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GROWING GAUTENG TOGETHER

Setswana/English

Lenaneotokafatso la Dipalo tša Mophato R Grade R Mathematics Improvement Programme



**Thutano 8 • Workshop 8
Kaedi ya Mofatlhosi • 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**.

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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.

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Porojeke ya Lenaneotokafatso la Dipalo le Puo tsa Mophato wa R ke itshimololelo ya **Lefapha la Thuto la Gauteng (Gauteng Department of Education)** mmogo le badirisani ba bona ba botlhokwa, **Gauteng Education Development Trust**.

Tlhabolole le tlhagiso ya didiriswa tsa katiso le phaposiborutelo ya Porojeke ya Lenaneotokafatso la Dipalo le Puo tsa Mophato wa R e kgontshitswe ke tshegetso ya **United States Agency for International Development** le **Zenex Foundation** ka matlole.

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Schools Development Unit (SDU) kwa **University of Cape Town (UCT)** ke badirisani ba setegeniki ba dipalo go Porojeke ya Lenaneotokafatso la Dipalo le Puo tsa Mophato wa R. SDU ke yuniti e e ka tlase ga School of Education sa UCT e e totileng tokafatso ya boporofesenele jwa barutabana mo Dipalong, Bonetetshing, Kitsokwalo/Puo le Dikgonotshelo go simolola ka Mophato R go fitlha ka Mophato 12. SDU e neelana ka thuto ka boithutedi jwa borutabana le dithutokhutshwe tse di dumeletsweng tsa UCT, tiro ya kwa sekolong, tlhagiso ya dibukana le dipatlisiso go tshegetsa go ruta le go ithuta mo makaelong otlhe a Aforikaborwa.

DITEBOGO

Ditebogo di lebiswa segolobogolo go:

- Batlhankedi ba Lefapha la Thuto la Gauteng mo Lephatheng la Kharikhulamo, Bokaedi jwa Thuto ya Barutabana le Thuto e e Kgethegileng ka ntlha ya seabe sa bona go dirisa dibukana tseno tsa rona.
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- Setlhophla se se kwalang *R-Maths*: Badiri ba SDU le bagakolodi.



Porojeke ya Lenaneotokafatso la Dipalo tsa Mophato R le tserwe go tswa mo *R-Maths*, e phasaladitswe lwantlha ka 2017 ke Schools Development Unit, ya University of Cape Town. Tetlokhopi ya *R-Maths* e tshwerwe ke University of Cape Town.

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Overview

Purpose

This is the eighth 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 continue assisting teachers to implement the Maths Programme in their classrooms. Participants will have the opportunity to reflect on their observations. They will explore how the guiding principles of teaching maths in Grade R should inform their planning, teaching and assessment. They will also consider learner progress, and individual developmental and learning needs. The workshop explores the content for Term 3 Weeks 4–6 and its classroom implementation.

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 3 Weeks 1–3
- ◆ To explore play-based strategies to support teaching maths in Grade R
- ◆ To deepen the understanding of the Maths Programme's topics
- ◆ To reflect on challenges and find solutions to implementing the Maths Programme
- ◆ To map out the Maths Programme content to be taught in Term 3 Weeks 4–6

Workshop content

- ◆ Opening and reflection (1 hour)
 - ◆ Session 1: Measurement (1 hour)
- TEA
- ◆ Session 2: Measurement (continued) (1 hour)
 - ◆ Session 3: Revisiting Grade R maths topics (1 hour)
- LUNCH
- ◆ Session 4: Planning for teaching (1½ hours)
 - ◆ Closing activities (30 minutes)

Thadiso

Maitlhommo

Eno ke thutano ya borobedi ya dithutano di le lesomepedi tsa Lenaneotokafatso la Dipalo tsa Mophato R, le e leng karolo ya Porojeke ya Lenaneotokafatso la Dipalo le Puo tsa Mophato wa R la Lefapha la Thuto la Gauteng (GDE).

Maitlhommo a thutano eno ke go thusa barutabana go diragatsa Lenaneo la Dipalo mo diphaposiborutelong tsa bona. Batsayakarolo ba tlaa nna le tšhono ya go sedisisa dikelotlhoko tsa bona. Ba tlaa sedisisa gore melawana e e kaelang go ruta dipalo tsa Mophato R e tshwanetse go tshwaela jang mo go rulaganyetseng, go ruteng le go tthatlhoba. Gape ba tlaa ela tlhoko tswelelopele ya barutwana, le ditlhokego tsa kgolo le tsa go ithuta tsa motho ka esi. Thutano e sedisisa diteng tsa Kgweditharo 3 Dibeke 4–6 le tiragatso ya tsona mo phaposiborutelong.

Metswedi ya Dikaroloteng tsa Dipalo tsa Mophato wa R di tserwe go tswa mo *Polelong ya Pholisi ya Kharikhulamo le Tlhatlhobo (PPKT): Dipalo tsa Mophato wa R (Lokwalo lwa Bofelo)*, 2011, Lefapha la Thutotheo, Aforika Borwa.

Dipoelothuto

- ◆ Go sedisisa mo tiragatsong ya Kgweditharo 3 Dibeke 1–3
- ◆ Go sedisisa ditogamaano tse di ikaegileng ka metshameko go tshegetsa go ruta dipalo mo Mophatong wa R
- ◆ Go tiisa go tthaloganya ditlhogo tsa Lenaneo la Dipalo
- ◆ Go sedisisa dikgwetlho le go batla ditharabololo tsa go diragatsa Lenaneo la Dipalo
- ◆ Go rulaganya diteng tsa Lenaneo la Dipalo tse di tshwanetseng go rutiwa mo Kgweditharong 3 Dibeke 4–6

Diteng tsa thutano

- ◆ Pulo le tshedisiso (Ura e le 1)
 - ◆ Karolo 1: Tekanyo (Ura e le 1)
- TEE
- ◆ Karolo 2: Tekanyo (tsweletso) (Ura e le 1)
 - ◆ Karolo 3: Go lebelela ditlhogo tsa dipalo tsa Mophato R gape (Ura e le 1)
- DIJOTSHEGARE
- ◆ Karolo 4: Go ithulaganyetsa go ruta (Diura di le 1½)
 - ◆ Ditirwana tsa tswalelo (Metsotso e le 30)

Preparation

- ◆ PPT welcome and outcomes
- ◆ Familiarise yourself with all the PowerPoints and videos
- ◆ Read:
 - Concept Guide*, pages 16–25, 28–31, 58–69 and 114–219
 - Activity Guide: Term 3*, pages 18 and 70–119
- ◆ Bring the post box
- ◆ Remind participants to bring their:
 - Concept Guide*
 - Activity Guide: Term 2*
 - Activity Guide: Term 3*
 - Poster Book*

