



**GAUTENG PROVINCE**  
EDUCATION  
REPUBLIC OF SOUTH AFRICA

**GGT 2030**  
GROWING GAUTENG TOGETHER

Xitsonga/English

# **Nongonoko wa Antswiso wa Matematiki wa Giredi ya V Grade R Mathematics Improvement Programme**



**Ndzetelavutivi wa 7 • Workshop 7  
Buku ya Ntirho ya Vatekaxiave • Participant's Workbook**

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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Phurojeke ya Antswiso wa Matematiki na Tindzimi ya Giredi ya V i matshalatshala ya **Ndzawulo ya Dyondzo ya Gauteng (Gauteng Department of Education)** na mutirhisankulu wa yona, **Gauteng Education Development Trust**.

Nhluvukiso na vuhumelerisi bya swipfuno swa vuleteri na swa le kamareni ro dyondzela swa Phurojeke ya Antswiso wa Matematiki na Tindzimi ya Giredi ya V swi endlwile swi koteka hi timali ta tiphurojeke to hananiwa kusuka eka **United States Agency for International Development** na **Zenex Foundation**.

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## SWIKHENSO

Ku khensa ko hlawuleka eka:

- Vakulukumba va Ndzawulotsongo ya Kharikhulamu, Dyondzo ya Vadyondzisi na Dyondzo yo Hlawuleka ta Ndzawulo ya Dyondzo ya Gauteng eka vuhoxaxandla bya vona ku fambelanisa matheriyali wa hina.
- Vakulukumba na vadyondzisi va Western Cape Education Department (WCED) eka vuhoxaxandla bya vona eka nsimeko lowu humeleleke wa Grade R Mathematics Programme (R-Maths) eKapa-Vupeladyambu exikarhi ka 2016 na 2019.
- Xipano xo tsala xa *R-Maths*: Vatirhi na vatsundzuxi va SDU.



Nongonoko wa Antswiso wa Matematiki wa Giredi ya V wu fambelanisiwile kusuka eka *R-Maths*, wu kandziyisiwile rosungula hi 2017 hi Schools Development Unit, University of Cape Town. Mfaneloxinawu ya mutumbuluxi ya *R-Maths* yi khomiwile hi University of Cape Town.

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# Contents

## Overview

Purpose .....	page 6
Learning outcomes .....	page 6
Workshop content .....	page 6

## Workshop content

Opening and reflection .....	page 10
Session 1: Setting the scene .....	page 12
Session 2: Play-based teaching and learning .....	page 16
Session 3: The Grade R maths learning environment .....	page 24
Session 4: Factors affecting maths learning .....	page 28
Session 5: Perceptual and motor development .....	page 32
Session 6: Planning for teaching .....	page 38
Closing activities .....	page 40
Appendix A: Term 3 Weekly Planning Template .....	page 42
Workshop 7 Evaluation Form .....	page 44

# Leswi nga endzeni

## Nkatsakanyo

Xikongomelo .....	pheji ya 7
Mivuyelo ya dyondzo .....	pheji ya 7
Vundzeni bya ndzetelavutivi .....	pheji ya 7

## Vundzeni bya ndzetelavutivi

Ku pfula na ku ehleketisisa.....	pheji ya 11
Sexini ya 1: Ku lulamisa ndhawu .....	pheji ya 13
Sexini ya 2: Madyondziselo na madyondzelo lama simekiweke eka ntlangu .....	pheji ya 17
Sexini ya 3: Mbangu wo dyondzela matematiki wa Giredi ya V .....	pheji ya 25
Sexini ya 4: Swiphemu leswi khumbaka madyondzelo ya matematiki .....	pheji ya 29
Sexini ya 5: Nhluvukiso wo tirlhisa swirho u ri karhi u vona .....	pheji ya 33
Sexini ya 6: Nkunguhato wa ku madyondziselo .....	pheji ya 39
Migingiriko yo pfala.....	pheji ya 41

## Xiengetelwa xa A: Thempuleti ya Nkunguhato wa Vhiki na Vhiki

wa Kotara ya 3 .....	pheji ya 43
Fomo ya Nkambelo ya Ndzetelavutivi wa 7.....	pheji ya 45

# Overview

## Purpose

This is the seventh 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 1–3 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 2 Weeks 8–10
- ◆ To apply the Maths Programme principles in weekly planning
- ◆ To explore play-based strategies to support teaching maths in Grade R
- ◆ To identify potential barriers to learning
- ◆ To introduce perceptual and motor development
- ◆ To engage with the Maths Programme content of Term 3 Weeks 1–3 (Patterns, Functions and Algebra; Numbers, Operations and Relationships)

## Workshop content

- ◆ Opening and reflection (30 minutes)
  - ◆ Session 1: Setting the scene (30 minutes)
  - ◆ Session 2: Play-based teaching and learning (1 hour)
- TEA
- ◆ Session 3: The Grade R maths learning environment (30 minutes)
  - ◆ Session 4: Factors affecting maths learning (30 minutes)
  - ◆ Session 5: Perceptual and motor development (1 hour)

LUNCH

# Nkatsakanyo

## Xikongomelo

Lowu i wa vunkombo wa khumembirhi ya miletelavutivi ya Nongonoko wa Antswiso wa Matematiki wa Giredi ya V (Nongonoko wa Matematiki), leyi yi vumbaka xiphemu xa Phurojeke ya Antswiso wa Matematiki na Tindzimi ya Giredi ya V ya Ndzawulo ya Dyondzo ya Gauteng (Gauteng Department of Education) (GDE).

Xikongomelo xa ndzetelavutivi lowu i ku pfuna vadyondzisi ku tirhisa Nongonoko wa Matematiki etikamareni to dyondzela ta vona. Vatekaxiave va ta kuma xivandlanene xa ku ehleketisisa hi mayelana na mixiyaxiyo ya vona. Va ta valanga hilaha milawu yo letela ya ku dyondzisa matematiki eka Giredi ya V yi faneleke ku letela hakona nkunguhato, madyondziselo na makambelelo. Va ta tlhela va anakanya hi ku ya emahlweni ka mudyondzi, na swilaveko swa nhluvukiso na ku dyondza swa mudyondzi hi un'weun'we. Ndzetelavutivi lowu wu valanga vundzeni bya Mavhiki ya 1–3 ya Kotara ya 3 na ku tirhisiwa ka wona ekamareni ro dyondzela.

Mikongomiso eka Swiyenge swa Vundzeni swa Matematiki wa Giredi ya V swi tekiwa kusuka eka *Xitatimente xa Pholisi ya Kharikhulamu na Makambelelo (XIPHOKHAMA): Matematiki wa Giredi ya V (Mpfapfarhuto wo Hetelela)*, 2011, Ndzawulo ya Dyondzo ya Masungulo, Afrika-Dzonga.

