

**Luhlelo Lwekwenta Kancono
Tibalo TeLibanga R
Grade R Mathematics
Improvement Programme**



**Umhlanganosikolo 4 • Workshop 4
Inkhombandlela Yemfundzisi • Facilitator's Guide**

The Grade R Mathematics and Language Improvement Project is an initiative of the **Gauteng Department of Education** and its key partner, the **Gauteng Education Development Trust**.

The development and production of the training and classroom resources for the Grade R Mathematics and Language Improvement Project were made possible by generous project funding from the **United States Agency for International Development** and the **Zenex Foundation**.

The Grade R Mathematics and Language Improvement Project is managed by **JET Education Services** with **UCT's Schools Development Unit** and **Wordworks** as technical partners.

The **Schools Development Unit (SDU)** at the **University of Cape Town (UCT)** is the mathematics technical partner to the Grade R Mathematics and Language Improvement Project. The SDU is a unit within UCT's School of Education that focuses on teachers' professional development in Mathematics, Science, Literacy/Language and Life Skills from Grade R to Grade 12. The SDU offers teacher qualifications and approved UCT short courses, school-based work, materials development and research to support teaching and learning in all South African contexts.

ACKNOWLEDGEMENTS

Special thanks to:

- The Gauteng Department of Education Curriculum, Teacher Education and Special Education Directorate officials for their contribution to the adaptation of our materials.
- The Western Cape Education Department (WCED) officials and teachers for their contribution to the successful implementation of the Grade R Mathematics Programme (R-Maths) in the Western Cape between 2016 and 2019.
- The R-Maths writing team: SDU staff and consultants.



The Grade R Mathematics Improvement Programme is adapted from *R-Maths*, first published in 2017 by the Schools Development Unit, University of Cape Town. Copyright of *R-Maths* is held by the University of Cape Town.

The Grade R Mathematics Improvement Programme is licensed under a Creative Commons Attribution 4.0 International Licence [Attribution-NonCommercial-ShareAlike].



This licence allows re-users to distribute, remix, adapt, and build upon the material in any medium or format for non-commercial purposes only, and only so long as attribution is given to the creator. If you remix, adapt, or build upon the material, you must license the modified material under identical terms. To view the full conditions for this licence, visit: <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Programme conceptualisation and management: Cally Kuhne and Tholisa Matheza
Translation and publishing project management: Arabella Koopman
Translation co-ordination (Nguni languages): Pumeza Ngobozana
Translation: Bukiwe Malangwane
Editing (Siswati): Thobile Mbatha
Illustrations: Jiggs Snaddon-Wood

Umklamo Wetibalo TeLibanga R Nekwenta Kancono Lulwimi lisu lelasungulwa **Litiko Letemfundvo laseGauteng (Gauteng Department of Education)** kanye nemlingani walo lomkhulu i-**Gauteng Education Development Trust**.

Lokwentiwa nekukhicitwa kwetinsita tekucesha netaseklasini kweTibalo TeLibanga R neMklamo Wekwenta Kancono Lulwimi kwenteka ngenca yekwesekelwa ngalokunemusa ngetimali letibuya ku-**United States Agency for International Development** kanye ne-**Zenex Foundation**.

Lomklamo Wetibalo TeLibanga R Nekwenta Kancono Lulwimi uphetfwe yi-**JET Education Services** ikanye ne-**UCT's Schools Development Unit** ne-**Wordworks** njengebalingani betebuchwepheshe.

Le-Schools Development Unit (SDU) e-**University of Cape Town (UCT)** ingumlingani wetebuchwepheshe wetibalo kuloMklamo Wetibalo TeLibanga R Nekwenta Kancono Lulwimi. Le-SDU iyiyunithi lengekhasi e-UCT School of Education lebukene nekutfufukiswa kwabothishela ngekwabungcweti kuTibalo, Isayensi, Kufundza nekubhala/Lulwimi Nemakhono Ekuphila kusuka kuLibanga R kuya kuLibanga le-12. Le-SDU iniketa ticutebuthishela kanye netifundvo letifishane letivunywe yi-UCT, umsebenti lophatselene nesikolo, kwentiwa kwemethiriyeli nekucwaninga kusekela kufundzisa nekufundza kuto tonkhe tingcikitsisimo taseNingizimu Afrika.

EMAVI EKUBONGA

Kubongwa ngalokukhetsekile ku:

- Tikhulu Tekharikhulamu Yelitiko Letemfundvo laseGauteng, teMfundvo Yabothishela neteBacondzisi Bemfundvo Lekhetsekile ngeligalelo labo kulokuguculwa kwemethiriyeli yetfu.
- Tiphatsimandla te-Western Cape Education Department (WCED) nabothishela ngeligalelo labo ekuphumeleliseni kusetjentiswa kwale-Grade R Mathematics Programme (R-Maths) eNshonalanga Kapa emkhatsini wa-2016 na-2019.
- Licembu lelibhala i-R-Maths: Basebenti nabonjingalwati be-SDU, netiphatsimandla te-WCED.



Luluhlelo Lwekwenta Kancono Tibalo TeLibanga R lususelwe ku-*R-Maths*, lwashicilelwa kwekucala nga-2017 yi-Schools Development Unit, University of Cape Town. Lilungelokucamba le-*R-Maths* ligodlwe yi-University of Cape Town.

Luhlelo Lwekwenta Kancono Tibalo TeLibanga R lunemvume (ilayisensi) yalo ngaphansi kwe-Creative Commons Attribution 4.0 International Licence [Attribution-NonCommercial-ShareAlike].



Lelayisensi ivumela basebentisi labasebentisa kabusha kutsi basabalalise, bahlanganise kabusha, kwetayela, kanye nekwakhela etukwalemethiriyeli nganoma nguyiphi indlela noma ifomethi ngetinjongo lekungasito tekutsengisa kuphela, futsi kuphela uma i-athribuyithi inikwa umsunguli. Uma uyihlanganisa kabusha, uyenta ifanele tidzingo takho, noma wakhela etukwalemethiriyeli, kufanele ube nelayisensi yalemethiriyeli leguculiwe ngaphansi kwemigomo lefananako. Kute ubone imibandzela lephelele yalayisensi, vakashela:

<https://creativecommons.org/licenses/by-nc-sa/4.0/>

Kufaka luhlelo kungcikitsisimo nekuphatsa: Cally Kuhne naTholisa Matheza
Kuphatsa umklamo wekuhumusha nekushicilela: Arabella Koopman
Kuchumanisa tekuhumusha (tilwimi tesiNguni): Pumeza Ngobozana
Kuhumusha Siswati: Bukiwe Malangwane
Kuhlela nekulungisa emaphutsa eSiswati: Thobile Mbatha
Kudvweba imidvwebo: Jiggs Snaddon-Wood

Contents

Overview

Purpose	page 6
Learning outcomes	page 6
Workshop content	page 6
Preparation	page 8
Materials	page 8

Workshop content

Opening and reflection	page 10
Session 1: Data Handling	page 12
Session 2: Numbers, Operations and Relationships	page 22
Session 3: Space and Shape (Geometry)	page 32
Session 4: Planning for teaching	page 38

Appendix A: Term 1 and 2 Weekly Content Summary:

Term 1 (Week 10) and Term 2 (Weeks 1–3)	page 48
Workshop 4 Evaluation Form	page 52

Lokucuketfwe

Sibutsetelo

Inhloso	likhasi 7
Imiphumela yekufundza	likhasi 7
Lokucuketfwe kwemhlanganosikolo	likhasi 7
Kulungiselela.....	likhasi 9
Emamethiriyeli.....	likhasi 9

Lokucuketfwe kwemhlanganosikolo

Kuvula nekubuyeketa	likhasi 11
Iseshini 1: Kusebenta Ngedatha.....	likhasi 13
Iseshini 2: Tinombolo, Ema-ophareshini neBudlelwane.....	likhasi 23
Iseshini 3: Sikhala naBunjwa (Ijomethri).....	likhasi 33
Iseshini 4: Kuhlelela kufundzisa	likhasi 39

Sengeto A: Ithemu 1 na-2 Sibutsetelo Salokucuketfwe Seliviki:

Ithemu 1 (Liviki 10) neThemu 2 (Emaviki 1-3)	likhasi 49
Lifomu Lekuhlolisisa Umhlanganosikolo 4	likhasi 53

Overview

Purpose

This is the fourth of twelve Grade R Mathematics Improvement Programme workshops, which form part of the Gauteng Department of Education (GDE) Grade R Mathematics and Language Improvement Project.

The purpose of this workshop is to assist teachers to implement the Maths Programme in their classrooms. Participants will have the opportunity to reflect on their observations and explore how the **level principle** informs planning, teaching and learning. Participants will also consider the **level principle** and how to respond to learners with individual developmental and learning needs. The sessions will provide additional knowledge and understanding of teaching and learning in the Content Areas covered in Week 10 of Term 1, and Weeks 1–3 of Term 2.

References to the Grade R Mathematics Content Areas are taken from the *Curriculum and Assessment Policy Statement (CAPS): Grade R Mathematics (Final Draft)*, 2011, Department of Basic Education, South Africa.

Learning outcomes

- ◆ To reflect on the implementation of Term 1 Weeks 6–9
- ◆ To explore strategies to support teaching maths in Grade R
- ◆ To start to present solutions to learner progress and developmental levels
- ◆ To apply the Maths Programme principles in weekly planning
- ◆ To engage with the Maths Programme content of Term 1 Week 10 and Term 2 Weeks 1–3 (Data Handling; Numbers, Operations and Relationships; Space and Shape (Geometry))

Workshop content

- | | |
|--|-----------|
| ◆ Opening and reflection | (1 hour) |
| ◆ Session 1: Data Handling | (1 hour) |
| TEA | |
| ◆ Session 2: Numbers, Operations and Relationships | (1 hour) |
| ◆ Session 3: Space and Shape (Geometry) | (1 hour) |
| LUNCH | |
| ◆ Session 4: Planning for teaching | (2 hours) |

Sibutsetelo

Inhloso

Lona ngumhlanganosikolo wesine walelishumi nakubili yeLuhlelo Lwekwenta Kancono Tibalo TeLibanga R, loyincenye yeLitiko Letemfundvo laseGauteng (Gauteng Department of Education - GDE) Umklamo Wetibalo TeLibanga R Nekwenta Kancono Lulwimi.

Inhloso yalomhlanganosikolo kusita bothishela kutsi bafezekise Luhlelo Lwetibalo emaklasini abo. Bahlanganyeli batawuba nelitfuba lekubuyeketa loko labakucaphele baphindze behlwaye kutsi **umtsetfosimiso welizinga** ukwesekela kanjani kuhlela, kufundzisa nekufundza. Bahlanganyeli batawucabanga **umtsetfosimiso welizinga** nekutsi babaphendvule kanjani bafundzi labanetidzingo tekutfufuka netekufundzisa letehlukene. Lamaseshini atawuniketa lwati lolwengetiwe nekuvisisa kufundzisa nekufundza kuMkhakha Wekufundza lofundvwe kuLiviki 10 leThemu1, kanye neThemu 2 Emaviki 1-3.

Emareferensi kuMkhakha Yalokucuketfwe Tibalo TeLibanga R atsetfwe ku*Sitatimende Senchubomgomo Yekharikhulamu Nekuhlola (i-CAPS): Tibalo TeLibanga R (Luhlaka Lwekugcina)*, 2011, Litiko Letemfundvo Lesisekelo, laseNingizimu Afrika.