Materials

- ◆ Flipchart paper, kokis
- ◆ Prestik
- ◆ A *Resource Kit* for each group
- ◆ For Activity 2: string, pencils, sticks, jug, vase, cups, bottles and containers of different sizes (including two containers with different shapes, but the same capacity), bucket of water, balance scale, two or more kinds of fruit, books of different masses, one plastic bottle and one glass bottle of different masses, candles, egg timers, stopwatch (on a cellphone)

Ipaakanyo

- ◆ PPT kamogelo le dipoelo
- ◆ Itlwaetse ditlhagiso tsa Powerpoint le divideo
- ◆ Buisa:
 - Kaedi ya Mogopolo*, ditsebe 16–25, 28–31, 58–69 le 114–219
 - Kaedi ya Ditirwana: Kgweditharo 3*, ditsebe 19 le 70–119
- ◆ Tlala ka lebokosoposo
- ◆ Gopotsa batsayakarolo go tla ka ditlabakelo tse di latelang tsa bona:
 - Kaedi ya Mogopolo*
 - Kaedi ya Ditirwana: Kgweditharo 2*
 - Kaedi ya Ditirwana: Kgweditharo 3*
 - Buka ya Diphousetara*

Didiriswa

- ◆ Pampiri ya tšhatephetogi, dikhokhi
- ◆ Sekgomaretsi
- ◆ *Kgetsana ya Didiriswa* ya setlhophu se sengwe le se sengwe
- ◆ Baakanyetsa Tirwana 2 tse di latelang: mogala, diphensele, dikota, jeke, bolompoto, dikopi, mabotlolo le ditshodi tsa bogolo jo bo farologaneng (go akaretsa ditshodi tse pedi tsa dipopego tse di farologaneng, tsa mothamo o o lekanang), kgamelo ya metsi, sekalamaleka, mefuta e mebedi ya maungo kgotsa go feta, dibuka tsa boima jo bo farologaneng, lebotlolo la polasetiki le le lengwe le lebotlolo la galase le le lengwe la boima jo bo farologaneng, dikerese, dibalamae, watšhe ya go bala (mo selefounung)

Opening and reflection

1 hour

Facilitator's notes

- ◆ PPT: Learning outcomes of the workshop.
- ◆ Discuss the post box comments and feedback from the previous workshop. Remind participants to 'post' any new comments and feedback during the workshop.
- ◆ Remind participants of the *Take back to school task* from the end of Workshop 7.
- ◆ Refer participants to **Activity 1** and read through the instructions. Participants complete the activity in their groups. Groups then share key points with the large group.
- ◆ After the small group discussions, take comments from each group. Summarise the successes and challenges and discuss the implications for classroom implementation.

Here is the *Take back to school task* from Workshop 7.



Take back to school task (Workshop 7)

1. Use the Term 3 Weekly Planning Template in Appendix A to plan and implement Term 3 Weeks 1–3 of the Maths Programme.
2. Document how you used the '**Check that learners are able to**' observation list (in the eye box) during each of the teacher-guided activities.
3. Write an evaluation of what worked well, what did not work so well and what you could do differently to improve teaching and learning.
4. Bring your evaluation to the next workshop.



Activity 1

1. In your group, share your successes and challenges with implementing the Maths Programme in Term 3 Weeks 1–3.

2. Discuss your use of the '**Check that learners are able to**' observation list (in the eye box) during each of the teacher-guided activities.

Dintlha tsa mofatlhosi

- ◆ PPT: Dipoelethuto tsa thutano.
- ◆ Buisanang ka ga ditshwaelo tsa lebokosoposo le ditlamorago tsa dithutano tse di fetileng. Gopotsa batsayakarolo go 'latlhela' ditshwaelo dingwe le dingwe tse dišwa le ditlamorago ka nako ya thutano.
- ◆ Gopotsa batsayakarolo ka ga *Tirwana e o e busetsang kwa sekolong* go tswa kwa bokhutlong jwa Thutano 7.
- ◆ Kopa batsayakarolo go lebelela **Tirwana 1** le go bala ditaelo. A batsayakarolo ba dire tirwana mo ditlhopheng tsa bona. A ditlhopha jaanong di arogane dintlha tsa botlhokwa le setlhopha se segolo.
- ◆ Morago ga dipuisano tsa setlhopha se sennye, letla setlhopha se sengwe le se sengwe go tshwaela. Sobokanya katlego le dikgwetlho mme lo buisane ka ga bokao jwa tiragatso mo phaposiborutelong.

Tirwana e o e busetsang kwa sekolong ke eno go tswa mo Thutanong ya 7.



Tirwana e o e busetsang kwa sekolong (Thutano 7)

1. Dirisa Thempoleiti ya Thulaganyetso ya Beke le Beke ya Kgweditharo 3 mo Mametlelelong ya A go rulaganyetsa le go diragatsa Kgweditharo 3 Dibeke 1–3 tsa Lenaneo la Dipalo.
2. Kwala gore o dirisitse jang lenanekelothoko la '**Ela tlhoko gore barutwana ba kgona go**' (mo lebokosong la leitlho) ka nako ya ditirwana tse dingwe le tse dingwe tse di kaelwang ke morutabana.
3. Kwala tshekatsheko ya se se dirileng sentle, se se sa dirang sentle le gore ke eng se o ka se dirang ka tsela e nngwe go tokafatsa go ruta le go ithuta.
4. Tlaya ka tshekatsheko ya gago kwa thutanong e e latelang.



Tirwana 1

1. Mo setlhopheng sa gago, aroganang katlego le dikgwetlho tsa lona mo go diragatseng Lenaneo la Dipalo mo Kgweditharong ya 3 Dibeke 1–3.
-
-
-

2. Buisanang ka ga tiriso ya lona mo lenaneng la kelothoko la '**Ela tlhoko gore barutwana ba kgona go**' (mo lebokosong la leitlho) ka nako ya ditirwana tse dingwe le tse dingwe tse di kaelwang ke morutabana.
-
-
-

3. Share strategies for improving teaching and learning for the challenges you identified.

4. Write the main points of your discussion on flipchart paper. Report back on your discussion to the large group.

 **Video 1**

Activity Guide: Term 3, Week 3, Teacher-guided activity (pages 64–67)

Watch the video of a teacher working with a small group of learners during the teacher-guided activity in Term 3 Week 3.

Observe how the teacher:

- ◆ has prepared the small group activity
- ◆ manages the transitions between the eight tasks
- ◆ uses questions to guide the learners
- ◆ records her observations of what has been learnt using the ‘**Check that learners are able to**’ observation list.

Facilitator’s notes

Show the video and lead a discussion based on the four observation prompts. If participants do not mention the following points, add them to the discussion.