## Mivuyelo ya dyondzo

- ◆ Ku ehleketisisa hi matirhelo ya Mavhiki ya 8–10 ya Kotara ya 2
- ◆ Ku tirhisa milawu ya Nongonoko wa Matematiki eka nkunguhato wa vhiki na vhiki
- ◆ Ku valanga maqhinga lama simekiweke eka ntlangu ku seketela ku dyondzisa matematiki eka Giredi ya V
- ◆ Ku kuma swirhalanganyi leswi nga tshukaka swi va kona eka ku dyondza
- ◆ Nhluvukiso wo tirhisa swirho u ri karhi u vona
- ◆ Ku tirhana na vundzeni bya Nongonoko wa Matematiki wa Mavhiki ya 1–3 ya Kotara ya 3 (Tipatironi, Tifankixini na Alijebura; Tinomboro, Tioparexini na Vuxaka)

## Vundzeni bya ndzetelavutivi

- ◆ Ku pfula na ku ehleketisisa (30 wa timinete)
- ◆ Sexini ya 1: Ku lulamisa ndhawu (30 wa timinete)
- ◆ Sexini ya 2: Madyondziselo na madyondzelo lama simekiweke eka ntlangu (1 ya awara)

### TIYA

- ◆ Sexini ya 3: Mbangu wo dyondzela matematiki wa Giredi ya V (30 wa timinete)
- ◆ Sexini ya 4: Swiphemu leswi khumbaka madyondzelo ya matematiki (30 wa timinete)
- ◆ Sexini ya 5: Nhluvukiso wo tirhisa swirho u ri karhi u vona (1 ya awara)

### LANCI

- ◆ Session 6: Planning for teaching
- ◆ Closing activities

(1½ hours)  
(30 minutes)



- ◆ Sexini ya 6: Nkunguhato wa ku dyondzisa
- ◆ Migingiriko yo pfala

(1½ wa tiawara)

(30 wa timinete)

# Opening and reflection

30 minutes

## The post box

Some of your issues and questions may not be addressed during this workshop. Write down any concerns or questions you may have during the workshop and post them in the post box. Your facilitator will make sure that these are addressed.

Here is the *Take back to school* task from Workshop 6.



### Take back to school task (Workshop 6)

1. Use *Activity Guide: Term 2* to plan and implement Weeks 8–10 of the Maths Programme.
2. Write an evaluation of what worked well, what did not work so well and what you could do differently to improve teaching and learning.
3. Bring the evaluation to the next workshop.

It is important for you to reflect on your teaching practices as this will help you to better understand why things happened as they did. You can find ways to do things differently and improve your teaching.

There will be many opportunities during these workshops to reflect on your successes and challenges with implementing the Maths Programme. We would like you to start the reflective process by spending a few minutes sharing your experiences of implementing Term 2 Weeks 8–10 based on the *Take back to school* task.



### Activity 1

1. In your group, share your experiences of implementing Term 2 Weeks 8–10.

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2. Share your successes and challenges with the large group.

## Bokisi ra poso

Swin'wana swa swiphiqo swa wena na swivutiso swi nga ka swi nga lulamisiwi eka nkarhi wa ndzetelavutivi lowu. Tsala swivilelo kumbe swivutiso swihi kumbe swihi leswi u nga vaka na swona eka nkarhi wa ndzetelavutivi lowu kutani u swi posa ebokisini ra poso. Muhumelerisi wa wena u ta tiyisisa leswaku leswi swa lulamisiwa na swona.

Hi lexi *Xintirhwana xo tlhelela na xona exikolweni* kusuka eka Ndzetelavutivi wa 6.



### **Xintirhwana xo tlhelela na xona exikolweni (Ndzetelavutivi wa 6)**

1. Tirhisa *Xiletelo xa Migingiriko: Kotara ya 2* ku kunguhata na ku tirhisa Mavhiki ya 8–10 ya Nongonoko wa Matematiki.
2. Tsala nkambelo wa leswi swi tirheke kahle swinene, na leswi swi nga tirhangiki kahle swinene na leswi a wu ta swi endla hi ku hambana ku antswisa madyondziselo na madyondzelo.
3. Tana na nkambelo eka ndzetelavutivi lowu landzelaka.

I swa nkoka eka wena ku ehleketisisa hi mayelana na maendlelo ya wena yo dyondzisa tanihleswi swi nga ta ku pfula ku twisisa ku antswa leswaku hikwalahokayini swilo swi humelela hilaha swi humeleleke hakona. U nga kuma tindlela ta ku endla swilo hi ku hambana kutani u antswisa madyondziselo ya wena.

Ku ta va na a swivandlanene swo tala eka nkarhi wa miletelavutivi leyi ku ehleketisisa hi mayelana na ku humelela na mitlhontlho hi ku tirhisa Nongonoko wa Matematiki. Hi ta tsakela ku sungula phurosese yo ehleketisisa hi ku tirhisa timinete tingaritingani ku ri karhi ku avelaniwa mitokoto ya n'wina ya ku tirhisa Mavhiki ya 8–10 ya Kotara ya 2 hi ku ya hi *Xintirhwana xo tlhelela na xona exikolweni*.



### **Nghingiriko wa 1**

1. Entlaweni ya n'wina, avelanani mitokoto ya n'wina ya ku tirhisa Mavhiki ya 8–10 ya Kotara ya 2.

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2. Avelanani ku humelela ka n'wina na mitlhontlho na ntlawa lowukulu.

# Session 1: Setting the scene

30 minutes

## Maths in the school context

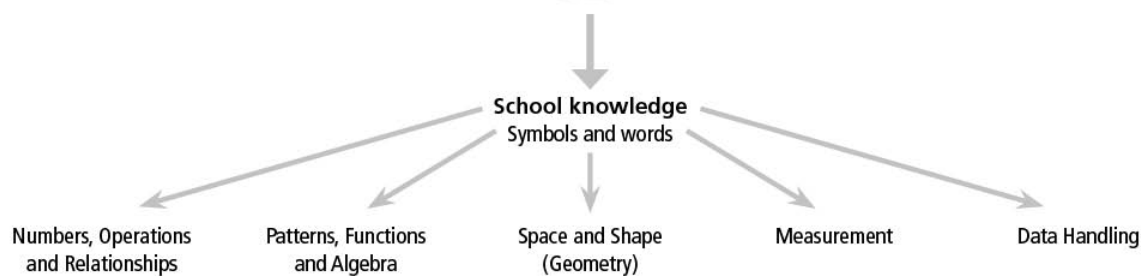
It is important to provide maths' experiences for Grade R learners that relate to their everyday lives.

Read the **context principle** on pages 16–25 of the *Concept Guide*.

The **context principle**: Learning takes places daily in classroom and home situations (contexts) that are meaningful to learners.

Learners come to school with an understanding of the world around them that is based on their own experiences. This is called everyday knowledge. At school, children build on this. We call this school knowledge. Let's look at the diagram below and think more about how learners build on their everyday knowledge.

**Everyday knowledge**  
comparing, sorting, matching,  
saying number names, learning  
about more/less, bigger/smaller,  
light/heavy



## Matematiki eka mbangu wa xikolo

I swa nkoka ku nyika mitokoto ya matematiki ya vadyondzi va Giredi ya V leyi yi fambelanaka na vutomi bya vona bya masiku hinkwawo.