Imiphumela yekufundza

- ◆ Kubuyeketa kufezekiswa kweThemu 1 Emaviki 6-9
- ◆ Kwehlwaya emasubuciko ekwesekela kufundzisa tibalo kuLibanga R
- ◆ Kucala kwetfula tisombululo kunchubekelembili yemfundzi kanye nemazinga ekutfufuka
- ◆ Kusebentisa imitsetfosimiso yeLuhlelo Lwetibalo ekuhleleni kweliviki Kubukana nalokucuketfwe nguloLuhlelo Lwetibalo kweThemu 1 Liviki 10 neThemu 2 emaviki 1-3 (Kusebenta Ngedatha; Tinombolo, Ema-ophareshini neBudlelwane; Sikhala naBunjwa (Ijomethri))

Lokucuketfwe kwemhlanganosikolo

- ◆ Kuvula nekubuyeketa (1 li-awa)
 - ◆ Iseshini 1: Kusebenta Ngedatha (1 li-awa)
- LITIYA
- ◆ Iseshini 2: Tinombolo, Ema-ophareshini neBudlelwane (1 li-awa)
 - ◆ Iseshini 3: Sikhala naBunjwa (Ijomethri) (1 li-awa)
- KUDLA KWASEMINI
- ◆ Iseshini 4: Kuhlelela kufundzisa (2 ema-awa)

Preparation

- ◆ PPT welcome and outcomes
- ◆ Read:
Concept Guide, pages 136–137, 212–219
Activity Guide: Term 1, pages 18–21
Appendix A: Term 1 and 2 Weekly Content Summary
- ◆ Set out a Maths Programme *Resource Kit* on each group's table.
- ◆ PPT: Data Handling cycle.
- ◆ Prepare the story, *They pulled and they pulled*, (*Activity Guide: Term 2*, pages 62 and 198).

Materials

- ◆ Flipchart paper, kokis
- ◆ *Resource Kit*: animal counters
- ◆ *Resource Kit*: attribute blocks
- ◆ A copy of *Activity Guide: Term 2* for each participant

Kulungiselela

- ◆ PPT kwemukela nemiphumela

- ◆ Fundza:

Inkhombandlela Yemcondvo, emakhasi 136–137, 212–219

Inkhombandlela Yemsebenti: Ithemu 1, emakhasi 18–21

Sengeto A: Ithemu 1 neLiviki 2 Sibutsetelo Salokucuketfwe Seliviki

- ◆ Yenta *Ikhithi Yetinsita etafuleni lelicembu ngalinye*.

- ◆ PPT: Umjikeleto Wekusebenta Ngedatha.

- ◆ Kulungiselela indzaba, *Badvonsa, badvonsa*, (*Inkhombandlela Yemsebenti: Ithemu 2*, emakhasi 63 na-199).

Emamethiriyeli

- ◆ Liphepha lefliphushadi, emakhokhi

- ◆ *Ikhithi Yetinsita*: tibali tetilwane

- ◆ *Ikhithi Yetinsita*: emabhlokhi e-athribhuyithi

- ◆ Ikhophi ye*Nkhombandlela Yemsebenti: Ithemu 2* yemhlanganyeli ngamunye

Opening and reflection

1 hour

Facilitator's notes

- ◆ PPT: Learning outcomes of the workshop.
- ◆ Remind participants of the *Take back to school task* from the end of Workshop 3.
- ◆ Refer participants to **Activity 1** and read through the instructions. Participants complete the activity in their groups. Groups share key points with the large group.
- ◆ Remind participants of the **level principle** and the importance of taking into account the learners' different abilities and developmental levels.

Reflect on the implementation of the Maths Programme in your daily programme and complete the following activity in your group.



Activity 1

Discuss your progress in implementing the *Take back to school* task from Workshop 3.

Refer to the observation check boxes at the end of each week in *Activity Guide: Term 1*, Weeks 6, 7, 8 and 9.

1. What insights did you gain while observing learners during their Mathematics focus time?

2. What did you find difficult about the observation during the teacher-guided activity?

3. Mention one new thing that is working well with your implementation of Term 1 Weeks 6–9. Have you found that the Maths Programme is assisting with teaching and learning in your Grade R class?

According to the **level principle**, differentiation means that what you teach and how you teach it needs to take into account the different abilities or developmental levels of your learners. To use this approach, you need to continuously observe and record each learner's progress and development in maths.

Emanotsi emfundzisi

- ◆ PPT: Imiphumela Yekufundza yemhlanganosikolo.
- ◆ Khumbuta bahlanganyeli nge*Msebenti wekubuyisela emuva esikolweni* losekupheleni kweMhlanganosikolo 3.
- ◆ Tjela bahlanganyeli bafundze **Umsebenti 1** bese ufundza tonkhe ticondziso. Bahlanganyeli benta bacedze umsebenti emacenjini abo. Emacembu abelana emaphuzu labalulekile nelicembu lelikhulu.
- ◆ Khumbuta bahlanganyeli nge**mtsetfosimiso welizinga** kanye nekubaluleka bekucabangela emakhono ebafundzi lehlukene kanye nemazinga ekutfufuka.

Cabanga ngekuzezekiswa kweLuhlelo Lwetibalo kuluhlelo lwakho lwemalanga onkhe bese niyenta nicedze lomsebenti lolandzelako ecenjini lenu.



Umsebenti 1

Khuluma ngenchubekelebili yakho ekufezekiseni umsebenti we*Kubuyisela emuva esikolweni* lokuMhlanganosikolo 3.

Fundza emabhokisi ekubukisisa lasekupheleni kweliviki ngalinye ku*Nkhombandlela Yemsebenti*: Ithemu 1, Emaviki 6, 7, 8 nele-9.

1. Ngukuphi kucaciseleka lokutfolile ngesikhatsi ubukisisa bafundzi ngesikhatsi sekugcila kuTibalo?

2. Yini loyitfole ilukhuni mayelana nalokubukisisa ngesikhatsi semsebenti loholwa nguthishela?

3. Shano into ibe yinye lesebenta kahle kakhulu nekufezekisa Ithemu 1 Emaviki 6–9. Ubonile yini kutsi Luhlelo Lwetibalo lusita kufundza nekufundzisa eklasini lakho leLibanga R?

Ngekuya kw**mtsetfosimiso welizinga**, kwehlukana kusho kutsi loko lokufundzisa nekutsi ukufundzisa kanjani kufanele kutsi kucabangele emakhono lehlukene nemazinga ekutfufuka ebafundzi bakho. Kusebentisa lendlela, udzinga kuhlala njalo unaka uphindze futsi ubhale phasi inchubekelebili yemfundzi ngamunye nekutfufuka kwakhe kutibalo.

Session 1: Data Handling

1 hour

Facilitator's notes

- ◆ This workshop focuses on teaching the content of the Maths Programme for Term 1 Week 10 and Term 2 Weeks 1–3.
- ◆ Explain that the focus of Term 1 Week 10 is on Data Handling.
- ◆ Refer participants to pages 136–137 of the *Concept Guide*.
- ◆ Ask participants to work in groups to complete **Activity 2**. Ask one person from each group to share their ideas.

This workshop focuses on teaching the following Maths Programme content: Term 1 Week 10 and Term 2 Weeks 1–3. This session focuses on Term 1 Week 10: Data Handling.

Term 1 Content overview: Data Handling

Refer to the Data Handling Content Area on pages 136–137 of the *Concept Guide*.



Activity 2

In your group, discuss:

1. What Data Handling content is covered in Term 1?

2. What does the Maths Programme add to the content from CAPS?

Working with data

Facilitator's notes

- ◆ Start this session with the following activity.
Ask participants who are wearing trainers to stand together.
Ask participants who are wearing sandals to stand together.
Ask participants who are wearing high heels to stand together.
Ask participants who are wearing closed shoes to stand together.
(NOTE: Change this activity according to the season and the types of shoes participants are wearing.)
Once the participants are in groups, discuss the following questions:
Which group has more people?
Which group has fewer people?
Which groups have the same number of people in them?

Iseshini 1: Kusebenta Ngedatha

1 li-awa

Emanotsi emfundzisi

- ◆ Lomhlanganosikolo ugcila ekufundziseni lokucuketfwe Luhlelo Lwetibalo kweThemu 1 Liviki 10 kanye neThemu 2 Emaviki 1–3.
- ◆ Chaza kutsi kugcila kweThemu 1 Liviki 10 kukuSebenta Ngedatha.
- ◆ Tjela bahlanganyeli bafundze emakhasi 136–137 e*Nkhombandlela Yemcondvo*.
- ◆ Cella bahlanganyeli basebente ngemacembu babhale **Umsebenti 2**. Cella umuntfu welicembu ngalinye kutsi babelane imibono yabo.

Lomhlanganosikolo ugcile ekufundziseni naku lokulandzelako lokucuketfwe Luhlelo Lwetibalo: Ithemu 1 Liviki 10 neThemu 2 Emaviki 1–3. Leseshini igcile kuThemu 1 Liviki 10: Kusebenta Ngedatha.

Ithemu 1 Sibutsetelo salokucuketfwe: Kusebenta Ngedatha

Fundza Inkhundla Yalokucuketfwe yeKusebenta Ngedatha kumakhasi 136–137 e*Nkhombandlela Yemcondvo*.



Umsebenti 2

Ecenjini lakho, khulumisanani:

1. Ngukuphi lokucuketfwe Kusebenta Ngedatha lokufundziswe kuThemu 1.

2. Yini leyengetwa Luhlelo Lwetibalo kulokutsetfwe ku-CAPS?

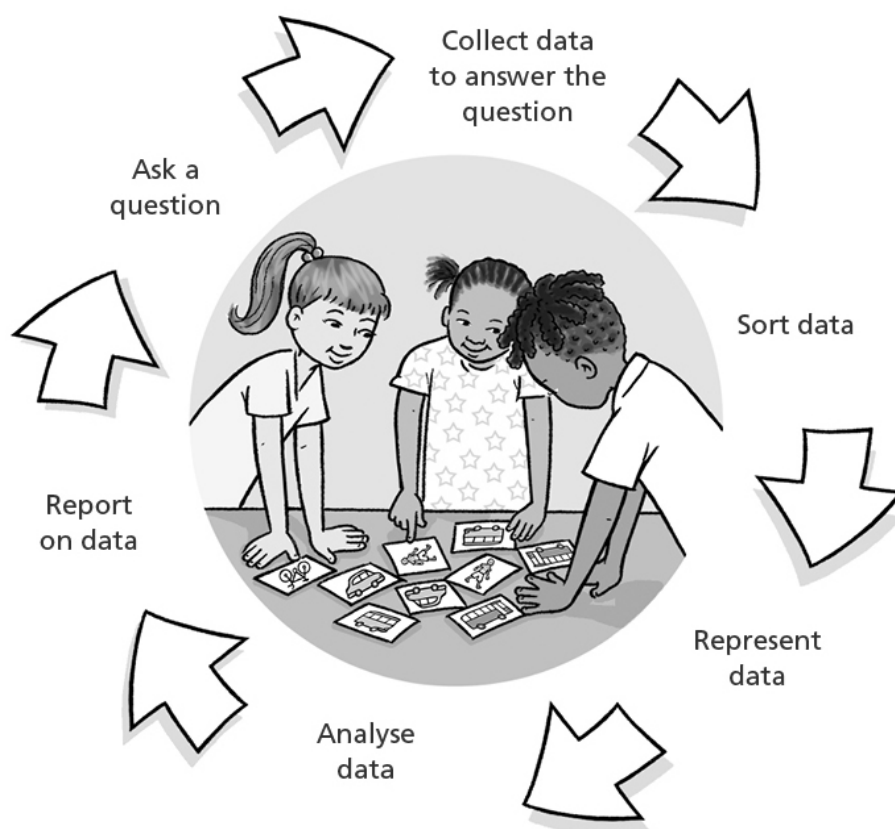
Kusebenta ngedatha

Emanotsi emfundzisi

- ◆ Cala leseshini ngalomsebenti lolandzelako.
Cela bahlanganyeli labagcoko kwekutivocavoca kutsi beme ndzawonye.
Cela bahlanganyeli labagcoko emasandali kutsi beme ndzawonye.
Cela bahlanganyeli labagcoko emantonto kutsi beme ndzawonye.
Cela bahlanganyeli labagcoko ticatfulo letivalekile kutsi beme ndzawonye.
(CAPHELA: Ntjintja lomsebenti ngekuya kwesikhatsi semnyaka kanye netinhlobo teticatfulo letigcokwe ngumhlanganyeli ngamunye.)
Uma bahlanganyeli sebahleti ngemacembu, khulumani ngalemibuto lelandzelako:
Nguliphi licembu lelinebantfu labanyenti?
Nguliphi licembu lelinebantfu labambalwa kakhudlwana?
Ngumaphi emacembu lanelinani lebantfu lelilinganako?