- ◆ It is essential to read the *Getting ready* and *What you need* sections of the *Activity Guide*.
- ◆ It is important to be prepared **before** the week/day begins and to have all the resources available during an activity.
- ◆ Teachers must have read the activities and be able to engage with the learners without reading the *Activity Guide* line by line.
- ◆ Manage the time allocated to an activity. Do not spend too long on any task so that others have to be omitted. (Remember learners in Grade R should only spend 10–15 minutes on an activity.)
- ◆ Use closed questions to determine knowledge/facts and use open-ended questions to probe learner’s reasoning and to find out how they solve problems.
- ◆ Listening to and observing **each** learner provides insight into their progress. It helps you to identify their abilities and the gaps in their skill and/or understanding.

3. Go lepalepana le dikgwethlo tse lo di lemogileng, aroganang malepa a go tokafatsa go ruta le go ithuta.

4. Kwala dintlhakgolo tsa dipuisano tsa lona mo pampiring ya tšhatephetogi. Begelang setlhopha se segolo ka ga dipuisano tsa lona.



Video 1

Kaedi ya Ditirwana: Kgweditharo 3, Beke 3, Tirwana e e kaelwang ke morutabana (ditsebe 64–67)

Lebelela video ya morutabana a dira le setlhopha se sennye sa barutwana ka nako ya tirwana e e kaelwang ke morutabana mo Kgweditharong ya 3 Beke 3.

Ela tlhoko gore morutabana:

- ◆ o rulagantse jang tirwana ya setlhopha se sennye
- ◆ o tsamaisa jang dineeletsano magareng ga ditirwana tse robedi
- ◆ o dirisa jang dipotso go kaela barutwana
- ◆ o rekota jang dikelotlhoko tsa gagwe tsa gore ke eng se se ithutilweng ka go dirisa lenanekelotlhoko la **'Ela tlhoko gore barutwana ba kgona go'**.

Dintlha tsa mofatlhosi

Bontsha video mme o etelele puisano pele mo ditlhotlheletsong tse nne tsa kelotlhoko. Fa batsayakarolo ba sa bue ka dintlha tse di latelang, di tsenyeletse mo puisanong.

- ◆ Go botlhokwa go buisa dikarolo tsa *Ipaakanye* le *Se o se tlhokang* tsa *Kaedi ya Ditirwana*.
- ◆ Go botlhokwa go nna o le malala a laotswe **pele** ga beke/lotsatsi le simologa le go nna le didiriswa tsotlhe di le teng ka nako ya tirwana.
- ◆ Barutabana ba tshwanetse ba bo ba buisitse ditirwana mme e bile ba kgona go buisana le barutwana ntle le go buisa *Kaedi ya Ditirwana* mola ka mola.
- ◆ Laola nako e o e neetsweng go dira tirwana sentle. O seka wa dirisa nako e ntsi mo tirwaneng moo ditirwana tse dingwe di tlogelwang. (Gopola gore barutwana mo Mophatong wa R ba tshwanetse go tsaya metsotso e le 10–15 mo tirwaneng.)
- ◆ Dirisa dipotso tse di tswalegileng go bona kitso/dintlha mme o dirise dipotso tse di bulegileng go tlhotlheletsa barutwana go neela mabaka le go tlhotlhomisa ka moo ba rarabololang dipalo ka teng.
- ◆ Go reetsa le go ela morutwana **yo mongwe le yo mongwe** tlhoko go neelana ka botlhale mo tswelapeleng ya bona. Go go lemosa bokgoni jwa bona le go lemoga dikgala mo dikgonong tsa bona/kgotsa mo go tlhologanyeng ga bona.

Session 1: Measurement

1 hour

Facilitator's notes

- ◆ Remind participants that the learners in Grade R measure informally, to find out 'How much of something' there is, by direct comparison and by using non-standard units of measurement. The focus in Grade R is on comparing how many non-standard units something measured. Discuss how learners can develop their estimation skills during measurement activities.

In Terms 1 and 2, time and length were the focus of Measurement. This session will revisit these topics and expand the discussion of Measurement to include mass, and capacity and volume.

Measurement is about finding out 'how much' there is of something. In Grade R, the focus of measurement is on:

- ◆ time
- ◆ length
- ◆ mass
- ◆ capacity and volume.

In the next activity, you will explore each of these measurement concepts.

Learners in Grade R measure informally, by direct comparison and by using non-standard units of measurement. Learners develop their estimation skills during informal measurement activities. They estimate how long or how heavy they think something is and then use a non-standard measuring instrument to find out how accurate their estimation was.

Facilitator's notes

- ◆ For **Activity 2**, set out the materials at different measurement workstations and clearly label each workstation according to the concept:
 - **Length:** string, pencils, sticks
 - **Capacity and volume:** jug, vase, cups, bottles and containers of different sizes (including two containers with different shapes, but the same capacity), bucket of water
 - **Mass:** balance scale, two or more kinds of fruit, books of different masses, one plastic bottle and one glass bottle of different masses
 - **Time:** candles, egg timers, stopwatch (on a cellphone).
- ◆ Divide participants into four groups and assign each group to a different measurement workstation. Explain that the groups will rotate. Participants should answer the questions in their *Participant's Workbook* for each workstation. They will spend about ten minutes at each workstation.

Dintlha tsa mofatlhosi

- ◆ Gopotsa batsayakarolo gore barutwana mo Mophatong wa R ba lekanya ka go sa tlhomamang, go batlisisa gore 'Go na le bokaakang jwa selo', ka papiso ka tthamalalo le ka go dirisa diyuniti tse di sa tlhomamang tsa tekanyo. Mophato R e totile go bapisa gore selo se lekannngwa ka diyuniti tse kae tse di sa tlhomamang. Buisanang ka gore barutwana ba ka godisa jang dikgono tsa bona tsa go lekanyetsa ka nako ya ditirwana tsa tekanyo.

Mo Dikgweditharong 1 le 2, nako le boleele di ne di totilwe ke Tekanyo. Karolo eno e tlaa lebelela ditlhogo tseno gape le go atolosa puisano ka ga Tekanyo go akaretsa boima, le mothamo le volumo.

Tekanyo e ka ga go batlisisa go na le 'bokaakang' jwa selo. Mo Mophatong wa R, Tekanyo e tobile:

- ◆ nako
- ◆ boleele
- ◆ boima
- ◆ mothamo le volumo.

Mo tirwaneng e e latelang, lo tlaa tlhotlhomisa mogopolo o mongwe le o mongwe wa tekanyo.

Barutwana ba Mophato R ba lekanya ka go sa tlhomamang, ka go bapisa ka tthamalalo le ka go dirisa diyuniti tse di sa tlhomamang tsa tekanyo. Barutwana ba godisa dikgono tsa bona tsa tekanyetso ka nako ya ditirwana tsa tekanyo e e sa tlhomamang. Ba lekanyetsa gore ba akanya gore selo se seleele kgotsa se boima go le kana kang mme ba bo ba dirisa sedirisa sa go lekanya se se sa tlhomamang go batlisisa gore tekanyetso ya bona e nepagetse go le kana kang.

