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GROWING GAUTENG TOGETHER

Tshivenda/English

Mbekanyamushumo ya u Khwinifhadza Mbalo dza Gireidi ya T Grade R Mathematics Improvement Programme



Wekishopo ya 8 • Workshop 8

Bugu ya Mushumo ya Vhashelamulenzhe • Participant's Workbook

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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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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)

Manweledzo

Ndivho

Iyi ndi wekishopo ya vhumalo kha dza fumimbili dza Mbekanyamushumo ya u Khwinifhadza Mbalo dza Gireidi ya Ṭ ine ya vhumba tshipiḁa tsha Muhasho wa Pfunzo wa Gauteng (GDE) Mbalo dza Gireidi ya Ṭ na Thandela ya u Khwinisa Dzinyambo.

Ndivho ya wekishopo iyi ndi u thusa vhagudisi u thoma Mbekanyamushumo ya Mbalo ngomu kiḁasirumuni dzavho. Vhashelamulenzhe vha ḁo vha na tshikhala tsha u amba nga zwe vha lavhelesa. Vha ḁo tandula uri milayo ya nyendedzi ya u funza mbalo kha Gireidi ya Ṭ i fanela u thusa hani u pulana havho, u funza na u linga. Vha ḁo dovha hafhu vha sedza mvelaphanḁa ya vhagudi, na ḁoḁea dza u guda na mveledziso dza mugudi nga eḁhe. Wekishopo i tandula magudiswa a Kotara ya 3 Vhege ya 4–6 na u thomiwa hao kiḁasini.

U referentsiwa kha Sia ḁa Magudiswa ḁa Mbalo dza Gireidi ya Ṭ zwo dzhiwa kha *Tshitatamennde tsha Pholisi tsha Kharikhulamu na u Linga (TSHIPHOKHALI): Mbalo dza Gireidi ya Ṭ (Mvetamveto ya u Fhedzisela)*, 2011, Muhasho wa Pfunzo ya Mutheo, Afrika Tshipembe.

Mvelelo dza u guda

- ◆ U humbula nga u thomiwa ha Kotara ya 3 Vhege ya 1–3
- ◆ U tandula maano o ḁisendekaho kha u tamba u itela u tikedza u funza mbalo kha Gireidi ya Ṭ
- ◆ U khwaḁhisedza u pfesesa thero dza Mbekanyamushumo ya Mbalo
- ◆ U amba nga dzikhaedu na u wana thandululo dza u thoma Mbekanyamushumo ya Mbalo
- ◆ U pulana magudiswa a Mbekanyamushumo ya Mbalo ane a ḁo funzwa kha Kotara ya 3 Vhege ya 4–6

Magudiswa a wekishopo

- ◆ Mvulatswinga na mihumbulo (Awara 1)
 - ◆ Dzulo ḁa 1: Muelo (Awara 1)
- TIE
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 - ◆ Dzulo ḁa 3: U lavhelesa hafhu thero dza mbalo dza Gireidi ya Ṭ (Awara 1)
- TSHISWIṬULO
- ◆ Dzulo ḁa 4: U pulanela u funza (Awara 1½)
 - ◆ Nyito dza u vala (Minetse ya 30)

Opening and reflection

1 hour

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.

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.

Mushumo wa u tuwa nawo tshikoloni u bva kha Wekishopo ya 7 ngoyu.



Mushumo wa u tuwa nawo tshikoloni (Wekishopo ya 7)

1. Kha vha shumise Themphuleithi ya u pulana ya Vhege nga Vhege ya Kotara ya 3 i re kha Thumetshedzo ya A u pulana na u thoma Kotara ya 3 Vhege ya 1-3 dza Mbekanyamushumo ya Mbalo.
2. Kha vha nwale uri vho shumisa hani '**Kha vha tole uri vhagudi vha a kona u**' kha mutevhe wa u lavhelesa (kha ito tshibogisini) nga tshifhinga tsha nyito dzo rangwaho phanda nga mugudisi.
3. Kha vha nwale zwe vha tola zwe zwa shuma zwavhuḁi, zwe zwa si shume zwavhuḁi na zwine vha nga ita nga inwe ndila yo fhambanaho u itela u khwinisa u funza na u guda.
4. Kha vha de na zwe vha ela zwavho kha wekishopo i tevhelaho.



