukile sib.  Nangabe ubala, inombolo yetintfo ayitsikabetwa isayizi nobe kubekeka, nobe ngabe teluhlobo lunye. sibonelo: - Hlela tinkinobho le- 5, emapeniseli la- 5, emahhulahhubhu la -5, bafundzi la -5 njl. - Tibale ngeluhlelo lolwehlukile sib. Tibale ngekutendlala, tisedvutedvute, emgceni nobe tipakiwe	Lubumba nobe linhlama yekudlala Emacembe	

Liviki 21	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Tfutfukisa kufundza ngenhloko ubuye ukhutsate bafundzi kutsi bati inombolo yendlu yakubo, likheli nenombolo yelucingo lwakubo ngenhloko** Dlala imidlalo lefana na: - Thishela usho inombolo yendlu, likheli nobe inombolo yelucingo yemfundzi. Umfundzi lowo lokuyinombolo nobe likheli lakhe kumele aphendvule. - Nangabe kugcwaliswa irejista yalabakhona yhishela angabuta imibuto lefana: “ukhona yini umfundzi lonenombolo yelucingo 435-6256 namuhla?” “Ukhona yini umfundzi lohlala eMandela Drive 123 namuhla?” - Bafundzi basebentisa emakhadi lanetinombolo kupaka inombolo yetindlu nobe inombolo yelucingo ngekulandzelana nanobe kungnteki kahle. - Kulingisa umdlalo wekucocisana ecingweni lekudlala. Umfundzi ufonela umuntfu lobalulekile. Hlanganisa ne buciko bekuticambela (umdlalo) tukwe Makhono Ekuphila	Lenombolo yelucingo kufanele kube yinombolo yekuchumana nebatali nobe umbhasobhi kantsi futsi kungaba inombolo yamakhalekhikhini Irejista yalabakhona Likhadinombolo nobe inombolo lenkhulu lebhalwe kukhadi bhodi Lucingo lwekudlala	Lilanga -1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Thishela ukhomba bafundzi: - Tinhlobo letahlukene tetinsita lapho angatfola khona inombolo -5 sib. Emakhadi elusuku lwekutalwa, emaphephandzaba, bomagazini, emaflaya, njll. - Likhadi lelinemacashati la- 5 nelikhadi lelinetitfombe le- 5. - Yenta bafundzi bacatsanise likhadi letitfombe nemakhadi emacashati nangenombolo lefananako yetibali nobe. - Yenta iphazili yetinombolo lefaka ekhatsi inombolo -5 e.g. 	Emakhadi elusuku lwekutalwa Emaphephandzaba, emaphephabhukui Emakhadi lanemacashati la- 5 Emakhadi lanetitfombe le- 5 Tintfo Tibali 	

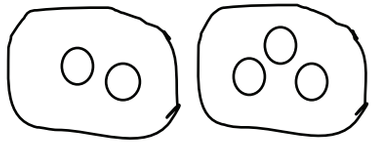
Liviki 21	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Kwati inombolo nekubona ligama lenombolo lelifaka ekhatsi inombolo -5** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku- 5 Bala uye phambili nasemuva kuye ku -5. Bala ngenhloko 1-10 **Umnyakato** - Liklasi lonkhe alihlale lente indilinga. - Hlela bantfwana ngetinombolo balandzele lephethini. 1, 2, 3, 4, 5. 1, 2, 3, 4, 5. 1, 2, 3, 4, 5. - Buta imibuto lefana na; “Ngubani lotakuba yinombolo lelandzelako 5? “Ngubani lotakuba yinombolo lelandzelako -4? - Uyicatulule njani lenkinga? - (Bafundzi bacatulula lenkinga ngendlela yekwenta yekucombela inombolo lelandzelako ngekubala uchubekele embili)	Emaculo nemilolotelo yetinombolo	Lilanga -1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Sebentisa emakhaditinombolo lafaka ekhatsi tinombolo -1 kuye ku-5. - Bafundzi bavala emehlo abo babuye batsintse inombolo lemele sihlanu ngetingalo tabo emkhatsini waletinye tinombolo. Niketa bafundzi tibali le -5 ngamunye netinkhomishi tepulastiki letimbili nobe tintfo letiphatsa emacandza. - Buta bafundzi: “tingaki tindlela letahlukene longahlela ngato letibali tibe kubo bhasikidi lababili?  nobe njll.	Emakhaditinombolo labambekako lanenombolo -5	

Liviki 21	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi ba: - Babona ifleshikhadi lelinetitfombe le -5. - Babona ifleshikhadi lelinemacashati la- 5. - Babona inombolo 5 lebekwe nobe ngakuphi eklasini. - Babona inombolo lesefleshikhadini. - Babona ligama lenombolo lelise fleshikhadini. - Bacatsanisa inombolo yetibali neligama letinombolo nenombolo ngekupaka sibali esitfombeni nelikhadi lemacashati ngalinye.	Emafleshikhadi lanetitfombe, inombolo neligama lenombolo- 5 **Tintfo longatibona longeke utibambe** 	Lilanga -1
3.4 **Umugca lohlukanisa emkhatsini kulingane kufanane**	• **Gcizelela umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako kuwe ngekwenta umnyakato lokhutsata kwengca umugca losemkhatsini** **Umnyakato** Bafundzi: - Badlala umdlalo “wekulandzela umholi” lapho bafundzi balingisa indlela yekuma leseshadini. - Badlala umdlalo“wekulandzela umholi” lapho thishela akhombisa indlela yekuma bese bafundzi.(faka ekhatsi iminyakato lapho bafundzi bengca umugcamkhatsi sib. Bamba lidvolo lesekudla ngesandla sesancele) - Badlala umdlalo “wekulandzela umholi” lapho umfundzi akhombisa indlela yekuma bese bonkhe lalabanye bayalingisa. - Thishela ukhombisa “kuzuba sankanyeti” abuye akhutsate bafundzi kwekutsi bente umnyakato lofanako **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** bafundzi: - Babeka ibhinibhegi esebuncele, esekudla, ngaphambili nangemuva kwemtimba wakhe. - Basebentisa sandla sakhe sebuncele ubuye ubeke ibhinibhegi ehlangotsini lesekudla lemtimba wakhe. - batelule bengce umugca losemkhatsini. - Baphindza umnyakato ngesandla sekudla. Hlanganisa lomsebenti nesifundvo sekutivocavoca lesiku Makhono Ekuphila		Lilanga 1 Ngemuvakwaloko ngalokuchubekako ngesikhatsi sekudlala lesikhululekile nangemisebenti yekukhulisa umtimba

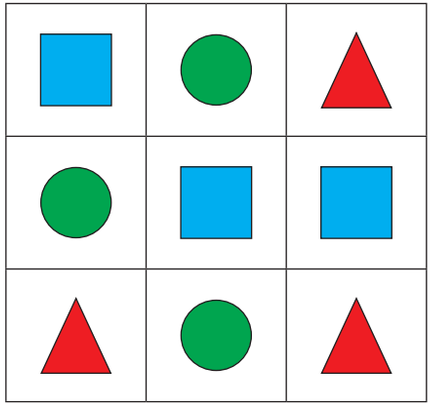
Liviki 21	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.2 **Budze**	• **Combela ubuye ukale budze betintfo letehlukene usebentise tinyawo, tandla, siceshana sentsambo, indvuku njll.** **Umnyakato** Bafundzi: - Bacatsanisa budze betinyawo netandla tabo. - Bafundzi bacombela kutsi nguyiphi intfo lendze nekutsi nguyiphi lemfisha ngekuwakala ngetinyawo nobe ngetandla tabo sib. Litafula nobe incenye yeliphayiphi lephukile lochamuke nayo ekhaya. - Bacombela kutsi nguyiphi intfo lendze kakhulu nobe lemfisha kakhulu sib. Sinyatselo nobe umugca wetitini. - Bafundzi abacombele kutsi ngukuphi lokutakuba kudze sib. Liklasi nobe lihhovisi labothishela? - Buta umbuto lofana na: “ngukuphi lokudze/lokudze kakhulu, ipeniseli nobe siceshana sentsambo?” njll.	Tintfo letinebudze lobuhlukene lokungakalwa ngesandla nobe lunyawo sib. Irula, litafula, umnyango, umugca wetitini, lipali linye lebhola yetinyawo, liklasi, umtfombolwati, njll.	Lilanga -1

Liviki 22	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfoliwe lolufaka ekhatsi inombolo -5** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku- 5. Bala uye phambili nasemuva kuye ku- 5. Bala ngenhloko 1-10 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka-5. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **Umnyakato** Khutsata bafundzi kutsi babone inombolo- 5 nge: - Kukhombisa iminwe le- 5 emoyeni. - Kutfola tintfo le -5 leti bovu, letiluhlata kwesibhakabhaka, letiphuti, letiluhlata. - Kutfola tintfo le -5 letibukeka njengendilinga, sikwele, calantsatfu. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi abatfutfukise lwati lwetinombolo nge: - Kutsatsa emabhuku la 5 ekhoneni lemabhuku - Kwakha sakhiwo lesidze kakhulu ngemakhiyubhi eyunifiksii la 5 nobe titini tekwakha.	Netinombolo temaculo nemilolotelo Sib. Imilolotelo yekubala netingoma sib. "1,2,3,4,5 ngaze ngabamba inhlati iphila" Tibali Emabhuku Emabhuloki ekwakha nobe emakhiyubhi langakahlangani	Lilanga -1

Liviki 22	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Sombulula tinkinga tetibalo ngemlomo (tibalo tetindzaba) ubuye uchaze tisombululo takho kuletinkinga tetibalo letifaka ekhatsi inombolo -5** **Umnyakato** - Bita bafundzi la -5 bete phambili. Sebentisa tikhwama le- 5. Yaba titulo ngalokulinganako emkhatsini walabo labasihlanu. - Susa situlo sinye. Nyalo aba letitulo kulabo labasihlanu. Munye umfundzi usala angenaso situlo. - Cala ku -5. Bala uye emuva. Cala ku- 3. Bala ufike ku -5. Cala ku- 1. Bala kuye ku -4 njll. **Lokubambekako usebentise tintfo te lmadayimenshini lamatsatfu (3-D)** **Tibonelo:** 1. Khombisa umuno -1 esandleni sakho sinye neminwe lemine kulesinye sandla sakho. Mingaki iminwe nangabe ihlangene? 2. Sam unemakokisi -4. Mpho umupha lelinye- 1. Unamangaki emakokisi Sam u-ma aphelele? 3. Tiny unematje la- 5 ubuye unikete onkhe ematje la- 5 ku Mia. Unamangaki ematje Mia? 4. Jan unemamabuli la -5 wase ulahlekelwa ngu -2. Usele namangaki emamabuli? 5. Likati linye linetindlebe letimbili. Emakati lamabili anetindlebe letingaki? 6. Liculo, “emabhodlela laluhlata lasihlanu lalengiswe ebondzeni, lagcina ngelicandza” (shano kutsi lamabhodlela ayancipha ngesibalo).	Tibali Timamabuli Liculo	Lilanga -1

Liviki 22	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Catsanisa kutsi ngutiphi tintfo letigcogciwe letiniketiwe letimbili letinyenti kuna, letincane kuna, kulingana na, kute kufike kunombolo- 5** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku- 5. Bala uye phambili nasemuva kuye ku -5. Bala ngenhloko 1-10 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 5. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **Umnyakato** - Thishela ubeka tintfo letehlukahlukene etafuleni, sibonelo, tinkomishi -2, le -5 letinemabhuloki lafananako, tikotela- 4, emabhuku -2. Bafundzi: - Ababale linani letinkomishi netikotela. Kukhona yini lokunyenti, ngabe tinkomishi nobe tikotela? - Bala linani yemabhuloki nemabhuku. Kukhona yini lokuncane, ngabe emabhuloki nobe emabhuku? Ngabe kunemabhuloki lamancane kunemabhuku? Ngabe kunemabhuloki lamanyenti kunemabhuku? - Babala emabhuku netinkomishi. Ngabe kunelinani letintfo letilinganako nobe cha?	Emaculo nemilolotelo yetinombolo Tinkomishi- 2, emabhuloki la -5 lafananako, tikotela- 4, emabhuku -2.	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Bafundzi bahlala ekhaphethini bese benta tikhehle letimbili ngensontfo - Thishela uniketa sicondziso sib. Bafundzi babeka tibali -2 esikhehleni sinye abuye ufake -3 kulesinye sikhehle. Ngusiphi sikhehle lesinakunyenti? Ngusiphi sikhehle lesinakuncane? - Thishela ubita bafundzi la -5 kutsi bête phambili. Ubeka inombolo yebuhlalu lehlukene etandleni tebafundzi ngamunye. - Ngusiphi sandla lesinakunyenti? - Ngusiphi sandla lesinakuncane?	Ticeshana letimbili tensontfo umfundzi ngamunye tibali leti 6 umfundzi ngamunye 	

Liviki 22	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Thishela ukhombisa emakhadi lamabili lanemacashati netitfombe lehlukene. - Bafundzi abacatsanise emakhadi netitfombe bese benta emacashati kuto babuye batfole lwati loku “nyenti kuna”, “lokuncane kuna” na “lokulingana na”.	Buhlalu Emakhadititfombe nemakhadi emacashati lafaka ekhatsi tinombolo- 1 kuye -5	Lilanga 1
2.1 **Emaphethini e-Jomethri**	• **Gcizelela kutsatsela iphethini leniketiwe** **Umnyakato** - Kusebenta ngemacembu bese nitsatsela iphethini leniketiwe sib. Umfundzi, situlo, Umfundzi, situlo - Bafundzi lababili, situlo sinye, bafundzi lababili, situlo sinye. - Gidza ngelunyawo lunye, gidza ngalolunye lunyawo, zupha uye phambili, zuba uye emuva	Bafundzi Titulo	Lilanga -1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Thishela utentela emaphethini asebentsa tibali netimbonyo temabhodlela sib. tibali, tibali, timbonyo temabhodlela, tibali, tibali, timbonyo temabhodlela. Bafundzi batsatsela lephethini. - Hamba kancane, kancane, ngekusheshisa. (Thishela ukhuluma abe ahamba) bafundzi batsatsela iphethini. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Hlukanisa bafundzi ngemacembu lasihlanu. Niketa licembu ngalinye titfombe tekwenta emaphethini. - Bafundzi batakhele emaphethini etitfombe basebentisa titfombe lebaniketwe tona sib. o liwolintji, lihhabhula, lihhabhula, liwolintji. o luvivane, luvivane, inyosi, inyosi. Lomsebenti ungahlanganiswa neBuciko Bekubona Wente lokutfolakala kuMakhono Ekuphila	Tibali Timbonyo temabhodlela Nobengutiphi titfombe letikhona sib. Dublikhetha tintfombe kute ucinisekise kutsi unaletanele.	

Liviki 22	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, tfola ubuye unike emagama abobunjwa labangemadayimenshini lamabili (2-D) eklasini nasesitfombeni** • **Gcizelela lwati lolutfolwe evikini le-6 lolufaka ekhatsi sikwele** Hlanganisa neSifundvo Sekutivocavoca lesikuMakhono Ekuphila **Umnyakato** - Dvweba sikwele enkhundleni yekudlala bese uvumela bafundzi kutsi bazuphe eceleni kwesikwele. Bafundzi abatsi: “ngizuba ecleni nesikwele– licala linye, emacala lamabili, emacala lamatsatfu, emacala lamane-onkhe emacala ngekufana” - Bafundzi bagobela inhloko etintwaneni etjanini/ phasi/ekhaphethini kwakha sikwele lesikhulu. - Emacembu ebafundzi awalale phasi ekhaphethini bese enta tikwele letincane. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - **Umdlalo:** thishela udvweba igridi enkundleni yekudlala. - Beka bobunjwa mbamba sib. Bobunjwa labamalogi, nobe titfombe letinabobunjwa ebhulokini ngayinye. - Thishela usho bunjwa. - Bafundzi baphosa ibhinibhegi ebhulokini lehambisana nabunjwa lobitiwe. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi kumele bahlukanise emkhatsini wemasayizi nemibala yetikwele letentiwe nguthishela. Bafundzi - Bona tikwele ngekwehlukana ngekwesayizi ngekusho kutsi ngutiphi tikwele letinkhulu kakhulu, ngutiphi letincane kakhulu, futsi ngutiphi tikwele letiyisayizi lesemkhatsini. - Bona imibala yetikwele letehlokene. **Hlunga tintfo ngabobunjwa, isayizi nembala** - Hlunga tintfo letitinhlobonhlobo ngekwembala nabobunjwa	Sikwele esiyilweni/ phasi  Ibhinibhegi tikwele -2letinkhulu telikhadibhodi sinye lesiluhlata kwesibhakabhaka nasinye lesilhhlata tikwele letincanyana temakhadibhodi le-2 sinye lesiluhlata kwesibhakabhaka nasinye lesiluhlata kwetjani (lokusemkhatsini) tikwele temakhadibhodi letincane kakhulu-2, sinye lesiluhlata kwesibhakabhaka nasinye lesiluhlata kwetjani	Lilanga 1

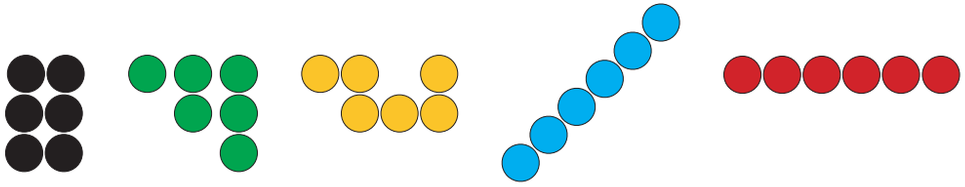
Liviki 23	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Kugcizelela lwati lolutfolile lolufaka ekhatsi letinombolo -1 kuye ku-5** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku- 5. Bala uye phambili nasemuva kuye ku -5. Bala ngenhloko 1-10 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 5. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **umnyakato** Asidlale umdlalo: - Thishela udlala umtjingo sib. Sigubhu. - Bafundzi bayahambahamba. - Nangabe sigubhu sithula, thishela ubita inombolo emkhatsini wa -1 ne- 5. - Bafundzi batihlela babe ngemacenjana lmancane sib. Thishela ubita -3 bese bafundzi batihlela ngemacembu -3.	Emaculo nemilolotelo yetinombolo Sigubhu	Lilanga- 1 Khetsa imisebenti lembalwa

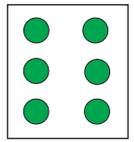
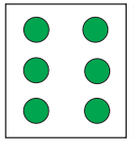
Liviki 23	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.6 **Emasu ekusombulula tinkinga tetibalo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Thisela ubeka incumbi yetintfo etafuleni. Bafundzi abacombele kutsi tngaki tintfo kulencumbi. - Tibale ngemuvakwesikhatsi. **Asidlale umdlalo:** Thishela wakha sitepisi setinombolo esiyilweni nobe phasi. Lenombolo lesesitepisini imele inombolo yendlu yalapho umfundzi ahlala khona. Thishela ukhetsa bafundzi asebentisa umlolotelo wekubala abuye anikete ticondziso letifana na: - Manini ecandzeni nobe nicale ngelicandza sonkhe sikhatsi. Veta kutsi licandza lisho kutsi akunalutfo nekutsi kubala kahle kahle kucala ku -1. - Bala ube uhanba ngasosonkhe sikhatsi. - Thishela utsi kumfundzi: “usendlini lengunombolo -2, nguyiphi inombolo leta ngemuva kwa- 2?” - Ticondziso letinye tingaba: “hamba uye endlini lengunombolo -3. Buyela emuva uye endlini lengunombolo -2. Hamba uyephambili endlini lengunombolo- 4.” - Thishela utsi: “ngisenombolweni ye -3, nguyiphi indlu lelandzela leyami?” - Hamba uye endlini lengunombolo -4. Hamba uyephambili udlule -1 inombolo. Hamba uye emuva ngetinombolo le- 2. - Mani emkhatsini wendlu lengunombolo -3 na -5.	0 1 2 3 4 5 Umlolotelo wekubala: 1, 2, 3, 4, 5, Ngingaze ngibambe inhlanti iphila 6, 7, 8, 9, 10 Ngase ngiyayiyekela yahamba	Lilanga- 1 Khetsa imisebenti lembalwa
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Sebentisa inombolo - 5 engcikitsini leyetayelekile** Kute utfutfukise kubamba/kukhumbula, khutsata bafundzi kutsi: - Babambe ngenhloko tinombolo telucingo lwabomake nabobabe wabo. - Babambe ngenhloko emakheli akubo. - Letinombolo telucingo kufanele tphindvwe ngesikhatsi kubukwa irejista yalabakhona malanga onkhe.	Inombolo yelucingo lwabomake nobe bobabe nemakheli asemakhaya	Lilanga -1

Liviki 23	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Kwakha tintfo letingemadayimenshini lamatsatfu (3-D) usebentisa tinsita letiphatsekako** - Bafundzi abakhe basukela esibonelweni sathishela. Uniketa lesicondziso lesilandzelako: - Yakha sakhiwo lesidze kakhulu lesifana nesami. - Yakha sakhiwo lesifisha kunesami - Yakha sakhiwo lesidze kunesami. - Bafundzi abatakhele sabo sakhiwo ngekutsatsela esakhiweni lebanikwe sona lesisibonelo.	Emabhuloki ekwakha/emabhuloki eLego emathulusi ekwakha.	Lilanga- 1 Kuyachubeka
3.1 **Kubekeka, kutetayeta nekubukeka**	**Landzela ticondziso kute unyakate nobe ume endzaweni letsite (Inkhombaphi)** • **Kutfutfukisa lwati lwetinkhombandlela ngekwetfula kokubili lokuphatselene na "embili nasemuva"** **Umnyakato** - Njengobe singeniso, sicinisekisa lwati lolutfolakele evikini le- 8.		Lilanga- 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Dvweba indilinga, calantsatfu nobe sikwele esicheshini seliphepha bese ukubeka esiyilweni/ekhaphethini. Bafundzi: - Abashove imoto yekudlala eceleni nemigca bese ubavumela uvumela bakutjele kutsi imoto iya ngakuphi (embili nasemuva, esancele nesekudla usbentisa umkhono wakho kuhomba sancele nesekudla)	Bobunjwa labakhulu labadvwetjiwe esiceshini seliphephe lemoto yekudlala Lithoyisi lemoto	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Bafundzi abasebente/abati ngalamagama embili/emuva ngekukhomba Inkhombandlela etitfombeni sib. Lapho kuyangakhona imoto, lapho umuntfu aya/ acondze ngakhonathe.	Titfombe letikhomba tinkhombandlela ngendlela lecacile sib. Lapho kuyangakhona imoto, lapho umuntfu acondze khona.	