Dintlha tsa mofatlhosi

- ◆ Setela **Tirwana 2** didiriswa kwa diteišeneng tiro tse di farologaneng tsa tekanyo mme o tshwaye seteišenetiro se sengwe le se sengwe ka tshwanelo go ya ka mogopolo:
 - **Boleele:** mogala, diphensele, dikota
 - **Mothamo le volumo:** jeke, bolompoto, mabotlolo le ditshodi tsa bogolo jo bo farologaneng (go akaretsa ditshodi tse pedi tsa dipopego tse di farologaneng, fela di lekana ka mothamo), kgamelolo ya metsi
 - **Boima:** sekalamaleka, mefuta e mebedi ya maungo kgotsa go feta, dibuka tsa boima jo bo farologaneng, lebotlolo le le lengwe la polasetiki le lebotlolo le le lengwe la galase la boima jo bo farologaneng
 - **Nako:** Dikerese, dibalamae, watšhe ya go bala (mo selefounung).
- ◆ Aroganya batsayakarolo ka ditlhopho di le nne mme o neele setlhopho se sengwe le se sengwe seteišenetiro sa tekanyo e e farologaneng. Tlhalosa gore ditlhopho di tlaa refosana. Batsayakarolo ba tshwanetse go araba dipotso tse di mo *Bukatiro ya Batsayakarolo* kwa seteišenetirong se sengwe le se sengwe. Ba tlaa tsaya metsotso e ka nna lesome kwa seteišenetirong se sengwe le se sengwe.

- ◆ After the activity, discuss each workstation. Discuss how accurate the estimations were and which of the estimations could not be checked by measuring with the tools provided, e.g., the tallest person, whether it would take longer to eat lunch or drive to school.
- ◆ Highlight how learners need many opportunities to develop their comparison and estimation skills before they can use standard units of measurement.



Activity 2

With your group, move to the measurement workstation you have been assigned to and answer the questions in your *Participant's Workbook*. Rotate to the next workstation when you receive the signal.

Length

Refer to page 210 of the *Concept Guide*. What vocabulary did you use during this activity?

Find the answer to each of the following and identify the non-standard unit of measurement you used.

	Estimate (guess)	Non-standard unit of measurement	Length
1. Who has the longest shoe?			
2. Who is the shortest?			
3. How long is your <i>Participant's Workbook</i> ?			
4. Who has the longest arm?			
5. How wide is your table?			
6. How many hand spans is the height of the door?			

- ◆ Morago ga tirwana, buisanang ka ga seteišenetiro se sengwe le se sengwe. Buisanang ka gore ditekanyetso di nepagetse go le kana kang le gore ke dife tsa ditekanyetso tse di se kileng tsa tlholwa ka go lekanya ka didiriswa tse di neetsweng, sk., motho yo moleele go gaisa, gore a go tlaa tsaya nako e telejana go ja dijotshegare kgotsa go kgweetsa go ya sekolong.
- ◆ Gatelela ka moo barutwana ba tlhokang ditšhono tse dintsinzana ka teng go godisa papiso ya bona le dikgono tsa go lekanyetsa pele ga ba dirisa diyuniti tse di tlhomameng tsa tekanyo.



Tirwana 2

Tsamaela kwa seteišenetirong se lo se tsholetswe, wena le sethlopha sa gago mme lo arabe dipotso tse di mo *Bukatiro ya Batsayakarolo*. Refosanelang go ya kwa seteišenetirong se sengwe fa lo supediwa jalo.

Boleele

Lebelela tsebe 211 ya *Kaedi ya Mogopolo*. O dirisitse tlotlofoko efe ka nako ya tirwana eno?

Batla dikarabo tsa potso nngwe le nngwe ya tse di latelang mme o tshoale yuniti e e sa tlhomamang ya tekanyo e o e dirisitseng.

	Lekanyetsa (fopholetsa)	Yuniti e e sa tlhomamang ya tekanyo	Boleele
1. Ke mang yo o nang le setlhako se segolo go gaisa?			
2. Ke mang yo mokhutshwane go gaisa?			
3. <i>Bukatiro</i> ya gago ya <i>Batsayakarolo</i> e telele go le kana kang?			
4. Ke mang yo o nang le letsogo le lelele go gaisa?			
5. Tafole ya gago e sephara go le kana kang?			
6. Bogodimo jwa lebatladi bo ka nna selekanyo se se kana kang sa boatlhamo jwa seatla?			

Capacity and volume

Refer to page 210 of the *Concept Guide*. What vocabulary did you use during this activity?

Find the answer to each of the following and identify the non-standard unit of measurement you used.

	Estimate (guess)	Non-standard unit of measurement	Capacity or volume
1. Which two containers of water will fill the jug?			
2. Which bottle holds the most cups of water?			
3. How many cups of water do you think it will take to fill the vase?			
4. How many cups of water will it take to half-fill the vase?			
5. Which container on the table has the least amount of water in it?			
6. Which two containers have the same amount of water?			

Mass

Refer to page 210 of the *Concept Guide*. What vocabulary did you use during this activity?

Find the answer to each of the following and identify the non-standard unit of measurement you used.

	Estimate (guess)	Non-standard unit of measurement	Mass
1. Whose handbag in your group is the heaviest?			
2. Which book in your group is the lightest?			
3. Who is the heaviest in your group? Who is the lightest?			
4. Which fruit is the heaviest?			
5. Which bottle weighs the most?			

Mothamo le volumo

Lebelela tsebe 211 ya *Kaedi ya Mogopolo*. O dirisitse tlotlofoko efe ka nako ya tirwana eno?

Batla dikarabo tsa potso nngwe le nngwe ya tse di latelang mme o tthaole yuniti e e sa tthomamang ya tekanyo e o e dirisitseng.

	Lekanyetsa (fopholetsa)	Yuniti e e sa tthomamang ya tekanyo	Mothamo kgotsa volumo
1. Ke ditshodi dife tse pedi tsa metsi tse di tlaa tlatsang jeke?			
2. Ke lebotlolo lefe le le tsayang dikopi tse dintsi go gaisa tsa metsi?			
3. O akanya gore bolompoto e tlaa tladiwa ke dikopi di le kae tsa metsi?			
4. Bolompoto bo ka bewa gare ke dikopi di le kae tsa metsi?			
5. Ke setshodi sefe mo papetleng se se nang le bokaakang jo bonnye tota jwa metsi mo go sona?			
6. Ke ditshodi dife tse pedi di nang le bokaakang jo bo tshwanang jwa metsi?			

Boima

Lebelela tsebe 211 ya *Kaedi ya Mogopolo*. O dirisitse tlotlofoko efe ka nako ya tirwana eno?

Batla dikarabo tsa potso nngwe le nngwe ya tse di latelang mme o tthaole yuniti e e sa tthomamang ya tekanyo e o e dirisitseng.