Hlaya **nawu wa mbangu** lowu nga eka tipheji ta 16–25 ta *Xiletelo xa Minongoti*.

**Nawu wa mbangu:** Ku dyondza swi humelela siku na siku eka kamara ro dyondzela na le ka swiyimo swa le kaya (mivangu) leyi nga nkoka eka vadyondzi.

Vadyondzi va ta exikolweni va ri na ntwisiso wa misava leyi nga ekusuhi na vona leyi yi simekiweke eka mitokoto ya vona vini. Leswi swi vuriwa vutivi bya masiku hinkwawo. Exikolweni, vana va aka ehenhla ka leswi. Leswi hi swi vula vutivi bya le xikolweni. A hi languteni dayagiramu leyi laha hansi kutani hi ehleketa swo tala hi mayelana na hilaha vadyondzi va akaka hakona ehenhla ka vutivi bya vona bya masiku hinkwawo.

**Vutivi bya masiku hinkwawo**  
ku fananisa, ku ava hi ku ya hi swihlawulekisi, ku pananisa, ku vula mavito ya tinomboro, ku dyondza hi mayelana na swo tala/leswitsongo, leswikulu/leswitsongo, swo vevuka/swo tika



**Vutivi bya le xikolweni**  
Mifungho na marito

Tinomboro,  
Tioparexini na Vuxaka

Tipatironi, Tifankixini  
na Alijebura

Ndhawu na  
Xivumbeko (Jometiri)

Mpimo

Matirhiselo ya Vuxokoxoko  
bya Tinhlayo



## Activity 2

1. What everyday knowledge have the learners in your class demonstrated?

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2. How have you built on this knowledge in your daily maths programme at school?

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## **Nghingiriko wa 2**

1. Xana i vutivi bya masiku hinkwawo byihi lebyi vadyondzi lava nga ekamareni ra wena ro dyondzela va byi kombiseke?

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2. Xana u akile njhani ehenhla ka vutivi lebyi eka nongonoko wa wena wa siku na siku exikolweni?

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## Session 2: Play-based teaching and learning 1 hour

The Curriculum and Assessment Policy Statement (CAPS): Grade R Mathematics, encourages a play-based, active approach to teaching and learning. This is in line with current research and understanding about how children learn. The Maths Programme supports the use of play to inform lesson planning and assessment.

The **play principle**: This principle promotes the idea that children learn best in free-play and guided-play activities and encourages indoor and outdoor play-based activities.

Read the **play principle** on pages 28–33 of the *Concept Guide*.



### Video 1

Watch the video of a group of children engaged in different types of play.

Identify the five types of play explained on page 28 of the *Concept Guide*.

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### The play continuum

A continuum is a series of things that are slightly different from one another that lie somewhere between two different points.

Play inside and outside the classroom can take different forms, ranging from free play initiated and directed by the learners, to playful instruction that is initiated and directed by the teacher.



# Sexini ya 2: Madyondziselo na madyondzelo lama simekiweke eka ntlangu

1 ya awara

Xitatimente xa Pholisi na Kharikhulamu na Makambeleo (XIPHOKHAMA); Matematiki wa Giredi ya V, wu khutaza endlelo ro gingirika leri simekiweke eka ntlangu eka madyondziselo na madyondzelo. Leswi swi fambisana na ndzavisiso wa nkarhi wa sweswi na ntwisiso hi mayelana na hilaha vana va dyondzaka hakona. Nongonoko wa Matematiki wu seketela ntirhiso wa ntlangu ku letela nkunguhato wa tidyondzotsongo na makambeleo.

**Nawu wa mitlangu:** Nawu lowu wu kondletela muanakanyo wa leswaku vana va dyondza kahle swinene eka migingiriko ya ku tlanga va tshunxekile na migingiriko ya ku tlanga leyi leteriwaka naswona wu khutaza migigiriko leyi simekiweke endzeni na le handle ka miako.

Hlaya **nawu wa mitlangu** lowu nga eka tipheji ta 28–33 ta *Xiletelo xa Minongoti*.



## Vhidiyo ya 1

Hlalelani vhidiyo ya ntlawa wa vana lava nga eku endleni ka mixaka ya ntlangu yo hambanahambana.

Kuma ntlhanu wa mixaka ya ntlangu leyi hlamuseriweke eka pheji ya 28 ya *Xiletelo xa Minongoti*.

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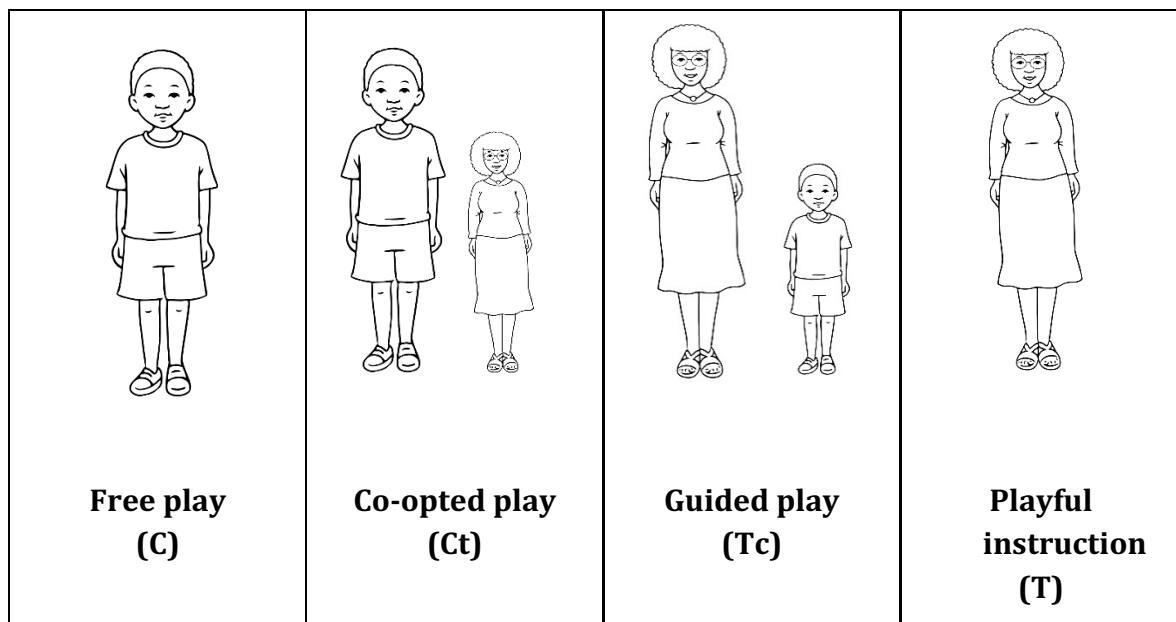
## Malongolokelo ya ntlangu lama yaka emahlweni

Malongolokelo lama yaka emahlweni i ntlhandlamano wa swilo leswi swi nga hambananyana kusuka eka xin'wana leswi swi kumekaka kun'wana exikarhi ka tindhawu to hambana timbirhi.