Liviki 23	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tekufundza) emaminithi ± 30 ngelilanga (± 5 lmisebenti yeTibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.2 **Bubze**	**Catsanisa ubuye uhlele tintfo ngendlela yekusebentisa tintfo letiphatsekako usebentisa silulumagama lesifanele kuchaza budze** • **Combela budze betintfo letehlukene** **Umnyakato** - Bafudzi batihlela kusukela kulomfisha kakhulu kuye kulomudze kakhulu. Catsanisa budze babo nebudze bebangani babo. - Dlala umdlalo “wekulandzela umholi”. Lomudze kakhulu wenta umnyakato ngesikhatsi labo labangemuva balingisa. Gucula lomugca wonkhee kute lomfisha kakhulu abe ngumholi. - Bafundzi abacatsanise tandla netinyawo tabo kute babone kutsi ngutiphi letindze kakhulu/letimfisha kakhulu. Combela ubuye ukale: - Bafundzi bacombela kutsi nguyiphi intfo lendze nekutsi nguyiphi lemfisha sib. Budze belitafula nobe siceshana sentsambo. - Combela kutsi nguyiphi intfo lendze kakhulu nobe lemfisha kakhulu sib. Ipeniseli nobe emakhilayoni emafutsa. - Bafundzi abacombele kutsi nguyiphi intfo letawuba yindze sib. Timunyo-2 tilaliswe tahlangana ngetihloko nobe emaphini ekufasa emaphephe. - Buta umbuto lofana na: “Ngukuphi lokudze/lokudze kakhulu, ipeniseli nobe siceshana sentsambo?” njll. - Ngusiphi situlo lesikhashane kakhulu nelideski lathishela? - Mangaki emapeniseli langenela licala lelidze lelideski lathishela? - Udzinga tinyatselo letingaki kute ufike emnyango? - Tingaki tikhwakhwa temetjiso, letigcwele Isanti, letitawugcwalisa lelibhokisi? - Tingaki tinkomishi temacandza letigcwele emanti letingagcwalisa leglasi? - Naba bafundzi labane netitulo letintsatfu. - Sidzinga kwengeta ngatingaki titulo?	Tintfo letinebudze lobuhlukene: Emapeniseli, emakhilayoni emafutsa, siceshana sentsambo (legocene), litafulu, emabhuku, tindvuku tekumunya, emaphini ekufasa emaphepha (lalulwe nalagocekile) njll.	Emalanga 2 nobe khetsa imisebenti lembalwa

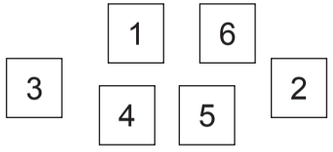
Emaviki 24	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –umsebenti lohleliwe weliklasi (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita Letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Ngenisa inshokutsi yenombolo -6** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kufike ku -6. Kubala uye phambili nasemuva kuye ku- 6. Kubala ngenhloko 1-10 **Gcizelela tibalo te-odinali:** Thishela upakisha tintfo emgceni. Ukhomba entfweni ngayinye ngalesikhatsi abala kunye, kubili, kutsatfu **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 6. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **Umnyakato** Bafundzi: - Babala kasitfupha ube ugibala titepisi. - Badvweba inombolo- 6 esantini bese uhamba /uyazuba/ intsambo/uyazuba ngemlente munye - Bashahaya tandla kasitfupha. - Babona tinombolo -1 kuye ku -6 ngemasethi etimphawu tetinombolo letinkhulu. - Bapaka inombolo yendlu nobe tinombolo telucingo lwakubo ekhadini lelinenombolo lenkulu.	Emaculo nemilolotelo yetinombolo Yenta lisethi lakho letimphawu, letingabanjwa bantfwana. Batawufundza ngenombolo yeminyaka yabo, inombolo yeflethi/indlu, inombolo yelucingo nobe yebafundzi nalokunye. Isethi yetinombolo lefanako ingasetjentiswa kubona tinombolo neku hlela kulandzelana kwetinombolo.	Lilanga -1

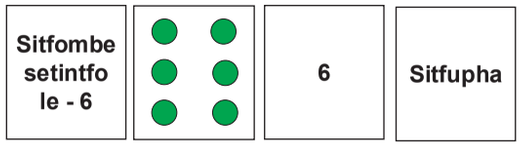
Emaviki 24	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –umsebenti lohleliwe weliklasi (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita Letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Kubala tintfo eklasini. Bafundzi abente loku: Buta bafundzi loku lokulandzelako: - Nguyiphi inombolo leta emva kwa kutsatfu, nguyiphi inombolo lelandzela -5 njll? - Thishela ubeka tintfo letiphatsekako encunjini etafuleni .Bafundzi abacombele kutsi tingaki tintfo letisencunjini, tibale ngemuva kwaloko. - Tfutfukisa lwati lwekubeka tinombolo ngekutsi bafundzi bapake tibali letisitfupha nobe letinye tintfo ngetindlela letehlukene sib.  Nangabe kubalwa,inombolo yetintfo ayitsikabetwa yizi yayo,nobe kubekeka nobe ngabe tiluhlobo lolufanako tiyefana.Sibonelo: - Hlela emakinobho la-6, emapeniseli lasi- 6, emahhulahhubhu la- 6, bafundzi la-6 njll. - Tibale ngeluhlelo lolwehlukile sib.tibale ngekutisakata, tisondzelene ndzawonye, tisemgceni nobe tilekene. Yehlukanisa bafundzi ngemacembu lasitfupha.Nika licembu ngalinye emabhuloki la-6 ekwakha. Emacembu: - Abala emabhuloki abo. - Akha sakhiwo lesiphakeme kakhulu lesinemabhuloki la- 6. Khutsata bafundzi kubala “lamabhuloki” njengobe bakha sakhiwo lesiphakeme kakhulu. - Thishela uhamba ecenjini ngalinye alebule sakhiwo ngelikhadi nombolo. Bafundzi babala takhiwo letiphakeme kakhulu kutsi tingaki. Kuphindze kanynti loku. - Khetsa umfundzi lotawuphosa lidayizi.Cinisekisa kutsi bonkhe bafundzi batalibona lelidayizi. Bafundzi babala inombolo yemacashati bese bakhomba sakhiwo lesakhiwo lesiphakeme kakhulu lesihambelana nenombolo yemacashati.	Tintfo letiseklasini naletisendzaweni letsite. Sebentisa tinsita letehlukene letitakunika umbono wekusetjentiswa kwemasu lehlukene. Emabhuloki la-6 ekwakha umfundzi ngamunye.	Lilanga -1

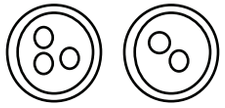
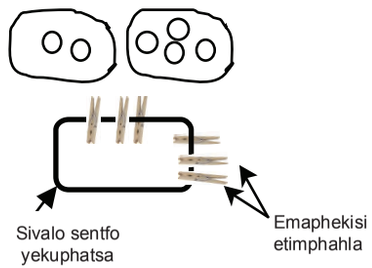
Emaviki 24	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –umsebenti lohleliwe weliklasi (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita Letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	**Yati inombolo ubuye ubone emagama etinombolo lafaka ekhatsi inombolo -6** **Temlomo:** Babala tintfo letisetjentiswa malanga onkheonkhe kuye ku- 6. Bala uye phambili nasemuva kufike ku -6 **Gcizelela lwati loluphatselene na "lokunyenti nalokuncane".** Shaya tandla kanyenti …… yekela/mani Shaya tandla ngesikhatsi lesincane. Thishela ushaya tandla ka -6. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **Umnyakato** - Dvweba inombolo- 6 phasi/esiyilweni bese bafundzi bahamba eceleni kweyo. - Dvweba inombolo- 6 esantini; emoyeni. - Yakha lenombolo-6 ngelubumba. - Bafundzi abacombele kutsi bangaki bafundzi labatawudzingeka kute bakhe inombolo 6 ngemitimba yabo. Bakha inombolo- 6 ngemitimba yabo. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Beka incumbi yetintfo etafuleni. Dlala ngetinombolo -1 kuye ku- 6 sib. - Bafundzi abacombele kutsi tingaki tintfo letikhona. - Bala letintfo.	Emaculo nemilolotelo yetinombolo Tintfo le-6	Lilanga -1
	Lokubonakalako ungeke ukuphatsa usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Bona inhlanganisela yemakhadigama lanetitfombe leti 6 kuwo uwahlobanise netinombolo tetibali. - Khombisa emakhadigama lanetitfombe leti 6 bese utihlobanisa netinombolo temacashati netibali. - Khombisa emakhadi emacashati lasi 6 lahambisana neluphawu lwenombolo kanye netibali letilingana naleyo nombolo. - Kutfola emakhadi tinombolo emagama etinombolo lletinelinani letibalilelifanako.	Emafleshikhadi etitfombe nemacashati lafaka ekhatsi lenombolo-6 Sib. **Sitfombe setintfo leti-6**  Tibali nobe tintfo letingemadayimenshini lamatsatfu (3-D) **Sitfombe setintfo le - 6**  **6** **Sitfupha**	

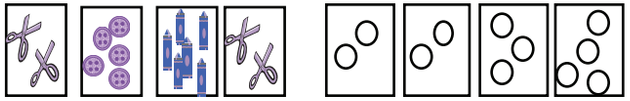
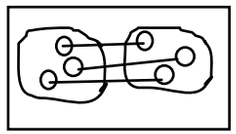
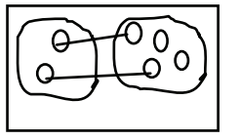
Emaviki 24	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –umsebenti lohleliwe weliklasi (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita Letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	**Sombulula tinkinga tetibalo tekuhlanganisa nekususa letetfulwe ngemlomo netim-phendvulo letifika ku-6** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkheonkhe kuye ku -6. Bala uye phambili nasemuva kuye ku -6 Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane. **Umnyakato** **Tibonelo:** 1. Thishela ubita bafundzi la -3 bete phambili abuye abite labanye bafundzi la-2 bese ubuta umbuto. Bangaki bafundzi bangaki labafundzi nangabe bahlangene? Ku- 3 na -2 →5. (thishela utsi: 3 na -2 kwenta-5) 2. Thishela upaka titulo leti -2. Ungeta ti-2. Kunatingaki titulo nyalo? 2 na-2 →4 3. Thishela uphakamisa sinye sandla. Bese utsi:"Balani iminwe yami.Nangabe ngifihla sitfupha, mingaki iminwe leniyibonako? 5 ususe 1→ 4. 4.Bafundzi ababale iminwe yabo kusinye setandla tabo.Fihla sitfupha sakho; Mingaki im-inwe loyibonako? Fihla sitfupha sakho; Mingaki iminwe loyibonako? 5 ususe 1→ 4	Emaculo nemilolotelo yetinombolo Bafundzi Titulo	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi bapaka tibali le-6 bese benta loku: • Thishela unika umfundzi ngamunye tibali leti -6. • Thishela unika ticondziso bese bafundzi bayenta sib. Paka tibali le-2, ngeta - 3 yetibali. • Tingaki nasetiphelele? 2 na -3 → 5. • Kubala tibali le-4. Bala wengete 2 usukele kukune.Unatingaki nyalo? -4 na -2 → 6. • Bala bonkhe buhlalu lonabo. Nangabe umbonya buhlalu lobubili ngesandla sakho, Bungaki buhlalu lobubonako? 6 ususe 2 → 4	Buhlalu nobe tibali	

Emaviki 24	Sikhatsi lesiphakanyisiwe sekufundzisa: Thishela munye –umsebenti lohleliwe weliklasi (tikhatsi tetifundvo) ± 30 emaminithi ngelilanga (± 5 lmisebenti yetibalo ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita Letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	• **sombulula tinkinga tetibalo temgama ngemlomo lokufaka ekhatsi inombolo-6** **Temlomo:** Kubala tintfo letisetjentiswa malanga onkheonkhe kufike ku- 6. Bala uye phambili nasemuva kuye ku- 6. **Gcizelela lwati loluphatselene na "lokunyenti nalokuncane".** Shaya tandla kanyenti …… yekela/mani Shaya tandla ngesikhatsi lesincane. Thishela ushaya tandla ka -6. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo nemilolotelo yetinombolo	**Lilanga- 1**
	Tintfo letibambekako usebentise tintfo temadayimane lamatsatfu (3-D) **Sibonelo:** 1. Mpho emakukisi la-4 .Peter umngetela nga- 2. Unamangaki emakukisi Mpho nangabe aphelele? 2. Bongi unemidoli lemi-3 naMartha unalemi-2. Ngubani lonaleminyenti? Minyenti ngamingaki imidoli yaBongi kunaleyo yaMartha? 3. Kunetinyoni leti -5 efenisini. Le-2 taphapha. Kusele tingaki? 4. Patrick unemathoyisi etimoto la-6.Tiny una- 4. Mancane ngamangaki emathoyisi etimoto lekanawo Tiny kulawo lana Patrck? 5. Umntfwana munye unemphumulo yinye. Bantfwana labatsatfu bana..... 6. Umntfwana munye unetinyawo letimbili. Bantfwana labatsatfu bana..... 7. Umntfwana munye unemikhono lemibili. Bantfwana lababili bana..... 8. Umntfwana munye unemlomo munye. Batfwana lababili bana.....	Tibali Sebentisa tinhlobonhlobo tetinsita kuniketa umbono wekusebentisa emasu lahlukene.	
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	• **Yakha sakhiwo lesingemadayimenshini lamatsatfu (3-D)ekhadini lalokucambile/lesitfombe** **Bafundzi:** - Bakha sakhiwo basisusela kulabakucambile nobe esitfombeni. - Bafundzi bafaka buhlalu entsanjeni ngekulandzelana kwabo esitfommbeni lesinikiwe.	"Bobunjwa beLogi"nemakhono emabhuloki " Nobe ngabe nguwaphi emathulusi ekwakha Buhlalu, tintsambo teticatfulo tinhlobonhlobo temakhadi letikhomba kulandzelana kwebuhlalu.	

Emaviki 25	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –utawuhola umsebenti waseklasini lohlelekile (iringi) ± 30 emaminithi ngelilanga (± 5 Emisebenti Yetibalo)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele evikini le-24 lolufaka ekhatsi tinombolo-6** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe letifike ku- 6 Bala uye embili nasemuva kufike ku- 6 Bala ngenhloko 1-10 **Gcizelela lwati loluphatselene na "lokunyenti nalokuncane".** Shaya tandla kanyenti …… yekela/mani Shaya tandla ngesikhatsi lesincane. Thishela ushaya tandla ka -6. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo nemilolotelo yetinombolo	Lilanga -1
	Umnyakato Asidlale umdlalo: Thishela ubeka phasi libhokisi lelikhulu labobunjwa labatinombolo nobe emakhadi lafaka ekhatsi tinomblo- 1kuye ku -6 ngekulandzelana kwato. Thishela unika bafundzi ticondziso letifana naleti: - Hlala enombolweni ye- 6 - Beka tintwane enombolweni- 3 - Gijima utungelete inombolo-2 katsatfu. - Zuba ngelunyawo lunye enombolweni- 1. - Thishela utawubese usakata emakhadi etinombolo bese unika ticondziso letifana naletingetulu.	Isethi yelibhokisi lelikhulu lelilikhadinombolo Ungabuye uwapende emaplastikini lacinile nobe ebhokisini 	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) **Bafundzi:** - Bala tintfo eklasini letifaka ekhatsi tinombolo-1 kuye ku -6. - Thishela ubeka tintfo tibe yincumbi etafuleni. Bafundzi bacombela kutsi tingaki tintfo letisecunjini.Tibale ngemuva kwaloko.		

Emaviki 25	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –utawuhola umsebenti waseklasini lohlelekile (iringi) ± 30 emaminithi ngelilanga (± 5 Emisebenti Yetibalo)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Bona ubuye utfole inombolo neligama lenombolo lelifaka ekhatsi inombolo- 6** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku -6 Bala uye phambili nasemuva kuye ku- 6. **Gcizelela lwati loluphatselene na "lokunyenti nalokuncane".** Shaya tandla kanyenti …… yekela/mani Shaya tandla ngesikhatsi lesincane. Thishela ushaya tandla ka -6. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo nemilolotelo yetinombolo	Lilanga -1
	Lokubonakalako ungeke ukuphatsa usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Khomba bafundzi emafleshikhadi lnemacashati lasitfupha bese uwachumanisa netibali letilingana nawo. - Kudlala imidlalo yekutfola inombolo letsite emkhatsini waletinye bese uyichumanisa netibali letilingana nayo. - Kudlala imidlalo ngekuchumanisa inombolo yetibali nemagama etinombolo, inombolo nemakhadititfombe. - Tsatsisela inombolo -6 ngelikhilayoni **Temlomo:** Babala tintfo letisetjentiswa malanga onkheonkhe kuye ku -6. Bala uye phambili nasemuva kufike ku -6 **Gcizelela lwati loluphatselene "lokunyenti nalokumbalwa".** Kushaya tandla emahlandla lamanyenti …MANI Kushaya tandla tikhatsi letimbalwa.Thishela ushaya tandla kuye etikhatsini leti 6. Buta imibuto kutsi ngukuphi kushaya lokube manyenti/nalakabemancane	Tintfo nobe tibali Emafleshikhadi lanetimphawu nemagama etinombolo Sib.  	

Emaviki 25	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –utawuhola umsebenti waseklasini lohlelekile (iringi) ± 30 emaminithi ngelilanga (± 5 Emisebenti Yetibalo)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Hlela ubuye ucatsanise tintfo letigcogciwe usebentisa “lokunyenti kuna / lokuncane kuna” lokulingana na” kuye ku- 6.** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe kuye ku-6. Bala uye phambili nasemuva kufike ku- 6 **Gcizelela lwati loluphatselene na “lokunyenti nalokuncane”.** Shaya tandla kanyenti …… yekela/mani Shaya tandla ngesikhatsi lesincane. Thishela ushaya tandla ka -6. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane Asidlale umdlalo: Thishela ubeka likhabhodi lelikhulu labobunjwa nobe emakhadi etinomblo 1kuye ku-6ngekuhleleka kwato esiyilweni.	Emaculo nemilolotelo yetinombolo	Lilanga 1 Khetsa imisebenti lembalwa
	Umnyakato - Thishela ubeka emahhulahhubhu lamabili phasi - Ubita bafundzi la-3 kutsi beme esidlekeni sinye nebafundzi la-2 kulesinye sidleke.”sikhehle” - Ngusiphi “sikhehle” lesinebafundzi labanyenti.?	2 emahhulahhubhu 	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Bafundzi bahlala ekhaphethini bente“tidlekeletimbilin ngesontfo . - Thishela uniketa ticondziso sib.Bafundzi babeka tibali leti- 2 “esidlekeni” sinye “sib. Bafundzi babeka tibali leti- 2 “esidlekeni” sinye naleti- 4 kulesinye “sidleke”(letimbalwa) ?Ngusiphi sidleke lesina tinyenti/letimbalwa? - Phindza usebntise tinombolo kufike ku -6. - Thishela usebentisa sivalo se ayisikhilimu. Ufasa timphahla leti -3 ecaleni lelisetulu lesivalo netimphahla leti -3.Wafasa- 3 timphahla ngemapegs ngakulicele lesekudla. - Nguyiphi inombolo yemapegs lenyenti kunalenye nobe tiyalingana. Bafundzi bangalingisa lomsebenti emacenjini licembu ngalinye libe nesivalo salo nemaphekisi etimphahla.	2 insontfo umfundzi ngamunye elearner Tibali  	

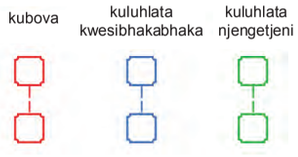
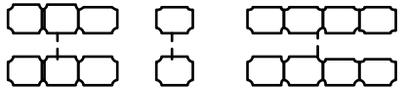
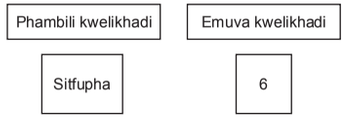
Emaviki 25	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Thishela munye –utawuhola umsebenti waseklasini lohlelekile (iringi) ± 30 emaminithi ngelilanga (± 5 Emisebenti Yetibalo)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Thishela ukhombisa emakhadi lanetinombolo letehlukene temacashati nobe titfombe kuwo.  - Bafundzi bacatsanisa emakhadi etitfombe nemacashati batfole kutsi nguwaphi lamanyenti kuna nalamanyenti kuna nalokuncane “kuna nalokulingana” nelwati lokukhulunywa ngalo. - Bafundzi badvweba tikhehle letimbili esiceshaneni seliphepha. Ngekuniketwa ticondziso batawupaka bachumanise tibali kuleso naleso sikhehle ngelikhilayoni Tfutfukisa umcondvo kwaba ngalokulinganako sib.  - Gcogca tinombolo letiphelele ngetimphendvulo letifaka umphumela sib. 	Titfombe nemakhadi emadothi. Liphepha le-A4 nemakhilayoniemafutsa Tibali	Lilanga 1 Khetsa imisebenti lembalwa
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, utfole ubuye utfole bobunjwa labangemada-yimenshini lamabili (2-D).** • **Yenta ubuye ucedzise iphazili yakho lebala ngaku-5** Bafundzi: - Badvweba sitfombe seliphepha le-A4. - Thishela udvweba imigca ngemuva kwencwadzi yemfundzi. - Umfundzi ujuba sitfombe sakhe emigceni leniketiwe. - Umfundzi ucedzela iphazili yakhe.	Emakhilayoni Liphepha le -A4 Tikelo  Imvilophu nobe sikhwama laba tentele sona Kute bafake iphazili (goca liphepha le- A4 ufake sinamatselisi emaceleni alo)	Lilanga -1

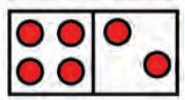
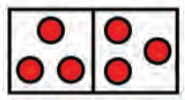
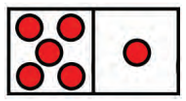
Emaviki 25	Sikhatsi lesiphakanyisiwe sekufundzisa: Thishela munye –utawuhola umsebenti waseklasini lohlelekile (iringi) ± 30 emaminithi ngelilanga (± 5 Emisebenti Yetibalo)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
5.1 **Gcogca ubuye uhlunge**	• **Inombolo yetinhlavu emagaeni ebafundzi** **Kucatulula tinkinga tetibalo: Nika bafundzi inkinga:** “Ngabe emagama lanetinhlavu letisitfupha avamile yini? Singatfola njani ? **Gcogca idatha** - Bafundzi babala inombolo yetinhlavu letisemagameni abo basusela egameni lelebli leyentiwe nguthishela. - Bafundzi babamba likhadinombolo lelihambisana nenombolo yetinhlavu letisegameni lemfundzi abuye ababute: Ngubani lonetinhlavu leti 4 egameni lakhe bese uphakamisa likhadi lelineluphawu lwenombolo? Phindza loku ngato tonkhe tinombolo.		
5.2 **Veta lugcogco lwetintfo letihlungiwe**	**Dvweba igrafu** - **Thishela udvweba lelithebuli lelandzelako abe aphakamisa tinombolo:**		

Tinhlavu 3	Tinhlavu 4	Tinhlavu 5	Tinhlavu 6
Ann Sam	Kady Mark Maja	David Aidon Sarah Caleb Naila	Sophie Jessie
2	3	5	2

5.3 **Coca ubuye ubike ngelugcogco lwetintfo letihlungiwe**	**Kufundza nekuhumusha igrafu** **Kufundza nekuhumusha lithebuli** - Nguyiphi inimbolo levela kanyenti kuletinombolo tetinhlavu teligama. - Mangaki emagama lanetinhlavu letingetulu kwa 5? Emagama lamabili lanetihlavu letisitfupha. - Mangaki emagama lanetinhlavu letimbalwa kunaleti 5? Emagama lamatsatfu		

Liviki 26	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele lolufaka ekhatsi tinombolo -1 kuya ku -6** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku- 6. Bala uye phambili nasemuva ufike ku- 6. **Gcizelela lwati loluphatselene na "lokunyenti" "lokuncane"** Shaya tandla kanyenti...MANI Shaya tandla tikhatsi letincane. Thishela ushaya tandla kasitfupha. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **Umnyakato** Bafundzi: - Abakhe tinombolo ngemitimba yabo. - Abaphakamise iminwe njengekusho kwathishela. - Abakhe tinombolo ngetintsanjana nobe inhlama yekudlala - Ababambe bobunjwa betinombolo labakhiwe ngekhadibhodi labasesikhwameni bese basho inombolo ngayinye - Ababhale tinombolo 1 kuya ku-6 emhlabatsini nobe emoyeni njll	Emaculo nemilolotelo yetinombolo Emasethi lamabili abobunjwa betinombolo labakhiwe ngekhadibhodi letifakwe esikhwameni sekubamba beve.	Lilanga -1

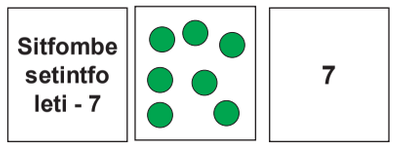
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Ababale tintfo eklasini letifaka ekhatsi tinombolo -1 kuye ku -6 - Ababale tibali letifika kunombolo -6 - Ababeke emakhiyubhi lambalwa eyunifiksi emgceni etukwelitafula - Abamatanise lamakhiyubhi ngembala basebentisa lamanye emakhiyubhi eyunifiksi nobe tibali. Sibonelo:  - Abakhe tincumbi letinebudze lobehlukene. Bafundzi bamatanisa ngekwelinani 	Tintfo eklasini Tibali letinemibala nobe emakhiyubhi eyunifiksi	Lilanga -1
1.3 **Timphawu nemagama etinombolo**	• **Wati tinombolo abuye abone emagama etinombolo letifaka ekhatsi inombolo -1 kuye ku -6** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -6 Bala uye phambili nasemuva ufike ku -6 **Gcizelela lwati loluphatselene na "lokunyenti" "lokuncane"** Shaya tandla kanyenti...MANI Shaya tandla tikhatsi letincane. Thishela ushaya tandla kufike ku-6 **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Asidlale umdlalo: - Thishela ubhala ligama lenombolo kulinye licale abhale inombolo kulelinye licala lokufaka ekhatsi tinombolo 1kuye ku- 6. (yenta emasethi lambalwa) - Bafundzi "bafundza" emagama etinombolo bese bacombela tinombolo. - Baguculela likhadi bese bayatilungisa.	 Emakhadi lafaka ekhatsi tinombolo 1-6 neligama lenombolo kulelinye licele nenombolo kulelinye licele (Enta emasethi lambalwa kute umntfwana ngamunye abe nelikhadi lakhe)	Lilanga -1

Liviki 26	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Sombulula tinkinga tetibalo temagama ngemlomo (tibalo tetindzaba) engcikitsini bese uchaza tisombululo takho letifaka ekhatsi inombolo- 6** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -6 Bala uye phambili nasemuva ufike ku- 6 **Gcizelela lwati loluphatselene na "lokunyenti" "lokuncane"** Shaya tandla kanyenti...MANI Shaya tandla tikhatsi letincane. Thishela ushaya tandla kasitfupha. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo nemilolotelo yetinombolo	Lilanga -1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) 1. Niketa umfundzi ngamunye liphepha le-A4 lelinemugca lodvwetjwe wacondza/ wabheka etulu netibali leti -6 sib.  2. Bafundzi abaphose tibali ngekucophelela etukweliphepha bese bacchaza kutsi tiwe njani tibali, sib:  4 na - 2 → 6 (4 na- 2 kwenta -6)  3 na - 3 → 6 3. Phindza wente ngetinombolo 1 kuye ku- 5.  5 na - 1 → 6 4. **Kusombulula tinkinga tetibalo:** Chaza tisombululo takho tetinkinga tetibalo. 5. Enta lokufananako ngetinkinga tetibalo tekususa	Tibali leti -6 temfundzi ngamunye Emaphepha e-A4 lanemugca locondzile/ lobheke utulu	

Liviki 26	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.4 **Umtsamo nebungako**	• **Kungenisa lwati lwesilinganiso semtsamo ngekucatsanisa kutsi tintfo tekutsela letahlukahlukene ticukatsa lokungakanani, sib:** - **“Akunalutfo/ kugcwele”** - **“Kunyenti kuna/ kuncane kuna”** - **“Kunyenti, kuncane”** Ngenisa umtsamo kubafundzi ngekubabuta kutsi nguyiphi intfo yekuphatsa lephatsa lokunyenti. Esikhatsini lesinyenti bafundzi bacatsanisa budze kunemtsamo. Sibonelo, nangabe ubutwa kutsi ngukuphi lophatsa lokunyenti, intfo yekuphatsa lendze nobe lemfisha, bafundzi labanyenti batawukhetsa lendze nanobe lelemfisha iphatsa lokusamanti lokunyenti. **Umnyakato** “Kunyenti kuna/ kuncane kuna” - Sebentisa intfo yinye yekuphatsa njengesilinganiso, sib: inkomishi yeyogathi. Niketa bafundzi tintfo tekuphatsa letehlukene. Bafundzi: - Abatfole kutsi nguyiphi intfo yekuphatsa lephatsa lokunyenti nobe lephatsa lokuncane, sib: inkomishi yeyogathi.Nguyiphi intfo yekuphatsa lenkhulu? Nguyiphi intfo yekuphatsa lencane? Nika bafundzi sipunu nelibhakede lelinesanti kute bakhe lsanti bayifake enkomoshini. Bafundzi: - Babala kutsi tingaki tipunu tesanti latidzingako kute agcwalise inkomishi. Lokufundza ngekulinga kungaba matima nangabe bafundzi banganiketwa tintfo tekuphatsa letinyenti, sib: inkomishi, ingilazi yepulasitiki nentfo yekuphatsa lencane. - Phindza lomsebenti usebentisa tinkomishi	Emanti (ngesikhatsi semdlalo wemanti) nesanti (ngesikhatsi semdlalo wesanti emgodzini wesanti) tindzawo letikahle tekutfutfukisa lwati lwemtsamo. Tintfo tekutsela letehlukene ngesimo nangesayizi Inkomishi yeyogathi Libhakede lelinesanti Inkomishi Sipunu	Lilanga -1 Khetsa umsebenti munye nobe lemibili kuphela