Nyito ya 1

1. Tshigwadani tshavho, kha vha kovhane zwe zwa shuma zwavhuḁi na dzikhaedu musi vha tshi khou thoma Mbekanyamushumo ya Mbalo kha Kotara ya 3 Vhege ya 1-3.

2. Kha vha haseledze tshumiso yavho ya mutevhe wa u lavhelesa wa '**Kha vha tole uri vhagudi vha a kona u**' (kha ito tshibogisini) nga tshifhinga tsha nyito dzo rangwaho phanda nga mugudisi dziñwe na dziñwe.

3. Kha vha vha fhe maano a u khwinisa u funza na u guda kha dzikhaedu dze vha topola.

4. Kha vha nwale mbuno khulwane dza khaseledzo yavho kha bammbiri la filipitshati. Kha vha vhigele murahu khaseledzo yavho kha tshigwada tshihulwane.



Video 1

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.



Vidiyo ya 1

Kha vha ṭalele vidiyo ya mugudisi a tshi khou shuma na tshigwada tshiṭuku tsha vhagudi nga tshifhinga tsha nyito yo rangwaho phanḁa nga mugudisi kha Kotara ya 3 Vhege ya 3.

Kha vha lavhelese uri mugudisi u:

- ◆ dzudzanya hani nyito ya tshigwada tshiṭuku
- ◆ langula hani muratho vhukati ha mishumo ya malo
- ◆ shumisa hani mbudziso u endedza vhagudi
- ◆ rekhoda hani zwe a lavhelesa zwa zwe zwa gudwa a tshi shumisa mutevhe wa u lavhelesa wa **'Kha vha ṭole uri vhagudi vha a kona u'**.

Session 1: Measurement

1 hour

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.



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?

Dzulo la 1: Muelo

Awara 1

Kha Kotara ya 1 na 2, tshifhinga na vhulapfu zwo vha zwo sedzwa kha Muelo. Dzulo ili li do sedza hafhu thero idzi na u tandavhudza khaseledzo ya Muelo u itela u katela tshileme, na vhungomu na volumu.

Muelo ndi nga u wana uri 'hu na zwingana' zwi re hone zwa tshithu. Kha Gireidi ya T, muelo u sedzesa kha:

- ♦ tshifhinga
- ♦ vhulapfu
- ♦ tshileme
- ♦ vhungomu na volumu.

Kha nyito i tevhelaho, vha do tandula tshiwe na tshiwe tsha divhaipfi idzi dza muelo.

Vhagudi kha Gireidi ya T vha ela zwi si fomala, nga u vhambedza ho livhaho na u shumisa zwa u ela zwi si zwa tshitandadi. Vhagudi vha bveledza zwikili zwavho zwa u anganyela nga tshifhinga tsha nyito dza u ela dzi si fomala. Vha anganyela uri tshithu tshi na vhulapfu vhungafhani kana u lemela hani vha konaha u shumisa tshishumiswa tsha u ela tshi si tsha tshitandadi u wana uri u anganyela havho ho vha hu hone naa.



Nyito ya 2

Na tshigwada tshavho, kha vha tshimbile vhaye tshitshitini tsha u shumela tsha muelo tshe vha newa tshone vha fhindule mbudziso dzi re ngomu ha *Bugu ya Mushumo ya Vhashelamulenzhe*. Vha tshintshane vha ye kha tshiwe tshitshitini tsha u shumela musi vha tshi wana ngafhadzo.