	Lekanyetsa (fopholetsa)	Yuniti e e sa tthomamang ya tekanyo	Boima
1. Ke kgetsana ya ga mang e e boima go gaisa mo setlhopheng?			
2. Ke buka efe e e bofefo go gaisa mo setlhopheng sa gago?			
3. Ke mang yo o boima go gaisa mo setlhopheng sa gago? Ke mang yo o bofefo go gaisa?			
4. Ke leungo lefe le le boima go gaisa?			
5. Ke lebotlolo lefe le le kalang go gaisa?			

Time

Refer to page 210 of the *Concept Guide*. What vocabulary did you use during this activity?

Find the answer to each of the following and identify the non-standard unit of measurement you used.

	Estimate (guess)	Non-standard unit of measurement	Time
1. Who arrived the earliest this morning?			
2. Who arrived the latest?			
3. How long does it take to walk from your chair to the car?			
4. Who walked the fastest from their chair to the car?			
5. Would it take longer to eat lunch or drive to school?			

Facilitator's notes

- ◆ Wrap up Session 1 with a discussion about how participants would be able to set up similar activities in their classrooms. Encourage discussion about issues of space, resources and discipline.

Nako

Lebelela tsebe 211 ya *Kaedi ya Mogopolo*. O dirisitse tlotlofoko efe ka nako ya tirwana eno?

Batla dikarabo tsa potso nngwe le nngwe ya tse di latelang mme o tthaole yuniti e e sa tthomamang ya tekanyo e o e dirisitseng.

	Lekanyetsa (fopholetsa)	Yuniti e e sa tthomamang ya tekanyo	Nako
1. Ke mang yo o gorogileng pele go gaisa mo mosong ono?			
2. Ke mang yo o gorogileng wa bofelo?			
3. Go go tsaya nako e kana kang go tswa mo setulong sa gago go ya kwa koloing?			
4. Ke mang yo o tsamaileng ka pele go gaisa go tswa mo setulong sa gagwe go ya kwa koloing?			
5. A go tlaa tsaya nako e telejana go ja dijotshegare kgotsa go kgweetsa go ya sekolong?			

Dintlha tsa mofatlhosi

- ◆ Sobokanya Karolo 1 ka puisano ka moo batsayakarolo ba ka kgonang go baakaneytsa ditirwana tse di tshwanang mo diphaposiborutelong tsa bona. Rotloetsa dipuisano mabapi le dilo tse di etsang sebaka, didiriswa le maitsholo.

Session 2: Measurement (continued)

1 hour



Activity 3

Consider the measurement activities that you have just experienced in Activity 2. How is your classroom set up to provide similar learning experiences?

In Grade R, Measurement focuses on estimating, weighing, comparing and ordering objects according to how heavy or light they are.

Learners may find it difficult to understand that a small object can be heavier than a larger object. They need many opportunities to explore small heavy objects, small light objects, big heavy objects and big light objects.

Facilitator's notes

- ◆ Show Video 2. After the video, discuss what participants observed.
- ◆ Point out that mass is an abstract concept. Learners cannot see whether something is heavy or light. Teachers in Grade R often introduce the concept of mass with a balance scale so that learners can see what happens when an object is placed on each of its sides.
- ◆ Find out how participants have used a balance scale in their classrooms.
- ◆ Often learners notice that one side of the balance scale goes up and one side goes down, but they think that this is because the side of the scale that is higher is heavier. Teachers can help by pointing out that the side with the heavier object always goes down.



Video 2

Activity Guide: Term 3, Week 5, Day 1 #4 (pages 88–91); Day 2 #4 and 5 (pages 90–93); Day 3 #4 (pages 92–95); Day 4 #4 (pages 94–95); Day 5 #4 (pages 96–97)

Watch the video of comparing the mass of one object against another.

Discuss these questions.

- ◆ What do you see happening?
- ◆ What concepts are being taught and learnt?
- ◆ What skills are being practised?
- ◆ What are the learners doing and saying?
- ◆ How is the teacher mediating learning?

Karolo 2: Tekanyo (tsweletso)

Ura e le 1



Tirwana 3

Leba ditirwana tsa tekanyo tse o di itemogetseng go sa le gale mo Tirwaneng 2. Phaposiborutelo ya gago e rulagantswe jang go neela maitemogelo a a tshwanang a go ithuta.

Mo Mophatong wa R, Tekanyo e totile go lekanyetsa, go kala, go bapisa le go rulaganya dilo ka tatelano go ya ka gore di boima kgotsa di bofefo go le kana kang.

Barutwana ba ka bona go le thata go tlhaloganya gore selo se sennye se ka nna boima go na le se segolo. Ba tlhoka ditšhono di le dintsi go tlhotlhomisa dilo tse dinnye tse di boima, dilo tse dinnye tse di bofefo, dilo tse dikgolo tse di boima le dilo tse dikgolo tse di bofefo.

Dintlha tsa mofatlhosi

- ◆ Bontsha Video 2. Morago ga video, buisanang ka se batsayakarolo ba se etseng tlhoko.
- ◆ Supa gore boima ke mogopolo o o sa tshwaregeng. Barutwana ga ba kgone go bona gore a selo se boima kgotsa se bofefo. Barutabana mo Mophatong wa R go le gantsi ba tthagisa mogopolo wa boima ka sekalamaleka gore barutwana ba kgone go bona gore go diragalang fa selo se beilwe mo letlhakoreng le lengwe le le lengwe la sona.
- ◆ Batlisisa gore batsayakarolo ba dirisitse jang sekalamaleka mo diphaposiborutelong tsa bona.
- ◆ Go le gantsi barutwana ba lemoga gore letlhakore le lengwe la sekalamaleka le ya kwa godimo le gore le lengwe le ya kwa tlase, fela ba akanya gore seno se diragala ka gobo letlhakore la sekala le le kwa godingwana le boimanyana. Barutabana ba ka thusa ka go supa gore letlhakore la selo se se boimanyana le ya tlase ka gale.



Video 2

Kaedi ya Ditirwana: Kgweditsharo 3, Beke 5, Letsatsi 1 #4 (ditsebe 88-91); Letsatsi 2 #4 le 5 (ditsebe 90-93); Letsatsi 3 #4 (ditsebe 92-95); Letsatsi 4 #4 (ditsebe 94-95); Letsatsi 5 #4 (letsatsi 96-97)

Lebelela video ya go bapisa boima jwa selo se sengwe kgatlhanong le se sengwe.

Buisanang ka ga dipotso tseno.

- ◆ O bona go diragalang?
- ◆ Ke megopolo efe e e rutiwang le go ithutiwa?
- ◆ Ke dikgono dife tse di ikatisetswang?
- ◆ Barutwana ba dirang mme e bile ba a reng?
- ◆ Morutabana o tsereganya go ithuta jang?