- ◆ Explain that what participants have done is to sort/classify according to one particular attribute that is the same and that this is a very important part of Data Handling.
- ◆ Emphasise the importance of sorting and classification in Grade R.
- ◆ Discuss the kinds of sorting activities that learners could do in Grade R.
- ◆ PPT: Data Handling cycle and summarise content from the *Participant's Workbook*.
- ◆ Discuss each of the six steps in the Data Handling cycle.

In this session, you will learn about the Data Handling cycle as a process for solving problems. Data Handling in Grade R focuses on collecting, sorting, organising, representing and analysing information about people or things. The main reason we collect data is to answer a question or to solve a problem.

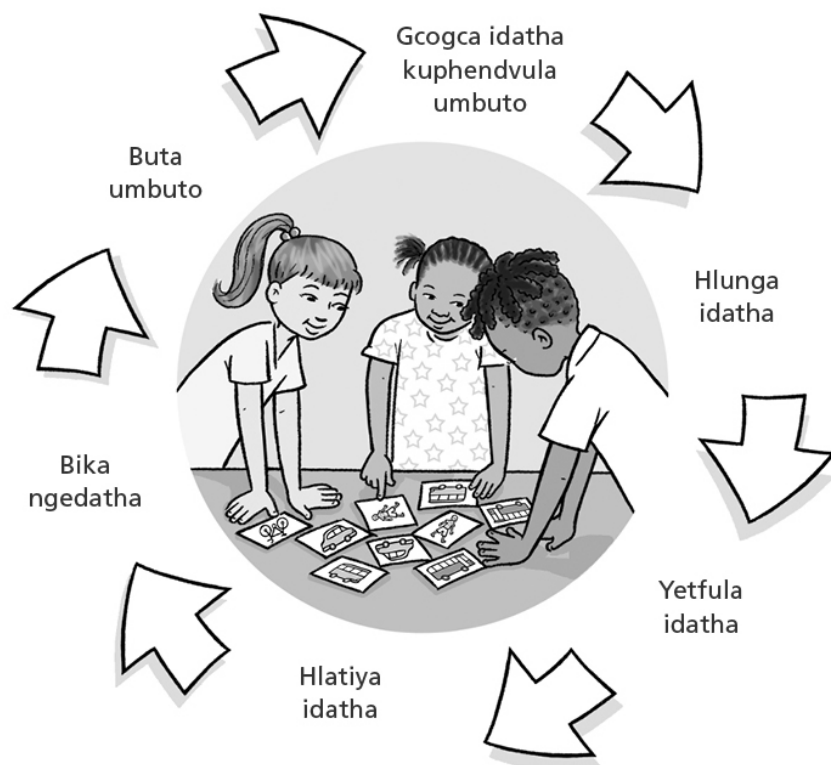


People often refer to the process of Data Handling as a cycle because the events or activities that are involved are repeated in the same sequence for each new question that is to be answered.

1. **Ask a question:** Learners decide what they want to find out about. This is the reason for collecting specific data or information.
2. **Collect data:** Learners decide they want to collect data based on the question or problem.

- ◆ Chaza kutsi loku lokwentiwe bahlanganyeli kuhlunga/kuhlela ngekuya kwe-athribhuyithi ngayinye kanye nekutsi loku Kusebenta Ngedatha lokubaluleke kakhulu.
- ◆ Gcizelela kubaluleka kwekuhlunga nekuhlela kuLibanga 1.
- ◆ Khuluma ngetinhlobo tekuhlela imisebenti bafundzi labangayenta kuLibanga R.
- ◆ PPT: Umjikeleto weKusebenta Ngedatha bese ubutsetela lokucuketfwe lokuku*Ncwadzi Yekusebentela Yebahlanganyeli*.
- ◆ Khuluma ngasinye ngasinye saletinyatselo letisitfupha kuMjikeleto Wekusebenta Ngedatha.

Kuleseshini, utawulalela mayelana neMjikeleto Wekusebenta Ngedatha njengenchubo yekusombulula tinkinga. Kusebenta Ngedatha kuLibanga R kugcila ekugcogceni, kuhlunga, kuhlela, kukhombisa kanye nekuhlatiya lwatiso mayelana nebantfu noma tintfo. Sizatfu lesikhulu sekutsi sigogce idatha kuphendvula umbuto noma kusombulula inkinga.



Bantfu bavamise kubita lenchubo yeKusebentisa Ngedatha ngekutsi ngumjikeleto ngoba letehlakalo noma lemisebenti lebandzakanyekako iyaphindzeka ngekulandzelelana ngalokufanako kulowo mbuto lomusha lophendvulwako.

1. **Buta umbuto:** Bafundzi bayancuma kutsi yini loko labafuna kutfo ngako. Lesi ngiso sizatfu sekugcogca idatha noma lwatiso lolutsite.
2. **Gcogca idatha:** Bafundzi bayatincumela kutsi bafuna kuyigcogca njani idatha basukela embutweni noma sibalo.

3. **Sort data:** Learners organise and sort data into groups according to the attribute. In order to answer questions and decide how to represent data that have been collected, decisions need to be made about how things could be sorted.
4. **Represent data:** Learners explore different ways of showing or displaying the information they have collected.
5. **Analyse data:** Learners describe and compare the data that is represented.
6. **Report on data:** Learners answer the question that was initially asked.

Objects can be sorted and classified (grouped) according to their similarities, such as colour, animals, plants. The more learners know about the properties of objects, and their similarities and differences, the more they are able to form different classification groups.



Video 1

Activity Guide: Term 1, Week 10, Day 4 #5-9 (pages 180-183)

Watch the video of the class creating and analysing a pictograph to represent the weather.

Discuss how the teacher presents each of the steps in the lesson. Notice the types of questions she uses and how she reinforces the use of correct vocabulary.

Facilitator's notes

- ◆ Highlight the importance of using the same size pieces of paper, starting at the bottom and placing each piece of paper right against the previous one. Make sure there is enough height for the longest column.
- ◆ PPT: Photos of correctly placed pieces of paper in a pictograph as well as examples of incorrectly structured pictographs.
After the activity, explain that:
Pictographs – always organise the data from the bottom to the top.
Construct a grid so that there is a one-to-one correspondence between each item in the grid. This makes it easier for learners to compare the quantities in each column.
- ◆ Reflect on the different steps of the Data Handling cycle the participants have gone through.
- ◆ Refer participants to **Activity 3**.

3. **Hlunga idatha:** Bafundzi bahlela futsi bahlunge ledatha ngemacembu ngekuya kwe-athribhiyuthi. Kute baphendvule imibuto futsi bancume kutsi batayetfula njani idatha labayigcogcile, tincumo kudzinga tentiwe ngekutsi tintfo titawuhlungwa njani.
4. **Yetfula idatha:** Bafundzi behlwaya tindlela letehlukene tekukhombisa noma idatha labayigcogcile.
5. **Hlatiya idatha:** Bafundzi bachaza futsi bacatsanise ledatha leyetfuliwe.
6. **Umbiko ngedatha:** Bafundzi baphendvula lombuto lowabutwa ekucaleni.

Ema-objekthi angahlungwa futsi ahlelwe (ngemacembu) ngekwekufana kwawo, njengembala, tilwane, titjalo. Uma bafundzi bati kabanti ngetimphawu nebunjalo bema-objekthi, kanye nekufana nekwehlukana kwawo, ngulapho batawukhona kwakha tinhlelo letehlukene temacembu.



Ividiyo 1

Inkhombandlela Yemsebenti: Ithemu 1, Liviki 10, Emalanga 1# 5- (emakhasi 180-183)

Bukela ividiyo yeliklasi licamba futsi lihlatiya umdvwebonkhulumo kute kutsi bakhombise simo selitulu.

Khulumani ngekutsi thishela usikhombisa kanjani sinyatselo ngasinye kulesifundvo. Caphela luhlobo lwemibuto layisebentisako nekutsi ukugcizelela kanjani kusetjentiswa kwesilulu lamagama lakuso.

Emanotsi emfundzisi

- ◆ Gcamisa kabaluleka kwekusebentisa emaphepha esayizi lefananako, kucala ngaphasi nekubeka liphepha ngalinye lihambisane naleli laphambilini. Yenta siciniseko sekutsi kunebudzekuphakama lobulinganako bekhulomu lendze kakhulu.
- ◆ PPT: Titfombe temaphepha labekwe kahle kumdvwebonkhulumo kanye netibonelo temidvwebonkhulumo lengakakhiwa kahle.
Ngemuva kwemsebenti, chaza kutsi:
Imidvwebonkhulumo – ngaso sonkhe sikhatsi ihlela idatha kusuka ngaphasi kuye etulu.
Yakha igridi kute kutsi kube nekucondzana kwakunye nakunye emkhatsini wentfo ngayinye kulegridi. Lokwenta kutsi kubelula kutsi bafundzi bacatsanise emanani kukholomu ngayinye.
- ◆ Buyeketa letinyatselo letehlukene temjikeleto weKusebenta Ngedatha labatihambile bahlanganyeli.
- ◆ Tjela bahlanganyeli bafundze **Umsebenti 3**.

This next activity will take you through the six stages of the Data Handling cycle.



Activity 3

Take the following animal counters from the Maths Programme *Resource Kit*: three ducks, two chickens and one horse.

1. Consider this question: Are there more ducks or more chickens in the group?
2. Sort and collect data: Organise your animals into groups and then discuss the following with a partner:
 - ◆ Can you see if there are more ducks than chickens now?
 - ◆ How can you check?
3. Represent data: Turn to the grid on page 20. Place animals of the same kind one above the other in a column starting at the bottom of the grid.
4. Analyse and report on data: Look at your columns and discuss with a partner:
 - ◆ Are there more ducks or more chickens? How do you know?
 - ◆ Which column has more animals?
 - ◆ Which column has fewer animals?
 - ◆ Are there the same number of any kind of animal?

Refer to pages 184–187 of *Activity Guide: Term 1* and discuss how this activity is introduced to learners. Refer to pages 212–219 of the *Concept Guide* to read more about Data Handling. Notice the appropriate questions and vocabulary related to the teaching and learning of Data Handling in Grade R.

Lomsebenti utakuhambisa kuto tonkhe tigaba temjikeleto weKusebenta Ngedatha.



Umsebenti 3

Tsatsa letibali tetilwane letilandzelako *Kukhithi Yetinsita yeLuhlelo Lwetibalo*: emadada lamatsafu, tinkhukhu letimbili kanye nelihhashi linye.