Vhulapfu

Kha vha sedze siatari la 211 la *Nyendedzi ya Divhaipfi*. Ndi divhaipfi ifhio ye vha shumisa nga tshifhinga tsha nyito iyi?

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?			

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?			

Kha vha wane phindulo ya tshiṅwe na tshiṅwe tsha zwi tevhelaho vha topole zwa u ela zwi si zwa tshitandadi zwe vha shumisa.

	U anganyela (u hambulela)	Zwa u ela zwi si zwa tshitandadi	Vhulapfu
1. Ndi nnyi a re na tshienda tshilapfusesa?			
2. Ndi nnyi a re na tshipfufhisesa?			
3. <i>Bugu ya Mushumo ya Vhashelamulenzhe</i> yavho yo lapfa hani?			
4. Ndi nnyi a re na mukonwo mulapfusesa?			
5. Tafula yavho yo tanḁavhuwa lungafhani?			
6. Vhulapfu ha muṅango ho itwa nga zwanḁa zwingana zwa u kala?			

Vhungomu kana volumu

Kha vha sedze siatari la 211 la *Nyendedzi ya Divhaipfi*. Ndi divhaipfi ifhio ye vha shumisa nga tshifhinga tsha nyito iyi?

Kha vha wane phindulo ya tshiṅwe na tshiṅwe tsha zwi tevhelaho vha topole zwa u ela zwi si zwa tshitandadi zwe vha shumisa.

	U anganyela (u hambulela)	Zwa u ela zwi si zwa tshitandadi	Vhungomu kana volumu
1. Ndi zwifaredzi zwivhili zwifhio zwa maḁi zwine zwa ḁo ḁadza bigiri?			
2. Ndi boḁelo lifhio li faraho vhunzhi ha khaphu dza maḁi?			
3. Ndi khaphu nngana dza maḁi dzine na hambula uri dzi nga ḁadza vasi?			
4. Ndi khapu nngana dza maḁi dzine dzi nga ḁadza hafu ya vasi?			
5. Ndi tshifaredzi tshifhio tshi re kha tafula tshi re na maḁi maḁukusa ngomu hatsho?			
6. Ndi zwifaredzi zwivhili zwifhio zwi re na maḁi a eḁanaho?			

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?			

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?			

Tshileme

Kha vha sedze siaṭari 1a 211 1a *Nyendedzi ya Divhaipfi*. Ndi divhaipfi ifhio ye vha shumisa nga tshifhinga tsha nyito iyi?

Kha vha wane phindulo ya tshiṅwe na tshiṅwe tsha zwi tevhelaho vha topole zwa u ela zwi si zwa tshitandadi zwe vha shumisa.

	U anganyela (u hambulela)	Zwa u ela zwi si zwa tshitandadi	Tshileme
1. Ndi mukhwama wa nnyi tshigwadani tshavho u lemelesaho?			
2. Ndi bugu ifhio tshigwadani tshavho i leluwesaho?			
3. Ndi nnyi a lemelesaho tshigwadani tshavho? Ndi nnyi a leluwesaho?			
4. Ndi mutshelo ufhio u lemelesaho?			
5. Ndi boḁelo li fhio li lemelesaho?			

Tshifhinga

Kha vha sedze siaṭari 1a 211 1a *Nyendedzi ya Divhaipfi*. Ndi divhaipfi ifhio ye vha shumisa nga tshifhinga tsha nyito iyi?

Kha vha wane phindulo ya tshiṅwe na tshiṅwe tsha zwi tevhelaho vha topole zwa u ela zwi si zwa tshitandadi zwe vha shumisa.

	U anganyela (u hambulela)	Zwa u ela zwi si zwa tshitandadi	Tshifhinga
1. Ndi nnyi o swikaho nga u ṭavhanyesa matsheloni ano?			
2. Ndi nnyi o swikaho o lengesa?			
3. Zwi dzhia tshifhinga tshingafhani u tshimbila u bva tshiduloni tshavho u ya goloini?			
4. Ndi nnyi o tshimbilaho nga u ṭavhanyesa u bva tshiduloni tshawe u ya goloini?			
5. Zwi nga dzhia tshifhinga tshilapfu u 1a tshiswiṭulo kana u reila u ya tshikoloni?			