Session 3: Revisiting Grade R maths topics

1 hour

Facilitator's notes

- ◆ Each group needs newsprint, kokis, Prestik and a *Resource Kit*.
- ◆ Allocate one topic to each small group.
- ◆ Small groups discuss the topic they are given and prepare a presentation for the whole group.
- ◆ As the groups are working, join their discussions and provide input on the content where they need this for their presentations.
- ◆ To support the participants' discussions, refer them to the relevant sections on pages 138–219 of the *Concept Guide*.

As you know, the Maths Programme is designed to introduce new knowledge and build on this progressively across the weeks and terms. During this session, we will revisit Content Areas and topics that we have dealt with in previous workshops and we will discuss how these topics have been presented in the Maths Programme.



Activity 4

The facilitator will give a topic to each group to discuss.

You are required to prepare a presentation on your understanding of the topic and how the Maths Programme deals with the development of the concepts and skills related to it. Read the relevant information associated with your topic in the *Concept Guide* (pages 138–219).

You will receive ONE of the following topics:

1. How are shapes introduced and consolidated in the Maths Programme? Refer to Term 3, Week 4, Days 1, 2 and 3 to support your discussion.
2. Position and direction are difficult concepts for young children to grasp. How does the Maths Programme present these topics in Terms 1, 2 and 3? Refer to Term 3, Week 4, Days 4 and 5 to support your discussion.
3. Term 3, Week 4, Day 5 deals with the topic of symmetry. Explain your understanding of this topic. Share your experiences of teaching symmetry and how your learners have demonstrated their understanding of it.
4. Dot cards are used throughout the Maths Programme. Discuss the value of using this resource and if/how it contributes to building number concept. Refer to Term 3, Weeks 4 and 6 to support your discussion.
5. Discuss the routine that is used to introduce a new number in the Maths Programme. Explain how this routine builds on and consolidates the development of number concept. Refer to Term 3, Week 6 to support your discussion.

Karolo 3: Go lebelela ditlhogo tsa dipalo tsa Mophato R gape

Ura e le 1

Dintlha tsa mofatlhosi

- ◆ Sethlopha se sengwe le se sengwe se tlhoka kgatiso ya dikgang, dikhokhi, Sekgomaretsi le *Kgetsana ya Didiriswa*.
- ◆ Tlhaolela sethlopha se sengwe le se sengwe setlhogo se le sengwe.
- ◆ Ditlhopho tse dinnye di buisana ka ga ditlhogo tse di di neetsweng le go baakanya tlhagiso ya sethlopha sotlhe.
- ◆ Fa ditlhopho di ntse di dira, tsena mo dipuisanong tsa tsona mme o neele ditshwaelo mo ditennyeng tseo ba di tlhokang mo ditlhagisong tsa bona.
- ◆ Go tshegetsa dipuisano tsa batsayakarolo, ba kope go lebelela dikarolo tse di maleba mo ditsebeng 138–219 tsa *Kaedi ya Mogopolo*.

Jaaka o itse, Lenaneo la Dipalo le laoletse go tlhagisa kitso e ntšhwa le go agelela mo go yona go ralala dibeke le dikgweditharo. Ka nako ya karolo eno, re tlaa lebelela Dikaroloteng gape le ditlhogo tse re setseng re di lebeletse mo dithutanong tse di fetileng mme e bile re tlaa buisana gore ditlhogo tseno di tlhagisitswe jang mo Lenaneong la Dipalo.



Tirwana 4

Mofatlhosi o tlaa neela sethlopha se sengwe le se sengwe setlhogo go buisana ka ga sona.

O tlhoka go baakanya tlhagiso eo mo go yona o tlhaloganyang setlhogo le ka moo Lenaneo la Dipalo le diranang ka teng le kgolo ya megopolo le dikgono tse di amanang le lona. Buisa tshedimose tse e e maleba e e amanang le setlhogo sa gago mo *Kaeding ya Mogopolo* (ditsebe 138–219).

O tlaa neelwa SENGWE sa ditlhogo tse di latelang:

1. Dipopego di tlhagisiwa le go tsolotannngwa jang mo Lenaneong la Dipalo? Lebelela Kgweditharo 3, Beke 4, Malatsi 1, 2 le 3 go tshegetsa puisano ya lona.
2. Boemo le kaelo ke megopolo e e thata go ka tshwarelelwa ke bana ba bannye. Lenaneo la Dipalo le tlhagisa jang ditlhogo tseno mo Kgweditharong ya 1, 2 le 3? Lebelela Kgweditharo 3, Beke 4, Malatsi 4 le 5 go tshegetsa puisano ya lona.
3. Kgweditharo 3, Beke 4, Letsatsi 5 go lebeletse setlhogo sa tekano. Tlhalosa ka moo o tlhaloganyang setlhogo seno ka teng. Arogana maitemogelo a gago a go ruta tekano le gore barutwana ba gago ba supile jang ka moo ba e tlhaloganyang ka teng.
4. Dikaratarontho di dirisiwa go ralala Lenaneo la Dipalo. Tlhalosa botlhokwa jwa go dirisa sediriswa seno le gore a mme e na le seabe/e tshwaela jang mo mogopolong wa go aga dinomere. Lebelela Kgweditharo 3, Dibeke 4 le 6 go tshegetsa puisano ya lona.
5. Buisanang ka ga moetlo o o dirisiwang go tlhagisa nomere e ntšhwa mo Lenaneong la Dipalo. Tlhalosa gore moetlo ono o agelela jang le go tsolotanya kgolo ya megopolo wa dipalo. Lebelela Kgweditharo 3, Beke 6 go tshegetsa puisano ya lona.

6. Explain how word problems are used to teach addition, subtraction, grouping (multiplication) and equal sharing (division). Discuss the importance of the use of language and the structure of the word problem. Also included a motivation for the use of fingers and concrete apparatus during problem-solving activities. Refer to Week 6, Day 5 and the teacher-guided activities to provide examples.
7. How does the Maths Programme facilitate learning how to sequence/order the counting numbers (oral counting)? Consider each of the resources below to support your discussion:
 - ◆ songs and rhymes
 - ◆ number washing line
 - ◆ jumping tracks
 - ◆ number symbol cards.

How do these activities link to the concept of ordinal numbers? Refer to Term 3, Week 6 for examples to support your discussion.

8. A real understanding of counting is achieved when learners are able to count each object in a collection and know that the last count represents the total number of the collection. This is a difficult concept for learners to grasp. How does the Maths Programme provide opportunities for learners to develop the concept of cardinality?

Facilitator's notes

- ◆ While each group is presenting, guide the discussion and ensure that the issues linked to the content have been dealt with.