1. Cabanga ngalombuto: Kulelicembu manyenti emadada kunetinkhukhu?
2. Hlunga futsi ugogce idatha: Hlela tilwane takho ngemacembu bese ukhuluma nemlingani ngaloku lokulandzelako:
 - ◆ Uyabona yini kutsi manyenti emadada kunetinkhukhu manje?
 - ◆ Ungakutfole kanjani?
3. Khombisa idatha: Buka igradi lekulikhazi 21. Beka tilwane letifanako sinye ngetulu kwalesinye kukholomu ucale ngaphasi kulegradi.
4. Hlatiya uphindze ubike ngedatha: Buka emakholomu akho bese ukhuluma nemlingani:
 - ◆ Manyenti emadada kunetinkhukhu? Wati kanjani?
 - ◆ Nguyiphi ikholomu lenetilwane letinyenti?
 - ◆ Nguyiphi ikholomu lenetilwane letimbalwa kakhudlwana?
 - ◆ Ngabe linani lenombolo yetinhlobo tetilwane iyalingana yini?

Buka emakhasi 184–187 e*Nkhombandlela Yemsebenti: Ithemu 1* bese ukhuluma ngekutsi lomsebenti wetfulwe kanjani kubafundzi. Fundza emakhasi 212–219 e*Nkhombandlela Yemcondvo* kute ufundze kabanti ngeKusebenta Ngedatha. Caphela imibuto lefanele kanye nesilulumagama lesiphatselene nekufundzisa nekufundza ngeKusebenta Ngedatha kuLibanga R.

Session 2: Numbers, Operations and Relationships

1 hour

Facilitator's notes

- ◆ Explain that the focus of Term 2 Weeks 1 and 2 is Numbers, Operations and Relationships. This session aims to deepen participants' knowledge and understanding of number and how it is taught and learnt in Term 2.
- ◆ Refer participants to pages 114–123 of the *Concept Guide*.
- ◆ Have participants work in groups to complete **Activity 4**. Ask one person from each group to share their ideas.

The focus of Term 2 Weeks 1 and 2 is Numbers, Operations and Relationships.

Term 2 Content overview: Numbers, Operations and Relationships



Activity 4

Refer to the Numbers, Operations and Relationships Content Area on pages 114–123 of the *Concept Guide*.

1. What concepts are covered in Term 2?

2. What does the Maths Programme add to the content of CAPS?

Activity Guide: Term 2

Facilitator's notes

- ◆ Hand out copies of *Activity Guide: Term 2* to all participants.
- ◆ Ask participants to look at the Contents page and pages 6–17 to see that the 'Introduction' in Term 2 is the same as in Term 1.
- ◆ Refer participants to 'Content overview: Term 2' (pages 18–21).
- ◆ Participants complete **Activity 5**.

Iseshini 2: Tinombolo, Ema-ophareshini neBudlelwane

1 li-awa

Emanotsi emfundzisi

- ◆ Chaza kutsi lokutawugcilwa kuko kuThemu 2 kuLiviki 1 ne-2 Tinombolo, Ema-ophareshini neBudlelwane. Leseshini ihlose kujulisa lwati nekuvisisa kwebahlanganyeli ngenombolo nekutsi ifundziswa kanjani iphindze futsi ifundvwe kanjani kuThemu 2.
- ◆ Tjela bahlanganyeli bafundze emakhasi 114–123 e*Nkhombandlela Yemcondvo*.
- ◆ Yenta bahlanganyeli basebente ngemacembu bente bacedze **Umsebenti 4**. Cela umuntfu welicembu ngalinye kutsi babelane imibono yabo.

Lokutawugcilwa kuThemu 2 Emaviki 1 nele-2 Tinombolo, Ema-ophareshini neBudlelwane.

Ithemu 2 Sibutsetelo salokucuketfwe: Tinombolo, Ema-ophareshini neBudlelwane



Umsebenti 4

Fundza Tinombolo, Ema-ophareshini neBudlelwane emakhasini 114–123 eMkhakha Walokucuketfwe ye*Nkhombandlela Yemcondvo*.

1. Nguyiphi imicondvo lefundziswe kuThemu 2?

2. Luhlelo Lwetibalo yini loluyengeta kulokucuketfwe yi-CAPS?

Inkhombandlela Yemsebenti: Ithemu 2

Emanotsi emfundzisi

- ◆ Nika bonkhe bahlanganyeli Emakhophi e*Nkhombandlela Yemsebenti: Ithemu ye-2*.
- ◆ Cela bahlanganyeli kutsi babuke likhasi laLokucuketfwe nemakhasi 6–17 kubona kutsi 'Singeniso' kuThemu 2 siyafanana nesaThemu 1.
- ◆ Tjela bahlanganyeli bafundze 'sibutsetelo saLokucuketfwe: Ithemu 2' (emakhasi 18–21).
- ◆ Bahlanganyeli benta bacedze **Umsebenti 5**.

Activity Guide: Term 2 provides teachers with weekly suggestions for teaching and learning Mathematics.

Look at the Contents page and pages 6–17 of *Activity Guide: Term 2*. You will see that the ‘Introduction’ in Term 2 is the same as in Term 1.

In Activity 4 you identified the number concepts to be covered in Term 2. In Activity 5 you will make links between these concepts and the New knowledge for the first two weeks of *Activity Guide: Term 2*.



Activity 5

Refer to ‘Content overview: Term 2’ (*Activity Guide: Term 2*, pages 18–21).

1. What new knowledge is introduced to learners in the Numbers, Operations and Relationships Content Area?
-
-

2. Go back to Activity 4 and highlight or circle the concepts covered.

Understanding numbers

Facilitator’s notes

- ◆ Review the routine that the participants have used to introduce numbers 1, 2 and 3 to learners in their classes.
- ◆ Ask participants to reflect on their experiences in the classroom and to complete **Activity 6**.
- ◆ Explain that in Term 2 they will be focusing on numbers 4 and 5, using this same routine to introduce the numbers.
- ◆ Read through the whole class activities that focus on number 4 in Week 1: *Activity Guide: Term 2*: page 24 (Day 1 #4), page 26 (Day 2 #5), page 28 (Day 3 #4), page 30 (Day 4 #4 and Day 5 #4).

In Term 1, the numbers 1, 2 and 3 were taught. You used the same routine for each number taught, adding one more to the number each time a new number was introduced. In Term 2 Week 1, the focus is on the concept of number again. Learners are introduced to the number 4, using the same routine as for numbers 1, 2 and 3.

Inkhombandlela Yemsebenti: Ithemu 2 inika bothishela imibono yanjalo-nje ngeliviki kutsi batatifundzisa kanjani Tibalo kuLibanga R

Buka likhasi laLokucuketfwe nemakhasi 6–17 e*Nkhombandlela Yemsebenti: Ithemu 2*. Utawubona kutsi ‘Singeniso’ kuThemu 2 siyafana nakuThemu 1.

KuMsebenti 4 ukhombela imicondvo yetinombolo letitawufundvwa kuThemu 2. KuMsebenti 5 utawakha luchumano emkhatsini walemicondvo kanye neLwati lolusha lwemaviki lamabili ekucala e*Nkhombandlela Yemsebenti: Ithemu 2*



Umsebenti 5

Fundza ‘Sibutsetelo salokucuketfwe: Ithemu 2’ (*Inkhombandlela Yemsebenti: Ithemu 2*, emakhasi 18–21).

1. Nguluphi lwati lolusha lolwetfulwe kubafundzi kuMkhakha Wekufundza Tinombolo, Ema-ophareshini neBudlelwane?

2. Buyela emuva kuMsebenti 4 bese ugcamisa noma ufaka indingilizi kumicondvo lefundziwe.

Kuvisisa tinombolo

Emanotsi emfundzisi

- ◆ Buyeketa inhlalayenta lesetjentiswe bahlanganyeli kwetfula tinombolo 1, 2 na-3 kubafundzi emakhasini abo.
- ◆ Cela bahlanganyeli babuyekete loko labahlangabetene nako ekhasini nekutsi bente bacedze **Umsebenti 6**.
- ◆ Chaza kutsi kuThemu 2 batawugcila kutinombolo 4 na-5, basebentisa inhlalayenta lefanako yekwetfula tinombolo.
- ◆ Fundza imisebenti yeliklasi lonkhe legcile kunombolo 4 kuLiviki 1: *Inkhombandlela Yemsebenti: Ithemu 2*: likhasi 25 (Lilanga 1 #4), likhasi 27 (Lilanga 2 #5), likhasi 29 (Lilanga 3 #4), likhasi 31 (Lilanga 4 #4 kanye neLilanga 5 #4).

KuThemu 1, kufundziswe letinombolo 1, 2 na-3. Usebentise inhlalayenta lefanako yenombolo ngayinye, wengeta yinye ngetulu kunombolo sikhatsi ngasinye nakwetfulwa inombolo. KuThemu 2 Liviki 1, kutawugcilwa kumcondvo wetinombolo futsi. Bafundzi betfulwa kunombolo 4, kusetjentiswa inhlalayenta lefanako neyentinombolo 1, 2 na-3.



Activity 6

Refer to the whole class activities that focus on number 4 in Week 1: *Activity Guide: Term 2*: page 24 (Day 1 #4), page 26 (Day 2 #5), page 28 (Day 3 #4), page 30 (Day 4 #4 and Day 5 #4).

1. Discuss how the number '4' is introduced.

2. Think about your own classroom practice and how this routine has been working so far. Complete the table.

Activity	What worked well?	What did not work so well?
Telling the story and building up the number frieze		
Dramatising the story		
Collecting objects for the maths area		
Matching objects to pictures, dot cards, number symbols and number words		
Using the <i>Poster Book</i>		



Umsebenti 6

Fundza imisebenti yeliklasi lonkhe legcile kunombolo 4 kuLiviki 1: *Inkhombandlela Yemsebenti: Ithemu 2*: likhasi 25 (Lilanga 1 #4), likhasi 27 (Lilanga 2 #5), likhasi 29 (Lilanga 3 #4), likhasi 31 (Lilanga 4 #4 kanye neLilanga 5 #4).

1. Khuluma ngekutsi inombolo '4' yetfulwa kanjani.

2. Cabanga ngalokwenta eklasini lakho nekutsi lenhlalayenta lena isebente kanjani kute kube ngumanje. Cedzela lelithebula.

Umsebenti	Ngukuphi lokusebente kahle kakhulu?	Ngukuphi lokungakasebenti kahle kakhulu?
Kucoca indzaba nekwakha ifrizi yetinombolo		
Kudlala indzaba		
Kugcogca ema-objekthi endzawo yetibalo		
Kumatanisa ema-objekthi netitfombe, emakhadi emacashati, timphawu tetinombolo kanye nemagama etinombolo		
Usebentisa <i>Incwadzi Yemaphosta</i>		

Maths vocabulary

Facilitator's notes

- ◆ Discuss how the participants model using the correct maths vocabulary in the classroom.
- ◆ Point out that this is an important part of the **interaction principle**, and that by using it themselves, they encourage learners to use maths vocabulary.

Part of learning new concepts involves new language. Learners need the vocabulary to talk and think about maths concepts (**interaction principle**). You can encourage learners to use maths vocabulary by using it yourself when you speak to them about maths concepts and by rephrasing what they say into maths language.

Money

Facilitator's notes

- ◆ Discuss what learners in Grade R need to learn about money. Emphasise that the focus in Grade R is on developing an awareness of what South African coins look like, but not on the value of the coins.
- ◆ Invite participants to share the kinds of activities they provide in their Grade R classrooms to help learners understand the purpose of money in their everyday lives.
- ◆ After **Activity 7**, discuss the kinds of open-ended questions that teachers can ask to help learners learn the purpose of money such as:
What do we use money for?
Do we always pay with money? How else could we pay for things that we buy?