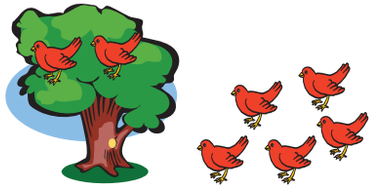
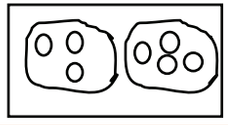
Liviki 26	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Uchaza tintfo letimbili nobe letinyenti temadayimenshini lamatsatfu (3-D) letinebudlelwane** • **Indzawo yetintfo letimbili nobe letengca kuletimbili natihambelana naletinye** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** **Umsebenti webhodi yemaphekisi:** Umfundzi akacale asebentise sandla sekudla abuye asebentise sesancele bese usebentisa totimbili tandla kufaka emaphekisi ebhodini. - Thishela utjela bafundzi kutsi bawafake kuphi emaphekisi, sib: Emgceni longetulu Emgceni longentasi Emgceni losemkhatsini Emkhatsini *Bafundzi:* - Bakha bobunjwa ebhodini yemaphekisi basebentisa emaphekisi lanembala - Thishela wakha iphethini lelula asebentisa emaphekisi ebhodini yakhe yemaphekisi bese bafundzi batsatsela lephethini yakhe bayenta kumaphegibhodi abo. - Bafundzi batsatsela iphethini leyentiwe ekhadini lelinephethini ledvwetjiwe	Iphegibhodi yemfundzi ngamunye nobe basebenta ngemacembu Likhadi lelidvwetjwe iphethini  Iphegibhodi yemfundzi ngamunye nobe basebenta ngemacembu Likhadi lelinephethini ledvwetjiwe	Lilanga- 1

Liviki 27	Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Ngenisa inshokutsi yenombolo- 7** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku- 7 Bala uye phambili nasemuva ufike ku -7 Bala ngenhloko 1-10 **Gcizelela kubala loku-odinali:** Thishela upaka tintfo le -3 emgceni. Khomba intfo yinye nawubala, kwekucala, kwesibili, kwesitsatfu, kwesine. **Gcizelela lwati loluphatselene na "lokunyenti" "lokuncane"** Shaya tandla kanyenti...MANI Shaya tandla tikhatsi letincane. Thishela ushaya tandla kayinkhotsa. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane **Umnyakato** - Thishela uhlukanisa bafundzi ngemacembu. Niketa licembu ngalinye emabhola la -7 lentiwe ngeliphephandzaba. - Bafundzi abaphose emabhola emantjini. Bafundzi kufanele babale baphimisela nabaphosa emabhola - Babala kutsi thishela ushaye kangaki etafuleni bese bayakopa lakwentako - Bala ngesikhatsi uhambisana nesigci ngalesikhatsi bafundzi behla titepisi, bazuba ngelunyawo lunye bangena, baphuma kumahhulahhubhu. - Shaya ngelunyawo phansi ulandzela sigci lesetayelekile.	Emaculo nemilolotelo yetinombolo Emabhola lakhiwe ngemaphephandzaba Timantji	Lilanga -1

Liviki 27	Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Thishela ubeka incumbi yemabhuloki ekwakha emkhatsini wesiyilo. Uniketa ticondziso letifana naleti: - Tsatsa emabhuloki lamatsatfu kulencumbi - Tsatsa emabhuloki lamatsatfu bese uyawabeka futsi njll. - Thishela ubeka tintfo encunjini etulu kwelitafula. Bafundzi bacombela kutsi tingaki tintfo letisencunjini. Bala letintfo emva kwaloko. - Kutfutukisa lwati lwekubekeka kwetinombolo ngekutsi bafundzi bapake -7 tibali nobe letinye tintfo ngeyindlela letehlukene. Sib:  - Nangabe ubala, inombolo yetintfo ayitsikabetwa yisayizi nobe indzawo nobe tiluhlobo lunye. Sibonelo: - Hlela tinkinobho le-7, emapeniseli la-7, emahhulahhubhu la-7, bafundzi la-7 njll - Tibale ngeluhlelo lolwehlukile, sib: tibale tehlukene, tisondzelene, tisemgceni nobe tipakiwe.	Emabhuloki ekwakha nobe emabhuloki e-Lego	Lilanga -1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Asidlale umdlalo: - Thishela udvweba nobe unamatsisela titfombe eceleni linye lelikhadi bese udvweba emacashati lalinganako kulelinye licele kufaka ekhatsi tinombolo -1 kuya ku -7 (enta emasethi lambalwa) - Uniketa umfundzi munye likhadi linye lesethi. - Bafundzi babala titfombe letisekhadini. - Gucula likhadi bese ubala emacashati. - Thishela uphakamisa likhadi lakhe linye lelinemacashati. - Bafundzi bamatanisa emakhadi abo nemacashati athishela. - Thishela uphakamisa isethi yemakhadi akhe lanetinombolo. - Bafundzi bamatanisa emakhadi abo nenombolo yathishela. - Umfundzi lonelikhadi lelingilo angasukuma bese ubala titfombe ngekuphimisela.	**Emasethi lambalwa** etitfombe, emakhadi emacashati netinombolo letifaka ekhatsi inombolo- 1 kuya ku -7  	

Liviki 27	Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	• **Sombulula tinkinga tetibalo temlomo tekuhlanganisa nekususa letifaka ekhatsi inombolo- 7** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku- 7 Bala uye phambili nasemuva ufike ku -7 **Gcizelela lwati loluphatselene na "lokunyenti" "lokuncane"** Shaya tandla kanyenti...MANI Shaya tandla tikhatsi letincane. Thishela ushaya tandla kayinkhotsa. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo nemilolotelo yetinombolo	Lilanga -1
1.6 **Emasu ekusombulula tinkinga tetibalo**	**Umnyakato** - Sebentisa sitepisi setinombolo lesilaliswe phansi (ngalokuvundlile) - Cala e- 0 ngaso sonkhe sikhatsi. Bala ngasosonkhe sikhatsi nangabe unyakata. Thishela ubuta kutsi: - Nguyiphi inombolo lesemkhatsini wa -4 ne- 6? Bafundzi batfola lwati lwekusebentisa sitepisi setinombolo. - Ngutiphi inombolo letisemkhatsini wa- 2 ne- 5? - Sebentisa imibono yakho kute bafundzi bati inombolo- 7 ngekweminyakato basebentisa imitimba yabo. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Nika umfundzi ngamunye -7 buhlalu nobe tibali. Buta imibuto lefana nale: - Hambisa sibali siye esancele. Nangabe singeta sinye sibali kulesi lesisesancele, sitawuba natingaki tibali nyalo? - 1 na -1 → 2 (Thishela utsi: 1 na -1 kwenta -2) - Hambisa tibali le -4 tiye esancele. Nangabe singeta -2 tibali kuleti letisesancele, tingaki tibali lesinato? - na 2 → 6 - Unetibali leti -5, ususa leti -2, kusala tingaki tibali?	0 1 2 3 4 5 6 7 Buhlalu nobe tibali Tibali	

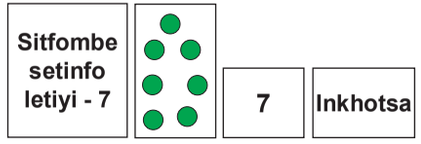
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.11 **Imali**	• **Bona ubuye utfole imali yemaphepha yaseNingizimu Afrika** - Sebentisa imali yemaphepha sib, R10, R20, R50, R100, R200 - Yenta bafundzi babe nelwati mayelana netitfombe tetilwane letehlukene letitfolakala emalini yemaphepha. - Lingisa umdlalo wemali ekhoneni lendlu.	Tibonelo letingito te R10, R20 na R50 Emanotsi (nobe imali yekudlala)	Lilanga- 1
1.9 **Kugcogcela ndawonye nekwabelana lokuholela ekuhlukaniseni**	• **Bala ngemlomo ubuye uchaze timphendvulo tetibalo temagama letikusimongcondvo(tibalo tetindzaba) letifaka ekhatsi:** - Kwabelana lokulinganako, - Gcogcela ndzawonye tinombolo letiphelele - Netimphendvulo letinetinsalela kufike ku- 7 **Temlomo:** Bala tintfo tyemalanga onkhe ufike ku-7 Bala uye phambili nasemuva ufike ku-4 Bala ngenhloko kusukela ku 1- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 6. Buta umbuto kutsi nguyiphi inombolo yekushya tandla lebeyinyenti/mbalwa.	Imilolotelo yetinombolo nemaculo	Lilanga -1 Khetsa umsebenti wemnyakato munye nobe lemibili kuphela Imisebenti yalokuphatsekako nalokubonakalako ungeke ukuphatse

Liviki 27	Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.9 **Kugcogcela ndawonye nekwabelana lokuholela ekuhlukaniseni**	**Umnyakato** Yakha emasethi usebentise bafundzi. **Tibonelo:** 1. Bafundzi abente tincumbi ta- 2, 3, 4, 5 ne- 6.bala kutsi kunakungaki encunjini. 2. Dvweba bobunjwa labakhulu emhlabatsini lonematje nobe esantini. Bafundzi benta licembu sib. Lelinebafundzi la- 4 ngekhatsi kwabunjwa. 3. Ngesikhatsi setikhatsi tekudla thishela utsi: “ningaphuma ngemacembu lahamba ngabane niyogeza tandla” kunekutsi: bafunzi labane bangahamba bayogeza tandla” 4. Khetsa bafundzi la- 7 usebentise umlolotelo wekubala. 5. Bafundzi la-7 balingisa tinyoni bese benta “sihlahla semfanekiso” basebentise tinsita tekucanca ngephandle nobe titulo nematafula ngekhatsi. 6. Thishela ubeka tinyoni le- 2 “kulesihlahla semfanekiso”” (bafundzi la-2 bacanca kulensita). Kungeteka inyoni ngayinye njalolo njalo. “tingaki ‘tinyoni’ esihlahleni nyalo, futsi tingaki letiphasi?” 7. Phindza kugcogcela ndzawonye bafundzi usebentise tinombolo - 1 kufike ke- 7 **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** **Tibonelo:** 1. Thishela unika fafundzi tibali. Bafundzi abente isethi yetibali le- 4. Bente lenye isethi yale- 3. “Unatingaki tibali esethini yakho lensha?” 2. Bafundzi abadvwebe tindilinga letimbili ephepheni. Ngekulandzela ticondziso tathishela, bafundzi bapaka tibali emasethini lamabili kuze kutsi isethi yinye ibe netibali leyinyenti kunalenye.buta imibuto lefana nalena “nguyiphi isethi lenetibali letinyenti kakhulu, letincane kakhulu?”	Sebantisa tinsita letehlukene kuniketa imicondvo yekusebentisa emasu lehlukene Tinsita tekugibela nobe ematafula netitulo  Tibali Emaphepha nemakhilayoni emfundzi ngamunye Tibali 	

Liviki 27	Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.4 **Umtsamo/bungako**	**Catsanisa lokulula nekuhlela tintfo letiphatsekako usebentisa silulumagama lesifanele** a) Umlomo b) Akunalutfo, kugcwele, kuna, kunanyenti kuna • **Gcizelela lolwati lolutfolwe evikini le -26 lokufaka ekhatsi umtsamo** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 7. Bala uye phambili nasemuva ufike ku- 7 Bala ngenhloko kusukela ku 1- 10 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 6. Buta umbuto lotsi nguyiphi inombolo yekushaywa kwetandla lenyenti kakhulu/lencane kakhulu.	Emanti (ngesikhatsi semdlalo wemanti) nesanti (ngesikhatsi semdlalo wesanti emgodzini wesanti) tindzawo letikahle tekutfutfukisa lwati lwemtsamo. Imilolotelo yetinombolo nemaculo Tintfo tekuphatsa letinetimo nemasayizi lehlukene	2 emalanga Nobe khetsa imisebenti lemibili nobe lemitsatfu

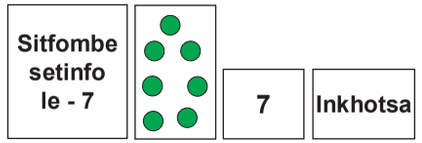
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.4 **Umtsamo/bungako**	**Umnyakato** Bafundzi: - Bahlela tintfo tekutsela letingenalutfo ngekwemtsamo wato. Ngalamanye emagama nguyiphi intfo yekutsela letawumumatsa lokunyenti kakhulu nobe lokuncane kakhulu? Bafundzi batawuhlola kucambela kwabo ngekutsela tinkomishi temanti kuletintfo tekutsela bese babala kutsi nguyiphi letsatsa tinkomishi letinyenti kakhulu. Ngeta inombolo yetintfo tekutsela kute ukwente kube lukhuni kakhulu. - Bangasebentisa inkomishi lefanako njengesikalo bese batfola kutsi ngabe kutawutsatsa tingaki tinkomishi telilayisi nobe emabhontjisi, nobeisanti kugcwalisa letintfo tekuphatsa letingenhla. - Hlela tintfo tekuphatsa teluhlobo lolufanako (sib. Emabhakedi emgodzini wesanti) kusukela kulokuncane kuye kulokukhulu. - Nika bafundzi tintfo tekutsela letahlukahlukene (emasayizi nabobunjwa labehlukene) bese ubuta imibuto lefana na: o “nicabanga kutsi nguyiphi yaletintfo tekutsela letsatsa umtsamo lomkhulu wesanti/emanti? o Umama utsela emantinti uwasusa entfweni yekutsela yinye uwafaka kulenye, combela kutsi utayigcwalisa yini?” - Bafundzi abatfole kutsi kwentekani etweni yekuphatsa lecishe yagcwala nangabe tintfo letincane tifakwa kuyo sib. faka ematje lahlobile, emabhuloki elogi, emapulastiki sib.bafundzi benta imidlalo yekucombela lebacombela koyo kutsi nguyiphi intfo yekuphatsa lemumatsa lokunyenti bese bahlola imiphumela kute batfole kutsi ngubani lophumelele. (thishela uveta kutsi tintfo letintantako angeke tikuphazamisi kukhuphuka kwemanti).	Inkomishi Inkomishi Irayisi Emabhontjisi Emabhakede langemasayizi lehlukene latfolakala emgodzini wesanti Tintfo tekuphatsa letehlukene ngesimo nangesayizi Emanti Isanti Tintfo letifana nematje lahlobile, emabhuloki eLego, emabhuloki epulastiki	2 emalanga Nobe khetsa imisebenti lemibili nobe lemitsatfu

Liviki 28	**Sikhatsi sekufundzisa lesiphakanyisiwe** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele lolufaka ekhatsi tinombolo 7** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku-7. Bala uye phambili nasemuva ufike ku-7. **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla layi 7 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa.	Imilolotelo nemaculo etinombolo	Lilanga 1
	Umnyakato - Bafundzi lababili babitwa baye phambili. Lomunye umfundzi uyababala. Labafundzi labaphambili baphakamisa inombolo lehambelanako. - Bita lomunye umfundzi ete phambili. Labanye bafundzi bayababala. Munye umfundzi uphakamisa inombolo lehambelanako 3 - Chubeka kuze kube nebafundzi labayi -7 phambili.	Emakhadi etinombolo lafaka ekhatsi tinombolo 1 kuya ku-7	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Beka tikotela leti -7 emgceni sib.  - Bafundzi abafake inhlanyelo/ litje esikoteleni sekucala, tinhlanyelo/ ematje lamabili esikoteleni sesibili, tinhlanyelo letintsatfu esikoteleni sesitsatfu bese uyachubeka tize letikotela letiyi -7 tibe nelinani lenhlanyelo/ ematje lelifana nenombolo lekhonjiswe ngaphandle esikoteleni. - Tsatsa emakhilayoni lamanyenti (lasemkhatsini wa 10 na 15) bese uwafaka enkomishini. Tjela bafundzi kutsi bacombele kutsi mangaki emakhilayoni lasenkomishini. Cocisanani ngetimphendvulo tabo. - Khombisa kutsi kubalwa njani ngekukhipha ngalinye esikoteleni bese abekwa emgceni.	Tikotela letiyi -7 letinanyatsiselwe tinombolo Inhlanyelo nobe ematje Emakhilayoni nenkomishi	

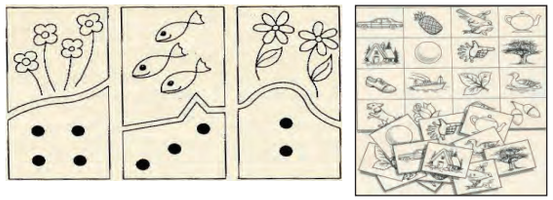
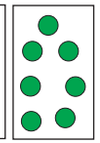
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Bona inombolo neligama lenombolo lelifaka inombolo 7** **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Dlala umdlalo: - Bafundzi bahlala bente indilinga. Beka likhadinombolo libuke phasi phambi kwemfundzi ngamunye. (kungaba yinombolo, ligama lenombolo, likhadi lemacashati nobe likhadisitfombe lelifaka tinombolo 1 kuya ku-7) - Fundzisa bafundzi kundlulisa likhadi liye kulomunye umfundzi ngekulishelelisa libuke phasi esiyilweni/ ekhaphethini - Bafundzi basho lamagama lalandzelako: “Nombolo lefihlakele, nombolo lefihlakele, kungaba nguyiphi ? Ase ngihlole” - Bafundzi bahlola emakhadi abo. - Thishela uphakamisa likhadinombolo lakhe - Bafundzi labanelikhadi lelifana nelikhadi lathishela, baphakamisa emakhadi abo bese batsi “Ngitawuphakamisa likhadi lami etulu kute wonkhe umuntfu abone		Lilanga 1
3.2 **Tintfo letingemada-yimenshini lamatsatfu (3-D)**	**Yakha intfo lengemadayimenshini lamatsatfu (3-D) usebentisa tintfo mbamba** • **Tsatsela lokwakhiwe lokusekhadini lelidvwetjiwe nobe khadinisitfombe** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi bakha sakhiwo lesifanako nalesi lesisesitfombeni - Tsatsela lesakhiwo lesisesitfombeni usebentisa iphegibhodi. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Chubekisela lomsebenti kusifundvo Sebuciko bekubona wente - Niketa umfundzi ngamunye liphepha lelinabobunjwa labehlukene labancane nalabakhulu: tindilinga, bocalandze netikwele Bafundzi: - Abajube labobunjwa bese bakha sakhiwo lesingemadayimenshini lamabili ephepheni bese uyatinamatselisa - Abahlobise lesitfombe ngemidvwebo.	Bobunjwa be-Logi Emabhuloki e-Brainy Nobe yini intfo yekwakha Iphegibhodi Bobunjwa labehlukene labakhulu nalabancane labasemaphepheni: Tindilinga, bocalantsatfu netikwele Tikelo, sinamatselisi	Lilanga 1 Lokuchubekako

Liviki 28	**Sikhatsi sekufundzisa lesiphakanyisiwe** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.4 **Umugca lohlukanisa emkhatsini kufanane, kulingane**	• **Tfutfukisa likhono lekuwela umugca losemkhatsini esifubeni** **Umnyakato** Bafundzi: - Ababukete lwati lebalutfolile; batsintsa titfo tabo temtimba ngekwesicondziso, badlala imidlalo leyenta kutsi batsintse titfo tabo temtimba. - Baniketwa letinye ticondziso letibavumela kutsi bece umugca losemkhatsini esifubeni njengekutsi: tsintsa lidvolo lakho ngemphumulo, tsintsa lihlombe lakho ngendlebe yakho, tsintsa lidvolo lakho lesencele ngelunyawo lwakho lwesekudla, tsintsa ingcoza yakho ngesandla sakho sinye njll	Umdlalo wekutsintsa titfo temtimba	Babona umugca lohlukanisa emkhatsini ngalokufanako nangalokulinganako kuye nasendzaweni • Kuwela umugcamkhatsi
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi: - Badvweba tindilinga letinkhulu ebhodini - Badvweba imigca lecondzile ebhodini. Cinisekisa kutsi bafundzi bayaweca imigca losemkhatsini esifubeni. - Ebhodini badvweba umugca losuka ecashatini linye uye kulelinye licashati lelikhashane nalo. - Badvweba siphohlongo lesivundlile ebhodini. Abasebentise iminyakato lemikhulu kute bece umugca losemkhatsini esifubeni. (Umfundzi usebentisa sandla sesencele nesekudla)	Bafundzi badvweba ebhodini 	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Hlanganisa nesifundvo Sebuciko bekubona wente Bafundzi: - Penda ephephendzabeni leliphindzekile kusuka esencele kuya esekudla.	Liphephandzaba leliphindzekile lemfundzi ngamunye. Ipende nelibhulashi	

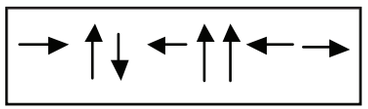
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.3 **Sisindvo**	**Catsanisa ngendlela lelula ubuye uhlele tintfo usebentisa lwatimagama lolufanele kuchaza:** - Sisindvo sib. kulula, kuyasindza, kulula kakhulu, kusindza kakhulu. • **Ngenisa lwati lwesisindvo ngekucatsanisa sisindvo setintfo letehlukene sib.** Kukala sisindvo kusho kutfola kutsi intfo inesisindvo lesingakanani. **Umnyakato** Bafundzi abacombele sisindvo setintfo: - Bamba letintfo letilandzelako, kunye esandleni sinye kute ucombele kutsi ngukuphi lokusindza kakhulu nalokulula kakhulu sib. o Litje nesitini sekwakha o Imoto yekudlala yepulasitiki nemoto yekudlala yensimbi o Sikotela selikhofi neroli yeliphepha lasendlini lencane o Ibhola lenkhulu yeraba nebhola yekhilikitsi Bafundzi baye bajaje kutsi intfo lenkhulu isindza kakhulu uma bacelwa kutsi bacombele sisindvo setintfo letimbili. - Ngenisa sikalo sekulinganisa sib. Kala tintfo kubona kutsi ngubani bafundzi labatfole timphendvulo letingito. - Buta imibuto lefana nekutsi: Nguyiphi intfo lesindza kakhulu/ lemelula kakhulu. Bafundzi abatfole intfo eklasini lesindndza kakhulu/lemelula kakhulu kunaloko lebakukalile. - Sikali sekulinganisa asibe khona ngesikhatsi sekudlala kute bafundzi bachubeke nemsebenti wekukala. - Beka sikali sekulinganisa ekhoneni kute bafundzi babone kutsi mangaki emabhuloki e Lego lasindza kulingana sibonelo: lihhabhula 	Tintfo letingemadayimenshini lamatsatfu (3-D) letinesisindvo lesehlukene nemasayizi lehlukene sib. Emabhuloki e-Lego, emathoyisi, emabhuloki ekwakha, tikotela, tintfo tekuphatsa njll. **Sikali sekulinganisa** Ungakha sikali lesilula: - Utawudzinga ihenga yepulasitiki. - Tintfo tekuphatsa imajarini letiyindilinga, emabhodlela ekhokhakhola layipulasitiki nentsambo - Bhobota tikhala letimbili ngala nangala etintfweni tekuphatsa imajarini/ emabhodleleni ekhokhakhola layipulasitiki - Hlanganisa letintfo tekuphatsa/ emabhodlela nehenga-utawuba nesikali - Lengisa lehenga esipikilini/ ehhukeni bese bafundzi Bacala kukala - Khombisa bafundzi kutsi ihenga kufanele icondze ngembi kwekutsi bacale kukala.	Lilanga 1 Khetsa imisebenti lemibili nobe lemitsatfu

Liviki 29	Sikhatsi sekufundzisa lesiphakanyisiwe Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfoliwe lolufaka tinombolo-1 kuye ku-7** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe letifike ku- 7 Bala uye embili nasemuva kufike ku- 7 Bala ngenhloko 1-10 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 7. Buta kutsi ngutiphi tandla letishaywe kanyenti/ kancane	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi: ○ Bagcogca tintsi. Batigcina eklasini kute bawasebentise futsi. ○ Basebentisa tintsi sib.kubhala inombolo 5.  nobe nobe njll.	Tintsi	
	Bafundzi**:** - Bafundzi basebentisa isethi yemafleshikhadi lafaka ekhatsi tinombolo -1 kuye- 7. - Dvweba inombolo yetintfo ulandzele sicondziso sathishela sib. Dvweba tindilinga le-2. - Chubeka ubale usukele enombolweni lenikiwe sib. Thishela usho lenombolo kutsatfu. Bafundzi batawubala bachubeke... kune, sihlanu, sitfupha. - Ngesikhatsi sekudla thishela utawubuta loku: "bangaki bafundzi labanemasangweji esinkhwa lesinsundvu? Bangaki labanemasangweji esinkhwa lesimhlophe? Ngabe bafundzi labanyenti banemasangweji esinkhwa lesimhlophe? Nguwaphi lamanyenti/lamancane?" - Thishela ubeka tintfo tibe yincumbi etafuleni. Bafundzi bacombela kutsi tingaki tintfo encunjini. Tibalwe ngemuva kwaloko.	Emafleshikhadi etitfombe nemacashati lafaka ekhatsi inombolo -1 kuye- 7 Emafleshikhadi etimphawu nemagama etinombolo letifaka ekhatsi tinombolo - 1 kuye- 7 sib.  Liphepha nelikhilayoni	

Liviki 29	**Sikhatsi sekufundzisa lesiphakanyisiwe** **Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	• **Bona inombolo neligama lenombolo lefaka ekhatsi tinombolo -1 kuye ku- 7** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 7. Bala uye embili nasemuva ufike ku- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 7. Buta umbuto lotsi nguyiphi inombolo yekushaywa kwetandla lenyenti kakhulu/lencane kakhulu. **Umnyakato** - Beka emakhaditinombolo ngekhatsi endlini nobe ngaphandle endzaweni yekudlala. - Lendzawo yibite ngekutsi "live letinombolo' bese bafundzi bona babitwa ngekutsi "baYikhosi/Indlovukati yenombolo." Beka umchele lowakhiwe ngelibhokisi enhloko yemfundzi ngamunye, lonetinombolo letibhalwe ngalokucacile. - Nika bafundzi ticondziso letifana naleti: o Bonkhe bafundzi labagcoke lokubovu abazubele ku- 2. o Bonkhe bafundzi labanetinwele letindze, abahambe mantontolwane ku- 6.	Emaculo nemilolotelo yetinombolo 3 5 2 Emakhadi lanetinombolo letinkhulu Imichele leminyenti yetinombolo umfundzi ngamunye leyakhiwe ngemabhokisi lebhalwe tinombolo.  	Lilanga 1