Ntlangu endzeni na le handle ka kamara ro dyondzela wu nga teka swivumbeko swo hambana, swi nava kusuka eka ntlangu wo tshunxeka lowu sunguriwaka na ku lawuriwa hi vadyondzi, kuya eka xileriso xo tlanga lexi xi sunguriwa na ku lawuriwa hi mudyondzisi.

A play-based approach to teaching and learning recognises that sometimes children learn best from free-play activities initiated and directed by the child without adult involvement. At other times children learn best from guided-play activities that are directed by the teacher for the whole class or in small groups.

The forms of play described below are closely related. Although they are illustrated as separate, very often one form of play changes into another form as the teacher and the children take on different roles.



### **Free play (C)**

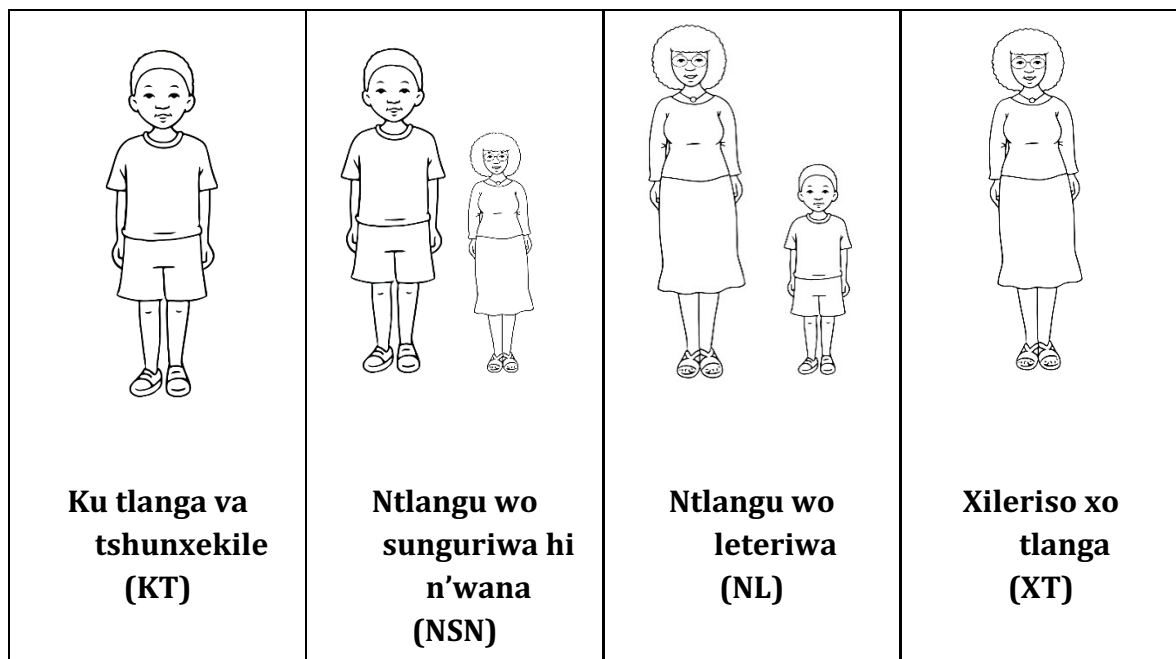
The child initiates and directs all of the play. The child decides and organises when, where, what and how to play, and who is playing. The teacher does not intervene or engage with the playing children. The teacher follows the direction set by the child.

### **Co-opted play (Ct)**

The child initiates and directs most of the play. The teacher occasionally intervenes in the children's play in order to extend the children's learning, e.g., by asking a question, making a suggestion or adding extra apparatus.

Endlelo leri simekiweke eka ntlangu eka madyondziselo na madyondzelo ri tekela enhlokweni leswaku mikarhi yin'wana vana va dyondza kahle swinene kusuka eka migingiriko yo tlanga va tshunxekile leyi sunguriwaka na ku lawuriwa hi n'wana ku ri hava ku nghenelela ka munhu lonkulu. Eka mikarhi yin'wana vana va dyondza kahle swinene kusuka eka migingiriko ya ntlangu ya tllasi hinkwayo kumbe ya mitlawa leyitsongo leyi leteriwa na ku lawuriwaka hi mudyondzisi.

Mixaka ya ntlangu leyi hlamuseriweke hi ku hlawulekisa laha hansi ya yelana swinene. Hambileswi yi kombisiweke tanihi leyi yi hambaneke, hakanyingi muxaka wun'we wa ntlangu wu cincela eka xivumbeko xin'wana tanihiloko mudyondzisi na vana va ri karhi va teka swiave swo hambanahambana.



### **Ku tlanga va tshunxekile (KT)**

N'wana u sungula ntlangu na ku lawula ntlangu hinkwawo ka wona. N'wana u teka xiboho na ku lulamisa leswaku hi rini, kwihi, i yini na hilaha ku tlangiwaka hakona, na leswaku i mani a tlangaka. Mudyondzisi a nga ngheneleli kumbe a nga vulavurisani na vana lava nga eku tlangeni. Mudyondzisi u landzelela xileriso lexi vekiweke hi n'wana.

### **Ntlangu wo sunguriwa hi n'wana (NSN)**

N'wana u sungula na ku lawula vunyingi bya ntlangu. Mudyondzi hi mikarhi wa nghenelela eka ntlangu wa vana hi xikongomelo xa ku engetela ku dyondza ka vana, xik., hi ku vutisa xivutiso, ku endla xiringanyeto kumbe ku engetela xitirhisiwa xo engetela.

### Guided play (Tc)

The teacher initiates and directs most of the children’s play by setting out specific activities, e.g., creative art, small group activities or an obstacle course. The children have some control because they can decide which activity they want to do or how they would like to do the activity.

### Playful instruction (T)

The teacher initiates and directs all the play. The teacher plans the activity with a particular teaching/learning purpose in mind, e.g., a story that teaches listening skills, matching counters to number symbols, or sorting shapes. The child follows the direction set by the teacher.



### Activity 3

In your group, discuss the following questions related to play.

1. How does *free play* provide opportunities to extend learning?

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2. According to the play continuum, what is the difference between *guided play* and *playful instruction*?

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3. Look at the teacher-guided activity of pages 32–35 of *Activity Guide: Term 3*.
  - ◆ Discuss how the five activities are intentionally planned around a particular curriculum skill/concept.

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## Ntlangu wo leteriwa (NL)

Mudyondzisi u sungula na ku lawula vuningi bya ntlangu wa vana hi ku lulamisa migingiriko yo karhi, xik., vutshila byo tumbuluxa, migingiriko ya mitlawa leyitsongo kumbe ndlela ya swirhalanganyi. Vana va na vulawurinyana hikuva va nga teka xiboho leswaku i nghingiriko wihi lowu va lava ku ku wu endla kumbe hilaha va nga ta tsakela ku endla nghingiriko lowu hakona.