In Term 2 Week 2 learners are introduced to money. Learners in Grade R are developing an awareness about the features of money and they need opportunities to explore what real South African coins look like.

Activity 7 focuses on helping learners to recognise the similarities and differences between coins: their size, shape and the animals on the coins.



Activity 7



1. What questions could you ask learners to help them recognise the different features of these coins?

Silulumagama seTibalo

Emanotsi emfundzisi

- ◆ Khuluma ngekutsi bahlanganyeli bakubonisa kanjani kusebentisa silulumagama setibalo eklasini.
- ◆ Khombisa kutsi lena yincenye lebalulekile yem**mtsetfosimiso wekukhulumisana**, nekutsi ngekuyisebentisa, bakhutsata bafundzi kutsi basebentise silulumagama setibalo.

Incenye yekufundza imicondvo ifaka ekhatsi lulwimi lolusha. Bafundzi badzinga silulumagama kukhuluma nekucabanga ngemicondvo yetibalo (**umtsetfosimiso wekukhulumisana**). Ungakhutsata bafundzi kutsi basebentise silulumagama setibalo ngekutsi usisebentise wena ngekwakho uma ukhuluma nabo mayelana nemicondvo yetibalo nekutsi ubeke kabusha labakushoko ngelulwimi lwetibalo.

Imali

Emanotsi emfundzisi

- ◆ Khuluma ngaloko bafundzi beLibanga R labadzinga kukufundza ngemali. Gcizelela kutsi kugcila kuLibanga R akuphakamise kucaphela kutsi tinhlavumali taseNingizimu Afrika tibukeka kanjani, kepha hhayi linani laletinhlavumali.
- ◆ Cela bahlanganyeli kutsi babelane ngetinhlobo temisebenti labayiniketa emaklasini abo eLibanga R kusita bafundzi bavisise ngesizatfu sebukhona betimali etimphilweni tabo temalanga onkhe.
- ◆ Ngemuva kwekwenta **Umsebenti 7**, khulumani ngemibuto levulekile bothishela labangayibuta kusita bafundzi kufundze ngesizatfu sebukhona bemali njengekutsi:
Imali siyisebentisela ini?
Sibhadala ngemali ngaso sonkhe sikhatsi? Nguyiphi lenye indlela lesingabhadala ngayo loko lesikutsengako?

KuThemu 2 Liviki 2 bafundzi bangeniswa kusifundvo semali. Bafundzi kuLibanga R batfutukisa kucaphela timphawukubukeka temali futsi badzinga ematfuba ekwehlwaya kutsi tinhlavumali taseNingizimu Afrika tibukeka kanjani kahlehle.

Umsebenti 7 ugcila ekusiteni bafundzi babone kufana nemehluko emkhatsini wetinhlavumali: bukhulu bato, bobunjwa bato kanye netilwane letikuto.



Umsebenti 7



1. Nguyiphi imibuto longayibuta bafundzi kubasita kutsi batibone letimphawukubukeka taletinhlavumali?

2. What new vocabulary will you introduce?

Facilitator's notes

- ◆ Refer participants to the whole class activities and small group activities on pages 40–51 of *Activity Guide: Term 2*.
- ◆ Have participants work in groups to complete **Activity 8**. Ask one person from each group to report back on their discussion.
- ◆ Draw attention to the money templates (*Activity Guide: Term 2*, pages 216–217). Ask for suggestions of how these could be used.

Learners first need to be able to identify and name coins before they are ready to understand their value.

Learners need to be exposed to the purpose of money. Teachers can help learners understand that money is used to buy things like food and clothes and to do different things like travelling by taxi or bus. Expose learners to money and its purpose by setting up a play-shop with pretend coins and notes and items that can be bought.

Refer to the whole class activities and small group activities that focus on money on pages 40–51 of *Activity Guide: Term 2*. In your group, complete Activity 8.



Activity 8

1. What money concepts are being taught and learnt in the whole class activities?

Recognising and matching South African coins, sorting according to colour and size.

2. How are learners encouraged to explore the purpose of money?

The shopping table teaches learners that we pay money for items.

3. How does the teacher consolidate this new knowledge in the small group activities?

Sorting and matching coins, drawing pictures of the coins.

2. Ngusiphi silulumagama lesisha lotasetfula?

Emanotsi emfundzisi

- ◆ Tjela bahlanganyeli babuke imisebenti yeliklasi lonkhe nemisebenti yemacembu lamancane kumakhasi 40–51 *Inkhombandlela Yemsebenti: Ithemu 2*.
- ◆ Yenta bahlanganyeli basebente ngemacembu bente bacedze **Umsebenti 8**. Cela umuntfu munye ecenjini ngalinye etfule umbiko wetingcogco tabo.
- ◆ Yenta kunakwe emathempulethi emali (*Inkhombandlela Yemsebenti: Ithemu 2*, emakhasi 216–217). Cela imibono mayelana nekutsi loku kungasetjentiswa kanjani.

Bafundzi bafanele kutsi bacale ngekwati kukhomba nekusho emagama etinhlavumali ngembikwekutsi bavisise bungako bato.

Bafundzi bafanele kutsi bavuleleke kutinhloso temali. Bothishela bangasita bafundzi bavisise kutsi imali isetjentiselwa kutsenga tintfo letifanana nekudla netimphahla tekugcoka kanye nekwenza letinye tintfo letehlukene njengekuhamba ngetekisi noma ibhasi. Yenta bafundzi bavuleleke ekwatini sizatfu sebukhona kwemali nekutsi wente sitolo sekudlala kusetjentiswe tinhlavumali nemaphephamali ekulingisa noma ekudlala kanye netintfo letitsengwako.

Tjela liklasi lonkhe libuke imisebenti yeliklasi lonkhe nemisebenti yemacembu lamancane kumakhasi 40–51 *eNkhombandlela Yemsebenti: Ithemu 2*. Ecejini lakho, yentani nicedze Umsebenti 8.



Umsebenti 8

1. Nguyiphi imicondvo yemali lefundziswa nalefundvwa kulemisebenti yeliklasi lonkhe?

Kubona nekumatanisa tinhlavumali taseNingizimu Afrika, kuhlunga ngekwembala kanye nengebukhulu.

2. Bafundzi bakhutsateka kanjani kwehlwaya ngesizatfu sebukhona bemali?

Litafula lekutsenga lifundzisa bafundzi tintfo lesitikhokhela imali.

3. Thishela uluhlanganisa njani lolwati lolusha kumisebenti yemacembu lamancane?

Kuhlunga nekumatanisa tinhlavumali, kudvweba titfombe tetinhlavumali.

Session 3: Space and Shape (Geometry)

1 hour

Facilitator's notes

- ◆ This session extends the discussion on Space and Shape (Geometry) from Workshop 3 and should not take longer than the suggested time as this is not new knowledge.
- ◆ Explain that the focus of Term 2 Week 3 is Space and Shape (Geometry).
- ◆ Refer participants to pages 126–131 of the *Concept Guide*.
- ◆ Have participants work in groups to complete **Activity 9**. Ask one person from each group to share their ideas.

The focus of Term 2 Week 3 is Space and Shape (Geometry).

Term 2 Content overview: Space and Shape (Geometry)

Refer to pages 126–131 of the *Concept Guide*.



Activity 9

1. What Space and Shape (Geometry) concepts are covered in Term 2?

2. What does the Maths Programme add to the content of CAPS?

Triangles

Facilitator's notes

- ◆ Refer participants to Day 2 #4 on page 58 of *Activity Guide: Term 2*.
- ◆ Ask participants to complete **Activity 10** in their small groups. Participants share their responses in the large group.
- ◆ Discuss the importance of giving learners opportunities to sort and group different shapes to help them learn about the properties of triangles, e.g. the number of sides, whether the sides are straight or curved, and the number of corners.

In Term 2 Week 3, learners continue their exploration of two-dimensional shapes as they describe, sort and compare them. In this session you will deepen your understanding of the properties of triangles.

Iseshini 3: Sikhala naBunjwa (Ijomethri)

1 li-awa

Emanotsi emfundzisi

- ◆ Leseshini yelula ingcogco mayelana neSikhala naBunjwa (Ijomethri) yeMhlanganosikolo 3 futsi ayikafaneli kutsatsa sikhatsi lesidze kunaleso lesibekiwe ngoba loku akusilo lwati lolusha.
- ◆ Chaza kutsi kugcila kweThemu 2 Liviki 3 kutawuba Sikhala naBunjwa (Ijomethri).
- ◆ Tjela bahlanganyeli bafundze emakhasi 126–131 *Inkhombandlela Yemcondvo*.
- ◆ Yenta bahlanganyeli basebente ngemacembu bente bacedze **Umsebenti 9**. Cela umuntfu welicembu ngalinye kutsi babelane imibono yabo.

Kugcila kweThemu 2 Liviki 3 Sikhala naBunjwa (Ijomethri).

Ithemu 2 Sibutsetelo salokucuketfwe: Sikhala naBunjwa (Ijomethri)

Buka emakhasi 126–131 *Inkhombandlela Yemcondvo*.



Umsebenti 9

1. Nguyiphi imicondvo yeSikhala naBunjwa (Ijomethri) lefundziswe kuThemu 2?

2. Yini leyengetwa Luhlelo Lwetibalo kulokucuketfwe yi-CAPS?

Bocalantsatfu

Emanotsi emfundzisi

- ◆ Tjela bahlanganyeli bafundze Lilanga 2# 4 kulikhasi 59 le*Nkhombandlela Yemcondvo: Ithemu 2*.
- ◆ Cela bahlanganyeli bente bacedze **Umsebenti 10** kumacembu abo lamancane. Bahlanganyeli babelana timphendvulo tabo ecenjini lelikhulu.
- ◆ Khulumani ngekubaluleka bekunika bafundzi ematfuba ekuhlunga nekubeka bobunjwa ngemacembu kubasita kutsi bafundze ngemaphrophathi abocalantsatfu, sib. linani lenombolo yemacala, kutsi lamacala acondzile yini noma agobile, kanye nelinani lenombolo yemakona.

KuThemu 2 Liviki 3, bafundzi bachubeka nekwehlwaya kwabobunjwa labanhangotsimbili ngesikhatsi bachaza, bahlunga futsi babacatsanisa. Kuleseshini utawujulisa kuvisisa kwakho emaphrophathi abocalantsatfu.

Refer to Day 2 #4 on page 58 of *Activity Guide: Term 2* and then complete Activity 10 in your group.



Activity 10

'How is the triangle different to other shapes in the classroom?' What answers would you expect from your learners?

It has three sides/lines/corners.

When learners are given opportunities to sort and group different shapes, they need to focus on the properties of the shapes to make their decisions, e.g. the number of sides, whether the sides are straight or curved and the number of corners.

Facilitator's notes

- ◆ Explain that the Maths Programme uses stories to teach maths concepts in a meaningful way.
- ◆ Dramatise the story, *They pulled and they pulled*, from Week 3 (*Activity Guide: Term 2*, pages 62 and 198).
- ◆ Ask participants to complete **Activity 11** in their groups.
- ◆ As each group reports back, list the questions they suggest on flipchart paper.

Stories are a great way to introduce shape concepts to learners. Listen to the story, *They pulled and they pulled*, from Week 3 (*Activity Guide: Term 2*, pages 62 and 198) as told by your facilitator and then complete Activity 11 in your group.