Liviki 29	Sikhatsi sekufundzisa lesiphakanyisiwe Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	**Lokubonakalako ungeke ukuphatse usebentise bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Badvweba inombolo yemacashati balandzela ticondziso tathishela sib. Dvweba emacashati la-2. Phindza ngetinombolo-1 kuye ku- 7 - Baba nemasethi lamanyenti emakhadinombolo nemakhadigama lakhona. Nika umfundzi ngamunye likhadi linye. Thishela uphakamisa likhadi bese bafundzi labanelikhadi lelifana nelakhe bayaliphakamisa nabo. - *Siphakamiso:* Vumela bafundzi bahlanganyele batakhele emakhadi abo. - Badlala imidlalo yekumatanisa emafleshikhadi etimphawu nemagama etinombolo. 	Liphepha nelikhilayoni **Emasethi emakhadinombolo** lendlula kuyinye lafaka ekhatsi tinombolo -1 kuye ku- 7 sib. **Sitfombe setinfo le - 7**  **7** **Inkhotsa**	Lilanga 1

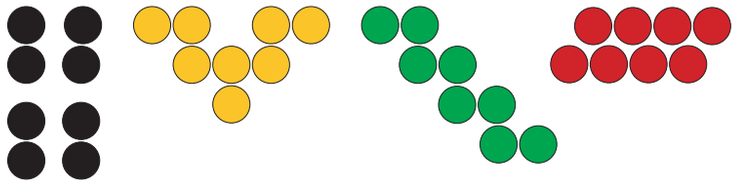
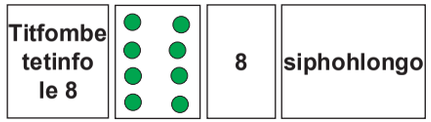
Liviki 29	Sikhatsi sekufundzisa lesiphakanyisiwe Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Kubala lokushiwo ngemlomo lokutibalo tekuhlanganisa nekususa lokunetimpendvulo kufike ku-7** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 7. Bala uye embili nasemuva ufike ku- 7 **Gcizelela lwati loluphatselene "nalokunyenti nalokumbalwa"** Shaya tandla kanyenti……MANI. Shaya tandla sikhatsi lesincane.Thishela ushaya tandla aphindze ka- 7. Buta umbuto lotsi nguyiphi inombolo yekushaywa kwetandla lenyenti kakhulu/lencane kakhulu. **Umnyakato** - Buka emaviki 24 na 27 kute utfole lwati - Sebentisa imibono yakho kute bafundzi batfole lwati ngenshokutsi yenombolo -7 ngekunyakatisa imitimba yabo. **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** - Buka emaviki 24 na 27 - Sebentisa imibono yakho kute bafundzi batfole lwati ngenshokutsi yenombolo -7 usebentise tintfo letiphatsekako letingemadayimenshini lamatsatfu (3-D)	Emaculo nemilolotelo yetinombolo Tibali	Lilanga 1

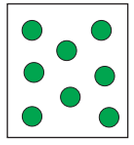
Liviki 29	Sikhatsi sekufundzisa lesiphakanyisiwe Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	• **Tfutfukisa lwati lwenkhombandlela ngekusebentisa emafleshikhadi emicibisholo nemashadi emicibishilo** **Umnyakato** Bafundzi abahambe bacondze etindzaweni letehlukene: - Baya emnyango, - Baya efasitelweni, - Baya ekhoneni lemabhuku njll. **Lokuphatsekako usebentise tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi - Badvweba siphohlongo lesivundlile ebhodini. Cinisekisa kutsi bafundzi bengca umugca losemkhatsini sib. 	Ibhodi	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentise bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Bafundzi ngamunye nobe ngemacembu benta loku: - Emehlo abuka ifleshi khadi bese uhambisa umkhono awuyise lapho umcibisholo ukhombe khona bsese uyakhuluma ngsikatsi enta lomnyakato sib. Nangabe umfundzi akhipha umkhono, kumele atsi “sekudla”. - Kuminyakato leya etulu naphasi umfundzi angasebentisa nobe nguwuphi umkhono. - Khomba tinkhombandlela eshadini lemicibisholo. - Banamatsisela titfombe tetinyatselo tibuke emnyango. **Lwatimagama:** etulu/phasi; ekhatsi/ngephandle; ngetulu/ngephasi ; phambili/emuva ; ngembi kwe/ ngemuva; luhlangotsi lunye/lolunye luhlangotsi; eceleni kwe;sancele nesekudla	Ifleshikhadi lenemcibisholo munye. Gucula ifleshikhadi uyibukise etindzaweni letehlukene **Lishadi letinkhomba** (iphosta lenemicibisholo lekhombe etindzaweni letehlukene 	

Liviki 29	Sikhatsi sekufundzisa lesiphakanyisiwe Umsebenti munye lohleliwe loholwa nguthishela (tikhatsi tetifundvo) Emaminithi ± 30 ngelilanga (Imisebenti yeTibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.3 **Sisindvo**	• **Gcizelela lwati lolutfole evikini le- 28 lolufaka silinganiso: Kumalula kakhulu/ kusindza kakhulu** **Umnyakato** Bafundzi: - Bacatsanisa sisindvo setintfo tekuphatsa letintsatfu kuye kuletisihlanu letifanako/ letilinganako (sib.tikotela letngenalutfo letingu- 400g) leticuketse silinganiso lesingafani sesanti, kute tisindvo tabo tehluke. - Batibeka ngekuhleleka bacale kulokumalula kakhulu kuye kulokusindza ngekuva lesisindvo. Ngemuva kwaloko sikalo sekulinganisa singasetjentiswa kutfola kutsi bafundzi ngabe bebacinisile nobe cha - *Siphakamiso:* Yenta kute ubone kutsi tingaki tinsimbi tekuwasha nobe tipikili letingasinyiswa kute ube nesilinganiso lesifanako. Naletinye tintfo tingasetjentiswa. Thishela ufaka tintfo letinesisindvo lesehlukile etintfweni tekuphatsa letifanako sib., tintfo letimbili letiphatsa ishizi ; yinye ibe nebhuloki nayinye lenebhola yethenisi. Bafundzi: - Beva umehluko emkhatsini wesisindvo setintfo letimbili bese bacombela kutsi ngukuphi lokusindza kakhulu nobe lokumalula kakhulu. - Basebentisa sikali sekulinganisa kute batfole imphendvulo lengiyo. - Gcugcutela bafundzi kutsi batfole tintfo letinesisindvo lesifanako eklasini.	Tikotela letingenalutfo letilinganako Sikalo sekulinganisa Tintfo letingemabhuloki eLego Tintfo letinesisindvo lesehlukene letifana netinsimbhi tekuwasha netipikili Tintfo letimbili tekuphatsa ishizi; yinye ibe nebhuloki lenye ibe nebhola yethenisi	Lilanga 1
	Umgodzi wesanti nendzawo yekudlala ngemanti kutindzawo letibalulekile lokufanele tisetjentiswe kute kugcizelelwe emagama lafana nalawa kumalula/kuyasindza/ kusindza kakhudlwane usebentise tintfo tekuphatsa letehlukene, Isanti leyomile nalemanti. **CAPHELA: Hlala nebafundzi ngesikhatsi ukhuluma, nicoca nangesikhatsi uchaza.**	Umgodzi wesanti Libhavu lelinemanti lekudlala, intfo yekuphatsa.	

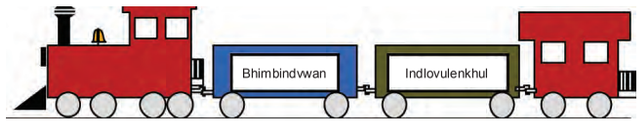
Liviki 30	Sebentisa liviki le -30 kunaka butsakatsaka belwati lwetibalo/ kutfola tihibe tekufundza.	
Umkhakha walokucuketfwe	**Sihloko**	**Indlela yekuhlola**
Tinombolo timphawu tekubala nebudlelwane	**1.1 Kubala tintfo**	Ucombela abuye abale ngenhloko kufika ku -7 (emaculo etinombolo nemilolotelo lefakiwe kutfutfukisa lwati lwetinombolo)
		Ubala aye emuva naphambili (1-7)
		Wati kutsi ngukuphi kushaya tandla lokunyenti/ lombalwa
		Ubona tinombolo kutingcikitsi letetayelekile sib. Budzala, irejista (hlola futsi)
		Utfola emakhadititfombe nemakhadi lanemacashati lafika ku -7
		Wati tinombolo 5, 6, 7
		Utfola lamagama etinombolo; sihlanu, sitfupha, inkhotsa
		Uyakwati kuhlukanisa emkhatsini walokunyenti, lokumbalwa, lokulinganako kufika ku -7
		Ubona umbala netilwane letehlukene emalini yemaphepha yaseNingizimu Afrika
	1.6 Kusombulula tinkinga tetibalo	Usebentisa tinsita letiphatsekako
		Uchaza imicabango yakhe ngemagama nangemidvwebo nobe tintfo letiphatsekako
	1.7 na 1.13 Kuhlanganisa nekukhipha	Utsatsela, achubele embili abuye atakhele emaphethini asebentisa titfombe.
Emaphethini nemafangishini Sikhala nabunjwa (Ijomethri)	**2.1 Emaphethini e-Jomethri**	Uyakwati kuhlanganisa emaphazili lanetincetu lokungenani leti -18
	3.1 Kubekeka, kutetayeta nekubukeka	Wati kubekeka kwentfo nangabe icatsaniswa nalenye: Phambi kwe-, emuva, etukwe-, etulu, ngaphasi, eceleni kwe-, emkhatsini, esencele, esekudla.
		Wenta lokushiwo ticondziso ebhodini yemaphekisi
		Wati tinkhombandlela letisekhadini lemicibisholo
	3.2 Tintfo letingemadayimenshini lamabili (2-D)	Wakha asebentisa sibonelo sesakhiwo lesiniketiwe
		UTsatsela lokwakhiwe nobe lokusekhadini letitfombe.
	3.3 Bobunjwa bemadayimenshini lamabill (2-D)	Wakha lokungenani iphazili yetincetu leti-18
		Ubona, utfola abuye anike emagama etikwele
		Wati bobunjwa labafanako labanebudlelwane
Silinganiso	**4.2 Budze**	Ucombela abuye akale budze betintfo letehlukene
	4.3 Sisindvo	Uvisisa: lokulula, lokusindzako, lokulula kakhudlwana, lokusindza kakhudlwana, lokulula kakhulu, lokusindza kakhulu.
	4.4 Umtsamo	Uvisisa: longenalutfo, lokugcwele, lokunyenti kuna-, lokuncane kuna-
	5.1 Kugcogca, kuhlunga, kudvweba, kufundza nekuveta idatha.	Uyakhona kugcogca, kuhlunga, kudvweba, kufundza nekukhombisa (ahlunge) tintfo ngekweluphawu lunye.
	5.2 Kumela tintfo letigcogciwe letihlungiwe	
Kusebenta ngedatha	**2.3 Ucoca abuye abike ngetintfo letigcogciwe letihlungiwe**	

ITHEMU 4 TIBALO LIBANGA R			
Liviki 31	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Tfula inshokutsi yenombolo 8** **Temlomo:** Bala tintfo onkhe malanga ufike e 8 Bala uye emuva naphambili ufike e 8 Bala ngenhloko 1-10 **Kungenisa kubala ngakubili usebentisa imilolotelo**. **Gcizelela kubala ngekuhleleka**: Thishela upaka tintfo letine emigceni abe akhomba kwekucala ,kwesibili,kwesitsatfu, kwesine **Niketa lwati lwa "kanyenti na mbalwa"** Shaya tandla kanyenti …… MANI. Shaya tandla kambalwa. Thishela ushaya ka 8 . Buta umbuto wekushaya tandla kutsi bekukanyenti/kancane.	Emaculo nemilolotelo yetinombolo. *Kubili,kune,sitfupha* *Yinye indvoda egedeni* *Itsi seyishiye sikhatsi;* *Kubili,kune,sitfupha,siphohlongo*	Lilanga 1
	Umnyakato Bafundzi ba: - Babala tinyatselo letisiphohlongo bahamba batungeletele liklasi - Khomber inombolo 8. Bafundzi ba: - Sebentisa sitepisi setinombolo lesifulethi (kuvundla) - Cinisekisa kutsi ngasosonkhe sikhatsi bafundzi bacala ku . - Kubona tinombolo timphawu njengoba bahamba kunombolo layini.	0 1 2 3 4 5 6 7 8 Lisethi lemakhadi tinombolo 1 kuya ku-8.	

Liviki 31	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Emagama etinombolo**	**Kubona tinombolo timphawu netinombolo magama** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Babala tintfo kufaka tinombolo 1 ku e 8. - Babala tibali kuyofika ku-8.	Lisethi letintfo eklasini Tintfo nobe tibali.	Lilanga 1
	- Kutfutfukisa lwati lwekubekeka kwetinombolo ngekutsi bafundzi bavunyelwe kupaka tibali leti 8 nobe tintfo ngetindlela letehlukene sib.  - Nangabe ubala inombolo yetintfo ayitsintseki ngesayizi yayo nobe ngendza nobe ifanana kuma kwayo, sib. - Hlela tinkinobho leti 8, emapeniseli la 8, emahhulahhubhu la 8, bafundzi laba 8 njll. - Tibale ngetindlela letehlukene sib. Tibale tindlalekile, tibeke ndzawonye, emgceni nobe utibeke tincumbi **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Let the bafundzi: - Badla umdla ngekumatanisa inombolo yetibali,ngetinombolo magama,tinombolo timphawu,emasashainemakhadi titfombe kufakwa inombolo 8 . - Batsatsela 8 ngemakhilayoni..	Tibali nobe tintfo le 8 Emafuleshikhadi lanetimphawu emagama, emacashati netitfombe sib.  Emakhilayoni Tibali	Lilanga 1

Liviki 31	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, catsanisa bese uhlela tinombolo letiphelele**	• **Sebentisa inombolo 8 etindzaweni letetayelekile** **Temlomo:** Bala ye 8 kuto tonkhe tintfo. Bala uye emuv naphambili ka 8 **Gcizelela kubala ngakubili usebentise imilolotelo yetinombolo.** **Niketa lwati lwa "kunyenti mbalwa"** Shaya tandla kanyenti …… MANI. Shaya tandla tikhatsi letimbalwa. Thishela ushaya kasi- 8 . Buta umbuto wekushaya tandla kutsi bekukanyenti/kancane	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Umnyakato Bafundzi ba: - Bakha inombolo 8 ngeminwe - Yakha inombolo ngetincetu tetintsambo nobe ludzaka lwekudlala - Babhala luphawunombolo 8 etreyini yesanti. - Beka emakhaditinombolo letisi- 8 ngetindlela letilandzelanako	Intsambo/intsontfo nobe ludzaka lwekudlala. itreyi yesanti Lisethi letinombolo timphawu letinkhulu	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Thishela uniketa umfundzi ngamunye ibhinibhegi la 8 nemakhadi nombolo lanelikhadi lemacashati la-8 . Bafundzi ba: - Beka libhontjisi kulinye licashati etulu lelikhadi lemacashata. - Bala emabhontjisi. - Matanisa likhadi lemacashati nelikhadi lemagama netibali	Emabhontjisi la 8 ngamunyeumfundzi. Likhadinlemacashat netibali.  **siphohlongo**	

Liviki 31	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Kubona utfole, ubuye usho emagama abobunjwa bemadayimenshini lamabili (2-D) laseklilasini nasesitfombeni** - **Calandze** • **Ngenisa calandze** **Umnyakato** Bafundzi benta loku: - Bafundzi bakha calandze ngemitimba yabo sib. bafundzi laba-6 bakha calandze ngemitimba yabo. - Bakha bobunjwa ngemitimba yabo sib.bafundzi laba 6 benta icalandze ngemitimba yabo (bafundzi laba 6). - Bakha calandze ngetingalo. - Bakha calandze ngetintsanjana tewulu neinhlama. - Hamba ngaphandle kwacalandze. Nabahamba bafundzi batsi: “Ngihamba ngaphandle kwacalandze-“Linye licala lelidze, linye licala lelifisha nalelinye futsi lelidze, nalelinye lelifisha.” - Bamba bobunjwa. Sebentisa bobunjwa labakhulu nobe ufake bobunjwa labahlukene “esikhwameni sefeli” Babe nelisethi lemakhadi ekumatanisa nabobunjwaleb lababhaliwe emakhadini. Dvweba calandze emoyen, phasi, emhlabatsini ubuye baya ephepheni.	Umdlalo wemakhadi kutfutfukisa bobunjwa Intsontfo nenhlama yekudlala. “ sikhwama sefeli” lesinabobunjwa bejometri. Kumatanisa lisethi lemakhadi abobunjwa lebakhishwa esikhwameni. Liphepha le A4 nemakhilayoni.	Lilanga 1
	Hlunga tintfo temadayimenshini lamatsatfu (3-D) nabobunjwa bemadayimenshini lamabili (2-D) ngekwesayizi, umbala nangekubunjwa **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi babuka tintfo letibocalandze eklasini . **Kubona tinombolo timphawu netinombolo magama** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamabili (2-D)** - Buka bocalandze etitfombeni. - Buka bonkhe bobunjwa labatfuliwe kahle ngetitfombe. **Hlunga tintfo letingemadayimenshini lamatsatfu (3-D) nabobunjwa labangemada-yimenshini lamabili ngemasayizi ngembala ngekubunjwa.** Hlunga tintfo letigcogcekile ngemasayizi, ngembala nabobunjwa.	Tintfo letibocalandze eklasini. Bonkhe bobunjwa labafundziwe bakhona: Titfombe letinabobunjwa. 	

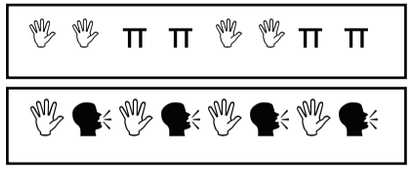
Liviki 31	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
5.1 **Kugcogca nekuhlunga tintfo**	**Gcila elwatini lwekusebenta ngedatha ngekugcogca tintfo ekhatsi eklasini nobe ngaphandle ngendlela letime ngayo sib. Tinsuku tekutalwa tebafundzi.** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** **Gcogca ubuye uhlunge idatha** - Kusebentisa lishadi letinsuku, Lusuku lwabani ngaleyo nyanga. - Bafundzi basita ngekwenta igrafu kubuka tinyanga temnyaka letinetinsuku tekutalwa kwebafundzi. - Thishela udvweba igrafu yetinyanga temnyaka. - Ngekusitwa nguthishela bafundzi bafaka emagama abo egrafini lekhomba inyanga lebatekutalw ngayo.	Lishadi letinsuku tekutalwa  	
5.2 **Lokudvwetjiwe lokuveta tintfo letigcogciwe letihlelekile**		Likhadi lelinemagama ebafundzi Dvweba emakholamu la-12 khombisa ngefleshikhadi kutsi bobani bafundzi lebabungata tinsuku tekutalwa .Sebentisa ± 3 liphepha A2 lelinemakholami la -12.	
5.3 **Kucoca nembiko ngetintfo letigcogciwe tabuye tahlungwa**	Bafundzi babala emagama ubuye babhala samba sebafundzi lebabungata tinsuku tekutalwa ngaleyonyanga.Bafundzi bacatsani tinombolo letikhona tetinsuku tekutalwa etinyangeni. - Bafundzi bacatsanisa tinombpolo tetinsuku tekutalwa kuletinyanga letehlukene. Thishela ubuta imibuto njengekutsi: - “Nguyiphi inyanga lenetinsuku tekutalwa letinyenti?” - “Nguyiphi inyanga lenetinsuku tekutalwa letinyenti?” - “Ngutiphi tinyanga letinetinetinsuku tekutalwa letifananako? tiyalingana. - “Ngutiphi tinyanga letinebafana labanyenti lababungata tinsuku tekutalwa ”? - “Ngutiphi tinyanga letinemantfombatane lamanyenti lababungata tinsuku tekutalwa ”? Bafundzi bacoca ngetiphetfo: - Bhimbidvwane unetinsuku tekutalwa letinyenti. Bafundzi labane babungata tinsuku tekutalwa ngabhimbindvwane. - Kute (akunamuntfu) lobungata lusuku lwekutalwa ngenyanga yendlovu lenkhulu. Letinye tinyanga tinetinsuku tekutalwa letilinganako njll. Ngutiphi leto tinyanga? - Letinye tinyanga tinetinombolo letilinganako tetinsuku tekutalwa njll. Ngutiphio leto tinyanga?		

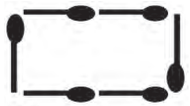
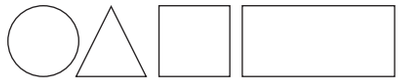
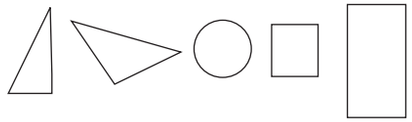
Bhimbidvwana	Indlovana	Indlovlenkhulu	Mabasa	Inkhwekhweti	Inhlaba	Kholwane
Sipho Martha Helen Dolly	David Bongi Claire		Nelson Jacob Tim	Kabelo Pat Thandi	Selina Liz Titus	Thabo Jane
4	**3**	**0**	**3**	**3**	**3**	**2**

Liviki 32	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lotfolakele evikini le 8 lelifaka inombolo 8** **Ngemlomo:** Bala tintfo onkhe malanga ufike e- 8 Bala uye emuva naphambili ufike e- 8 Bala ngenhloko 1-10 **Gcizelela kubala ngakubili usebentise imilolotelo yetinombolo.** **Niketa lwati lwa "kanyenti na kube mbalwa"** Shaya tandla kanyenti …… MANI. Shaya tandla kambalwa. Thishela ushaya ka 8 . Buta umbuto wekushaya tandla kutsi bekukanyenti/kancane.	Emaculo nemilolotelo yetinombolos	Lilanga 1
	Umnyakato Bafundzi badlala umdlalo: - Thishela ushaya Umtjingo sib.sigubhu. - Bafundzi banyaka. - Nangabe sigubhu sithula, thishela ubita tinombolo emkhatsini wa1 ne 8 ubuye bafundzi bayatihlela ngemacembu lamancane sib.thishela ubita inombolo 8 ubuye bafundzi bayatihlela ngetinchumbi leti 8. - Khombisa tingalo le 8 esandleni sakho - Akha lisethi nebafundzi. Dvweba indilinga lenkhulu. Bafundzi abente tincumbi tabo 8ekhatsi kwendingilizi. Licembi lebafundzi laba 8 benta imisebenti leminyenti ndzawonye ngekuhamba kwelusuku sib.badlala ekhoneni lemabhuloki baye endzaweniyemakhona njll.	Sigubhu	

Liviki 32	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Basebntisa tiba kubona kutsi nguyiphi inombolo licala kucala ku-8 nasemuva kwa 5? Nguyiphi inombolo lesemkhatsini we 6 ne 8? - Bala tintfo ngatimbili. o Lipheya leticatfula, o Lipheya lemakawosi o Emehlo lamabili, o Lipheya lemacici o Tindlebe letimbili o Imilente lemibili	Tibali Lipheya leticatfula, emakawosi emacici	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Nangabe thishela atsatsa irejista utsi Ukhona yini umfundzi lone nombolo yendlu yakubo nobe likheli lakubo ? Bafundzi kumele baphendvule ngekutsi “Lapha” - Phindza ngelilanga lelilandzelakongetinombolo telucingo lwasendlini nabomakhala ekhikhini.	Likhadi lelinetincingo nemakheli ebafundzi	

Liviki 32	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Catulula ngemlomo tinkinga tetibalo temagama (tibalo tetindzaba) letifaka inombolo 8** **Umnyakato** - Thishela usita bafundzi kwenta emacembu la 2 lanebafundzi laba 6 . - Hlanganisa lamacembu kwente licembu linye. - Buta bafundzi kutsi bangaki ecenjini lelihlanganisiwe? 6 na 2 → 8.(Thishela atsi: 6 na 2 kukunika 8) - Enta licembu lebafundzi la 8. Khipha bafundzi la 3 bente licembu lelincane. Bngaki bafunzi lebasele ecenjini lelikhulu? 8 ukhiphe 3 → 5. - Khetsa bafundzi usebentise umlolotelo wekubala. - Beka tintsi leti -4 esandleni semfundzi nalamanye la 4 esandleni salomunye umfundzi. Tingaki tintsi setitonkhe? 4 na 4 → 8. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Niketa bafundzi laba 8 emagala. - Tshidi unetintsi leti -6 umngani wakhe unetintsi leti -2. Tingaki tintsi setitonkhe? 6 na 2 → 8. - Monica unetintsi leti -8. Ulahlekelwa nguleti -2. Tingaki tintsi letisele naMonica? 8 **ukhiphe 5 → 3**. **Lokubonakalako ungeke ukubambe usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Thishela ubeka titfombe letimbili kuflanelibhodi. Ungeta letinye titfombe letisihlanu. Sekunatingaki titfombe nyalo ? 2 na 5 → 7. - Faka bobunjwa 8 ebhodini yefulaneli. Khipha 5. Bangaki lebasele **5 → 3.**	Licembu lebafundzi Tintsi Umlolotelo wekubala Tintsi Umlolotelo: 1, 2, 3, 4, 5 Nangabe ngingabamba inhlanti iphila 6, 7, 8, 9, 10 Ubuye ngiyayiyekela ihambe Tintsi Ibhodi yefulaneli netitfombe / bobunjwa.	Lilanga 1

Liviki 32	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	• **Tsatsela uchubekise emaphethini ekuva** **Umnyakato** Bafundzi bahamba ngesigci semculo ngemitimba yabo sib. - Nyatsela, nyatsela, zuba ngelinyawo, Zuba ngelunyawo ..... - Zuba ngalunye lunyawo, Zuba ngalunye lunyawo, Zuba ngalunye lunyawo, Zuba ngalunye lunyawo..... **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Hlanganisa nemakhono ebuciko bekwenta (umculo) neMakhono ekuphila. Bafundzi bahamba ngemculo ngetandla tabo ubuye babamba ematsangeni. Sib.. - Shaya tandla, shaya tandla, shaya tandla, shaya tandla (ubuye bashaya tandla ematsangeni) - Thishela wenta emakhadi esigci ubuye bafundzi bayaphindza ngekushaya tandla(basebashaya tandla,bashaye lunyawo). Sib.  - Shaya, shaya, gidza, gidza …… - Shaya,memeta, Shaya,memeta …….	Sidlalama-CD Ngemculo Umsindvo wekushayisana kwetitfo temtimba	Lilanga 1 Lilanga 1