6. Tlhalosa gore dipalofoko di dirisiwa jang go ruta tlhakanyo, ntsho, kokoanyo (go atisa) le go aroganya ka go lekana (go arola). Tlhalosa botlhokwa jwa tiriso ya puo le kagego ya palofoko. Gape akaretsa tlhotlheletso ya tiriso ya menwana le dilo tse di tshwaregang ka nako ya tharabololo ya dipalo. Lebelela Beke 6, Letsatsi 5 le ditirwana tse di kaelwang ke morutabana go neela dikao.
7. Lenaneo la Dipalo le thusa jang go ithuta go tthatlhamisa/rulaganya dinomore tsa go bala (go balela kwa godimo)? Dirisa sediriswa se sengwe le se sengwe sa tse di fa tlase go tshegetsang puisano ya lona:
- ◆ mogala wa dinomore
 - ◆ mela ya go tlola
 - ◆ dikaratatshwao tsa nomore.
- Ditirwana tseno di golagana jang le mogopolo wa dipalokemotatelano? Lebelela Kgweditsharo 3, Beke 6 go bona dikao tse di tshegetsang puisano ya lona.
8. Go tlhaloganya go bala ga nnete go fitlhelwa fa barutwana ba kgona go bala selo se sengwe le se sengwe mo kokoanyong le go itse gore palo ya bofelo e emela palogotlhe ya kokoanyo. Ono ke mogopolo o o thata go o tshwarelela. Lenaneo la Dipalo le neelana jang ka ditšhono gore barutwana ba nne le mogopolo wa bonoko?

Dintlha tsa mofatlhosi

- ◆ Fa setlhophaga se sengwe le se sengwe se neela tlhagiso ya sona, kaela puisano mme o netefatse gore dintlha tse di amanang le diteng di lebeletswe.

Session 4: Planning for teaching

1½ hours

It is important to plan and prepare thoroughly for each week. This will allow you to feel confident about what you are doing and help you to focus on teaching and working with the learners. As you have already experienced in Terms 1 and 2, the Maths Programme is carefully structured, and the maths content is presented in a progressive developmental sequence. It has been designed to ensure that all the Grade R Mathematics content and skills are covered and learners are well prepared for Grade 1. Teachers need to be cautious about selecting activities from different weeks and leaving other activities out.

Facilitator's notes

- ◆ Move between the groups as participants discuss the planning and preparation for teaching Term 3 Weeks 4–6 in **Activity 5**. Assist by making suggestions on overcoming challenges.
- ◆ Each group presents their main discussion points to the whole group.



Activity 5

1. In your group, complete the planning templates for Term 3 Weeks 4–6 (Appendix A).
2. Your group will present an overview of your planning discussion to the other groups. Note the main points of your discussion on flipchart paper. Include answers to the following questions:
 - ◆ How could you work with a colleague to prepare for each week?
 - ◆ How is the week structured?
 - ◆ How do the topics build on previous lessons?
 - ◆ Do the whole class activities successfully open the way for discussion and exploration of new knowledge?
 - ◆ How does the teacher-guided activity provide opportunities for the teacher to assess and support the learners?
 - ◆ Do the independent small group activities allow for adequate practice of new knowledge and skills?

Karolo 4: Go ithulaganyetsa go ruta

Diura di le 1½

Go bothokwa go rulaganyetsa le go ipaakanyetsa beke e nngwe le e nngwe sentle. Seno se tlaa dira gore o itshepe tebang le se o se dirang le go go thusa go tsepama mo go ruteng le go dira le barutwana. Jaaka o setse o itemogetse mo Kgweditharong 1 le 2, Lenaneo la Dipalo le rulagantswe ka kelotlhoko, le diteng tsa dipalo di tlhagisitswe ka tatelano e e tlisang kgolo. Le tlhamilwe go netefatsa gore diteng tsotlhe tsa Dipalo tsa Mophato R le dikgono di lebeletswe le gore barutwana ba ipaakanyeditse Mophato 1 sentle. Barutabana ba tlhoka go nna kelotlhoko ka ditirwana tse ba di tlhophang go tswa mo dibekeng tse di farologaneng le go tlogela ditirwana tse dingwe.

Dintlha tsa mofatlhosi

- ◆ Tsamaya magareng ga ditlhopho fa batsayakarolo ba buisana ka ga go rulaganya le ipaakanyetso ya go ruta Kgweditharo 3 Dibeke 4–6 mo **Tirwaneng 5**. Ba thuse ka go tshikhinya ditsela tsa go fenywa dikgwetho.
- ◆ Setlhopho se sengwe le se sengwe se tlhagisetsa setlhopho sotlhe dintlhakgolo tsa bona tsa puisano.



Tirwana 5

1. Mo ditlhopheng tsa lona, tlatlang dithempoleiti tsa Kgweditharo 3 Dibeke 4–6 (Mametlelelo A).
2. Setlhopho sa gago se tlaa tlhagisetsa ditlhopho tse dingwe thadiso ya puisano e lo e rulagantseng. Kwalang dintlhakgolo tsa puisano ya lona mo pampiring ya tšhatephetogi. Akaretsa dikarabo tsa dipotso tse di latelang:
 - ◆ O ne o ka dira jang le molekane go ipaakanyetsa beke nngwe le nngwe?
 - ◆ Beke e rulagantswe jang?
 - ◆ Ditlhogo di agelela jang mo dikamusong tse di fetileng?
 - ◆ A ditirwana tsa phaposiborutelo yotlhe di bula tsela ya dipuisano ka katlego le tekeletso ya kitso e ntšhwa?
 - ◆ Tirwana e e kaelwang ke morutabana e neelana jang ka ditšhono tsa gore morutabana a tlhatlhobe le go tshegetsatsa barutwana?
 - ◆ A ditirwana tse di ikemetseng tsa ditlhopho tse dinnye di letla ikatiso e e lekaneng ya kitso e ntšhwa le dikgono?

Closing activities

30 minutes

Facilitator's notes

- ◆ **Workshop reflection:** Ask participants to take a few minutes to reflect on the day and to page through their *Participant's Workbook*. Ask them to jot down any questions or comments to share with the whole group.
Ask individual participants to volunteer responses to the following:
 - I learnt ...
 - I did not like ...
 - I enjoyed ...
 - I now understand ...
 - I'm still not clear about ...
 - I would like more information on ...
- ◆ Encourage participants to add any comments and feedback not yet shared to the post box.
- ◆ **Take back to school task:** Read through this task. Ask if there is anything that is not clear and that requires more explanation.
- ◆ **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 6

Workshop reflection: Take a few minutes to reflect on the day. Page through your *Participant's Workbook* to remind yourself of what was covered. Write down your thoughts.

Share your reflections with the large group.



Take back to school task

1. Use *Activity Guide: Term 3* to plan and implement Term 3 Weeks 4–6 of the Maths Programme.
2. Write comments in the book that you use to keep track of each learner's progress (learner observation book). Use the '**Check that learners are able to**' observation list (eye box) during each of the teacher-guided activities to guide your observations and comments.