Activity 11

1. What questions could you ask learners to help them learn more about the properties of triangles?

Examples:

What can you tell me about the lines/corners/points of this shape?

How do you know it is a triangle?

What is the same/different about the triangle and the square?

Buka Lilanga 2# 4 kulikhasi 59 *Inkhombandlela Yemcondvo: Ithemu 2* bese uyenta ucedza **Umsebenti 10** ecenjini lakho.



Umsebenti 10

'Lobunjwa wehluke kanjani kulabanye bobunjwa lapha eklasini?' Ngutiphi timphendvulo longatilindzela kubafundzi bakho?

Unemacala /imigca/emakona lamatsatfu.

Uma bafundzi banikwa ematfuba ekuhlunga nekubeka ngemacembu bobunjwa labehlukene, badzinga kugcila kumaphrophathi walabobunjwa kute batsatse tincumo tabo, sib. linani letinhlangotsi, ngabe lamacala acondzile noma agobile kanye nelinani lemakona.

Emanotsi Emfundzisi

- ◆ Chaza kutsi loLuhlelo Lwetibalo lusebentisa tindzaba kufundzisa imicondvo ngendlela leniketa lwati.
- ◆ Dlala indzaba, *Badvonsa, badvonsa*, yeLiviki 3 (*Inkhombandlela Yemsebenti: Ithemu 2*, emakhasi 63 na-199).
- ◆ Cela bahlanganyeli kutsi bente bacedze **Umsebenti 11** emacenjini abo.
- ◆ Licembu ngalinye letfula umbiko, bhala phasi ephepheni lefiphushadi loluhlu lwalemisebenti labayiphakamisako.

Tindzaba tiyindlela lekahle kakhulu yekwetfula imicondvo yabobunjwa kubafundzi. Lalela indzaba, *Badvonsa, badvonsa*, yeLiviki 3 (*Inkhombandlela Yemsebenti: Ithemu 2*, emakhasi 63 na-199) njengobe icocwa ngumfundzisi bese niyenta nicedza **Umsebenti 11** ecenjini lenu.



Umsebenti 11

1. Nguyiphi imibuto longayibuta bafundzi kubasita kutsi bafundze kabanti ngemaphrophathi acalantsatfu?
-
-

Tibonelo:

Yini longayisho ngemigca/emakona/imicije yalobunjwa?

Wati kanjani kutsi ngucalantsatfu?

Yini lefanako/leyehlukile ngalocalantsatfu nesikwele?

2. Are most of these questions open-ended or closed questions?

Note: Use *Activity Guide: Term 1* and *Term 2* to help you plan for teaching these weeks. The ideas and activity suggestions are a guide and resource. Set up the maths area with the content focus for each week.

2. Ngabe linyenti lalemibuto ngulevulekile noma levalekile?

Caphela: Sebentisa *Inkhombandlela Yemsebenti: Ithemu 1 neThemu 2* kukusita kuhlelela kufundzisa kulamaviki. Lemibono kanye nekuphawula kutinkhombandlela kanye netinsitakufundza. Yenta indzawo yetibalo nekugcila kwalokucuketfwe kweliviki ngalinye.

Session 4: Planning for teaching

2 hours

Facilitator's notes

- ◆ Refer participants to Appendix A: Term 1 and 2 Weekly Content Summary: Term 1 (Week 10) and Term 2 (Weeks 1–3).
- ◆ Read the whole class, teacher-guided and workstation activities sections.
- ◆ Have participants work in groups to complete **Activity 12**.



Video 2

Activity Guide: Term 2, Week 1 (page 32)

Watch the video of the teacher-guided activity. Observe how the teacher uses questions to prompt and guide the learners during the activity.

Discuss how you have managed your teacher-guided activities in Term 1.

Have you faced any challenges? If so, what strategies have you used to resolve them?

Terms 1 and 2 Content Summary (Term 1 (Week 10) and Term 2 (Weeks 1–3))

Appendix A: Term 1 and 2 Weekly Content Summary: Term 1 (Week 10) and Term 2 (Weeks 1–3) outlines the main Content Area Focus for each week, the topics to be covered, the new knowledge and practise focus for each week, and suggested activities for whole class, teacher-guided and independent group work for the week.



Activity 12

Look at Appendix A: Term 1 and 2 Weekly Content Summary: Term 1 (Week 10) and Term 2 (Weeks 1–3). Answer the questions.

Iseshini 4: Kuhlelela kufundzisa

2 ema-awa

Emanotsi emfundzisi

- ◆ Tjela bahlanganyeli bafundze Sengeto A: Ithemu 1 na-2 Sibutsetelo Salokucuketfwe Seliviki: Ithemu 1 (Liviki 10) neThemu 2 (Emaviki 1-3).
- ◆ Fundza tigaba temisebenti yeliklasi lonkhe, leholwa nguthishela neyenzawo yekusebentela.
- ◆ Yenta bahlanganyeli basebente ngemacembu bate bacedze **Umsebenti 12**.



Ividiyo 2

Inkhombandlela Yemsebenti: Ithemu 2, Liviki 1(likhasi 33)

Bukela ividiyo yemsebenti loholwa nguthishela. Bukisisa kutsi thishela uyisebentisa kanjani imibuto kucondzisa nekukhombindlela bafundzi ngesikhatsi semsebenti.

Khuluma ngekutsi ubukene nayo kanjani imisebenti leholwa nguthishela wakho kuThemu 1.

Uhangene yini netinsayeya? Uma ngabe kunjalo, ngumaphi emasubuciko lowasebentisile kutisombulula?

Ithemu 1 ne-2 Sibutsetelo Salokucuketfwe (Ithemu 1 (Liviki 10) kanye neThemu 2 (Emaviki 1-3))

Sengeto A: Ithemu 1 ne-2 Sibutsetelo Salokucuketfwe Seliviki: Ithemu 1 (Liviki 10) neThemu 2 (Emaviki 1-3) sibeka emabalengwe eKugcila Kwemkhakha Walokucuketfwe eliviki ngalinye, tihloko letitawufundvwa, kugcila kwelwati lolusha nekutetayeta kweliviki ngalinye, kanye nemisebenti yeliklasi lonkhe lephakanyisiwe yeliviki ngalinye, nemisebenti lephakanyisiwe yeliklasi lonkhe, umsebenti loholwa nguthishela newelicembu lelitimele.



Umsebenti 12

Buka Sengeto A: Ithemu 1 ne-2 Sibutsetelo Salokucuketfwe Seliviki: Ithemu 1 (Liviki 10) neThemu 2 (Emaviki 1-3). Phendvula lemibuto.

Questions	Week 10 Term 1	Week 1 Term 2	Week 2 Term 2	Week 3 Term 2
What is the Content Area Focus for the week?	Data Handling	Numbers, Operations and Relationships	Numbers, Operations and Relationships	Space and Shape (Geometry)
What are the key concepts that learners will be learning?	Collecting, sorting and classifying data Representing data Reporting on data	Number symbols and number words Ordering numbers	Money Ordinal numbers Equal groups Counting objects	Position, direction and views 2-D shapes
What new knowledge is introduced?	Collect, sort and represent collections of objects Discuss and report on sorted collections of objects	More than, fewer than, equal to Number 4	South African coins Ordinal numbers first to fourth Making equal groups the same to 4 Counting objects 1-6	Oral counting 1-15 Counting objects 1-7 Position: underneath
What skills are being practised?	Oral counting 1-10 Counting objects 1-5 Sequencing numbers 1-3 Number concept 1-3 Before and after Copying patterns Problem solving	Oral counting 1-10 and 5-1 Counting objects 1-5 Sequencing numbers 1-3 Reinforcing number concept 1-3	Oral counting 1-10 and 5-1 Counting objects 1-5 Sequencing numbers 1-4 Reinforcing number concept 1-4 Biggest to smallest, smallest to biggest	Position: next to, between, in front of, behind, on top Direction: forwards, backwards Number concept 1-4 Sequencing numbers 1-4 Count backwards 5-1 Shapes: circle, square, triangle

Activity Guide: Term 1: Week 10 and Activity Guide: Term 2: Weeks 1-3

Refer to Week 10 in *Activity Guide: Term 1* and Weeks 1, 2 and 3 in *Activity Guide: Term 2*. Complete Activity 13 in your group.

Imibuto	Liviki 10 Ithemu 1	Liviki 1 Ithemu 2	Liviki 2 Ithemu 2	Liviki 3 Ithemu 2
Ngumuphi Umkhakha Walokucutketfw e Wekugcila kuleliviki?	Kusebenta Ngedatha	Tinombolo, Ema-ophareshini neBudlelwane	Tinombolo, Ema-ophareshini neBudlelwane	Sikhala naBunjwa (Ijomethri)
Nguyiphi imicondvolebalu lekile letawufundvwa bafundzi?	Gcogca, hlunga bese ukhombisa lamagcogco ema-objekthi Hlatiya bese uyabika ngedatha	Bona timphawu tetinombolo nemagama etinombolo Chaza, catsanisa bese uhlele tinombolo	Imali Tinombolondzawo Lamacembu kutsi alingane Ubala ema-objekthi	Sikhundla, kuma nekubukeka kwabobunjwa bema2-D
Nguluphi lwati lolusha lolwetfuliwe?	Gcogca uphindze uhlunge ema-objekthi Khombisa emagcogco ema-objekthi lahlungiwe Cocisanani niphindze nibike ngalamagcogco ema-objekthi lahlungiwe	Nengi kuna, mbadlwana kuna, lingana na Inombolo 4	Tinhlavumali taseNingizimu Afrika Tinombolondzawo kwekucala kuya kukwesine Kwenta emacembu afanane kuya ku-4 Kubala ema-objekthi 1-6	Kubala nge mlomo 1-15 Kubala ema-objekthi 1-7 Sikhundla: ngephansi
Ngumaphi emakhono lotawetayetwa?	Kubala nge mlomo 1-10 Kubala ema-objekthi 1-5 Kulandzelanisa tinombolo 1-3 Umcondvo wetinombolo 1-3 Ngaphambilini nangemuva Kukopa emaphethini Kusombulula tibalo	Kubala nge mlomo 1-10 ne-5-1 Kubala ema-objekthi 1-5 Kulandzelanisa tinombolo 1-3 Umcondvo wenombolo 1-3	Kubala nge mlomo 1-10 ne-5-1 Kubala ema-objekthi 1-5 Umcondvo wenombolo 1-4 Umcondvo wenombolo 1-4 Lokukhulu kakhulu kuya kulokuncane kakhulu, lokuncane kakhulu kuya kulokukhulu kakhulu	Sikhundla: dvute na-, emkhatsini, -ngembi kwe-, ngemuva, ngetulu Indlela: embili, emuva Umcondvo wenombolo 1-4 Kulandzelanisa tinombolo 1-4 Kubala uye emuva 5-1 Bobunjwa: indingilizi, sikwele, calantsatfu

Inkhombandlela Yemsebenti: Ithemu 1: Liviki 10 neNkhombandlela Yemsebenti: Ithemu 2: Emaviki 1-3

Buka Liviki 10 kuNkhombandlela Yemsebenti: Ithemu 1 neMaviki 1, 2 nele-3

kuNkhombandlela Yemsebenti: Ithemu 2. Catsanisa Umsebenti 13 ecenjini lakho.



Activity 13

Find Week 10 in *Activity Guide: Term 1*. Answer the questions.

1. What is the Content Area Focus for the week?
2. What topics and new knowledge are taught in this week?
3. How does the 'Practise' content link to the previous week?
4. What do you need to get ready before teaching this week?
5. Read the whole class activities and small group activities.
6. Discuss in your small group how you will plan and organise your class for this week of teaching.
7. In your small group refer back to Week 10 in Appendix A. Match the whole class activities and small group activities in Week 10 of *Activity Guide: Term 1* to the Weekly Content Summary in Appendix A.