## Xileriso xo tlanga (XT)

Mudyondzisi u sungula ntlangu na ku lawula ntlangu hinkwawo. Mudyondzisi u kunguhata nghingiriko lowu a ri na xikongomelo xa madyondziselo/madyondzelo yo karhi emiehleketweni, xik., xitori lexi xi dyondzisaka swikili swo yingisela, ku pananisa swihlayeri eka mifungho ya tinomboro, kumbe ku ava swivumbeko. N'wana u landzelela xileriso lexi vekiweke hi mudyondzisi.



### Nghingiriko wa 3

Entlaweni wa n'wina, kanelani swivutiso leswi landzelaka leswi fambelanaka na ntlangu.

1. Xana *ntlangu wo tshunxeka* wu nyika njhani swivandlanene swa ku dyondza loku engeteriweke?

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2. Hi ku ya hi malongolokelo ya ntlangu lama yaka emahlweni, xana hi kwihi ku hambana exikarhi ka *ntlangu lowu leteriwaka* na *xileriso xo tlanga*?

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3. Langutani nghingiriko lowu leteriwaka hi mudyondzisi wa tipheji ta 32–35 ta *Xiletelo xa Migingiriko: Kotara ya 3*.

- ◆ Kanelani hilaha migingiriko leya ntlhanu yi kunguhatiweke hakona hi xikongomelo hi mayelana na xikili xa/nongoti wa kharikhulamu yo karhi.

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- ◆ How does the teacher use questions to prompt the learners 'playfully' during the activities?

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- ◆ How does this assist the teacher with her observation for informal assessment?

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- ◆ Xana mudyondzisi u tirhisa njhani swivutiso ku tsundzuxa vadyondzi 'hi ndlela yo tlanga' hi nkarhi wa migingiriko leyi?

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- ◆ Xana leswi swi pfuneta njhani mudyondzisi hi nxiyaxiyo wa yena eka makambeleo ya nkamafundza?

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# Session 3: The Grade R maths learning environment

30 minutes

The Grade R maths learning environment should support learning through play. A well-planned teaching and learning programme should include a balance of all the different types of play activities.



## Activity 4

Look at the photograph of a Grade R classroom.



1. Think about what you know about how young children learn. Discuss whether the learning environment in the photograph is appropriate for Grade R.

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2. How could you improve this learning environment?

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# Sexini ya 3: Mbangu wo dyondzela matematiki wa Giredi ya V

30 wa timinete

Mbangu wo dyondzela matematiki wa Giredi ya V wu fanele ku seketela ku dyondza hi ku tirhisa ntlangu. Nongonoko wo dyondzisa na ku dyondza lowu kunguhatiweke kahle swinene wu fanele ku katsa ndzinganiso wa mixaka yo hambanahambana hinkwayo ya migingiriko ya ntlangu.



## Nghingiriko wa 4

Langutani xinepe xa kamara ro dyondzela ra Giredi ya V.



1. Ehleketani hi mayelana na leswi u swi tivaka hi mayelana na hilaha vana va dyondzaka hakona. Kanelani loko mbangu wa ku dyondza lowu nga exinepeni wu fanerile eka Giredi ya V.

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2. Xana u nga wu antswisa njhani mbangu lowa ku dyondza?

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3. Evaluate your own learning environment.

Tick ✓

Is the classroom inviting?	
Is the space organised so that learners can gather in large groups for whole class sessions, and also work in teacher-guided and other small group activities?	
Are there free choice activity areas where learners can choose their own activities, explore, investigate and solve problems?	
Are learners able to be active in their own learning, and explore things around them through their five senses?	
Are learners able to work together, and talk, listen and learn from one another?	
Are the materials placed so that learners can help themselves?	
Are learners able to move around freely from one activity to another?	
Are the daily programme, weather chart, posters and learners' work displayed at learners' eye level?	
How have you organised the maths environment? Do you have: <input type="checkbox"/> a maths area <input type="checkbox"/> number friezes <input type="checkbox"/> the <i>Poster Book</i> displayed <input type="checkbox"/> a <i>Resource Kit</i> <input type="checkbox"/> tubs for each learner <input type="checkbox"/> the learners' work displayed	
How have you integrated maths in the free choice activities? Do you have: <input type="checkbox"/> construction toys <input type="checkbox"/> books <input type="checkbox"/> fantasy play <input type="checkbox"/> puzzles <input type="checkbox"/> art <input type="checkbox"/> sand and water <input type="checkbox"/> outdoor play <input type="checkbox"/> educational games <input type="checkbox"/> a collection of recycled materials, e.g. plastic tubs and lids Other: _____	
What challenges do you face in setting up your Grade R environment?	
Would you make any changes?	

3. Kambela mbangu wa wena n'wini wa ku dyondza.

Khwajula ✓

Xana kamara lero dyondzela ra naveta?	
Xana ndhawu yi lulamisiwile ku endlela leswaku vadyondzi va kota ku hlengeletana hi mitlawa leyikulu ya tisexini ta tlilasi hinkwayo, na ku tlhela va tirha eka migingiriko leyi leteriwaka hi mudyondzisi na migingiriko ya mitlawa leyitsongo yin'wana?	
Xana ku na ndhawu ya migingiriko yo hlawula va tshunxekile laha vadyondzi va nga kotaka ku hlawula migingiriko ya vona vini, va valanga, va lavisisa na ku ololoxa swiphiqo?	
Xana vadyondzi va kota ku fikelela ku dyondza ka vona vini, na ku valanga swilo leswi nga ekusuhi na vona hi ku tirhisa switwi swa vona swa ntlhanu?	
Xana vadyondzi va kota ku tirhisana, na ku vulavula, ku yingisela na ku dyondza kusuka eka un'wana?	
Xana timatheriyali ti veketeriwile ku endlela leswaku vadyondzi va kota ku titekela?	
Xana vadyondzi va kota ku fambafamba hi ku tshunxeka kusuka eka nghingiriko wun'wana kuya eka wun'wana?	
Xana nongonoko wa siku na siku, chati ya maxelo, tiphositara na ntirho wa vadyondzi swi kombisiwile eka mpfhuka lowu vadyondzi va kotaka ku swi vona?	
Xana u lulamisile mbangu wa matematiki? Xana u na: <input type="checkbox"/> ndhawu ya matematiki <input type="checkbox"/> swipendiwankhavisio swa tinomboro <input type="checkbox"/> <i>Buku ya Tiphositara</i> leyi kombisiweke <input type="checkbox"/> <i>Khiti ya Swipfuno</i> <input type="checkbox"/> timfuku ta mudyondzi un'wana na un'wana <input type="checkbox"/> ntirho wa vadyondzi wu kombisiwile	
Xana u wu pfanganisile njhani matematiki eka migingiriko yo hlawule va tshunxekile? Xana u na: <input type="checkbox"/> switlangiso swo aka <input type="checkbox"/> tibuku <input type="checkbox"/> ntlangu wa milorho <input type="checkbox"/> swiphazamiso <input type="checkbox"/> vutshila <input type="checkbox"/> misava na mati <input type="checkbox"/> mitlangu ya le handle <input type="checkbox"/> mitlangu ya dyondzo <input type="checkbox"/> nhlengelo wa timatheriyali leti vuyelerisiweke, xik. timfuku ta pulasitiki na swipfalo swa pulasitiki Swin'wana: _____	
Xana i mitlhontlho yihi leyi u hlanganaka na yona loko u lulamisa mbangu wa wena wa Giredi ya V?	
Xana swi kona swihi kumbe swihi leswi u nga swi cincaka?	