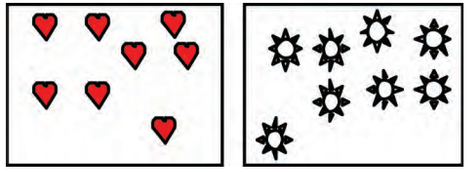
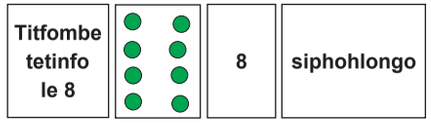
Liviki 32	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona abuye achaze bobunjwa labangemadayimenshini lamabili (2-D) eklasini** • **Gcizelela lwati lwacalandze** **Umnyakato** Bafundzi: - Bakha bobunjwa ngemitimba yabo sib. Bafundzi labane benta calandze. - Bakha calandze usebentise iminwe. - Bakha calandze ngetintsi letisitfupha temetjiso.  - Bakha calandze ngesontfo nobe inhlama yekudlala. - Bakha calandze ngetintsanjana tensontfo nenhlama. - Bahamba ngaphandle kwacalandze. Nabahamba bafundzi batsi: “Ngihamba ngaphandle kwacalandze-“Linye licala lelidze, linye licala lelifisha nalelinye futsi lelidze,nalelinye lelifisha.” - Babamba bobunjwa. Sebentisa bobunjwa labakhulu nobe ufake bobunjwa labahlukene “esikhwameni sefeli” Babe nelisethi lemakhadi ekumatanisa nabobunjwaleb lababhaliwe emakhadini. - Dvweba calandze emoyeni,phasi,emhlabatsini ubuye baya ephepheni.	Umdlalo wemakhadi kutfutfukisa kubona bobunjwa Tintsi temetjiso Insontfo nobe inhlama yekudlala Sikhwama sefeli lesinabobunjwa labahlukene be-Jomethri  Faka phakatsi bobunjwa labakhulu nalabancane nabocalantsatfu bema-engeli lahlukene esikhwameni sefeli sib.  Kumatanisa isethi yemakhadi ledvwetjwe bobunjwa Liphepha le-A4 nemakhilayoni	Lilanga 1

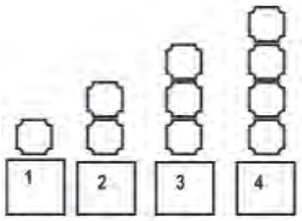
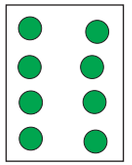
Liviki 32	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Tintfo letiphatsekako ngekusebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi babuka tinfo letinabobunjwa labangu calatsatsela **Lokubonakalako lewungeke ukuphatse ngekusebentisa bobunjwa labangemada-yimenshini lamabili (2-D)** Dlala umdlalo: “Ngubani loshodako?” - Faka inombolokubobunjwa labangemada-yimenshini lamabili (bobunjwa bangandluli ku-5) ephepheni bahleti ekhaphethini sib. bobunjwa beLogi. - Chaza munye bunjwa kubafundzi. - Niketa bafundzi kubamba ngenhloko bobunjwa lebasephepheni. - Bafundzi bavala emehlo. - Thishela akhiphe munye bunjwa. - Bafundzi bavule emehlo babuke kutsi ngumuphi bunjwa loshodako - Baphindza leyondlla. - Tfutfukisa bobunjwa bejometri ngekuniketa emakhadi mdlalo “Yini sikwele?”nobe lomunye	Tinfto letingucalandze eklasini Tinhlobo tabobunjwa sib bobunjwa we Logi.	Lilanga 1

Liviki 32	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Chaza kubekeka kwetinfo letingemadayimenshini lamatsatfu (3-D) ngekuhlobana lenye kulenye.** **Umnyakato** Bafundzi: - Bema emkhatsini wetintfo letimbili nobe kubafundzi lababili. - Mani eceleni kwentfombatane legcoke lilogo leliluhlata kwesibhakabhaka. - Mani eceleni kwemfana logcoke emasandazi lansundvu. - Hamba emkhatsini wemabhokisi. - Khasa ngephasi kwelitafula - Khasa ngephasi kwesitulo - Beka situlo phambi kwakho - Beka situlo emvakwakho - Mani etulu esitulwini - Hlala esitulwini - Beka situlo etulu kwakho - Beka situlo eceleni kwakho - Beka situlo esndleni sesincele nasesandleni sekudla.	Titulo 2 .	Lilanga 1

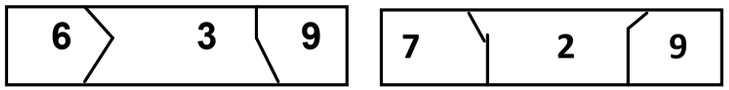
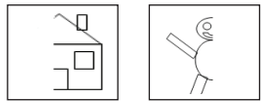
Liviki 32	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Vumela bafundzi bacedzele emaphzili ebantfu netilwane. - Faka buhlalu entsanjini ngendlela lasho ngayo thishela sib. Faka buhlalu lobubovu ubuye ulandzelisa ngalobuluhlata kwesibhakabha. - Faka buhlalu ngendlela ngendlela titfombe tilandzana ngayo. **Sebenta ngemacembu lamancane.** Thishela uniketa bafundzinngamunye iphekibhodi yakhe nemaphekisi. Banikete leticondziso letilandzelako: - Faka emaphekisi lelibovu lamabili etulu ekhoneni lesancele. - Faka liphekisilelilulhlata esekudla seliphekisi lelibovu - Faka linye liphekisi lelilulhlata kwesibhakabhaka ngaphasi kweliphekisi lelilulhlata.	Emaphazili Buhlalu netsambo Emabhodi emaphekisi 	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Dvweba bantfu nobe tilwane letingenatinyawo nemkhono cela bafundzi bacedzele umdvwebo.	Liphepha lekusebentela nemaphini	

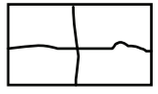
Liviki 33	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele evikini lema-31 nele- 32 lelifaka ekhatsi 1 kuye kusi-8inombolo 8** **Ngemlomo:** Bala tintfo onkhe malanga ufike kusi- 8 Bala uye emuva naphambili ufike kusi- 8 Bala ngenhloko 1-10 **Gcizelela kubala ngakubili usebentise imilolotelo yetinombolo.** **Kugcizelela kubala ngetinombolo te-odinali** **Gcizelela lwati lwa "kanyenti na mbalwa"** Shaya tandla kanyenti …… MANI. Shaya tandla kambalwa. Thishela ushaya kasi- 8 . Buta umbuto wekushaya tandla kutsi bekukanyenti/tikhatsi letimbalwa	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Umnyakato - Bafundzi basebentisa imitimba yabo kwakha tinombolo timphawu. - Thishela usebentisa tinsita letinyenti kwenta tinombolo bafundzi bangatibamba sib liphepha lesendi /ludzaka/ intsambo. - Enta imilolotelo nemaculo etinombolo.	Tinombolo letinkhulu letentiwe ngeliphepha lelihhedlako.	
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Sebentisa tintfo letibambekakao njenge mabhuloki netilwane temapulasitiki. - Tibale, tihlunge, faka leti 8 elayinini njll. Hlukanisa bafundzi ngemacembu Beka incumbi yetilwane tepulasitiki emkhatsini walinye licembu. Bafundzi ba: - sebentani ngababili babuye bacombele kutsi tingaki tillwane encumbini. - Linye lipheya litsatsa tinombolo makhadi bacondzanisa nalobakucombelako. - Bala inombolo yetilwane lengiyo. - Lipheya linye lifaka tinkhanyeti embombo. - Phindza ngekufa tilwane letehlukene emkhatsini wemadi.	Emabhuloki netilwane temapulasitiki Tilwane temapulasitiki le -9 Emasethi lamancane etinombolo timphawu Tinkhanyeti tekubabonga	

Liviki 33	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	**Kubona nekutfola tinombolo nemagama etinombolo letifaka tinombolo 1 kuya ku-8** **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Matanisa timphawu tinombolo netitfombe - Bafundzi kumele bati kutsi inchumi yetintfo ingatfwala tintfo letifananako  - Bafundzi bakhomba intfo ubuye bayabala. - Bafundzi bafanele bacondzanise intfo nalenye sib. Yinye inhlitiyo kulinye lilanga. - Matanisa likhdi titfombe, likhadi lemacashati, likhadi letinombolo lilingane netibali.	Titfombe nemafleshikhadi etinombolo Tibali  Lisethi lemakhaditinombolo letifaka tinombolo 1-8	
1.4 **Chaza, catsanisa ubuye uhlele tinombolo letiphelele**	• **Hlela ubuye ucatsanise tintfo letigcogciwe ngekusebentisa kunyeti kuna, kuncane kuna,kuyalingana ngekufaka inombolo 8** **Temlomo**: Bala tonkhe tinfo uyofika ku-8. Bala uye emuva naphambili uyofika e 8. **Gcizelela kubala ngakubili usebentise imilolotelo yetinombolo.** **Niketa lwati lwa "kunyenti netikhatsi letimbalwa"** Shaya tandla kanyeti…… Mani. Shaya tandla tikhatsi letimbalwa. Thishela ushaya tandla kasi- 8.	Emaculo nemilolotelo yetinombolo	Lilanga 1

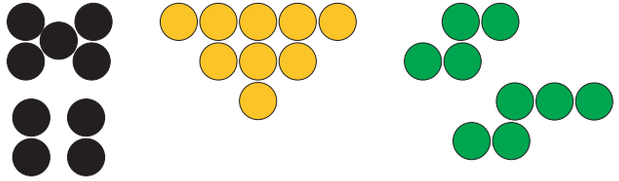
Liviki 33	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, catsanisa ubuye uhlele tinombolo letiphelele**	**Umnyakato** - Thishela ubeka emabhuloki la -8 etafuleni. Ngaphandle kwekubala, bafundzi abacombele linani lemabhuloki. - Thishela uyabuta: o “Ngabe kunemabhuloki langetulu kwalama-3?” o Bafundzi babuka timphendvulo ngekubala emabhuloki ” o “Bekudvute ngakanani kucombela?	Emabhuloki	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Akha licembu lebafundzi labane. Niketa linye licembu tibali le 8 neliphepha lelinetindilinga letinkhulu letimbili. Tindilinga atibitwe ngetikhehle. - Bafaka tibali esikhehleni sinye ubuye bayabala kutsi tingaki tibali esikhehleni, balandzele loko lokushiwo nguthishela. - Bafundzi bacatsanisa “tikhehle”ubuye babuka tikhehle ”letinyenti kuna“nale ”tincane kuna”, na “kuyalingana” netinombolo tetibali. Hlukanisa bafundzi ngemacembu. - Niketa emacembu tikwele temayunifiksi kufaka ekhatsi inombolo 1 kuya kusi- 8. - Vumela licembu lebafundzi lakhe Sakhiwo lesidze kakhulu ubuye ulebula ngasinye sakhiwo lesikhulu ngetinombolo temakhuyubhu letisetjentisiwe sib  	Tibali liphepha le- A4 lelinetikhehle ti- 2  Emakhiyubi eyunifisi Likhadi letinombolo timphawu kusuka 1-8 Emakhadi nemacashati etitfombe **Titfombe tetinfo letisi-8** 	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Thishela ubakhombisa emakhadi lamabili lahlukene emacashati netitfombe. - Bafundzi bacatsanisa emakhadi etitfombe nemacashati ekubona “lokunyenti kuna” na “lokuncane kuna” na “kuyalingana”.		

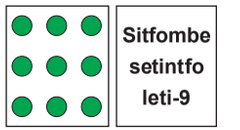
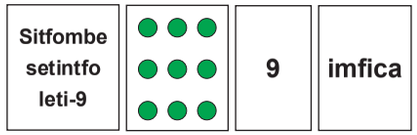
Liviki 33	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	• **Catulula tinkinga tetibalo ngekusho ngekuhlanganisa nekususa kuye kusi-8** **Ngemlomo:** Bala tintfo onkhe malanga ufike e -8 Bala uye emuva naphambili ufike e -8 Gcizelela kubala ngakubili usebentise imilolotelo yetinombolo. **Gcizelela lwati lwa "kanyenti netikhatsi letimbalwa"** Shaya tandla kanyenti …… MANI. Shaya tandla kambalwa. Thishela ushaya kasi- 8. Buta umbuto wekutsi nguyiphi inombolo yekushaya tandla lebeyikanyenti/ tikhatsi letimbalwa.	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Umnyakato Tibonelo**:** 1. Thishela ubita bafundzi laba 3 abamise embili. Bafundzi bayababala. Thishela ubita labanye la 2 ubuye uyabuta: Bangaki labafundzi sebabonkhe?" 3 na 2 → 5. (Thishela utsi: 3 na kwenta 5) 2. Thishela ubeka titulo le 2 ngeta letinye le 2 Tingaki titulo setitonkhe? 2 na 2 → 4. 3. Thishela uphakamisa sinye ubuye utsi ubuye utsi "Balani tingalo tami.Nangabe ngifihla sitfupha, tingaki tingalo letisele? 5 ususe 1 → 4. 4. Bafundzi ababale tingalote sandal sabo sinye. Fihla tfupha; tingaki tingalo lestisele? 5 ususe 1 → 4.		
	Tintfo letiphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi babeka tibali e 6 ubuye benta loku: - Thishela uniketa munye umfundzi tibali le 6. Thishela uniketa bafundzi ticondiso sib. Beka tibali timbili 2, ngeta letinye tibali le 3. Tingaki tibali setitonkhe. 2 na 3 → 5. - Tibali le 4. Ngeta 2 kulo- 4. Sewunakungaki nyalo? 4 na-2 → 6. - Bala bonkhe buhlalu lonabo. Nawubona buhlalu bubili esandleni ytabona bungaki? 6 ususe 2 → 4.	Tintfo ne /nobe tibali	

Liviki 33	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Akha emaphazili ubuye uvumela bafundzi badlale ngemaphazili. 	Emaphazili etinombolo	Lilanga 1
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Buka,tfola ubuye uchaze bobunjwa labangemadayimenshini lamabili (2-D) etitfombeni** **Buka ticenye etintfweni letiphelele** **Umnyakato** Thishela uchaza intfo abuye ubute bafundzi kutsi yini sib. - 'Ngicabanga intfo lebovu lenemasondvo lamane, tivalo letine nelifasitelo lelingavuleka ibanga umsindvo itsi "hhamu! hhamu" Lomsebenti ungentiwa ngemacembu -linye licembu liyachaza lelinye liyacombela kutsi yini lentfo . - *Chaza umuntfu ubuye ubute bafundzi kutsi ngubani.* **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** - Khomba bafundzi sitfombe ubuye utsi abasibuke. Sikhiphe ubuye ucela bafundzi kutsi basichaze ngendle lebasibone ngayo nalebakhumbula ngayo. - Tsatsa sitfombe sinye usente tincenye letehlukene. Tifake ebhokisini sewucela bafundzi kutsi babuke tincenye letilahlekile ebhokisini. - Dvweba imidvwebo lengakapheleli ephepheni ubuye ucela bafundzi bacedzele sitfombe.	Nobe ngusiphi sitfombe Sitfombe lesinetincenye letijutjiwe Umdvwebo longakapheleli 	Lilanga 1

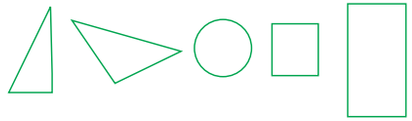
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyiswe**	**Budze besikhatsi lesilinganisiwe**
3.4 **Kwhlukanisa emkhatsini kulingane ngalokufanako**	• **Tfutfukisa lwati lwekutsi umtimba unetihlangotsi lwesencele nelwesekudla lolunganyakata ngalunye.** **Umnyakato** - Faka libande lelasitiki esihlakaleni sesandla sekudla semfundzi ngamunye. - Cula liculo lelinemnyakato. Bafundzi: - Ababeke tandla tabo etinhloko tabo - Abatsintse emadvolo abo esencele ngetingcoza tesekudla. - Abatsintse emahlombe esekudla ngetandla tesencele njll	Tingoma nemaculo emnyakato sib. “Ngifaka lunyawo lami lesancele”	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Niketa umfundzi ngamunye ibhuloki yekwakha Bafundzi abahlale ekhaphethini: - Beka ibhuloki ecaleni lesekudla/ lesencele - Ehlombe lesencele/ lesekudla - Edvolweni lesencele/ lesekudla - Enyaweni lesencele/ lesekudla	Ibhuloki yemfundzi ngamunye	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Umfundzi ngamunye utfola liphepha nekhilayoni. - Bafundzi abadvwebe umugca emkhatsini weliphepha kusukela etulu kuya phasi nalomunye umugca emkhatsini kusukela esencele kuya esekudla. - Thishela uniketa ticondziso: o Beka umunwe wakho emkhatsini wesiphambano o Dvweba indilinga ebhulokini lengenhla esandleni sesencele o Dvweba calantsatfu ebhulokini lengentasi yesekudla o Dvweba sikwele ebhulokini lengenhla yesekudla o Dvweba calandze ebhulokini lengentasi yesencele. - Cocisanani ngephosta yesitfombe. Bafundzi baphendvula imibuto lebavumela kutsi bachaze (ngaphandle kwekukhombisa) kubekeka kwetintfo esitfombeni.	Liphepha 	

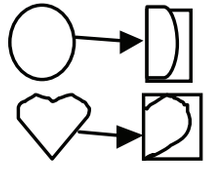
Liviki 34	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Ngenisa inshokutsi yenombolo 9** **Temlomo:** Bala tintfo tmalanga onkhe ufike kusi- 9. Bala uye phambili nasemuva ufike ku-9. Gcizelela kubala ngakubili ngekusebentisa imilolotelo yetinombolo. **Gcizelela kubala tinombolo te-odinali;** Thishela upaka tintfo leti-6 emgceni. Khomba intfo ngayinye ngalesikhatsi ubala *kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha.* **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla layi 9 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa.	Emaculo nemilolotelo yetinombolo	Emalanga 2
	Umnyakato Bafundzi: - Ababale kufika ku-9 ngalesikhatsi bakhuphuka titepisi. - Dvweba inombolo 9 esantini/ esiyilweni/ phasi ubuye uhamba etukwayo. - Shaya tandla emahlandla layi-9. - Bona tinombolo 1 kuya ku-9 natihlanganiswe nesethi yetinombolo letinkhulu. - Sebentisa imibono yakho kute bafundzi batfole inshokutsi yenombolo 9 ngemitimba yabo.	Isethi yetinombolo letinkhulu.	

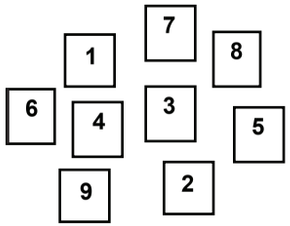
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.6 **Emasu ekucatulula tinkinga tekubala**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Thishela wakha umugcatinombolo nobe sitepisi setiombolo esiyilweni nobe phasi. - Thishela wakha umugcatinombolo nobe sitepisi esiyilweni nobe phasi - Thishela uniketa ticondziso letifana nekutsi: - Mani ecandzeni nobe cala ecandzeni ngaso sonkhe sikhatsi - Bala ube uhamba ngaso sonkhe sikhatsi. - Hamba uye enombolweni 5. Buyela emuva enombolweni 2. Hamba uye embili enombolweni 8 - Hamba uye enombolweni 8. Hamba uye phambili ngenombolo yinye. Hamba uye emuva ngetinombolo letimbili. - Nguyiphi inombolo lelandzela 3? - Nguyiphi inombolo leyendvulela 7? - Tfutfukisa lwati lwekubekeka kwetinombolo ngekuvumela bafundzi kutsi bapake tibali letiyimfica nobe ngutiphi tintfo ngetindlela letehlukene. sib.  Nakubalwa, inombolo yetintfo ayiphazanyiswa yisayizi nobe kubekeka nekutsi tiluhlobo lolufanako yini. Sibonelo: - Hlela emakinobho la-9, emapeniseli layi-9, emahhulahhubhu layi-9, bafundzi labayi-9 njll. - Tibale ngeluhlelo lolwehlukile sib. Tibale tisakatekile, tisondzelene, tisemgceni nobe tilakanyene.	Sitepisi setinombolo 0 1 2 3 4 5 6 7 8 9	

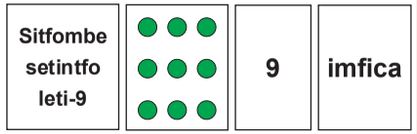
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.6 **Emasu ekucatulula tinkinga tekubala**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** Sebentisa inombolo 9 kusimongcondvo lebasetayele. Bafundzi: - Matanisa likhadititfombe nemacashati lanenombolo lefanako. Paka tibali letiyinombolo lefanako.		
1.3 **Timphawu nemagama etinombolo**	• **Bona timphawu tetinimbolo nemagama etinombolo.** **Umnyakato** - Beka tintfo leti 5 emgceni. - Vumela bafundzi kutsi batibuke kahle. - Bafundzi babuka eceleni ubuye thishela ukhipha yinye intfo. - Bafundzi kufanele basho kutsi nguyiphi intfo lekhishiwe. - Faka letinye tintfo esikhundleni saletikhishiwe ubuye uphindza emahlandla lambalwa ubuye uyachubeke ukhipha tintfo letimbili nobe letingetulu kwaloko. Bafundzi: - Khetsa inombolo 9 neligama lalenombolo emkhatsini walamanye emakhadigama. - Beka emakhaditinombolo esiyilweni ngendlela lekulandzelana ngayo tinombolo. - Beka emakhaditinombolo asakateke.	Tintfo leti -5 (kukhumbula ngekubona) Tibali  Emakhaditinombolo lambalwa lafaka ekhatsi inombolo 1 kuya ku-9 that involves number 1 ku- 9 **9** **imfica**	
	Hlukanisa bafundzi ngemacembu lamancane. Thishela uniketa licembu ngalinye isethi yemakhaditinombolo. Nika bafundzi ticondziso sib. - Tsintsa inombolo 4, beka ingcoza etulu kwenombolo 8, hlala etulu kwenombolo 3, gijima ujikelete inombolo 5 emahlandla lasihlanu njll. - Dlala imidlalo ngekuchumanisa linani letibali kanye neligama lenombolo, inombolo, emacashati nemakhadititfombe. - Ciniseka kutsi inombolo neligama lenombolo kuhlala kuchumene nelinani lelifanako letintfo.	Emakhadigama lanenombolo, emagama etinombolo, emacashati netitfombe sib.  Tibali	

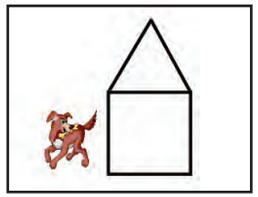
Liviki 34	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kwetayela kanye nekubukeka**	**Landzela tinkhombandlela kuhamba nobe kutibeka endzaweni letsite.** - Tfutfukisa lwati lwenkhombandlela **Umnyakato** - Dvweba calantsatfu lomkhulu nobe sikwele phasi nobe esiyilweni. - Bafundzi bahamba bajikelete bunjwa baphimisa kutsi ngabe bajikela esancele nobe esekudla babuye bakukhombise loko ngetandla, **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Dvweba calantsatfu lomkhulunobe sikwele ephepheni ubuye ulibeka esiyilweni. Umfundzi munye: - Ushova ithoyisi yemoto emigceni. - Labanye bafundzi balula tandla tabo tesencele nobe tesekudla tihambisane nenkhombandlela babuye basho kutsi kusencele nobe kusekudla. Bafundzi: - Bachaza tintfo ngetindlela letehlukene sib. Umdoli (phambili/ emuva), indlu (phambili/ emuva), sikolo (phambili/ emuva), imoto (phambili/ emuva) kuye ngekutsi wena ume kuphi. - Bachaza loko lebakubonako sib. Nangabe kunesihlahla phambi kwendlu, bachaza indzawo lesikuyo sihlahla. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Bafundzi batfola lwati lwa phambili/ emuva ngekukhombisa indlela etitfombeni.	Bobunjwa labakhulu labadvwetjwe ephepheni Ithoyisi yemoto Umdoli Indlu mbamba Imoto Titfombe leticacisa kahle inkhombandlelasib. Tinkhombandlela letikhombisa luhambo lwemoto, tinkhombandlela letilandzelwa ngumuntfu lohambako.	Lilanga 1

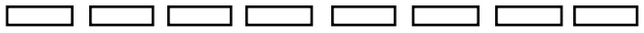
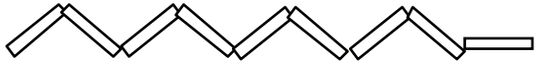
Liviki 34	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± 5 ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, tfola ubuye usho emagama abobunjwa labangemada-yimenshini lamabili (2-D) eklasini nasetitfombeni abuye abahlunge.** - **Gcizelela lwati ngendilinga, calantsatfu, sikwele nacalandze** **Umnyakato** Bafundzi baba ngababili: - Dvweba bunjwa emhlane wemngani wakhe ngemunwe. Lolomunye umfundzi kumele atfole kutsi ngumuphi lobunjwa wemngani. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Niketa bobunjwa be-Jomethri labangemasayizi nebubanti lobehlukene. Bafundzi: - Bahlunga bobunjwa ngekwe: tindilinga, bocalantsatfu, tikwele nabocalandze. - Bahlunga bobunjwa be-Jomethri ngekwesayizi. - Bahlunga bobunjwa be-Jomethri ngekwembala. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe** Bafundzi: - Bajuba labobunjwa labangenhla ephepheni. Faka bobunjwa labakhulu nalabancane nabocalantsatfu labanema-engeli lehlukene. - Hlunga bobunjwa labehlukene ndzawonye. - Hlela sitfombe usebentisa bobunjwa labajutjiwe ubuye ubasebentisa ngesikhatsi semsebenti webuciko.	Bobunjwa labatinhlobonhlobo Liphepha lelinetindilinga, bocalantsatfu, tikwele nabocalandze sib.  Faka nabobunjwa labancane nalabakhulu nabocalantsatfu labangema-engeli lehlukene sib. 	Lilanga 1

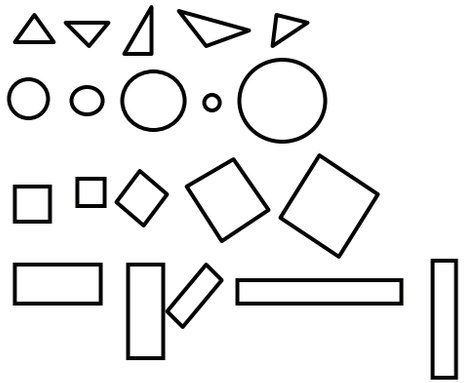
Liviki 34	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± 5 ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.4 **Umugca lohlukanisa emkhatsini kufanane, kulingane**	• **Tfutfukisa lwati lwekutsi kunemugca lohlukanisa tintfo emkhatsini kufanane, kulingane.** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Funa tintfo mbamba letitawuveta umugca lohlukanisa emkhatsini kufanane, kulingane. (licala linye libukeka lifana nalelinye licala) sib. Livivane, licembe lembali njll. - Thishela nebafundzi bagcogca titfombe letinemifanekiso lekhombisa kuhlukanisa emkhatsini kufanane, kulingane. Sib. Imifanekiso lependwe etindlini, imifanekiso yemathayilisi, imifanekiso lekumavasi nemapharashuthi. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Bafundzi bajuba bunjwa loyinhlitiyo nobe ivasi yetimbali ephepheni leligocwe laba yihhafu ubuye bayalihlobisa ngesikhatsi sebuciko bekubuka wente.	  Siceshana seliphepha leligocwe emkhatsini	**Lilanga 1**

Liviki 35	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele evikini 34 lolufaka ekhatsi inombolo 9** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike kusi-9. Bala uye phambili nasemuva ufike kusi- 9. Bala ngenhloko 1 - 10 **Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo.** **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla layi 9 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa.	Imilolotelo nemaculo etinombolo	Lilanga 1
	Umnyakato Asidlale umdlalo: Thishela ubeka bobunjwa labakhulu labentiwe ngelikhadibhodi nobe emakhadi lafaka ekhatsi tinombolo 1 kuya ku-9 ngekuhleleka esiyilweni. Thishela uniketa bafundzi ticondziso letinjengaleti: - Hlala etukwenombolo 6. - Beka lutwane lwakho enombolweni 3. - Gijima utungelete inombolo 2 katsatfu. - Zuba ngelunyawo lunye etukwenombolo 1. - Thishela angabuye awasakate emakhaditinombolo emva kwesikhatsi.	Isethi yemakhadi etinombolo lamakhulu lakhiwe ngekhadibhodi. Ungabuye uwapende eticeshaneni letilugcinsi tepulasitiki nobe ihadibhodi.  	