Activity 14

Find Weeks 1, 2 and 3 in *Activity Guide: Term 2*. Answer the questions.

1. What is the Content Area Focus for each week?
2. What topics and new knowledge are taught in each week?
3. How does the 'Practise' content link to the previous week?
4. What do you need to get ready before teaching each week?
5. Read the whole class activities and small group activities.
6. Discuss in your small group how you will plan and organise your class for these three weeks of teaching.
7. In your small group refer back to Weeks 1–3 in Appendix A. Match the whole class activities and small group activities in Weeks 1–3 of *Activity Guide: Term 2* to the Weekly Content Summary in Appendix A.



Remember that the eye in the shaded block at the end of the teacher-guided activities (**Check that learners are able to**) reminds us that we need to observe the learners while they are busy, and we need to listen carefully while they are talking to us and to their peers.

Make a mental note of each learner and once the learners have left for the day, write down your observations in a dedicated observation book that has space for each learner's notes.



Umsebenti 13

Tfola Liviki 10 kuNkhombandlela Yemsebenti: Ithemu 1. Phendvula lemibuto.

1. Yini Kugcila Kumkhakha Walokucuketfwe kwaleliviki?
2. Ngutiphi tihloko nelwati lolusha lolufundziswa kuleliviki?
3. Lokucuketfwe kwa 'Tetayete' kuchumana kanjani neliviki leliphelile?
4. Yini lokudzingako kute ulungele kufundzisa kuleliviki?
5. Fundza yonkhe imisebenti yeliklasi lonkhe neyemacembu lamancane.
6. Cocani emacenjini enu lamancane ngekutsi nitawulihlela kanjani liklasi kuleliviki lekufundzisa.
7. Emacenjini enu lamancane fundzani Liviki 10 kuSengeto A. Matanisani imisebenti yeliklasi lonkhe nemisebenti yemacembu lekuLiviki10 Inkhombandlela Yemsebenti: Ithemu 1 neSibutsetelo Salokucuketfwe Seliviki kuSengeto A.



Umsebenti 14

Tfola Emaviki 1, 2 nele-3 kuNkhombandlela Yemsebenti: Ithemu 2. Phendvula lemibuto.

1. Yini Kugcila Kumkhakha Walokucuketfwe kweliviki ngalinye?
2. Ngutiphi tihloko nelwati lolufundziswa ngeliviki ngalinye?
3. Ngabe lokucuketfwe ku'Tetayete' kuyachumana yini nekweliviki leliphelile?
4. Yini lodzinga kuyilungisa ngembi kwekufundzisa kuleliviki?
5. Fundza yonkhe imisebenti yeliklasi lonkhe neyemacembu lamancane.
6. Cocisanani emacenjini enu lamancane kutsi utawenta lisu uphindze futsi ulihlele kanjani liklasi lakho kulamaviki lamatsatfu ekufundzisa.
7. Emacenjini enu lamancane fundzani Liviki 1- 3 kuSengeto A. Matanisani imisebenti yeliklasi lonkhe nemisebenti yemacembu lekuLiviki 1-3 leNkhombandlela Yemsebenti: Ithemu 2 neSibutsetelo Salokucuketfwe Seliviki kuSengeto A.



Khumbula Loluphawu lweliso kubhlokhi lehlikihliwe ekupheleni kwemsebenti loholwa nguthishela (**Hlola kutsi bafundzi bayakhona ku:**) lusikhumbuta kutsi sifanele kutsi sibukisise bafundzi ngesikhatsi bamatasatasa, futsi sifanele kutsi silalelisise ngesikhatsi bakhuluma natsi nebalngani babo.

Yenta emanotsi engcondvweni kutawutsi bafundzi bangacedza umsebenti welusuku, bese thishela ubhala encwadzini yakhe yekubukisisa lenenzawo yemanotsi emntfwana ngamunye.

Closing activities

Facilitator's notes

- ◆ **Lessons learnt:** Ask participants to think about what they have learnt during the workshop and to complete **Activity 15** individually.
- ◆ **Take back to school task:** Read through this task. Ask if there is anything that is not clear and that requires more explanation. Draw attention to how observation and assessment records and systems must be in place by this stage of the year. Ask how participants are filing these. Ask for examples to be brought to Workshop 5.
- ◆ **Evaluation:** Hand out copies of the Workshop Evaluation Form and have participants complete the form.
- ◆ **Next workshop:** Give dates for the next workshop and close the workshop.



Activity 15

Lessons learnt: Think about what you learnt during the workshop and complete the table.

Things I am already doing that work well	New ideas that I would like to try

Imisebenti yekuvala

Emanotsi emfundzisi

- ◆ **Sifundvo lesifundziwe:** Cela bahlanganyeli bacabange ngaloko labakufundzile kulomhlanganosikolo nekutsi babhale **Umsebenti 15** ngamunye.
- ◆ **Umsebenti wekubuyela emuva esikolweni:** Fundza wonkhe lomsebenti. Babute kutsi kukhona yini lokungacaci futsi lokudzinga kuchazwa kabanti. Yenta kutsi banake kutsi emarekhodi ekubukisisa nekuhlola netinchubo kufanele kutsi kube khona kanjani ngalesikhatsi semnyaka. Buta bahlanganyeli kutsi bakwenta njani loku. Cela kutsi bete netibonelo kuMhlanganosikolo 5.
- ◆ **Kuhlolisisa:** Banike emakhophi eLifomu Lekuhlolisisa Umhlanganosikolo futsi yenta bahlanganyeli baligcwalise lelifomu.
- ◆ **Umhlanganosikolo lolandzelako:** Niketa tinsuku temhlanganosikolo lolandzelako.



Umsebenti 15

Sifundvo lesifundziwe: Cabanga ngaloko lokufundzile kumhlanganosikolo bese ugcwalisa lelithebula.

Tintfo lesengivele ngitenta letisebenta kahle	Imibono lemisha lengitayetama



Take back to school task

1. Continue with your observations to build up a complete picture of each learner.
2. During the teacher-guided activities complete the *Check that learners are able to* section (after the teacher-guided activity in each week) for each learner being observed.
3. Make a copy of the Exemplar Record of Continuous Assessments in *Activity Guide: Term 1* (pages 190–193).
4. Use the information collected in your observation notes to date and record each learner's development. (Remember that patterns of development need to be recorded over time.)
5. Use *Activity Guide: Term 1* (Week 10) and *Activity Guide: Term 2* (Weeks 1–3) to plan and implement Term 1 Week 10 and Term 2 Weeks 1–3 of the Maths Programme, including creating a maths area with a focus on the concept for each week.
6. Write an evaluation of what worked well, what did not work so well and what you could do differently to improve teaching and learning. Bring your evaluation report to the next workshop.

Evaluation

Complete the Evaluation Form.



Umsebenti wekubuyisela emuva esikolweni

1. Chubeka nekubukisisa kwakho kute wakhe sitfombe lesiphelele ngemfundzi ngamunye.
2. Ngesikhatsi semisebenti leholwa nguthishela yenta ucedze lesigaba lesitsi *Hlola kutsi bafundzi bayakhona ku* (ngemuva kwemsebenti loholwa nguthishela ngeliviki ngalinye) kwemfundzi ngamunye lobukisiswako.
3. Yenta ikhophi yeSibonelo Selirekhodi Leluhlolo Loluchubekako ku*Nkhombandlela Yemsebenti: Ithemu 1* (emakhasi 190–193).
4. Sebentisa lwatiso lolukumanotsi akho lowagcogcile kute kube ngumanje bese ubhala lirekhodi lekutfufuka kwemfundzi ngamunye. (Khumbula kutsi emaphethini ekutfufuka adzinga kubhalwa ekuhambeni kwesikhatsi.)
5. Sebentisa *Inkhombandlela Yemsebenti: Ithemu 1* (Liviki 10) ne*Nkhombandlela Yemsebenti: Ithemu 2 (Emaviki 1–3)* kuhlela nekufezekisa *Ithemu 1 Liviki 10 neThemu 2 Emaviki 1–3 eLuhlelo Lwetibalo, kufaka ekhatsi kwakha indzawo yetibalo, legcile kumcondvo weliviki ngalinye.*
6. Bhala silinganiso saloko lokusebente kahle kakhulu naloko lokungakasebenti kahle kakhulu nekutsi yini lotawuyenta ngalokwehlukile kwenta kancono kufundzisa nekufundza. Wota nembiko wakho wekulinganisa kumhlanganosikolo lolandzelako.

Kuhlolisisa

Gcwalisa leLifomu Lekuhlolisisa.

APPENDIX A: TERM 1 AND 2 WEEKLY CONTENT SUMMARY: TERM 1 (WEEK 10) AND TERM 2 (WEEKS 1–3)

Term 1: Activity Plan

Week 10				
CONTENT AREA: DATA HANDLING				
TOPIC: Collect and sort objects, represent sorted collections of objects, discuss and report on sorted collections of objects				
INTRODUCE NEW KNOWLEDGE: Collect, sort and represent collections of objects (weather); discuss and report on sorted collections; create own pattern				
PRACTISE: Oral counting 1–10, counting backwards from 5, sequencing numbers 1–3, counting objects 1–5, number concept 1–3, copy patterns, problem-solving techniques				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Sorting and classifying, waste items.	Oral counting. Touch and count – one-to-one correspondence. Sorting and classifying activities – animals. Representing and interpreting data.	Activity 1	Sorting waste.
Day 2	Data collection, sorting clothing items.		Activity 2	Sorting colours.
Day 3	Sorting and classifying, group game.		Activity 3	Sorting tray, natural items.
Day 4	Use data collected from the weather discussions, represent and analyse how many days were sunny, raining etc.		Activity 4	Copy pattern using concrete objects and then create own pattern.
Day 5	Weather data collection, representing and analysing.			

Term 2: Activity Plan

Week 1				
CONTENT AREA: NUMBERS, OPERATIONS AND RELATIONSHIPS				
TOPIC: Recognise number symbols and number words, describe, order and compare numbers				
INTRODUCE NEW KNOWLEDGE: More than/fewer than/equal to, introduce number 4				
PRACTISE: Oral counting 1–10, sequencing numbers 1–3, counting objects 1–5, reinforce number concept 1–3				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Introduce 4 (giraffes).	Counting objects 1–5. Matching objects to number dot, symbol and word cards 1–4. Arrange counters to match dot cards. Practise more than, fewer than, equal. Write number 4 (as with numbers 1 to 3).	Activity 1	Playdough mat 4 (as for previous numbers).
Day 2	Introduce more than/less than/equal to, maths table.		Activity 2	Number ordering puzzle activity to 4 (forms a picture).
Day 3	Reinforce 1–4, dot cards and ordering.		Activity 3	Matching number symbols, words and concrete objects to 4.
Day 4	Reinforce 1–4, Unifix blocks and hoops.		Activity 4	Number puzzles (no number words).
Day 5	Reinforce number 4, Poster 6.			