Dintlha tsa mofatlhosi

- ◆ **Tshediso ya thutano:** Kopa batsayakarolo go beela thoko metsotso e le mmalwa go sedisisa letsatsi le go phetlha *Bukatiro ya Batsayakarolo*. Ba kope go kwala dipotso kgotsa ditshwaelo go arogana le setlhopha sotlhe.
Kopa batsayakarolo ka bosii go ithaopa go tsibogela tse di latelang:
 - Ke ithutile ...
 - Ga ke a rata ...
 - Ke itumetse ...
 - Jaanong ke a tlhologanya ...
 - Ke sa ntse ke sa tlhologanye ...
 - Nka rata go bona tshedimosetso e ntsi ka ...
- ◆ Rotloetsa batsayakarolo go tlaleletsa ditshwaelo dingwe le dingwe le ditlamorago tse di iseng di aroganngwe kwa lebokosongposo.
- ◆ **Tirwana e o e busetsang kwa sekolong:** Buisa tirwana eno. Botsa gore a go na le sengwe se se sa tlhakang mme se tlhoka go tlhalosiwa gape.
- ◆ **Tlhatlhobo:** Ntsha dikhophi tsa Foromo ya Tlhatlhobo ya Thutano mme o kope batsayakarolo go e tlatsa.
- ◆ **Thutano e e latelang:** Neela matlha a thutano e e latelang mme o khutlise thutano.



Tirwana 6

Tshediso ya thutano: Tsaya metsotso e le mmalwa go sedisisa ka ga letsatsi. Phetlha *Bukatiro ya Batsayakarolo* ya gago go ikkopotsa se se dirilweng.

Arogana ditshedisiso tsa gago le setlhopha se segolo.



Tirwana e o e busetsang kwa sekolong

1. Dirisa *Kaedi ya Ditirwana: Kgweditharo 3* go rulaganya le go diragatsa Kgweditharo 3 Dibeke 4–6 tsa Lenaneo la Dipalo.
2. Kwala ditshwaelo mo bukeng tse o di dirisang go ela tlhoko tswelolepele ya morutwana (buka ya ngwana ya kelotlhoko). Dirisa lenanekelotlhoko (lebokoso la leitlho) la '**Ela tlhoko gore barutwana ba kgona go**'. Ka nako ya ditirwana tse dingwe le tse dingwe tse di kaelwang ke morutabana go kaela dikelotlhoko le ditshwaelo tsa gago.

3. Make notes of what worked well, what did not work well and how you resolved any challenges during your implementation of Term 3 Weeks 4–6.
4. Bring your learner observation book and the notes you made when reflecting on each day's teaching to the next workshop.

Evaluation

Complete the Evaluation Form.

3. Kwala dintlha tsa se se dirileng sentle thata, se se sa dirang sentle le gore ba rarabolotse jang dikgwetlho dingwe ka nako ya tiragatso ya Kgweditsharo 3 Dibeke 4-6.
4. Tlala ka buka ya morutwana ya kelotlhoko le dintlha tse o di kwadileng fa o sedisisa thuto ya letsatsi le lengwe le le lengwe mo thutanong e e latelang.

Tlathobo

Tlatsa Foromo ya Tlathobo.

APPENDIX A: TERM 3 WEEKLY PLANNING TEMPLATE

Term 3: Activity Plan: Week ____

CONTENT AREA:				
TOPIC:				
INTRODUCE NEW KNOWLEDGE:				
PRACTISE:				
Whole class activities		Teacher-guided activity	Workstation activities (independent small group activities)	
Day 1			Activity 1	
Day 2			Activity 2	
Day 3			Activity 3	
Day 4			Activity 4	
Day 5				

MAMETLELELO A: KGWEDITHARO 3 THEMPOLEITI YA THULAGANYO YA BEKE LE BEKE

Kgweditharo 3: Thulaganyo ya ditirwana: Beke ____

KAROLOTENG:				
SETLHOGO:				
TLHAGISA KITSO E NTŠHWA:				
IKATISE:				
Ditirwana tsa phaposiborutelo yothle		Tirwana e e kaelwang ke morutabana	Ditirwana tsa seteišenetiro (ditirwana tse di ikemetseng tsa sethlopha se sennye)	
Letsatsi 1			Tirwana 1	
Letsatsi 2			Tirwana 2	
Letsatsi 3			Tirwana 3	
Letsatsi 4			Tirwana 4	
Letsatsi 5				

Term 3: Activity Plan: Week ____

CONTENT AREA:				
TOPIC:				
INTRODUCE NEW KNOWLEDGE:				
PRACTISE:				
Whole class activities		Teacher-guided activity	Workstation activities (independent small group activities)	
Day 1			Activity 1	
Day 2			Activity 2	
Day 3			Activity 3	
Day 4			Activity 4	
Day 5				

Kgweditharo 3: Thulaganyo ya ditirwana: Beke ____

KAROLOTENG:				
TLHAGISA KITSO E NTŠHWA:				
TLHAGISA KITSO E NTŠHWA:				
IKATISE:				
Ditirwana tsa phaposiborutelo yotlhe		Tirwana e e kaelwang ke morutabana	Ditirwana tsa seteišenetiro (ditirwana tse di ikemetseng tsa setlhopha se sennye)	
Letsatsi 1			Tirwana 1	
Letsatsi 2			Tirwana 2	
Letsatsi 3			Tirwana 3	
Letsatsi 4			Tirwana 4	
Letsatsi 5				

Term 3: Activity Plan: Week ____

CONTENT AREA:				
TOPIC:				
INTRODUCE NEW KNOWLEDGE:				
PRACTISE:				
Whole class activities		Teacher-guided activity	Workstation activities (independent small group activities)	
Day 1			Activity 1	
Day 2			Activity 2	
Day 3			Activity 3	
Day 4			Activity 4	
Day 5				

Kgweditharo 3: Thulaganyo ya ditirwana: Beke ____

KAROLOTENG:				
TLHAGISA KITSO E NTŠHWA:				
TLHAGISA KITSO E NTŠHWA:				
IKATISE:				
Ditirwana tsa phaposiborutelo yotlhe		Tirwana e e kaelwang ke morutabana	Ditirwana tsa seteišenetiro (ditirwana tse di ikemetseng tsa setlhopha se sennye)	
Letsatsi 1			Tirwana 1	
Letsatsi 2			Tirwana 2	
Letsatsi 3			Tirwana 3	
Letsatsi 4			Tirwana 4	
Letsatsi 5				

Workshop 8 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?

Foromo ya Tlhatlhobo ya Thutano 8

1. A thutano e kgonne go fitlhelela ditsholofelo tsa gago?

2. Ke eng se o se ithutileng mo thutanong eno se se go thusitseng go gaisa?

3. A go na le sengwe se o sa se ratang kgotsa se se neng se go thatafalela?

4. O ya go diragatsa jang se o se ithutileng mo phaposiborutelong ya gago ya Mophato wa R?

5. A go na le se o se tshikhinyang go ka thusa go tokafatsa dithutano tse di latelang?