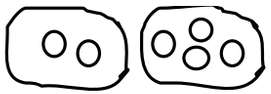
Liviki 35	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, catsanisa ubuye uhlele tinombolo**	• **Sebentisa tinombolo tesimongcondvo lesetayelekile** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu** Bafundzi: - Bafundzi babala tintfo letiseklasini - Babala ngetibali - Thishela ubeka tintfo tibe yincumbi etafuleni. Bafundzi abacombele kutsi tingaki tintfo letikulencumbi. Batatibala emuva kwaloko.	Tibali Tintfo letiseklasini Ifleshikhadi lelinenombolo neligama lenombolo, emacashati netitfombe sib.	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Bafundzi: - Badlala imidlalo ngekukhombisa kuhambelana kwenombolo yetibali neligama lenombolo, inombolo, emakhadi emacashati netitfombe. - Bacinisekisa kutsi inombolo neligama lenombolo kuhambelana nelinani lelifanako letintfo. - Batsatsisela inombolo 9 ngekhilayoni.	 Tibali, emakhilayoni	
1.7 **Kuhlanganisa nekususa**	• **Sombulula ngemlomo tinkinga tetibalo temagama (tibalo tetindzaba) engcikitsini lefaka ekhatsi tinombolo 1 kuya ku-9** **Umnyakato** - Coca indzaba ngesihlahla lesinenyoni yinye kuso. Kwafika lenye inyoni. Nyalo sekunetinyoni letingaki? Bafundzi benta samdlalo basebentisa emamaski. 1 na 1 kwenta 2. - Phindza lendzaba kuze kube netinyoni letisi- 9.	Sitfombe sesihlahla lesikhulu	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) - Umngani munye unetibali leti 8 sib. Tilwane letakhiwe ngepulasitiki, umngani wakhe unasinye ngetulu. Tingaki tilwane tepulasitiki lebanato setihlangene. 8 na 1 ® 9	Tibali letiyi 9	
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe - Niketa umntfwana ngamunye liphepha lekusebentela lelinesitfombe sesihlahla. Bafundzi babeka sibali sinye esihlahleni. Bayachubeka bangeta sibali sinye esihlahleni.	Liphepha lekusebentela lelinesihlahla netibali	

Liviki 35	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Chaza tintfo letimbili Nangabe uticatsanisa nalenye** **Umnyakato** - Umfundzi ucela umngani wakhe kutsi eme emkhatsini wetintfo letimbili/ webafundzi lababili. - Umfundzi ucela umngani wakhe kutsi eme eceleni nentfombatane legcoke liloko leliluhlata njengesibhakabhaka. - Umfundzi ucela umngani wakhe kutsi eme eceleni kwemfana logcoke emasandasi lansundvu. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Lengisa intsambo emkhatsini wetintfo letimbili. - Bafundzi baneka timphahla mbamba ngekwesicondziso lesitsite sib. o “Neka lihembe ecaleni lesancele lentsambo yekuneka” o “Neka liloko ecaleni lesekudla lelihembe” o “Neka liduku lekutesula edvute ne …..njll” o “Neka libhuluko emkhatsini we ….njll”		Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) - Dvweba sitfombe sendlu ngekweticondziso sib. o Dvweba luphahla ngetulu kwelikhasi. o Dvweba lubondza lwendlu emkhatsini weliphepha. o Dvweba inja ecaleni lesancele lendlu. Liphepha kumele lingabi likhulu kakhulu kute kube nesiciniseko sekutsi labobunjwa labehlukene bayatsintsana kute kwakheke sitfombe sendlu. 	Liphepha Emakhilayoni	

Liviki 35	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Bona, utfole ubuye unikete emagama abobunjwa labangemada-yimenshini lamabili (2-D) eklasini nasetitfombeni:** • **Kugcina bobunjwa** - **Gcizelela lwati lolutfolakele ngacalandze.** **Kugcina lwati kuyindlela yekwati kwehlukanisa emkhatsini wabobunjwa labasendzaweni yetfu ngaphandle kwekubuka isayizi yabo nobe isayizi yema-engeli.** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Hlukanisa bafundzi ngemacembu. - Niketa licembu ngalinye emabhuloki ekwakha laluhlobo lwacalandze langemasayizi lehlukene abe yi 9. Bafundzi: - Bahlunga emabhuloki ekwakha abe tincumbi letingemasayizi lalinganako. - Bala inombolo yemabhuloki ekwakha. Thishela uniketa leticondziso letilandzelako: - Beka emabhuloki ekwakha laluhlobo lwacalandze emgceni locondzile.  - Beka emabhuloki ekwakha laluhlobo lwacalandze eme, acondze.  - Beka emabhuloki ekwakha laluhlobo lwacalandze akhe umugca wezigi zegi.  - Thishela uniketa umfundzi ngamunye siceshana sensontfo. Bafundzi bakha bunjwa loluhlobo lwacalandze basebentisa insontfo.  Thishela utawukhombisa kutsi calandze wemfundzi ngamunye wehlukile kodvwa labobunjwa babocalandze bonkhe.	Licembu ngalinye litfola emabhuloki ekwakha bobunjwa labangubocalandze labayi-9 bemasayizi lahlukene. Siceshana sensontfo	Lilanga 1 Nobe khetse leminye

Liviki 35	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga (Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.3 **Bobunjwa labangemada-yimenshini lamabili (2-D)**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Thishela udvweba emakhadi lehlukene langemashumi lamabili, ngalinye libe nabocalantsatfu labehlukile, tindilinga, tikwele nabocalandze sib.  Thishela uhlukanisa bafundzi ngemacembu: Bafundzi: - Bakhetsa ifleshikhadi lenacalandze kulabanye bobunjwa. Bafundzi: - Bakhetsa tonkhe titfombe letinetimbali kuletinye titfombe tetihlahla nemacembe.	Emafleshikhadi langemashumi lamabili, ngalinye linacalantsatfu munye kulabasihlanu labehlukene, tindilinga, tikwele nabocalandze.	Lilanga 1 Nobe khetse leminye

Liviki 36	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Gcizelela lwati lolutfolakele lolufaka ekhatsi tinombolo 1 kuya ku-9** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike kusi- 9. Bala uye phambili nasemuva ufike kusi- 9. Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla layi 9. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Beka tintfo tibe tincumbi letifaka ekhatsi tinombolo 1 kuya ku-9 ubuye ubala tintfoo uphimisele. - Dlala emadomino etinombolo.	Emaculo etinombolo nemilolotelo  Tintfo letiseklasini Emadomino etinombolo	Lilanga 1
	Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe Nika umfundzi ngamunye likhadi lesitfombe, lelicashati, lenombolo nobe leligama lenombolo. Bafundzi balandzela ticondziso tathishela: - Bafundzi bahlala bente indilinga. - Thishela ubita inombolo sib. 9. Bafundzi labanemakhadi lanesitfombe, licashati, inombolo nobe ligama lenombolo lelimele 9, bahamba batungelete indilinga batsi "Nginemfica" - Phindza ngaletinye tinombolo. - Nangabe bonkhe bafundzi babe nelitfuba "kuba" yinombolo, bita tinombolo ngekuhleleka kwato. - Bafundzi bayasukuma ubuye baphakamisa emakhadi abo Nangabe abitwa. - Buka kutsi bafundzi bayakwati yini kutihlela ngekulandzelana kusukela ku -1 kuye ku -9 - Buka kutsi bafundzi bayakwati yini kuhlela emakhadi laveta tinombolo 1, 2, na 3 kuye enombolweni 9 sekuhlangene.	Emasethi lanele emakhaditinombolo lafaka ekhatsi tinombolo 1 kuya ku-9 kute umfundzi ngamunye loseklasini lakho atfole ifleshikhadi.	

Liviki 36	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Catsanisa kutsi ngutiphi tintfo letimbili letigcogciwe kuleti:** - **kunyenti kuna** - **kuncane kuna (lokumbalwa)** - **kulingana na (kuyafana)** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela uniketa tintfo letehlukene letifana nemacembe, ematje, timbonyo temabhodlela, emakhilayoni, emabhuloki njll. Bafundzi: - Bayatihlunga bente “tincumbi” sib. Ematje onkhe ndzawonye. - Babala inombolo yetintfo “ letisencunjini” ngayinye. - Bakhombisa kutsi nguliphi “licembu” “lelinyenti kuna” “lelincane kuna” “nalelilingana na”. Emasethi lafaka ekhatsi tinombolo ufike ku- 9: - Bafundzi bahlala ekhaphethini ubuye bakha tikhehle letimbili ngensontfo. - Thishela uniketa bafundzi sicondziso sekutsi babeke tibali leti -2 esikhehleni sinye babuye babeke leti -4 kulesinye sikhehle. - Buta imibuto lefana nale: Ngusiphi sikhehle lesinetibali “letinyenti kuna” “letincane kuna” lesinenombolo “lefanako” yetibali? sib. “Sikhehle” lesinetibali leti-2 sinalokuncane kunesikhehle lesinetibali leti -4  - Bafundzi abakhe emasethi “alokunyenti kuna”, “alokuncane kuna” kanye “nalokulinganako” ngetinombolo letifika ku-9.	Ticeshana letimbili tensontfo temfundzi ngamunye Tibali leti -9 umfundzi ngamunye	Lilanga 1

Liviki 36	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	• **Bala tibalo temagama tekuhlanganisa nekususa ngemlomo letifaka ekhatsi tinombolo 1 kuya ku-9** **Temlomo:** Bala tintfo letisetjentiswa malanga onkhe ufike ku- 9. Bala uye phambili nasemuva ufike ku- 9. Gcizelela kubala ngakubili ngekusebentisa imilolotelo yetinombolo. **Gcizelela kubala ngetinombolo te-odinali;** Thishela upaka tintfo leti- 6 emgceni. Khomba intfo ngayinye ngalesikhatsi ubala *kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha.* **Gcizelela lwati lwa "lokunyenti" " nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla layi-9 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa.	Emaculo etinombolo nemilolotelo	Lilanga 1
	Umnyakato - Thishela ubita umfundzi munye aye phambili. - Thishela ubeka linani lelehlukile lebuhlalu (kufika ku-9) esandleni semfundzi ngasinye sib. Leti -4 esandleni sinye naleti -5 kulesinye sandla. Thishela uhlela bafundzi ngemacembu alabayiyimfica. - Bafundzi bahlala esiyilweni. - Thishela ucela bafundzi lababili kutsi basukume. - Thishela ubuta kutsi: Bangaki bafundzi labahleti esiyilweni?	Buhlalu nobe tibali	

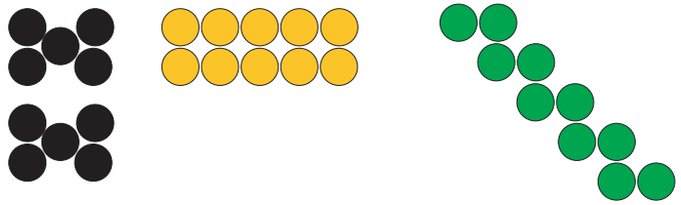
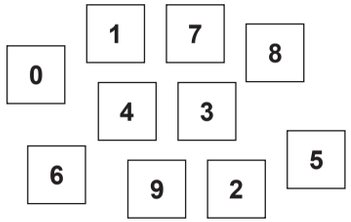
Liviki 36	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi bahlala ekhaphethini. - Umfundzi ngamunye utfola buhlalu lobu -8 lobufakwe enkomishini yepulasitiki lenelisoso. - Tsatsa buhlalu lobu -6 enkomishini ubuye ububeka etukwelisoso. Tsatsa lobunye buhlalu lobu -2 ubuye uhlanganisa nalobuhhlalu lobusesosweni. Bungaki buhlalu lobusenkomishini? 6 na 2 → 8. - Tsatsa buhlalu lobu -4 esosweni ubuye ubufake enkomishini yeplastiki. Tsatsa lobunye buhlalu lobu -4 ubuhlanganise nebuhlalu lobusenkomishini yeplastiki. Bungaki buhlalu lobusesosweni? 8 ususe 4 ususe 4 → 0. - Susa buhlalu lobu -4 enkomishini yeplastiki buye esosweni. Bungaki buhlalu lobusele enkomishini yeplastiki? 8 na 4→4 - Susa buhlalu lobu-4 enkomishini yeplastiki. Kusele bungaki esosweni? 4 na 4 → 8 **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** Hlukanisa bafundzi ngemacembu. Niketa licembu ngalinye isethi yemafleshikhadi etitfombe. - Bala letitfombe leti -6 letisefleshikhadini. Nangabe uhlanganisa nefleshikhadi lenetitfombe leti -2, utawuba naletingaki titfombe? 6 na 2 → 8. - Bala letitfombe leti -8 ekhadini letitfombe. Nangabe umbonya titfombe leti -3, tingaki titfombe lotibonako? 8 ususe 3 → 5. - Paka linani lelifanako letibali.	Enta taba Nangabe ungenato tinkomishi nemasoso. Emasethi lambalwa emafleshikhadi etitfombe	Lilange 1
2.1 **Emaphethini e-Jomethri**	• **Tsatsela iphethini yemsindvo** **Umnyakato** - Thishela uhlukanisa bafundzi ngemacembu lamatsatfu. Hleba ubuye ukhombise ecenjini ngalinye umsindvo weluhlobo lwesitfutsi lebalumele. - Licembu ngalinye lenta umsindvo leliniketwe wona ngalesikhatsi thishela alikhomba sib. - Vumm, hhaamm, brrm/ vumm, hhaamm, brrm.	Titfombe tetitfutsi letintsatfu letihamba emgwaceni nobe imishini.	Lilanga 1

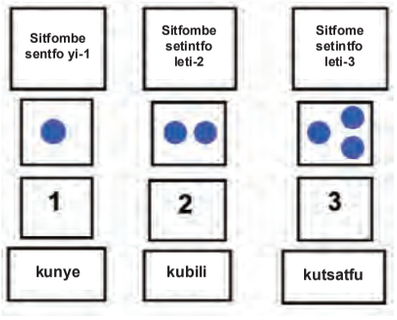
Liviki 36	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (tikhatsi tetifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
5.1 **Gcogca ubuye uhlunge tintfo**	• **Gcizelela lwati lwekusebenta ngedatha** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Asidlale umdlalo: Hlunga imibala lekhetsiwe yenhlama yekudlala ubuye uyibeke ngemacembu kulungiselela liviki lelilandzelako sib. - Inkinga lekumele isonjululwe kutfola kutsi kumele ube njani umbala wenhlama yekudlala kuleliviki lelilandzelako. **Gcogca ubuye uhlunge idatha** - Sebentisa tintfo letiphatsekako kwakha igrafu njengemabhuloki, kupaka emakhiyubhi, emabhuloki e-Lego nobe e-Duplo lamele imibala yenhlama lohlela kuyenta sib. Loluhlata njengesibhakabhaka, loluphuti naloluhlata njengetjani. - Umfundzi ngamunye ukhetsa ibhuloki lemele umbala wenhlama yekudlala lawutsandzako walelo vikii. **Dvweba igrafu** - Emabhuloki apakwa ngekwemibala ephosteni. **Fundza ubuye uhumushe lithebula** - Ngekwekukhetsa kwebafundzi, umbala wenhlama yekudlala yeliviki utawuba ngulomtfubi.	Umbala loluhlata sasibhakabhaka, loluphuti nelogo leluhlata satjani, i-Duplo- nobe ibhuloki yeyunifiksi. (Kusetjentiswe luhlobo lunye kuphela)	Lilanga 1
5.3 **Coca ubuye ubike ngetintfo letigcogciwe**			

Loluhlata njengesibhakabhaka	Loluphuti	Loluhlata njengetjani
☐ ☐	☐ ☐ ☐ ☐	☐ ☐
2	4	2

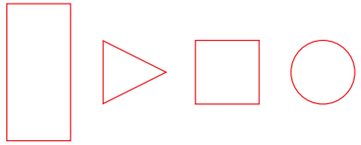
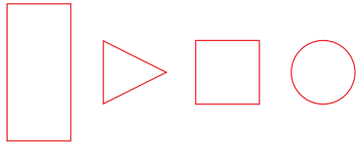
Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Ngenisa inshokutsi yenombolo 0 (licandza)** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -10 ucale ecandzeni. Bala uye phambili nasemuva ufike ku -10 ucale ecandzeni. **Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo** **Gcizelela kubala ngetinombolo te-odinali**: Thishela upaka tintfo leti -6 emgceni. Khomba intfo ngayinye ngalesikhatsi ubala *kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha.* **Gcizelela lwati lwa "lokunyenti" " nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla la -10 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa. Thishela uyachaza kutsi licandza lisho kutsi akunalutfo nekutsi kubala mbamba kucala ku-1. **Umnyakato** - Thishela ukhombisa bafundzi ligama lenombolo yelicandza. - Bafundzi kumele batfole kutsi ngusiphi sitfo semtimba lesingakha licandza sib. o Imilomo yebafundzi o Iminwe yebafundzi **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela ufaka sibali sinye esandleni sakhe sinye ubuye angafaki lutfo kulesinye sandla. - Uvula sandla sakhe sinye abuye akhombisa bafundzi sibali sinye avula lesinye sandla sakhe akhombise bafundzi kutsi akunalutfo. - Lomsebenti ungentiwa kusetjentiswa bafundzi. **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Thishela ukhombisa bafundzi ifleshikhadi lete titfombe nenombolo 0	Emaculo nemilolotelo yetinombolo Tibali ☐ 0	Lilanga 1

Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Ngenisa inshokutsi yenombolo 10** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -10. Bala uye phambili nasemuva ufike eli -10. Kubala ngenhloko 0 - 10 **Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo** **Gcizelela kubala ngetinombolo te-odinali**: Thishela upaka tintfo leti -6 emgceni. Khomba intfo ngayinye ngalesikhatsi ubala *kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha.* **Gcizelela lwati lwa "lokunyenti" " nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla la -10 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa.	Emaculo nemilolotelo yetinombolo	Lilanga 1 Khetsa imisebenti kuphela.
	Umnyakato Bafundzi: - Ngababili bakha inombolo yeli-10 basebentise imitimba yabo (bafundzi laba -4) - Babala kufika eli -10 ngalesikhatsi banyakata bahambisana nekushaywa kwesigubhu. - Baphakamisa iminwe le -10. - Badvweba inombolo 10 esantini/ esiyilweni/ phasi ubuye bahamba etukwayo. - Bazuba emahlandla la -10 - Faka tinombolo tekhadibhodi letijutjiwe esikhwameni setintfo letiviwa ngekubanjwa. - Sebentisa isethi yemafleshikhadi lanetitfombe letimele tinombolo sib. Emabhola lamabili lasekhadini nenombolo 2. Umfundzi "utsintsa" tinombolo letikufelibhegi ubuye utimatanisa nemakhadi.	Tinombolo tekhadibhodi letijutjiwe Emafleshikhadi lamakhulu etinombolo	

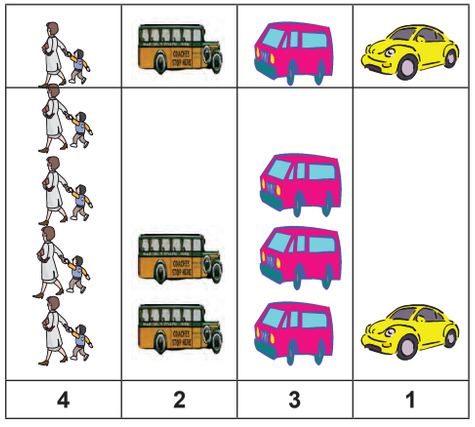
Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi: - Bapaka tinombolo tabo telucingo basebentisa emakhadi etinombolo lamakhulu. Bente bati ngelicandza lelimela inombolo 10 - Tfutfukisa lwati lwekugina tinombolo ngekuvumela bafundzi kutsi bapake tibali letisihlanu nobe nguyiphi intfo ngetindlela letehlukene sib.  Nakubalwa, inombolo yetintfo ayiphazanyiswa yisayizi nobe kubekeka,nobe titeluhlobo lunye. Sibonelo: - Hlela emakinobho lali-10, emapeniseli lali-10, emahhulahhubhu lali-10, bafundzi labali-10 njll. - Tibale ngetindlela letehukile sib. Tibale tisakatekile, tisondzelene, tisemgceni nobe tipakelene.	Emakhadi lanetinombolo tebafundzi telucingo 	Lilanga 1 Khetsa imisebenti kuphela.

Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** Bafundzi balandzela ticondziso tathishela: - Babeka tintfo ngetincumbi letifaka ekhatsi tinombolo 1 kuya eli-10 ubuye ubala tintfo ngekuphimisela. Thishela uhlukanisa bafundzi ngemacembu lasihlanu. Bafundzi: - Hlela ubuye ucondzanise emakhadi etitfombe, emafleshikhadi emacashati, timphawu nemagama etinombolo ngekulandzelana kufika ku-10 sib.  njll - Paka linani letibali ekhadini lemacashati ngalinye.	Tintfo letiseklasini Isethi yemakhadi etitfombe lafika ku -10 ☐ 0 Tibali	Lilanga 1 Khetsa imisebenti kuphela.

Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	• **Dlala umdlalo wephethini-"I-Hop scotch"** Hlanganisa neSifundvo Sekutivocavoca esifundvweni Semakhono ekuphila. **Umnyakato** - Hambahamba ujikelete eklasini. Ngekubonakala kweluphawu nobe ngekuma kwemculo, thishela ubita ligama labunjwa. Bafundzi bakha lobunjwa ngeminwe yabo. Bangabuye bakhe emacembu bakhe bobunjwa ngemitimba yabo. - Dvweba lephethini lengentasi esiyilweni/ phasi nobe evulanda kute bafundzi bahambe ngendlela letsite.  - Chaza iphethini sib. - Buta imibuto lefana: - "Ngumuphi bunjwa lota emuva kwacalantsatfu wekucala ?" - "Ngumuphi bunjwa losembi kwendilinga yekucala ?" Bafundzi balandzela lephethini ngalendlela lelandzelako: - Thishela utsi: Jona, wena uzuba ngembi kwaMelisa", Mariya, ungazuba nasekuzube Kabelo" - Zuba ngetinyawo totimbili kucalandze - Zuba ngelunyawo lwesencele kucalantsatfu - Zuba ngelunyawo lwesekudla kusikwele - Zuba ngetinyawo totimbili endilingeni ubuye ugucula umtimba wakho useme endilingeni - Cedzela lephethini	Lesibonelo sephethini lenikiwe sidvwetjwe esiyilweni/ phasi/ evulanda	Lilanga 1

Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Umfundzi ngamunye utfola labobunjwa labalandzelako:  Thishela wakha iphethini ngabobunjwa bakhe. Bafundzi: - Batsatsela emaphethini athishela basebentisa labobunjwa labangenhla. - Batakhela abo emaphethini ngabobunjwa labanikiwe.	Umfundzi ngamunye utfola labobunjwa labalandzelako: 	Lilanga 1
3.1 **Kubekeka, kutetayeta nekubukeka**	**Landzela tinkhombandlela kunyakata nobe kutibeka emkhatsini wendzawo letsite** • **Tfutfukisa lwati lwenkhombandlela ngekusebentisa ticondziso letifaka ekhatsi sencele nesekudla** **Umnyakato** Bafundzi abalandzele sicondziso sathishela: - Buka etulu/ buka phasi - Goba ubuke phasi - Phakamisa lunyawo lwesencele/ phakamisa lunyawo lwesekudla - Khasa ujikelete litafula - Hamba uye phambili/ hamba uye emuva - Lula sandla sakho/ finyeta sandla sakho - Mani eceleni lesekudla lesitulo/ Mani ecaleni lesancele lesitulo - Mani ecaleni embi kwesitulo sakho/ Mani ecaleni emuva kwesitulo sakho - Mani emkhatsini wetitulo letimbili - Buka kusekudla/ buka kusencele - Gucukela enyaweni lwakho lwesancele/ gucukela enyaweni lwakho wlesekudla	Ticondziso letibuya kuthishela. **Silulumagama:** Etulu/ phasi Ekhatsi/ ngaphandle Ngetulu/ ngaphasi Phambili/ emuva Phambili kwe / emuva kwe Licala linye / lelinye licala Edvute ne Sencele / sekudla Emkhatsini	Lilanga 1

Liviki 37	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilangab (Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** Bafundzi abente loku lokulandzelako ebhodini: - Dvweba tindilinga ubuye uchubeke nekujikeleta uphindze ujikelete  - Dvweba imigca lecondzile lesuka kusencele kuya kusekudla  - Dvweba imigca iye etulu naphasi  - Thishela udvweba emacashati lamabili ubuye umfundzi udvweba umugca wekuwahlanganisa. 	Ibhodi	Lilanga 1

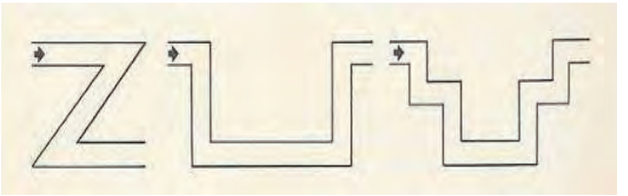
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Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
5.1 **Gcogca ubuye uhlunge tintfo**	• **Gcizelela lwati lwekusebenta ngedatha** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Thishela ucocisana nebafundzi kutfola kutsi umfundzi ngamunye uta ngani esikolweni. - Wakha igrafutitfombe lekhombisa bafundzi labahamba ngetinyawo, labahamba ngethekisi, labeta ngetimoto tebatali nalabeta ngebhasi sib.	Titfombe tethekisi, ibhasi, imoto nemfundzi lohamba ngetinyawo letijutjwe ephephabhukwini. Nangabe ungenato titfombe enta taba tekutidvwebela takho titfombe.	Lilanga 1
5.2 **Veta tintfo letigcogciwe kugrafu**	 **4** **2** **3** **1**		
5.3 **Chaza ubuye ubike ngetintfo letigcogciwe**	o Hlatiya imiphumela ngekubuta imibuto		

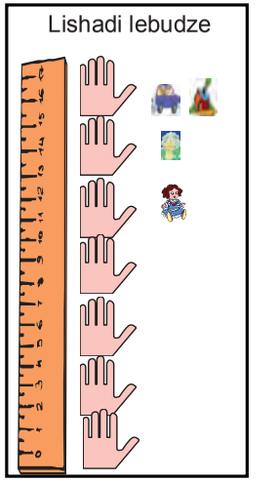
Liviki 38	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela lwati lolutfolakele evikini 37 lolufaka ekhatsi kwenombolo 0 kuya ku-10** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -10 Bala uye phambili nasemuva ufike ku -10 Bala ngenhloko 0 - 10 **Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo** **Gcizelela kubala timbolo te-odinali**: Thishela upaka tintfo leti -6 emgceni. Khomba intfo ngayinye ngalesikhatsi ubala *kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha.*		Lilanga 1 Nobe Khetsa kuphela leminye imisebenti.
	Gcizelela lwati lwa "lokunyenti nalokumbalwa" Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla la -10 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa.	**Emaculo nemilolotelo yetinombolo**	
	Umnyakato - Thishela udvweba tindilinga leti-11 (0 kuya ku-10) enkhundleni yetemidlalo nobe emahhulahhubhu. Bhala tinombolo 0 kuya ku-10 ekhatsi endilingeni. Thishela ubita inombolo abuye umfundzi aphosa ibhinibhegi yakhe ekhatsi endilingeni lebitiwe. - Khumbuta bafundzi kutsi 0 usho kutsi akunalutfo. Nangabe umfundzi aphosa ibhinibhegi kulendilinga lenenombolo lelicandza, utawuphuma emdlalweni. - Umfundzi uphosa ibhinibhegi yakhe endilingeni lehambisana nelikhadi lelinelicashati nobe sitfombe lesikhonjiswe nguthishela. - Umfundzi uphosa ibhinibhegi yakhe endilingeni lekhonjiswe kulikhadinombolo lelikhonjiswe nguthishela. - Chubeka ngekusebentisa emakhadi emagama etinombolo ngendlela lefanako.	10 emabhinibhegi Dvweba tindilinga esantini/ phasi nobe esiyilweni nobe usebentise emahhulahhubhu	

Liviki 38	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.3 **Timphawu nemagama etinombolo**	**Kubona nekutfola timphawu nemagama etinombolo** **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** Asidlale umdlalo: - Thishela ubhala ligama lenombolo ecaleni linye lelikhadi ubuye ubhala inombolo kulelinye licala lelikhadi kufaka ekhatsi tinombolo 0 kuya ku-10 (Sebentisa emasethi lambalwa) - Bafundzi "bafundza" ligama lenombolo ubuye bacambela inombolo. - Bagucula likhadi ubuye bayatilungisa.	Isethi yemakhadi etitfombe lafika ku -10 Emakhadi lafaka ekhatsi tinombolo 1 -10 laneligama lenombolo ecaleni linye kanye neluphawu lwenombolo ecaleni linye (Yakha emasethi lambalwa kute umfundzi ngamunye abe neyakhe)	
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Ngenisa kubala lokukhombisa kubekeka - kwekucala, kwesibili, kwesitsatfu kufika kukwesitfupha …… kwekugcina** Lolwati lutfutfukiswa ngekuhamba kwesikhatsi nangekusebentisa nekulebula timo temvelo ngendlela letenteka ngayo eklasini sib. Kufola kute baye ngaphandle "Siya wekucala, Helen wesibili ……" **Umnyakato** - Bafundzi bagijima umjaho. Ngubani wekucala, wesibili newekugcina ? **Dlala umdlalo-"Ngubani"?** - Cela bafundzi labasihlanu kutsi bahlale emgceni wetitulo letisihlanu. - Thishela utsi: "Ngicabanga ngemfundzi munye. Lomfundzi ugcoke lijezi lelibovu" - Ucala ngemfundzi lohleti ekucaleni, uyachubeka ulandzela umugca, utsintsa umfundzi ngamunye ubuye uyabuta: "Ngabe ungumfundzi wekucala, wesibili, wesitsatfu …….? Bafundzi labasihlanu bema etitepisini ngaphandle. Thishela ubeka likhadi lelinenombolo lengiyo ngaphasi kwemfundzi ngamunye losetitepisini. Ngikhombe kutsi ngumuphi lome: - Esitepisini sekucala - Esitepisini sesibili - Esitepisini sesitsatfu njll Umfundzi losesitepisini sekucala uphakamisa likhadi lelinenombolo kuphela emva kwekutsi bangani bakhe baseklasini sebakhulume imphendvulo. Chubeka uze ufike kusi- 6.	Titulo letisihlanu Isethi yemakhadi etitfombe lafika ku -10 Yenta taba nangabe kute titepisi	Lilanga 1

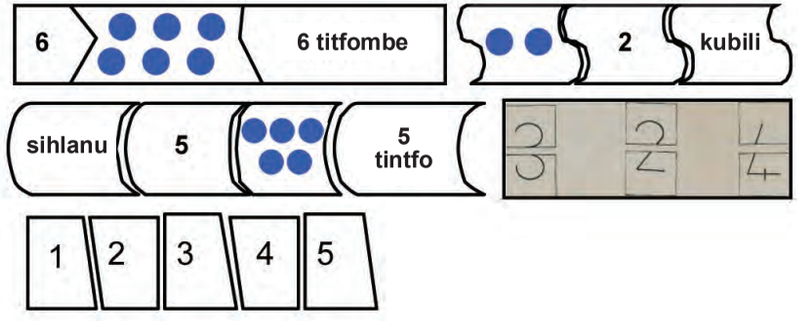
Liviki 38	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(lmisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.7 **Kuhlanganisa nekususa**	• **Sombulula ngemlomo tinkinga tetibalo temagama (tibalo tetindzaba) engcikitsini lefaka ekhatsi inombolo 10** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -10 Bala uye phambili nasemuva ufike ku -10 **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla la -10 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa. Sibonelo: 1. Bekunemamantfombatane lasi -5 endlini. Kwangena lamanye lasi -5. Sekunamangaki nyalo? 5 nesi- 5 → 10. 2. Bala tibali leti -7. Bala ungete lokubili. Bala ungete kunye. Kungaki sekukonkhe? Si-7 naku- 2 naku- 1 → 10. 3. Bekunetibali leti -10 etafuleni. Kusele leti -4 kuphela. Kususwe letingaki? 10 susa letisi-6 → kule-4. 4. Unetimabuli leti -10. Susa leti -3. Usele naletingaki? 10 susa 3 → 7 5. Ubhake emakhekhe la -10. Utsengise lama -2. Usele nalamangaki?	Tibali	Lilanga 1

Liviki 38	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Landzela tinkhombandlela kunyakata nobe kuma endzaweni leseklasini** **Umnyakato** - Thishela ucela bafundzi kutsi beme ngemuva eklasini (umnyango ukhombisa kutsi kuphambili kweliklasi) - Thishela ucela bafundzi kutsi beme ecaleni linye leliklasi - Thishela ucela bafundzi kutsi beme ngaphambili eklasini		Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) **Umsindvo unenshokutsi** Bafundzi balalela**:** - Insimbi - Imfengwane - Lithulusi lemculo - Shayanisa emabhuloki lamabili Bafundzi bavala emehlo babuye balalele, batfole umsindvo wensimbi nobe imfengwane nobe lithulusi lemculo. - Bafundzi bavala emehlo babuye batfole kutsi umsindvo uchamukaphi. Bangacala ngekuphosa ibhinibhegi bayicondzise ngalapha umsindvo uchamuka ngakhona babuye basho kutsi umsindvo ukuphi sib. Phambili eklasini, edvute nelikhabethi lemabhuku njll. - Thishela utjela bafundzi laba -4 kutsi beme basekele elubondzeni lweliklasi ngamunye abe nelithulusi lemculo lelehlukile (Insimbi, imfengwane, lithulusi lemculo nemabhuloki lamabili) - Thishela ukhombisa ngesandla sakhe kubafundzi labatsite kutsi bente umsindvo ngemathulusi abo emculo sib. Insimbi kuphela. - Kugcizelela lwati lwesencele nelwesekudla, tfumela bafundzi lababili labeme phambili nasemuva eklasini babuyele kulaba labanye bafundzi. - Phindza lomsebenti ugcile emisindvweni lechamuka kusencele nesekudla seliklasi. - Bafundzi batsi “sencele” Nangabe umsindvo uchamumuka kusencele, batsi “sekudla” Nangabe umsindvo uchamuka kusekudla.	Insimbi Imfengwane Noma nguliphi lithulusi lemculo Emabhuloki lamabili elukhuni Insimbi Imfengwane Noma nguliphi lithulusi lemculo Emabhuloki lamabili elukhuni	

Liviki 38	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(lmisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi basebentisa ibhuloki, sib. Hambisa ibhuloki ihambelane nesitulo o Hambisa uye emuva / hambisa uye phambili. o Mani kusencele sesitulo / Mani esekudla sesitulo. - Mani emkhatsini wetitulo letimbili. - Hlunga ticatfulo tasesencele netasesekudla.		Lilanga 1
	Lokubonakalako longeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe. Bafundzi bacedzela liphepha lekusebentela basebentisa likhilayoni kudvweba umugcai emkhatsini wemalayini sib. 	Liphepha lekusebentela nekhilayoni	

Liviki 38	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(lmisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
4.2 **Budze**	**Catsanisa ngekwenta ubuye uhlele tintfo usebentisa silulumagama lesifanele kuchaza budze.** • **Kala budze bebafundzi ngethephu** **Umlayeto** - Buka ethemini yekucala neyesitsatfu ngalesikhatsi kukalwa budze bebafundzi ngekusetjentiswa tandla eshadini lebudze. - Phindza ukale budze bebafundzi. - Thishela ubeka ithephu edvute nesitfombe setandla eshadini lebudze. - Chazela bafundzi kutsi sisebentisa lithulusi lekukala lelihlelekile, loku ngulokusetjentiswa ngumake ngalesikhatsi atfunga timphahla. - Manje budze babo abusito tandla letilishumi kodvwa sebuyimitha yinye neli- 10 senthimitha - Bafundzi bangacatsanisa budze babo. Ngubani lomudze kunabo bonkhe/ lomfisha kunabo bonkhe eklasini. **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Umfundzi ulala esiyilweni, labanye babeka emabhuloki ekwakha (emasayizi lafanako) emgceni eceleni nemtimba wemfundzi. - Thishela unika sicondziso: “Yakha intfo lendze/ lemfisha kunemngani wakho”	**Lishadi lebudze** Ithephu Lishadi lebudze 	

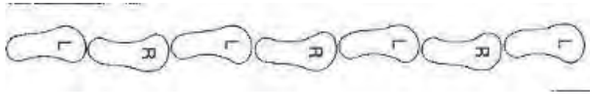
Liviki 39	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	• **Gcizelela inshokutsi yenombolo 10** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike ku -10. Bala uye phambili nasemuva ufike ku -10. Kubala ngenhloko 0 - 10 **Gcizelela kubala ngetinombolo te-odinali**: Thishela upaka tintfo letisi -6 emgceni. Khomba intfo ngayinye ngalesikhatsi ubala *kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu, kwesitfupha.* **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla la -10 Buta imibuto kutsi ngukuphi kushaywa kwetandla lokube kunyenti/ mbalwa.	Emaculo nemilolotelo yetinombolo	**Lilanga 1**
	Umnyakato Bafundzi: - Abasho umlolotelo wetinombolo basebentisa iminwe lelishumi. - Ababale kutsi thishela ushaya kangaki etafuleni babuye batsatsele lokwentiwa nguthsihela. - Shaya tandla tabo emahlandla lalishumi. - Bala ngesigci ngalesikhatsi bafundzi behla titepisi, bazuba bangena baphuma kumahhulahhubhu. - Shaya tinyawo phasi ulandzele sigci. - Bafundzi labalishumi bema bakhe indilinga kube nemantji emkhatsini, umfundzi ngamunye ubamba ibhinibhegi. Bafundzi abaphose emabhinibhegi emantjini babuye bachubeke bafike eli- 10. Bafundzi kufanele babale baphimisele ngalesikhatsi baphosa. Phindza lomsebenti baze bonkhe bafundzi batfole litfuba.	Emabhinibhegi nemantji	

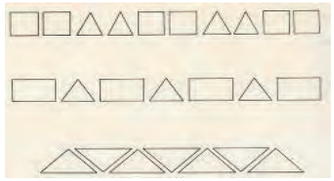
Liviki 39	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.1 **Bala tintfo**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** Hlukanisa bafundzi ngemacembu lamancane: - Thishela uniketa bafundzi emaphazili etinombolo. - Bafundzi batfola babuye baphenye tonkhe tindlela. - Bafundzi bangaphosa lidayizi kute batfole kutsi nguyiphi iphazili  	Yakha emaphazili etinombolo lafaka ekhatsi tinombolo 1 kuya ku-10	**Lilanga 1**

Liviki 39	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	• **Gcizelela kuhlanganisa nekususa lokunetimphendvulo letifika eli- 10** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike eli -10. Bala uye phambili nasemuva ufike eli -10. **Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo** **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla la -10 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa. **Umyakato** - Thishela ubita bafundzi labasihlanu kutsi bete phambili, uyachubeka ungeta ngamunye umfundzi baze bafike eli- 10 - Bafundzi babala baphimisele. 5 na 1 → 6. (Tsani: Sihlanu nakunye kukunika sitfupha) 6 na 1 → 7. 7 na 1 → 8. 8 na 1 → 9. 9 na 1 → 10. - Thishela ubuyisela bafundzi emuva, bafundzi babala baye emuva. 10 susa 1 → 9 9 susa 1 → 8 10 susa 2 → 8	Emaculo nemilolotelo yetinombolo	Lilanga 1
	Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D) Bafundzi bahlala ekhaphethini. Umfundzi ngamunye unetibali leti -10 nesimbonyo seplasitiki. Bafundzi balandzela ticondziso: - Paka tibali leti -4 esimbonyweni sakho. Ngeta futsi leti -4. Tingaki setitonkhe 6 na 4 → 10 - Paka tibali letili -10. Susa letisi -5. Kusele letingaki? njll	10 tibali temfundzi ngamunye Timbonyo teplasitiki sib. Timbonyo tetintfo tekuphatsa i-ayisikhilimu.	

Liviki 39	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.13 **Kuhlanganisa nekususa**	**Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Bala tintfo leti -8 letisekhadini letitfombe. Nangabe uhlanganisa likhadi lelinetitfombe leti -2, utawuba natingaki nyalo? 8 naku- 2 → 10. Paka linani lelilinganako letibali. - Bala tintfo letili -10 letisekhadini letitfombe. Nangabe umbonya tintfo leti -3, ubona letingaki? 10 susa 3 → 7. Paka linani lelilinganako letibali.	Emafleshikhadi etitfombe lafaka ekhatsi tinombolo 1 kuya kuli- 10 Tibali	Lilanga 1
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	• **Catsanisa kutsi ngutiphi tintfo letimbili kuletigcogciwe leti:** - **nyenti kuna-** - **mbalwa kuna-** - **letilingana na-** **Temlomo:** Bala tintfo letisetjentiswa malanga onkheonkhe ufike kuli -10. Bala uye phambili nasemuva ufike eli -10 usebentisa imilolotelo yetinombolo nemaculo. **Gcizelela kubala ngakubili usebentisa imilolotelo yetinombolo** **Gcizelela lwati lwa "lokunyenti nalokumbalwa"** Shaya tandla emahlandla lamanyenti …….MANI Shaya tandla emahlandla lambalwa. Thishela ushaya tandla emahlandla lali -10 Buta kutsi ngukuphi kushaya tandla lokube kunyenti/ mbalwa. **Umnyakato** - Thishela ubeka bafundzi laba -6 ndzawonye kuhhulahhubhu nebafundzi laba -4 kulenye ihhulahhubhu. - Thishela uyabuta: Kunebafundzi labanyenti, labambalwa nobe labalinani lelilinganako kuhhulahhubhu ngayinye? - Bafundzi batfola kutsi nguyiphi ihhulahhubhu lenebafundzi laba "nyenti kuna" laba "mbalwa kuna" nalabalinani "lelifanako"	2 Emahhulahhubhu	Lilanga 1

Liviki 39	Sikhatsi lesiphakanyisiwe sekufundzisa: Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
1.4 **Chaza, ucatsanise ubuye uhlele tinombolo**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Beka tibali leti -10, leti -6 naleti -4 etafuleni. - Combela linani letibali/ lemabhuloki lasetafuleni ngaphandle kwekubala - Thishela uyabuta: Ngabe kunetibali letengca ku -7? “Ngabe ticishe tilingane, tinyenti, timbalwa kuna-, tenele, atikeneli?” - Thishela utsi: “Hlola timphendvulo takho ngekubala tibali” Kusondzele kanganani kucombela kwakho?	Tibali	Lilanga 1
	Lokubonakalako longeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe. - Thishela ukhombisa emakhadi lamabili lanemacashati netinombolo letehlukene kuwo. - Bafundzi abacatsanise emakhadi lanetitfombe nemacashati ubuye batfola lwati lwa “lokunyenti kuna-” “lokumbalwa kuna-” “ lokulingana na-”	Emakhadi lamabili lanelinani lelehlukile lemacashati netitfombe kuwo.	

Liviki 39	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Chaza tintfo letimbili nobe letengca kuletimbili letingemadayimenshini lamatsatfu (3-D) ngekuticatsanisa.** **Gcizelela sencele nesekudla** **Umnyakato** - Thishela ubeka tinyatselo tesencele netesekudla yonkhe indzawo eklasini.  - Bafundzi bakhasa ngesandla nelidvolo lelifanako, banyakate kanyekanye. - Bahamba etukwato, sibonelo: Nangabe baya ebhavini lekugeza.  Thishela ubopha intsanjana lebovu esandleni kusekudla semfundzi ngamunye. Thishela unika ticondziso: - Phakamisa lunyawo lwakho lwesencele. - Beka lunyawo lwakho lwesekudla esitulweni. - Tsintsa lidvolo lakho lesencele ngengcoza yakho yesekudla. - Dvonsa indlebe yakho yesencele ngesandla sakho sesekudla. - Beka sandla sakho sekudla ehlombe lakho lesencele nesandla sakho sesencele ehlombe lakho lesekudla kanyekanye. - Tigone (uphambanise tandla emgceni losemkhatsini-esifubeni)	Tinyatselo teliphepha letimakhiwe “sencele” ne “sekudla” Intsanjana lebovu yensontfo	Lilanga 1

Liviki 39	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
3.1 **Kubekeka, kutetayeta nekubukeka**	**Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** ○ Thishela ubeka tikotela leti -7 etafuleni. ○ Bafundzi abasho kutsi nguyiphi inombolo lengasencele senombolo 3, nguyiphi inombolo lengesekudla senombolo 6, nguyiphi inombolo lesemkhatsini waku-3 nesi-6 ○ Nguyiphi inombolo lesekucaleni, nguyiphi inombolo lesekugcineni.  - Thishela ubeka imidoli lenetembatfo letibonakala kahle nobe timoto letinemibala lebonakala kahle etafuleni. - Ubuta imibuto lefana nekutsi: o Ngumuphi umdoli/ imoto lesesencele? o Ngumuphi umdoli/ imoto lesesencele? Nguyiphi imoto lesekucaleni/ lesekugcineni? **Lokubonakalako ungeke ukuphatse usebentisa bobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe.** - Ngesikhatsi se**Buciko bekubona** bafundzi benta emaphrinti epende basebentisa tandla tabo tesencele netesekudla. - Juba ubuye unamatsisele ephepheni ukhombise lunyawo lwesencele nelesekudla.	Tikotela letinetinombolo Imidoli lemitsatfu nobe timoto	Lilanga 1
2.1 **Emaphethini e-Jomethri**	• **Takhele emaphethini** **Lokuphatsekako usebentisa tintfo letingemadayimenshini lamatsatfu (3-D)** - Bafundzi bacala kutsatsela emaphethini lanikiwe. - Bafundzi baubuye batakhela emaphethini babuye bawachaze. 	Emakhadi abobunjwa nemaphethini	Lilanga 1

Liviki 39	**Sikhatsi lesiphakanyisiwe sekufundzisa:** **Umsebenti munye weliklasi lohleliwe loholwa nguThishela (sikhatsi sesifundvo) emaminithi ± 30 ngelilanga(Imisebenti yetibalo ± ngeliviki)**		
Sihloko	**Emanotsi lacacisako**	**Tinsita letiphakanyisiwe**	**Budze besikhatsi lesilinganisiwe**
2.1 **Emaphethini e-Jomethri**	**Umsebenti webhodi yemaphekisi:** Umfundzi akacale asebentise sandla sesekudla abuye asebentise sesencele abuye asebentise totimbili tandla ebhodini yemaphekisi. - Thishela utjela bafundzi kutsi balibeke kuphi liphekisi sib. o Emgceni longenhla o Emgceni longentasi o Ecaleni lesencele o Ecaleni lesekudla o Emkhatsini Bafundzi: - Abakhe bobunjwa ebhodini yemaphekisi basebentisa emaphekisi lanembala - Thishela ucamba iphethini lelula asebentisa emaphekisi ebhodini yemaphekisi yakhe ubuye bafundzi batsatsela iphethini ebhodini yemaphekisi yakhe.	Emaphegibhodi nemaphekisi. Emaphethini lebangakopa kuwo bafundzi	Lilanga 1

Liviki 40	Sebentisa liviki le -40 kunaka butsakatsaka belwati lwetibalo/ kutfola tihibe tekufundza.	
Umkhakha walokucuketfwe	**Sihloko**	**Indlela yekuhlola**
Tinombolo netimphawu tekubala	**1.1** **Bala tintfo**	Ucombela abuye abale ngenhloko kufika ku -10 (emaculo etinombolo nemilolotelo lokufaka ekhatsi kutfutfukisa lwati lwetinombolo)
		Ubala aye emuva naphambili (0-10)
		Ubala ngakubili (Emaculo nemilolotelo yetinombolo)
		Uvisisa lokuphatselene “nalokunyenti” “nalokumbalwa” (kushaya tandla)
		Uvisisa kutsi ngukuphi kushaywa tandla lokube kunyenti/ mbalwa
		Ubona tinombolo tetitfombe nemakhadi emacashati kusukela ku-0 kuye eli-10
		Wati timphawu tetinombolo 8, 9 neli-10 kanye neli-0
		Ubona emagama etinombolo 8,9,10 kanye neli-0
		Ucedzela kulandzelana kwetinombolo lokulula kusukela ku-1 kuye eli-10
	1.4 **Chaza, catsanisa ubuye uhlele tinombolo**	Ubona abuye atfole tinombolo etingcikitsi letetayelekile sib. budzala ngemnyaka, irejista.
		Utfola umehluko emkhatsini walokunyenti, lokumbalwa, lokulinganako, lokunyenti kakhulu abuye ente luhla lwetinombolo kufike eli-10.
		Uvisisa tinombolo te-odinali- yekucala, yesibili, yesitsatfu, yesine, yesihlanu neyesitfupha.
	1.6 **Emasu ekubala tinkinga tetibalo**	Usebentisa tinsita letiphatsekako Uchaza lakucabangako ngemagama nangemidvwebo nobe ngetintfo letiphatsekako
	1.7/1.13 **Kuhlanganisa nekukhipha**	Ucatulula tinkinga tekuhlanganisa nekususa ngemlomo letifaka ekhatsi tinombolo letifika eli-10.
Emaphethini nemafangishini	**2.1** **Emaphethini e-Jomethri**	Utsatsela, achubekisele embili abuye atakhele emaphethini lalalelwako.
		Uvisisa umdlalo: i-Hop scotch.
Sikhala nabunjwa(ljomethri)	**3.1** **Kubekeka, kutetayeta nekubukeka**	Kuba nelwati lwalokusedvute ne, emkhatsini, kusencele nakusekudla.
		Kuvisisa lwati: phambili, nasemuva, etulu naphansi, kusencele nesekudla.
	3.2 **Tintfo letingemadayimenshini lamatsatfu (3-D) kanye 3.3** **Bobunjwa bemadayimenshini lamabili (2-D)**	Uyakwati kwacha lokungenani tincetu temaphazili langemashumi lamabili nane
		Ubona abute atfole indilinga, calantsatfu, sikwele nacalandze.
	3.4 **Umugca lohlukanisa umkhatsini ngalokulinganako nangalokufanako**	Ubona umugca lohlukanisa tintfo emkhatsini ngalokufanako nangalokulinganako
Silinganiso	**4.2 Budze**	Uvisisa kutsi tintfo tikalwa ngekusebentisa ithephu yekukala.
Kusebenta ngedatha	**5.1 Kugcogca nekuhlunga**	Uyakwati kugcogca, kuhlunga, kudvweba, kufundza nekumela (kuhlatiya) tintfo letinetimphawu letifanako.
	5.2 **Kwetfula tintfo letigcogciwe letihlungiwe**	
	5.3 **Coca ubuye ubike ngetintfo letihlungiwe**	

SIGABA 4: NEKUHLOLA

4.1 SINGENISO

Kuhlola kuyinchubo lechubekako nalehleliwe yekubona, kubutsela ndzawonye nekuhumusha lwati ngemphumelelo yebafundzi, ngekusebentisa tinhlobo letehlukene tekuhlola. Kufaka ekhatsi tinyatselo letine:

- kwenta ubuye ugcogce bufakazi bemphumelelo;
- kuhlola lobufakazi;
- kurekhoda lokutfolakele;
- kusebentisa lolwati kuvisisa nekusita kutfutfuka kwemfundzi kute kwentiwe ncono inchubo yekufundza nekufundzisa.