SENGETO A: ITHEMU 1 NA-2 SIBUTSETELO SALOKUCUKETFWE SELIVIKI: ITHEMU 1 (LIVIKI 10) NETHEMU 2 (EMAVIKI 1-3)

Ithemu 1: Luhlelolisu Lwemsebenti

Liviki 10				
INKHUNDLA YALOKUCUKETFWE KUSEBENTA NGEDATHA				
SIHLOKO: Gcogca hlunga ema-objekthi, khombisa ligcogco lema-objekthi lahlungiwe, khuluma ngekwetfula umbiko wemagcogco ema-objekthi lahlungiwe				
YETFULA LWATI LOLUSHA: gcogca, hlunga kanye nekukhombisa ligcogco lema-objekthi (simo selitulu); khuluma uphindze futsi wetfule umbiko ngeligcogco lehlungiwe; kutakhela yakho iphethini				
TETAYETE: Kubala ngemlomo 1-10, kubala uye emuva kusuka ku- 5, kulandzelanisa tinombolo 1-3, kubala ema-objekthi 1-5, umcondvo wetinombolo 1-3, kukopa emaphethini, emasu ekusombulula tinombolo				
Imisebenti yeliklasi lonkhe		Imisebenti yeliklasi lonkhe		Umsebenti loholwa nguthishela
Lilanga 1	Kuhlunga nekuhlela, tintfo letingasasebenti.	Kubala ngemlomo. Tsintsa bese uyabala – kucondzana kwakunye nakunye. Kuhlunga nekuhlela imisebenti - tilwane. Kukhombisa nekuhumusha idatha.	Umsebenti 1 Umsebenti 2 Umsebenti 3 Umsebenti 4	Kuhlunga tintfo lesetingenamsebenti. Kuhlunga imibala. litreyi, tintfo temvelo Kukopa iphethini usebentisa ema-objekthi lacinile nekutakhela iphethini.
Lilanga 2	Kugcogca idatha, kuhlunga tintfo			
Lilanga 3	Kuhlunga nekuhlela, umdlalo wemacembu.			
Lilanga 4	Sebentisa idatha legcogcwe etingcogcweni tesimo selitulu, khombisa uphindze futsi uhlatiye kutsi mangaki emalanga ekubalela kwelilanga, kunewelitulu njll.			
Lilanga 5	Kugcogca idatha yesimo selitulu, kukhombisa kanye nekuhlatiya.			

Ithemu 2: Luhlelolisu Lwemsebenti

Liviki 1				
INKHUNDLA YALOKUCUKETFWE: TINOMBOLO, EMA-OPHARESHINI NEBUDLELWANE				
SIHLOKO: Kubona timphawu tetinombolo nemagama etinombolo, kuchaza, kuhlelebisa uphindze ucatsanise tinombolo				
YETFULA LWATI LOLUSHA: Nyenti kakhudlwana kuna/mbalwa kakhudlwana kuna/kulingane ne, yetfula inombolo 4				
TETAYETE: Kubala ngemlomo 1- 10, kulandzelanisa tinombolo 1-3, kubala ema-objekthi 1-5, kugcizelela umcondvo wetinombolo 1-3, emaphethini				
Imisebenti yeliklasi lonkhe		Umsebenti loholwa nguthishela		Imisebenti yenzawo yekusebentela
Lilanga 1	Yetfula 4 (tindlulamitsi).	Kubala ema-objekthi 1-5. Kumatanisa ema-objekthi nemacashati, timphawu nemakhadi etinombolo 1-4. Hlela tibali kumatanisa emakhadi emacashati Kutetayeta nyenti kuna, mbadlwana kuna, kulingana. Bhala inombolo 4 (njengobe wentile kutinombolo 1 kuya ku-3).	Umsebenti 1 Umsebenti 2 Umsebenti 3 Umsebenti 4	Limethi lenhlama yekudlala 4 (njengakutinombolo taphambilini). Umsebenti wephazili wekuhlelebisa tinombolo kuya ku-4 (kwakha sitfombe). Kumatanisa timphawu tetinombolo, emagama kanye nema-objekthi lacinile kuya ku-4. Emaphazili etinombolo (emagama etinombolo).
Lilanga 2	Yetfula nyenti kuna/ncane kuna/lingana na, litafula letibalo.			
Lilanga 3	Gcizelela 1-4, emakhadi emacashati kanye nekuhlelebisa,			
Lilanga 4	Gcizelela 1-4, emabhulokhi e-Yunifiksi nemahuphu.			
Lilanga 5	Gcizelela tinombolo 4, 6.			

Week 2				
CONTENT AREA: NUMBERS, OPERATIONS AND RELATIONSHIPS				
TOPIC: Money: develop an awareness of South African coins				
INTRODUCE NEW KNOWLEDGE: South African coins, ordinal numbers first to fourth, making equal groups the same to 4, counting objects 1–6				
PRACTISE: Oral counting 1–10 and 5–1, sequencing numbers 1–4, reinforce number concept 1–4, biggest to smallest/smallest to biggest				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Introduce South African coins (cents and rands), Poster 7.	Number concept 1–4. Estimation. Shake and break with 4. South African coins – match coins to ‘goods in shop’. Use cut-out coins; sorting, ordering, matching. Make equal groups to 4 – using counters.	Activity 1	Make own coin (give a circle shape).
Day 2	Maths table – shopping, ordinal numbers first to fourth.		Activity 2	Number caterpillar – sequencing numbers 1–4.
Day 3	Matching number/dot cards and number words.		Activity 3	Draw or paste objects to match numbers 1–4.
Day 4	Ordering number 1–4, shopping.		Activity 4	Posting activity using number and colour 1–4.
Day 5	Problem solving up to 4 (Poster 7).			

Week 3				
CONTENT AREA: SPACE AND SHAPE (GEOMETRY)				
TOPIC: Position, orientation and views; describes sorts and compares 2-D shapes				
INTRODUCE NEW KNOWLEDGE: Position: underneath, oral counting 1–15, counting objects 1–7, orientation and views				
PRACTISE: Oral counting 1–10 and 5–1; sequencing numbers 1–4; reinforce number concept 1–4; count backwards 5–1; shapes: circle, square, triangle; position: in front of, behind, on top, between, next to; direction: forwards, backwards				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Positions, shape game.	Counting. Use shapes to show correct number (1–4). Position: next to, between, in front of, behind, on top, underneath. Direction: forwards, backwards.	Activity 1	Colour triangles.
Day 2	Reinforce the triangle.		Activity 2	Carrot activity (cut out triangles and add correct number of leaves).
Day 3	Position (next to, between, in front of, behind, on top, underneath).		Activity 3	Sorting tray – according to colour, shape or size (one attribute).
Day 4	Reinforce all the shapes done, shape story.		Activity 4	Building towers with construction blocks.
Day 5	Following direction: How do I get to ...? Poster 9. Orientation and views using a toy car.			

Liviki 2				
INKHUNDLA YALOKUCUKETFWE: TINOMBOLO, EMA-OPHARESHINI NEBUDLELWANE				
SIHLOKO: Imali: Yenta kube nekucashelwa kwetinhlavumali taseNingizimu Afrika				
YETFULA LWATISO LOLUSHA: Tinhlavumali taseNingizimu Afrika, tinombolondzawo kusuka kuyekucala kuye kuyesine, kwenta emacembu lalinganako afanane nga-4, kubala ema-objekthi 1-6				
TETAYETE: Kubala ngemlomo 1-10 na-5-1, kulandzelanisa tinombolo 1-4, gcizelela imicondvo yetinombolo 1-4, khulu kakhulu kuya kuncane kakhulu/ncane kakhulu kuya kukhulu kakhulu				
Imisebenti yeliklasi lonkhe		Umsebenti loholwa nguthishela	Imisebenti yenzawo yekusebentela	
Lilanga 1	Yetfula tinhlavumali taseNingizimu Afrika (emasenti nemandi), Iphosta 7.	Umcondvo wetinombolo 1-4. Kulinganisela	Umsebenti 1	Kutakhela tinhlavumali (niketa bunjwa loyindingilizi).
Lilanga 2	Litafula letibalo – kutsenga, tinombolondzawo yekucala kuya kuyesine.	Khuhlutisa bese uyahlukanisa Tinhlavumali taseNingizimu Afrika –	Umsebenti 2	Sibungu setinombolo – kuhlembisa tinombolo 1-4.
Lilanga 3	Kumatanisa tinombolo/emakhadi emacashati nemakhadi emagama.	matanisa tinhlavumali ne'tintfo letisesitolo'. Sebentisa tinhlavumali letisikwe takhishwa;	Umsebenti 3	Dvweba noma unamatsisele ema-objekthi kumatanisa tinombolo 1-4.
Lilanga 4	Kuhlembisa tinombolo 1-4, kutsenga.	kuhlunga, kuhlembisa, kumatanisa.	Umsebenti 4	Umsebenti wekuphosta ngekusebentisa umbala netinombolo 1-4.
Lilanga 5	Kusombulula tinombolo kufika ku-4 (Iphosta 7).	Yenta emacembu lalinganako kuya ku-4 – usebentisa tibali.		

Liviki 3				
INKHUNDLA YALOKUCUKETFWE: SIKHALA NABUNJWA (IJOMETHRI)				
SIHLOKO: Sikhundla, kuma nekubukeka: chaza, hlunga uphindze ucatsanise bobunjwa lababo-2-D				
YETFULA LWATISO LOLUSHA: Sikhundla: ngaphasi, kubala ngemlomo 1-15, kubala ema-objekthi 1-7, kuma nekubukeka				
TETAYETE: Kubala ngemlomo 1-10 na-5-1; kubala ngemlomo 1-4; kugcizelela umcondvo wetinombolo 1-4; kubala uye emuva 5-1; bobunjwa: indingilizi, sikwele, calantsatfu; sikhundla: ngembi kwa, ngemuva kwe, ngetulu, emkhatsini, eceleni kwe; indlela: embili, emuva				
Imisebenti yeliklasi lonkhe		Umsebenti loholwa nguthishela	Imisebenti yenzawo yekusebentela	
Lilanga 1	Tikhundla, umdlalo wabobunjwa.	Kubala	Umsebenti 1	Faka bocalantsatfu umbala.
Lilanga 2	Gcizelela calantsatfu.	Sebentisa bobunjwa kukhombisa tinombolo letingito (1-4).	Umsebenti 2	Umsebenti welikherothi (sika ukhiphe bobunjwa bese ufaka linani lemacembe lelifanele).
Lilanga 3	Sikhundla (eceleni kwa, emkhatsini, ngembi kwa, ngemuva kwa, ngetulu, ngaphasi).	Sikhundla: eceleni kwa, emkhatsini, ngembi kwa, ngemuva kwa, ngetulu, ngaphasi.	Umsebenti 3	Lithreyi lekuhlunga – ngekuya ngembala, bunjwa noma isayizi (i-athribhuyithi yinye).
Lilanga 4	Gcizelela bonkhe bobunjwa labentiwe, indzaba yabobunjwa.	Indlela: embili, emuva.	Umsebenti 4	Kwakha imibhoshongo ngemabhlokhi ekwakha.
Lilanga 5	Kulandzela indlela: Ufika kanjani ku...? Iphosta 9. Kuma nekubukeka usebentisa imoto lelithoyisi.			

Workshop 4 Evaluation Form

1. Did the workshop meet your expectations?

2. What did you learn in this workshop that helped you the most?

3. Was there anything that you did not like or had difficulty understanding?

4. How will you apply what you have learnt in your Grade R classroom?

5. Do you have any suggestions for improving further workshops?

Lifomu Lekuhlolisisa Umhlanganosikolo 4

1. Lomhlanganosikolo ufinyelele yini ezengeni lebewulilindzele?

2. Yini lokufundzile kulomhlanganosikolo lokubalulekile lokukusite kakhulu?

3. Kukhona yini longakakutsandzi noma lokutfole kulukhuni?

4. Utakusebentisa kanjani eklasini leLibanga R loku lokufundzile?

5. Ikhona yini imibono lonayo yekwenta kancono imihlanganosikolo lechubekako?