# Session 4: Factors affecting maths learning

30 minutes

The **inclusivity principle**: All learners have a right to feel special, participate and be included in classroom activities and discussions. This includes children who have disabilities, behavioural issues or other barriers to learning.

## Barriers to learning maths

Many learners experience barriers to learning maths that are the result of a range of factors. Let's take a closer look at some of the barriers to learning that learners may experience. Look at Figure 29 on page 58 of the *Concept Guide*.



### Activity 5

Make a list of the kinds of barriers that learners in your class are experiencing that impact on their learning.

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With careful planning and in collaboration with families and other support people, learners with special developmental needs can participate fully in the Grade R programme.



### Activity 6

In your group, share your experiences about learners who are experiencing barriers to learning maths. Choose a learner who is not successfully coping with classroom tasks and activities. Attempt to answer these questions.

1. What is the barrier to learning?

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# Sexini ya 4: Swiphemu leswi khumbaka madyondzelo ya matematiki

30 wa timinete

**Nawu wa nkatsahinkwavo:** Vadyondzi hinkwavo va fanele ku titwa va ri vo hlawuleka, va teka xiave na ku va va katsiwile eka migingiriko na mikanelo ya le kamareni ro dyondzela. Leswi swi katsa vana lava va nga na vutsoniwa, swiphigo swa matikhomelo kumbe swirhalanganyi swa ku dyondza swin'wana.

## Swirhalanganyi swa ku dyondza matematiki

Vadyondzi vo tala va hlangana na swirhalanganyi swa ku dyondza matematiki leswi swi vangiwaka hi swivangelo swo tala. A hi langutiseni swinene swin'wana swa swirhalanganyi swa ku dyondza leswi vadyondzi va nga hlanganaka na swona. Langutani Xifaniso xa 29 eka pheji ya 59 ya *Xiletelo xa Minongoti*.



### Nghingiriko wa 5

Endlani nxaxamelo wa mixaka ya swirhalanganyi leswi vadyondzi lava nga etlilasini ya wena va hlanganaka na swona leswi swi khumbaka ku dyondza ka vona.

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Hi nkunguhato wa vukheta na hi ku tihlanganisa na mindyangu na vanhu vo seketela van'wana, vadyondzi lava nga na swilaveko swa nhluvukiso swo hlawuleka va nga kota ku teka xiave hi ku hetiseka eka nongonoko wa Giredi ya V.



### Nghingiriko wa 6

Entlaweni wa n'wina, avelanani mitokoto ya n'wina hi mayelana na vadyondzi lava va hlanganaka na swirhalanganyi swa ku dyondza matematiki. Hlawulani mudyondzi loyi a nga kondzeleliki hi ndlela leyi humelelaka na swintirhwana na migingiriko ya le kamareni ro dyondzela. Ringetani ku hlamula swivutiso leswi.

1. Xana i yini xirhalanganyi xa ku dyondza?

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2. What are the learner's learning needs?

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3. What support is needed?

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4. What steps could you take to minimise the barrier to learning so that the learner can participate more successfully in Grade R maths?

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5. If you cannot identify the barrier, the learning needs or the support required, who could you consult?

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Read some of the ways you can include all learners in the Grade R classroom on page 60 of the *Concept Guide*.

Remember that it is important to identify barriers to learning as early as possible so that a plan can be put in place to address a learner's individual developmental and learning needs. Your ongoing observations of learners' progress will help you recognise any potential gaps in their learning and also help you plan ways to address these.

2. Xana swilaveko swa ku dyondza swa mudyondzi hi swihi?

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3. Xana hi wihi nseketelo lowu lavekaka?

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4. Xana i magoza wahi lama u nga ma tekaka ku hunguta xirhalanganyi xa ku dyondza leswaku mudyondzi a kota ku teka xiave swinene hi ndlela leyi humelelaka eka matematiki wa Giredi ya V?

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5. Loko u nga koti ku kuma xirhalanganyi, swilaveko swa ku dyondza kumbe nseketelo lowu lavekaka, xana i mani loyi u nga vulavurisanaka na yena?

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Hlaya tin'wana ta tindlela leti u nga katsaka hatona vadyondzi hinkwavo lava nga ekamareni ro dyondzela ra Giredi ya V leri nga eka pheji ya 60 ya *Xiletelo xa Minongoti*.

Tsundzuka leswaku i swa nkoka ku tiva swirhalanganyi swa ku dyondza hi ku hatlisa hilaha swi kotekaka hakona ku endla leswaku kungu ri ta endliwa ri va kona ku tirhana na swilaveko swa nhluvukiso na ku dyondza hi xin'wexin'we swa mudyondzi.

Mixiyaxiyo ya wena leyi yaka emahlweni ya ku ya emahlweni ka vadyondzi yi ta ku pfuna ku lemuka mavangwa lama nga tshukaka ya va kona wahi kumbe wahi eka ku dyondza ka vona naswona yi ta tlhela yi ku pfuna ku kunguhata tindlela na ku tirhana na wona.

# Session 5: Perceptual and motor development

1 hour

Perception develops through information that is gathered from the senses of touch, sight, smell, taste and hearing, and helps children to learn about the world. Motor development unfolds with perceptual development – as children use their motor skills to move through the environment, they gather information with their senses.

Perceptual and motor skills are very important for learning maths. They include:

- ◆ visual perception
- ◆ auditory perception
- ◆ tactile and kinaesthetic perception.

## Visual perception

Visual perception is the ability to use what the eyes see and to interpret this visual information. There are different categories of visual perceptual skills.



### Activity 7

The following are scenarios that illustrate visual perceptual skills in young children.

1. Read the information on visual perception on pages 64–67 of the *Concept Guide* and identify which visual perceptual skills the children below are practising.
    - ◆ Welekazi is playing in the fantasy play area. She looks for and finds her favourite red shoes amongst all the other shoes in the wardrobe.
- 
- ◆ The teacher makes a pattern of different coloured beads on a string. Leah makes her own string of beads by repeating the pattern her teacher has made.
-



# Sexini ya 5: Nhluvukiso wo tirhisa swirho u ri karhi u vona

1 ya awara

Ndzemuko wu humelela hikwalaho ka vuxokoxoko lebyi hlengeletiwaka kusuka eka switwi swa ku khumba, swa ku vona, swa ku ringa na swa ku twa, naswona wu pfuna vana ku dyondza hi mayelana na misava. Nhluvukiso wa ku tirhisa swirho swa miri wu humelela na nhluvukiso wo lemuka – tanihiloko vana va ri karhi va tirhisa swirho swa miri swa vona embangwini, va hlengeleta vuxokoxoko hi switwi swa vona.

Swikili swo lemuka na swo tirhisa swirho swa miri i swa nkoka swinene eka ku dyondza matematiki. Swona swi katsa:

- ◆ ndzemuko wa swo voniwa
- ◆ ndzemuko wa swo twiwa
- ◆ ndzemuko wa swo khomiwa na wa swirho swa miri.

## Ndzemuko wa swo voniwa

Ndzemuko wa swo voniwa i vuswikoti bya ku tirhisa leswi mahlo ya swi vonaka na ku humesa nhlamuselo ya vuxokoxoko lebyo voniwa. Ku na mikhetekanyo yo hambanahambana ya swikili swo lemuka swo voniwa.



### Nghingiriko wa 7

Leswi landzelaka i swiyimo leswi kombisaka swikili swo lemuka swo voniwa eka vana lavatsongo.

1. Hlaya vuxokoxoko hi mayelana na ndzemuko wa swo voniwa lowu nga eka tipheji ta 64–67 ta *Xiletelo xa Minongoti* kutani u kuma leswaku hi swihi swikili swo lemuka swo voniwa leswi vana lava nga laha hansi va nga eku titoloveteni ka swona.
  - ◆ Welekazi u le ku tlangeni eka ndhawu ya ntlangu wa milorho. Wa lava kutani a kuma a kuma tintangu ta yena ta xirhandzwa to tshwuka exikarhi ka tintangu letin'wana endzeni ka ewadiropo.

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- ◆ Mudyondzisi u endla patironi ya vuhlalu leyi pendiweke hi vuhlalu byo hambanahambana engotni. Leah u endla ngoti ya yena ya vuhlalu hi ku vuyelela patironi leyi mudyondzisi wa yena a yi endleke.
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2. What are the kinds of activities you have done in your Grade R class that support these perceptual skills?

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### **Auditory perception**

Auditory perception is the ability to use what the ears hear and to interpret this auditory information. There are different categories of auditory perceptual skills.



#### **Activity 8**

The following are scenarios that illustrate auditory perceptual skills in young children.

1. Read the information on auditory perception on page 68 of the *Concept Guide* and identify which auditory perceptual skills the children below are practising.

- ◆ Raiz is playing in the noisy block area. Even though there are many other learners around him talking as they play, he can focus on what his teacher is asking him to do with the blocks.

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- ◆ Thobeka listens to her teacher as she counts ten counters while placing them on the mat. Thobeka remembers what she has heard and repeats the order of the numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

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2. What are the kinds of activities you have done in your Grade R class that support these perceptual skills?

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2. Xana i mixaka yihi ya migingiriko u yi endleke etlilasini ya wena ya Giredi ya V leyi yi seketelaka swikili swo voniwa?

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## Ndzemuko wa swo twiwa

Ndzemuko wa swo twiwa i vuswikoti bya ku tirhisa leswi tindleve ti swi twaka na ku humesa nhlamuselo ya vuxokoxoko lebyo twiwa. Ku na mikhetekanyo yo hambanahambana ya swikili swo lemuka swo twiwa.



### Nghingiriko wa 8

Leswi landzelaka i swiyimo leswi swi kombisaka swikili swa ndzemuko wa swo twiwa eka vana lavatsongo.

1. Hlaya vuxokoxoko hi mayelana na ndzemuko wa swo twiwa lowu nga eka pheji ya 68 ya *Xiletelo xa Minongoti* kutani u kuma leswaku hi swihi swikili swa ndzemuko wa swo twiwa leswi vana lava nga laha hansi va nga eku titoloveteni ka swona.
  - ◆ Raiz u le ku tlangeni eka ndhawu ya buloko leyi nga na huwa. Hambiloko ku ri na vadyondzi van'wana vo tala ekusuhi na yena lava nga eku vulavuleni loko va ri karhi va tlanga, wa swi kota ku kongomisa eka leswi mudyondzisi a n'wi kombelaka ku swi endla hi tibuloko.

- 
- ◆ Thobeka u yingisela mudyondzisi wa yena loko a ri karhi a hlayela khume ra swihlayeri loko a ri karhi a swi veketela emeteni. Thobeka wa swi tsundzuka leswi a swi tweke kutani u vuyelela nandzelelano wa tinomboro leti: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

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2. Xana i mixaka yihi ya migingiriko u yi endleke etlilasini ya wena ya Giredi ya V leyi yi seketelaka swikili swo voniwa?

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## Tactile and kinaesthetic perception

These two types of perception go hand in hand. Tactile perception is the ability to notice similarities and differences in the way things feel. Kinaesthetic perception is the ability to use body movements and muscle feelings. Together they provide the brain with information.



### Activity 9

How can we help learners develop their tactile and kinaesthetic perception?

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Refer to the other activity ideas on page 68 of the *Concept Guide*.

## **Ndzemuko wa ku vona swo khomiwa na ku tirhisa swirho swa miri**

Mixaka leyimbirhi ya ndzemuko ya fambisana. Ndzemuko wa swo khomiwa i vuswikoti bya ku vona ku fanana na ku hambana eka ndlela leyi swilo swi twalaka hayona.

Ndzemuko wo tirhisa swirho swa miri i vuswikoti bya ku tirhisa mifambafambo ya miri na matitwelo ya mipfimbi. Swi ri kun'we swi nyika byongo vuxokoxoko.



### **Nghingiriko wa 9**

Xana hi nga va pfuna njhani vadyondzi ku hluvukisa ndzemuko wa swo khomiwa na wa ku tirhisa swirho swa miri?

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Kongomisa eka mianakanyo ya migingiriko yin'wana leyi nga eka pheji ya 68 ya *Xiletelo xa Minongoti*.

## Session 6: 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 10

Your facilitator will assign each group either Week 1, 2 or 3 of Term 3 to focus on.

1. Look at page 18 of *Activity Guide: Term 3* to identify the Content Area Focus of your week.
2. Find the CAPS content for this Content Area on pages 114–137 of the *Concept Guide*.
3. Read the contents of your assigned week in *Activity Guide: Term 3*.
4. Complete the planning template in Appendix A to capture the focus of the whole class and small group activities. Discuss the following to guide your planning:
  - ◆ The key concepts that learners will be learning in this week
  - ◆ The topic
  - ◆ The new knowledge to be introduced
  - ◆ The skills from previous weeks to be practised
  - ◆ How learners will be taught and will learn during:
    - whole class activities
    - small group activities
      - teacher-guided
      - independent small groups (at the workstations).
5. Identify any potential challenges in implementing the activities for your assigned week. Propose suggestions to resolve or minimise these. Record your points on flipchart paper to share with the whole group.

## Sexini ya 6: Nkunguhato wa ku dyondzisa 1½ wa tiawara

I swa nkoka ki kunguhata na ku lulamisela swinene vhiki rin'wana na rin'wana. Leswi swi ta ku pfumelela ku titwa u ri na vutitshembi hi mayelana na leswi u nga eku swi endleni na ku ku pfuna ku kongomisa eka ku dyondzisa vadyondzi na ku tirha na vadyondzi. Tanihileswi se u tokoteke eka Tikotara ta 1 na 2, Nongonoko wa Matematiki wu vumbiwile hi vukheta, naswona vundzeni bya matematiki byi andlariwile hi malongolokelo ya nhluvukiso lama yaka emahlweni. Wu dizayineriwile ku tiyisisa leswaku vundzeni na swikili swa Matematiki wa Giredi ya V swa angariheliwa naswona vadyondzi va lulamiseriwa kahle swinene kuya eka Giredi ya 1. Vadyondzisi va fanele ku va na vukheta hi mayelana na ku hlawula migingiriko kusuka eka mavhiki yo hambanahambana na ku siya migingiriko yin'wana.



### Nghingiriko wa 10

Muhumelerisi u ta nyika ntlawa wun'wana na wun'wana ku nga va Vhiki ra 1, 2, kumbe ra 3 ra Kotara ya 3 ku kongomisa eka rona.

1. Languta eka pheji ya 18 ya *Xiletelo xa Migingiriko: Kotara ya 3* ku kuma Nkongomo wa Xiyenge xa Vundzeni wa vhiki ra wena.
2. Kuma vundzeni bya XIPHOKHAMA bya Xiyenge xa Vundzeni lexi nga eka tipheji ta 114–137 ta *Xiletelo xa Minongoti*.
3. Hlaya vundzeni bya vhiki ra wena leri u ri kunguhateleke leri nga eka *Xiletelo xa Migingiriko: Kotara ya 3*.
4. Hetisa thempuleti ya nkunguhato leyi nga eka Xiengetelwa xa A ku rhekoda nkongomo wa migingiriko ya tlilasi hinkwayo na migingiriko ya mitlawa leyitsongo. Kanelani leswi landzelaka ku letela nkunguhato wa n'wina:
  - ◆ Minongotikulu leyi vadyondzi va nga ta va va ri eku yi dyondzeni vhiki leri
  - ◆ Nhlokomhaka
  - ◆ Vutivi byintshwa lebyi faneleke ku tivisiwa
  - ◆ Swikili kusuka eka mavhiki lama nga hundza leswi faneleke ku titoloveta
  - ◆ Hilaha vadyondzi va nga ta dyondzisiwa hakona na hilaha va nga ta dyondza hakona:
    - migingiriko ya tlilasi hinkwayo
    - migingiriko ya mitlawa leyitsongo
      - leyi leteriwaka hi mudyondzisi
      - mitlawa leyitsongo leyi tshunxekeke (eswitichini swo tirhela).
5. Kuma mitlhonthlo leyi nga tshukaka yi va kona yihi kumbe yihi eka ku tirhisa migingiriko leyi eka vhiki ra wena leri u ri nyikeke yona. Ringanyeta swiringanyeto ku yi ololoxa kumbe ku yi hunguta. Rhekoda timhakakulu eka phepha ra chati yo pfula ku ti avelana na ntlawa hinkwawo.

# Closing activities

30 minutes



## Activity 11

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

The facilitator will direct the groups to the sheets of paper on the walls. Each sheet will prompt you on how to comment.



### Take back to school task

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.

### Evaluation

Complete the Evaluation Form.





## Nghingiriko wa 11

**Vuehleketisisi bya ndzetelavutivi:** Teka timinete tingaritingani ku ehleketisisa hi mayelana na siku leri. Pfula *Buku ya Ntirho ya Vatekaxiave* ku titsundzuxa hi leswi swi angarheliweke.

Muhumelerisi u ta lawula mitlawa kuya eka swipandzu swa maphepha lama nga ekhumbini. Xipandzu xin'wana na xin'wana xi ta ku tsundzuxa hi laha ku nyikiwaka hakona swibumabumelo.



### Xintirhwana xo tthelela na xona exikolweni

1. Tirhisa Thempuleti ya Nkunguhato wa Vhiki na Vhiki ya Kotara ya 3 leyi nga eka Xiengetelwa xa A ku kunguhata na ku tirhisa Mavhiki ya 1-3 ya Kotara ya 3 ya Nongonoko wa Matematiki.
2. Tsala hilaha u tirhiseke hakona nxaxamelo wo xiyaxiya wa '**Kamba leswaku vadyondzi va kota ku**' (ebokisini ra mahlo) hi nkarhi wa wun'wana na wun'wana wa migingiriko leyi leteriwaka hi mudyondzisi.
3. Tsala nkambelo wa leswi swi tirheke kahle swinene, na leswi swi nga tirhangiki kahle swinene na leswi a wu ta swi endla hi ku hambana ku antswisa madyondziselo na madyondzelo.
4. Tana na nkambelo wa wena eka ndzetelavutivi lowu landzelaka.

### Nkambelo

Tatisa Fomo leya Nkambelo.

**APPENDIX A: TERM 3 WEEKLY PLANNING TEMPLATE**

**Term 3: Activity Plan: Week \_\_\_\_**

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

**XIENGETELWA XA A: THEMPULETI YA NKUNGUHATO WA VHIKI NA VHIKI WA KOTARA YA 3**

**Kotara ya 3: Kungu ra Migingiriko: Vhiki ra \_\_\_\_**

<b>XIYENGE XA VUNDZENI:</b>				
<b>NHLOKOMHAKA:</b>				
<b>TIVISA VUTIVI BYINTSHWA:</b>				
<b>TITOLOVETI:</b>				
<b>Migingiriko ya tlilasi hinkwayo</b>		<b>Nghingiriko lowu leteriwaka hi mudyondzisi</b>	<b>Migingiriko ya le ka xitichi xo tirhela (migingiriko ya mitlawa leyitsongo leyi tshunxekeke)</b>	
<b>Siku ra 1</b>			<b>Nghingiriko wa 1</b>	
<b>Siku ra 2</b>			<b>Nghingiriko wa 2</b>	
<b>Siku ra 3</b>			<b>Nghingiriko wa 3</b>	
<b>Siku ra 4</b>			<b>Nghingiriko wa 4</b>	
<b>Siku ra 5</b>				

# Workshop 7 Evaluation Form

1. Did the workshop meet your expectations?

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

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

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

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

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# Fomo ya Nkambelo ya Ndzetelavutivi wa 7

1. Xana ndzetelavutivi lowu wu fikelerile swilanguteriwa swa wena?

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2. Xana u dyondzile yini eka ndzetelavutivi lowu wu ku pfuneke swinene?

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3. Xana a ku ri na xilo xihi kumbe xihi lexi u nga xi tsakelangiki kumbe u veke na ku tikeriwa hi ku xi twisisa?

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4. Xana u ta swi tirhisa njhani leswi u swi dyondzeke ekamareni ra wena ro dyondzela ra Giredi ya V?

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5. Xana u na swiringanyeto swihi kumbe swihi swa ku antswisa miletelavutivi yo yisa emahlweni?

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