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.



Video 2

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?

Dzulo la 2: Muelo (u bvela phanda)

Awara 1



Nyito ya 3

Kha vha sedze nyito dza muelo dze vha tshenzhela kha Nyito ya 2. Kibasirumu yavho yo dzudzanywa hani u itela u netshedza tshenzhemo ya u guda i fanaho?

Kha Gireidi ya T, Muelo u sedzesa kha u anganyela, u kala, u vhambedza na u tevhekanya zwithu u ya nga uri zwi lemela kana u leluwa hani.

Vhagudi vha nga wana zwi tshi vha kondela u pfesesa uri tshithu tshituku tshi nga lemelesesa u fhira tshithu tshihulwane. Vha toda zwikhala zwinzhi u itela u tandula zwithu zwituku zwi lemelaho, zwithu zwituku zwi leluwaho, zwithu zwihulwane zwi lemelaho na zwithu zwihulwane zwi leluwaho.



Vidiyo ya 2

Kha vha talele vidiyo ya u vhambedza tshileme tsha tshithu tshithihi na tshinwe.

Kha vha haseledze mbudziso idzi.

- ◆ Vha khou vhona hu tshi khou itea mini?
- ◆ Ndi divhaipfi ifhio ine ya khou funzwa na u gudwa?
- ◆ Ndi zwikili zwifhio zwi no khou itwa ndowendowe yazwo?
- ◆ Vhagudi vha khou ita mini na u amba zwifhio?
- ◆ Mugudisi u khou konanya hani u guda?

Session 3: Revisiting Grade R maths topics

1 hour

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.

Dzulo la 3: U lavhelesa hafhu thero dza mbalo dza Gireidi ya T

Awara 1

Vhunga vha tshi zwi divha, Mbekanyamushumo ya Mbalo yo dizainwa u divhadza ndivho ntswa na u fhaṭa khayō hu bvelaho phanda kha vhege dzoṭhe na kotara dzoṭhe. Nga tshifhinga tsha dzulo ili, ri do lavhelesa hafhu Sia la Magudiswa na thero dze ra kwama kha wekishopo dzo fhiraho nahone ri do haseledza uri thero idzi dzo kumedzwa hani kha Mbekanyamushumo ya Mbalo.



Nyito ya 4

Mutshimbidzi u do nea tshigwada tshinwe na tshinwe thero uri tshi haseledze.

Vha khou fanela u dzudzanya mukumedzo nga kupfesesele kwavho kwa thero na uri Mbekanyamushumo ya Mbalo i shuma hani na mveledziso ya divhaipfi na zwikili zwi re na vhushaka nayo. Kha vha vhale mafhungo o teaho a tshimbilelanaho na thero yavho ngomu ha *Nyendedzi ya Divhaipfi* (masiatari a 138–219).

Vha do wana NTHIHI ya thero dzi tevhelaho:

1. Zwivhumbeo zwi divhadzwa na u pfumbiswa hani kha Mbekanyamushumo ya Mbalo? Kha vha sedze kha Kotara ya 3, Vhege ya 4, Duvha la 1, 2 na 3 u itela u tikedza khaseledzo yavho.
2. Vhuimo na sia ndi divhaipfi i konḁaho u i pfesesa kha vhana vhaṭuku. Mbekanyamushumo ya Mbalo i kumedza hani thero idzi kha Kotara ya 1, 2 na 3? Kha vha sedze kha Kotara ya 3, Vhege ya 4, Duvha la 4 na 5 u itela u tikedza khaseledzo yavho.
3. Kotara ya 3, Vhege ya 4, Duvha la 5 li shuma na thero ya ndinganyahuvhili. Kha vha ṭalutshedze kupfesesele kwavho kwa thero iyi. Kha vha ambe nga tshenzhemo yavho ya u funza ndinganyahuvhili na uri vhagudi vhavho vho sumbedzisa hani u i pfesesa.
4. Magaraṭa a tshithoma a shumiswa kha Mbekanyamushumo ya Mbalo yoṭhe. Kha vha haseledze ndeme ya u shumisa itshi tshishumiswa na arali/tshi shela hani mulenzhe kha u fhaṭa divhaipfi ya nomboro. Kha vha sedze kha Kotara ya 3, Vhege ya 4 na 6 u itela u tikedza khaseledzo yavho.
5. Kha vha haseledze ndowelo ine ya shumiswa u divhadza nomboro ntswa kha Mbekanyamushumo ya Mbalo. Kha vha ṭalutshedze uri ndowelo iyi i fhaṭa u ya phanda hani na u pfumbisa mveledziso ya divhaipfi ya nomboro. Kha vha sedze kha Kotara ya 3, Vhege ya 6 u itela u tikedza khaseledzo yavho.

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?

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.



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?

Dzulo la 4: U pulanela u funza

Awara 1½

Ndi zwa ndeme u pulana na u lugisela nga vhudzivha vhege inwe na inwe. Izwi zwi do vha thusa uri vha vhe na fulufhelo nga zwine vha khou ita na u vha thusa u sedzesa kha u funza na u shuma na vhagudi. Vhunga vho no di zwi vhona kha Kotara ya 1 na 2, Mbekanyamushumo ya Mbalo yo dzudzanywa nga vhuronwane, nahone magudiswa a mbalo o kumedzwa nga u tevhekana ha mveledziso hu bvelaho phanda. Yo dizainiwa u itela u khwaḥisedza uri magudiswa oḥthe a Mbalo dza Gireidi ya T na zwikili zwo kwamiwa nahone vhagudi vho lugiselwa zwavhuḍi Gireidi ya 1. Vhagudisi vha fanela u ḥhogomela musi vha tshi nanga nyito u bva kha vhege dzo fhambanaho na u litsha dziinwe nyito.



Nyito ya 5

1. Tshigwadani tshavho, kha vha fhedzise themphuḗleithi ya u pulana ya Kotara ya 3 Vhege ya 4–6 (Thumetshedzo ya A).
2. Tshigwada tshavho tshi do kumedza manweledzo a khaseledzo ya u pulana havho kha zwiinwe zwigwada. Kha vha iwale mbuno khulwane dza khaseledzo yavho kha bambiri la filipitshati. Vha katele phindulo dza mbudziso dzi tevhelaho:
 - ◆ Vha nga shuma hani na mushumisani u lugisela vhege inwe na inwe?
 - ◆ Vhege yo dzudzanywa hani?
 - ◆ Thero dzi fhaḥa hani u bva kha ngudo dzo fhiraho?
 - ◆ Hone mishumo ya kilasi yoḥthe i a kona u vula zwavhuḍi ndila ya khaseledzo na thandululo ya ndivho ntswa?
 - ◆ Nyito yo rangwaho phanda nga mugudisi i netshedza hani mugudisi zwikhala zwa u linga na u tikedza vhagudi?
 - ◆ Hone nyito dza tshigwada tshituku dzo diimisaho dzi a tendela ndowenḍowe yo linganelaho ya ndivho ntswa na zwikili?

Closing activities

30 minutes



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.
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.



Nyito ya 6

U amba nga wekishopo: Kha vha dzhie minetse i si gathi u amba nga ḍuvha. Kha vha fhende Bugu ya Mushumo ya Vhashelamulenzhe yavho u ḍi humbudza nga zwe zwa kwamiwa. Kha vha n̄wale mihumbulo yavho.

Kha vha kovhane zwe vha amba na tshigwada tshihulwane.



Mushumo wa u t̄uwa nawo tshikoloni

1. Kha vha shumise *Nyendedzi ya Nyito: Kotara ya 3* u pulana na u thoma Kotara ya 3 Vhege ya 4–6 dza Mbekanyamushumo ya Mbalo.
2. Kha vha n̄wale mahumbulwa buguni ine vha i shumisa u itela u sedza mvelaphanda ya mugudi muñwe na muñwe (bugu ya u lavhelesa vhagudi). Kha vha shumise mutevhe wa u lavhelesa wa '**Kha vha t̄ole uri vhagudi vha a kona u**' (kha i t̄o tshibogisini) nga tshifhinga tsha nyito dzo rangwaho phanda nga mugudisi dziñwe na dziñwe u itela u endedza u lavhelesa havho na mahumbulwa.
3. Kha vha ite notsi dza zwe zwa shuma zwavhuḍi, zwe zwa si shume zwavhuḍi, na uri vho tandulula hani dzikhaedu dziñwe na dziñwe nga tshifhinga tsha u thoma havho Kotara ya 3 Vhege ya 4–6.
4. Kha vha d̄e na bugu ya u lavhelesa vhagudi na notsi dze vha ita musi vha tshi khou amba nga u funza ha d̄uvha l̄iñwe na l̄iñwe kha wekishopo i tevhelaho.

U linga

Kha vha d̄adze Fomo ya u Linga.

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				

THUMETSHEDZO YA A: THEMPHULEITHI YA U PULANA YA VHEGE NGA VHEGE YA KOTARA YA 3

Kotara ya 3: Pulane ya Nyito: Vhege _____

SIA LA MAGUDISWA:				
THERO:				
KHA VHA DIVHADZE NDIVHO NTSWA:				
NDOWEDZO:				
Nyito dza kilasi yothe		Nyito yo rangwaho phanda nga mugudisi		Nyito dza tshitshini tsha u shumela (nyito dza tshigwada tshituku tsho diimisaho)
Duvha la 1				Nyito ya 1
Duvha la 2				Nyito ya 2
Duvha la 3				Nyito ya 3
Duvha la 4				Nyito ya 4
Duvha la 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				

Kotara ya 3: Pulane ya Nyito: Vhege ____

SIA LA MAGUDISWA:				
THERO:				
KHA VHA DIVHADZE NDIVHO NTSWA:				
NDOWEDZO:				
Nyito dza kilasi yothe		Nyito yo rangwaho phanda nga mugudisi	Nyito dza tshitshini tsha u shumela (nyito dza tshigwada tshituku tsho diimisaho)	
Duvha la 1			Nyito ya 1	
Duvha la 2			Nyito ya 2	
Duvha la 3			Nyito ya 3	
Duvha la 4			Nyito ya 4	
Duvha la 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				

Kotara ya 3: Pulane ya Nyito: Vhege ____

SIA LA MAGUDISWA:				
THERO:				
KHA VHA DIVHADZE NDIVHO NTSWA:				
NDOWEDZO:				
Nyito dza kilasi yothe		Nyito yo rangwaho phanda nga mugudisi	Nyito dza tshitshini tsha u shumela (nyito dza tshigwada tshituku tsho diimisaho)	
Duvha la 1			Nyito ya 1	
Duvha la 2			Nyito ya 2	
Duvha la 3			Nyito ya 3	
Duvha la 4			Nyito ya 4	
Duvha la 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?

Fomo ya u LINGA ya WEKISHOPO ya 8

1. Wekishopo yo swikelela ndavhelelo dzavho?

2. Ndi zwifhio zwe vha guda kha iyi wekishopo zwe zwa vha thusesa?

3. Ho vhuya ha vha na zwiṅwe zwe vha si zwi takalele kana zwe vha konḑelwa u zwi pfesesa?

4. Vha ḑo shumisa hani zwe vha guda ngomu kiḷasirumuni yavho ya Gireidi ya T?

5. Vha na zwine vha tama u dzinginya u itela u khwinisa wekishopo dzi tevhelaho?