Kuhlola kufanele kube ngulokuhlelekile (Kuhlola kwekufundza) kubuye kube ngulokungahleleki (Kuhlola kwalokufundziwe). Kuto totimbili letindlela tekuhlola bafundzi kufanele banikwe umbiko ngaso sonkhe sikhatsi kute bakhuphule lwati lwabo lwekufundza.

Esigabeni Sabokhewane, emasu lasemcoka eluhlolo **loluhlelekile** na**lolungakahleleki** kubuka kwathishela, kucoca, kukhombisa ngekwenta nekubhala. Luhlolo lweliBanga R kumele lugcile kakhulukati kutemlomo nekwenta.

4.2. LUHLOLO LOLUNGAKAHLELEKI NOBE LUHLOLO LWAMALANGA ONKHE

Kuhlola kwekufundza kunenhloso yekuchubeka kugcogce lwati ngemphumelelo yebafundzi lengasetjentiswa kwenta ncono kufundza kwabo. Loku kungabuye kubitwe ngekutsi luhlolo lolungakahleleki. Kukuhlola inchubekelembili yebafundzi malanga onkhe. Loku kwenteka ngekubuka kwathishela, kucoca, kukhombisa ngekwenta, kusebentisana eklasini ngalokungakahleleki njll. Kufanela kungabukwa njengalokwehlukile kunemisebenti yekufundza leyenteka eklasini. Kuhlola lokungakahleleki kusita thishela kutsi ahlole inchubekelembili yebafundzi abuye utsatsa tincumo tekufundzisa temalanga onkhe. Luhlolo lolungakahleleki lusetjentiswa ku:

- nika timphendvulo kubafundzi
- nika lwati nakuhlelelwa kufundzisa.

Ngaletinye tikhatsi thishela angagcina tinhla tekutikhumbuta nobe luhlelo lwekubuka njengendlela yekurekhoda inchubekelembili yebafundzi. Ngaletinye tikhatsi umfundzi nobe thishela angamaka umsebenti. Nanobe kunjalo, luhlolo lolungakahleleki alubi yincenye yemarekhodi emfundzi lahlelekile. Imiphumela yemisebentiluhlolo lengakahleleki yemalanga onkhe ayibalwa nangabe umfundzi endluliselwa ebangeni lelilandzelako nobe aniketwa sitifiketi.

4.3 LUHLOLO LOKUHLELEKILE

Yonkhe imisebenti yekuhlola leyakha luhlelo lwekuhlola loluhlelekile lwemnyaka itsatfwa njengeLuhlolo Loluhlelekile. Imisebenti yekuhlola lehlelekile iyamakwa ibuye irekhodwe ngalokuhlelekile nguthishela ngetinhloso tekundlulisela umfundzi ebangeni lelilandzelako nekunika sitifiketi. Kuhlola lokuhlelekile kunika bothishela indlela lemisiwe yekuhlola kutsi bafundzi bachubeka kahle yini ebangeni nobe esifundvweni lesitsite.

Thishela angabuka lokungenani bafundzi labalishumi ngesikhatsi ngaloko– ke imisebenti luhlolo lehlelekile ingenteka ngalesikhatsi kugcilwe emacenjini lamancane futsi kutawutsatsa emalanga lambalwa kuhlola liklasi lonkhe. Tonkhe tintfo netinsita letivame kusetjentiswa bafundzi kufanele tibe khona njengalokwetayelekile (tintfo tekubala, emashadi etinombolo njll)

Letinhlobo tekuhlola letisetjentiswako kufanele tihambelane nemnyaka kanye nelizinga lekutfutfuka lelifanele umfundzi. Luhlolo loluhlelekile kufanele lufake emazinga lehlukene ekucabanga kwengcondvo netintfo lebakhona kutenta bafundzi. Luhlakasimo lwalemisebenti lufanele luhlanganise lokucuketfwe kwaleso sifundvo ngetindlela letehlukene.

Tinhlobo letinyenti teluhlolo (kubuka, temlomo, kwenta nekubhala) kufanele tisetjentiswe kunika umfundzi ngamunye litfuba lekukhombisa langakwenta nalangeke akhone kukwenta.

Loku kwenteka ngobe labanye bafundzi bayakwati kukhombisa kalula lebakwatiko kuletinye tinhlobo tekuhlola. Sibonelo:

- Labanye bafundzi labahlangabetana nebulukhuni ekufundzeni bafike bakhombise kuhlakanipha etibalweni.
- Labanye bafundzi ababi sezingeni lemphumelelo lelilindzelekile elulwimini lwekufundza nekufundzisa.

Imisebentiluhlolo yeTibalo kufanele ifake imisebenti lengakagcili elulwimini nome ekufundzeni kute ivete kahle loko lebangakhona kukwenta bafundzi.

Nanobe kunjalo, kufanele kube nekucaphelisisa kutsi yini lehlolwako. Lolunye lwati nemakhono ahlolwa kahle ngetindlela letitsite tekuhlola. Tinhlobo letehlukene teluhlolo tilungele emakhono nelwati loludzingekako kutihloko temacembu laneminyaka leyehlukene. Kulusito kusebentisa luhla lwekusita nawubuka kuhlola bafundzi Nangabe bakala emabangeni lasekucaleni. Emarubhrikhi angasetjentiswa kuhlola emakhono ekucatulula tinkinga tetibalo.

4.4 LUHLELO LWEKUHLOLA LOKUHLELEKILE

Imisebentiluhlolo lehlelekile yeTibalo ifaka ekhatsi tihloko teTibalo letengca kusinye sihloko. Imisebentiluhlolo yemnyaka wonkhe kufanele ibe nayo yonkhe imikhakha yalokucuketfwe netihloko kodvwa akusiko konkhe lokucuketfwe kukharikhulamu lekufanele kuhlolwe ngalokuhlelekile nobe kubikwe ngako. Tinombolo, timphawu tekubala nebudlelwane takha 60% weTibalo ebangeni R. Loku kusho kutsi 60% wemsebentiluhlolo lohlelekile esigabeni ngasinye kufanele ugcile etinombolweni, timphawu tekubala nebudlelwane.

Umsebentiluhlolo ngamunye awukafaneli kubonwa njengesehlakalo lesenteka kanye nome sivivinyo. Leminye imigomo ingahlolwa ngesikhatsi sinye kodvwa leminye imigomo ingahlolwa ngetikhatsi letehlukene. Sib. Nangabe kuhlolwa likhono lebafundzi lekubala bece, likhono labo lekwenta loku lokulandzelako lingahlolwa nalo esehlakalweni sinye nobe emsebentini munye:

- kucedzela kubala lokulandzelanako
- kufundza nekubhala tinombolo
- kubala

Nanobe kunjalo, Nangabe umsebentiluhlolo ucuketse kokubili: kusombulula tinkinga tetibalo tekugcogcela ndzawonye nekwabelana nekuhlola likhono lebafundzi kukala umtsamo; kuvamile kutsi letincenye teTibalo tingahlolwa ngetikhatsi letehlukene nangetindlela letehlukene.

4.5 KUREKHODA NEKUBIKA

Kurekhoda inchubo lapho thishela arekhoda khona lizinga lekuphumelela kwemfundzi emsebentini lotsite. kukhombisa kutfutfuka kwelwati lwemfundzi ngemphumelelo njengobe kuvetwe esitatimendeni saVelonkhe neNchubomgomo yekuhlola. Kurekhoda imphumelelo yemfundzi, kumele kunike bufakazi bekutsi umfundzi angakhona kutfutfuka aye ebangeni lelilandzelako. Emarekhodi emphumelelo yemfundzi angabuye asetjentiswe kucinisekisa inchubekelembili leyenteka kuthishela nemfundzi ngalesikhatsi kufundzisa nekufundza kuchubeka.

Kubika kuyinchubo yekwatisa umfundzi, umtali, sikolo nebantfu labanenshisekelo kutemfundvo ngemphumelelo yemfundzi. Imphumelelo yemfundzi ingabikwa ngetindlela letehlukene. Loku kufaka ekhatsi emakhadimbiko, imihlangano yebatali, tinsuku tekuvakashela esikolweni, kucocisana kwemtali nathishela, kushaya lucingo, tincwadzi, umbhalo wekwatisa weliklasi newesikolo njll. Bothishela kuwo onkhe emabanga babika ngemaphesenti lahambisana nesifundvo. Emazinga lahlukene emphumelelo nemaphesenti awo akhonjiswa kuleLithebula lelingentasi

Emakhodi nemaphesenti ekurekhoda nekubika

Emazinga	Tinchazelo temakhono	Emamaki ngemaphesenti
7	Imphumelelo ngemalengiso	80-100
6	Imphumelelo ngelicophelo lelisetulu	70-79
5	Imphumelelo ngalokuncomekako	60-69
4	Imphumelelo ngalokwenetisako	50-59
3	Imphumelelo ngalokulingene	40-49
2	Imphumelelo ngalokuyincenye	30-39
1	Akunamphumelelo	0-29

Thishela utawurekhoda emamaki lekunguwonawona ahambisane nemsebenti lowentiwe, asebentise liphepha lekurekhoda (kucopha), abuye abike ngemaphesenti ahambisane nesifundvo ekhadinimbiko lemfundzi.

4.6. LOKUNYE JIKELELE

Lomculu ufanele ufundvwe ngekuhlanganisa ne:

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

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

4.7 SIBONELO SELUHLA LWEKUBUKA LWELUHLOLO LOLUHLELEKILE LWELIBANGA R

Sibonelo seluhla lwekuhlola seliBanga R sinikiwe ngentasi. Sizatfu saso kusita bothishela kutsi batilungiselele babuye bahlole luhlolo lolulungiselelwe ngendlela lechubekako.

LIBANGA R **Luhla lwekubuka luhlolo lweThemu yeku -1**				
Umkhakha walokucuketfwe	**Lokucuketfwe**	**Umgomo**	**√ nobe x**	**Kuphawula**
Tinombolo, timphawu tekubala nebudlelwane.	Kubala	Ucombela kubala ngenhloko afike kusi-5 (Emaculo etinombolo letifaka kutfutfukiswa lwati lwetinombolo)		
	Kubona tinombolo	Ubona tinombolo engcikitsini leyetayelekile - sib. iminyaka, irejista		
		Uvisisa tinombolo (sib. Ngetikhatsi tekuya endlini lencane)		
	Kwati tinombolo	Uvisisa kuchumana lomunye nalomunye (lishadi lebasiti ngesikhatsi selikhefu)		
	Tfola ubuye uchaze tinombolo letiphelele	Utfola inombolo yetitfombe nemakhadi emacashati lafaka ekhatsi inombolo 1		
		Wati luphawu lwenombolo 1		
		Ubona ligama lenombolo 1		
	Kucatulula tinkinga tetibalo	Usebentisa tinsita letiphatsekako uchaza kucabanga kwakhe ngemagama nangemidvwebo nobe tintfo letiphatsekako		
Emaphethini nemafangishini	Tsatsela, chubekisa ubuye wente emaphethini	Utfola emaphethini kutendzawo		
		Utsatsela, uchubekisa,abuye atakhele emaphethini akho		
Sikhala nabobunjwa (Ijomethri)	Bona, tfola ubuye unike emagama etintfo letingemadayimenshini lamatsatfu (3-D)	Ubona, atfole abuye abite emagama emabhola		
		Ubona, atfole abuye abite emagama emabhokisi		
	Bona, tfola ubuye unike emagama abobunjwa labangemada-yimenshini lamabili (2-D) nobe titfombe	Ubona, atfole abuye asho ligama leluphawu lwakho, luphawu lwantsanga kanye neligama leliklasi		
		Wakha lokungenani tincetu tephazili letisi- 6		
		Ukhombisa likhono lekuhlukanisa emkhatsini wetintfo “kulingaphambili nelingemuva”		
	Bobunjwa be-Jomethri	Utfola abuye abone indilinga		
		Utfola abuye abone calantsatfu		
		Utfola abuye abone sikwele		

Umkhakha walokucuketfwe	Lokucuketfwe	Umgomo	√ nobe x	Kuphawula
Sikhala nabobunjwa (Ijomethri)	Chaza, hlunga ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) ngaloku lokulandzelako:	Ucatsanisa kutsi ngukuphi kwaletintfo letimbili telugcogco letinikiwe talokukhudlwana nalokumbalwa, lokukhulu kakhulu, lokuncane kakhulu.		
		Uhlunga tintfo nge: Sayizi-lokuncane nalokukhulu,		
		Umbala -imibala yemvelo (lokubovu, lokumtfubi, lokuluhlata kwesibhakabhaka)		
		Bunjwa -indilinga,calantsatfu nesikwele		
		Tintfo letigicikako		
		Tintfo letishelelako		
	Bona umugca lohlukanisa emkhatsini ngalokulinganako nangalokufanako:	Ubona umugca lohlukanisa emkhatsini ngalokulinganako nangalokufanako kuye		
	Budlelwane bendzawo: Kubekeka kwetintfo letimbili nobe letingetulu ngalokuhambisana nemfundzi	Wati ngembikwe/ngemuva,		
		Wati ngetulu kwe, ngetulu, ngephasi,		
		Wati ekhatsi/ngekhatsi, ngaphandle,		
		Wati etulu, phasi		
	Tinkhomba	Uvisisa lwati: phambili, emuva, phambili nasemuva		
Silinganiso	Sikhatsi	Usebentisa emagama lafana nalawa, imini, busuku, kukhanya nebumnyama, ekuseni, ntsambama, ebusuku kute achaze sikhatsi selusuku		
		Uhlela tintfo letihlala tenteka emphilweni yakhe yemalanga onkhe (luhlelo lwemalanga onkhe)		
		Ukhombisa lwati ngemalanga eliviki, tikhatsi temnyaka nesimo selitulu		
		Kwati lusuku lwakho lwekutalwa		
	Budze	Uhlukanisa emkhatsini waloku, lokudze, kudzana, kudze kakhulu, kufisha, kufishanyana.kufisha kakhulu		
Kusebentisa idatha	Gcogca, hlunga, dvweba, fundza nekukhombisa idatha	Ukhona kugcogca, kuhlunga, kudvweba, kufundza nekuhlatiya tintfo ngekufanana/ kubukeka kwato.		

SILINGANISO SEKUGCINA:

LIBANGA R Luhla lwekubuka luhlolo lweThemu ye -2				
Umkhakha walokucuketfwe	**Lokucuketfwe**	**Umgomo**	**√ nobe x**	**Kuphawula**
Tinombolo, timphawu tekubala nebudlelwane..	Kubala	Ucombela kubala ngenhloko afike ku-7 (Emaculo etinombolo letifaka kutfutfukiswa lwati lwetinombolo)		
		Ubala uye emuva naphambili (1-4)		
		Uvisisa lamagama “kunyenti nakuncane” (ushaya tandla)		
	Kubona tinombolo	Ubona tinombolo engcikitsini leyetayelekile-sib. Inombolo yendlu, likheli, irejista		
	Bona nekuchaza tinombolo letiphelele	Ubona tinombolo tetitfombe nemakhadi emacashati		
		Wati letinombolo 1, 2, 3,4		
		Ubona emagama etinombolo kubili, kutsatfu na-kune		
	Lwati lwetinombolo	Uvisisa kuchumana kulomunye nalomunye (lishadi lemsiti ngesikhatsi sekudla)		
		Uhlukanisa emkhatsini waloku, kunyenti, kuncane, nakulingana kufike ku -4		
		Ubona umehluko emalini yebuhhehlu yaseNingizimu Afrika		
	Kucatulula tinkinga tetibalo	Usebentisa tinsita letiphatsekako kuchaza kucabanga kwakhe ngemagama nangemidvwebo nobe tintfo letiphatsekako		
		Ucatulula tinkinga tetibalo tekuhlanganisa nekususa ngemlomo afike ku-4		
Emaphethini nemafangishini	Tsatsela, chubela embili ubuye utakhele emaphethini akho	Utsatsela, achubekise,abuye atakhele iphethini yakhe (tintfo, bobunjwa nemali yebuhhehlu)		

Umkhakha walokucuketfwe	Lokucuketfwe	Umgomo	√ nobe x	Kuphawula
Sikhala nabobunjwa (Ijomethri)	Bona ubuye usho bobunjwa bemadayimenshini lamabili (2-D)	Wakha lokungenani tincetu temaphazili leti-12.		
		Ukhombisa lwati lwekuhlukanisa tintfo “letingembili naletingemuva” (phindza uhlole)		
	Bobunjwa be-Jomethri	Utfola,abone abuye anike emagama acalantsatfu		
		Uvisisa kwakheka kwacalantsatfu (kwakheka kwabunjwa)		
	Chaza, hlunga ubuye ucatsanise tintfo letingemadayimenshini lamatsatfu (3-D) mayelana naloku lokulandzelako:	Ucatsanisa kutsi ngukuphi kwaletintfo letimbili letigcogciwe letiniketiwe letindze, letimfisha		
		Uhlunga tintfo ngesayizi -lokudze nalokufisha		
		Imibala - (lokubovu, lokumtfubi, lokuluhlata kwesibhakabhaka nalokuluhlata)		
		Bobunjwa		
	Kwakha tintfo letingemadayimenshini lamatsatfu (3-D) ngekusebentisa tintfo letiphatsekako.	Kutetayeta ngemabhuloki ekwakha		
	Bona umugca lohlukanisa emkhatsini ngalokulinganako nangalokufanako:	Ubona umugca lohlukanisa emkhatsini ngalokulinganako nangalokufanako kuye nasemvelweni laphila kuyo		
		Ukwati kuwela umugca losemkhatsini lohlukanisa ngalokulinganako nangalokufanako		
	Budlelwane bendzawo	Uvisisa kubekeka kwetintfo letimbili nobe letinyenti nakaticatsanisa nemfundzi - Etulu, ngaphasi		
Silinganiso	Sikhatsi	Uvisisa emalanga eliviki, tikhatsi temnyaka nelishadi lesimo selitulu (emaculo nemilolotelo-phindza ukuhlole)		
		Wati ngelusuku lwakhe lwekutalwa (phindza ukuhlole)		
	Budze	Uhlukanisa emkhatsini walokudze kakhulu, lokufisha kakhulu, lokudze, lokufisha (lishadi lelimayelana nebudze)		
Kusebentisa idatha	Gcogca, hlunga, dvweba, fundza ubuye ukhombise idatha	Ukhona kugcogca, kuhlunga, kudvweba, kufundza nekuhlatiya tintfo ngekufanana/ kubukeka kwato.		

SILINGANISO SEKUGCINA:

LIBANGA R Luhla lwekubuka luhlolo lweThemu ye -3				
Umkhakha walokucuketfwe	**Lokucuketfwe**	**Umgomo**	**√ nobe x**	**Kuphawula**
Tinombolo, timphawu tekubala nebudlelwane.	Kubala	Ucombela kubala ngenhloko afike ku-7 (Emaculo etinombolo letifaka kutfutfukiswa lwati lwetinombolo)		
		Ubala aye emuva naphambili (1-7)		
		Wati kutsi ngukuphi kushaywa kwetandla lokunyenti/lokuncane		
	Kubona tinombolo	Ubona tinombolo engcikitsini leyetayelekile-sib. Inombolo yendlu, likheli, irejista (phindza ukuhlole)		
	Kubona nekuchaza tinombolo letiphelele	Utfola tinombolo tetitfombe nemakhadi emacashati ufike ku 7		
		Wati letinombolo 5, 6, 7		
		Ubona emagama etinombolo,sihlanu, sitfupha, inkhotsa		
	Lwati lwetinombolo	Uhlukanisa emkhatsini wa-lokunyenti, lokuncane,kulingana ufike ku-7		
		Ubona umbala kanye netilwane letehlukene emalini yemaphepha yaseNingizimu Afrika		
	Kucatulula tinkinga tetibalo	Usebentisa tinsita letiphatsekako kuchaza kucabanga kwakho ngemagama nangemidvwebo nobe tintfo letiphatsekako		
		Ucatulula tinkinga tetibalo tekuhlanganisa nekususa ngemlomo ufike kusi-7		
Emaphethini nemafangishini	Utsatsela, uchubela embili abuye atakhele emaphethini akhe	Utsatsela, uchubekise,bese utakhela iphethini yakhe asebentisa titfombe		
Sikhala nabobunjwa (Ijomethri)	Bona abuye asho bobunjwa labangemada-yimenshini lamabili (2-D)	Wakha lokungenani tincetu tephazili leti-18		
	Bobunjwa be-Jomethri	Utfola,abone abuye asho calantsatfu		
		Uvisisa kwakheka kwabobunjwa lokufundvwe ngabo kute kube ngulesikhatsi (kwakheka kwabobunjwa)		
	Kwakha tintfo letingemadayimenshini lamatsatfu (3-D) ngekusebentisa tintfo letiphatsekako.	Wakha asukela tukwesibonelo lesakhiwe loniketwe sona		
		Utsatsela sakhiwo lesisekhadini lephethini nobe sitfombe		
	Budlelwane bendzawo	Wati kubekeka kwetintfo letimbili nobe letinyenti nawucatsanisa lenye nalenye - ngembikwe,ngemuva, ngetulu kwe, etulu, ngaphasi, edvute ne, emkhatsini, sancele nesekudla		
		Usebenta ngeticondziso letisebhodini yemaphekisi		
	Inkhomba	Wati tinkhombandlela letiseshadini lemicibisholo		

Umkhakha walokucuketfwe	Lokucuketfwe	Umgomo	√ nobe x	Kuphawula
Silinganiso	Budze	Ucombela ubuye ukale budze betintfo letehlukene		
	Sisindvo	Uvisisa lamagama “kulula, kuyasindza/ kumatima; kululanyana, kuyasindza kancane; kulula kakulu, kusindza kakhulu”		
	Umtsamo	Uvisisa inshokutsi yalamagama “akunalutfo,kugcwele, kunyenti kuna, kuncane kuna”		
Kusebentisa idatha	Gcogca, hlunga, dvweba, fundza ubuye ukhombise idatha	Ukwati kugcogca, kuhlunga, kudvweba, kufundza nekumela tintfo ngendlela ngekwetimphawu tato		

SILINGANISO SEKUGCINA:

LIBANGA R

Luhla lwekubuka luhlolo lweThemu ye -4

Umkhakha walokucuketfwe	Lokucuketfwe	Umgomo	√ nobe x	Kuphawula
Tinombolo, timphawu tekubala nebudlelwane.	Kubala	Ucombela kubala ngenhloko ufike eli-10 (Emaculo etinombolo letifaka kutfutfukiswa lwati lwetinombolo)		
		Ubala uye emuva naphambili (0-10)		
		Ubala ngakubili (emaculo etinombolo nemilolotelo)		
		Uvisisa inshokutsi yaloku, “kunyenti na-kuncane (ngekushaya tandla)		
		Uvisisa kutsi ngukuphi kushaywa kwetandla lokunyenti/lokuncane, lokunyenti kakhulu/ lokuncane kakhulu		
	Kubona tinombolo	Ubona tinombolo engcikitsini leyetayelekile-sib. Inombolo yendlu, likheli, irejista		
	Kubona nekuchaza tinombolo letiphelele	Utfola tinombolo tetitfombe nemakhadi emacashati usuke eli- 0-10		
		Wati timphawu tetinombolo 8, 9, 10 and 0 and		
		Ubona emagama etinombolo, siphohlongo, imfica, lishumi nelicandza		
		Ucedzela kulandzelana kwetinombolo letilula kuletinombolo 1-10		
	Lwati tinombolo	Uhlukanisa emkhatsini waloku, kunyenti, kuncane,kulingana, lokunyenti nalokuncane ufike e 10		
		Uvisisa tinombolo letetayelekile -kwekucala, kwesibili, kwesitsatfu, kwesine, kwesihlanu nekwesitfupha		
	Kucatulula tinkinga tetibalo	Usebentisa tinsita letiphatsekako kuchaza kucabanga kwakhe ngemagama nangemidvwebo nobe tintfo letiphatsekako		
		Ucatulula tinkinga tetibalo tekuhlanganisa nekususa ngemlomo ufike eli-10		

Umkhakha walokucuketfwe	Lokucuketfwe	Umgomo	√ nobe x	Kuphawula
Emaphethini nemafangishini	Kutsatsela, kuchubela embili nekutakhela emaphethini akhe	Utsatsela, achubekise nekutakhela emaphethini etimviwa		
		Uvisisa umdlalo wetshiritshiri		
Sikhala nabobunjwa	Kubona nekubita bobunjwa labangemada-yimenshini lamabili (2-D)	Wakha lokungenanitincetu tephazili leti-24		
	Bobunjwa be-Jomethri	Ubona abuye atfole, indilinga, calantsatfu, sikwele nacalandze		
	Bona umugca lohlukanisa emkhatsini ngalokulinganako nangalokufanako	Ubona umugca lohlukanisa emkhatsini ngalokulinganako nangalokufanako		
	Budlelwane bendzawo	Kwati lamagama, dvute ne, emkhatsini nemkhatsi, sancele nesekudla		
		Kukhona kwenta umsebenti webhodi yemaphekisi losezingeni lelisetulu		
	Inkhombandlela	Uvisisa lamagama lalandzelako: ngemuva nangembili, etulu na-phasi, ngetulu nangaphasi, sancele ne-sekudla		
Silinganiso	Budze	Uvisisa kutsi tintfo tibuye futsi tikalwe ngethephu yekukala		
Kusebentisa idatha	Gcogca, hlunga, dvweba, fundza ubuye ukhombise idatha	Ukhona kugcogca, kuhlunga,kudvweba, kufundza nekuhlatiya tintfo ngedlela yinye yetimphawu tato		

SILINGANISO SEKUGCINA: