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GROWING GAUTENG TOGETHER

IsiZulu/English

# **Uhlelo Lokuthuthukisa Izibalo Zebanga R Grade R Mathematics Improvement Programme**



**Umhlangano Wokucobelelana Ngolwazi 11 • Workshop 11  
Umhlahlandlela Wabadidiyeli • 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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I-**Schools Development Unit (SDU)** e-**University of Cape Town (UCT)** iwumlingani owuchwepheshe wezibalo kuHlelo Lokuthuthukisa Izibalo neziLimi ZeBanga R. I-SDU iyinxenye ephakathi ku-School of Education sase-UCT egxile ekuthuthukisweni kobungcweti bothisha eziBalweni, Isayensi, Ukwazi Ukufunda Nokubhala/ Ulimi kanye namaKhono Empilo kusuka EBangeni R kuya EBangeni le-12. I-SDU inikeza iziqu zobuthishela kanye nezifundo zesikhathi esifushane ezivunywwe i-UCT, umsebenzi osekelwe esikoleni ukuthuthukiswa kwezinto kanye nocwaningo ukuze kusekwe ukufundisa nokufunda kuzo zonke izimo zaseNingizimu Afrika.

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- Izikhulu zomkhakha woHlelo Lwezifundo, Umkhakha Wokufunda kothisha kanye nomkhakha WokuFunda okukhethekile woMnyango WezeMfundo wesiFundazwe saseGauteng, ngokuzinikela kwabo ukulungisa izinsiza kufunda zethu.
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# Overview

## Purpose

This is the eleventh 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 consolidate the understanding of the Maths content taught in Grade R and to continue assisting teachers to implement the Maths Programme in their classrooms. Participants will have the opportunity to reflect on their implementation of the Maths Programme and discuss their planning, teaching and assessment. They will also consider learner progress, and individual developmental and learning needs. Participants will reflect on appropriate assessment strategies for capturing learner progress. The workshop explores the content for Term 4 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 deepen understanding of Grade R Mathematics content
- ◆ To reflect on classroom implementation of the Maths Programme
- ◆ To identify challenges and find solutions to implementing the Maths Programme
- ◆ To reflect on informal forms of assessment in Grade R
- ◆ To plan the Maths Programme content to be taught in Term 4 Weeks 4–6

## Workshop content

- ◆ Opening and reflection (1 hour)
  - ◆ Session 1: Review of the Maths Content Areas (1 hour)
- TEA
- ◆ Session 2: Maths Content Area presentations (1 hour)
  - ◆ Session 3: Maths Content Area presentations (continued) (1 hour)
- LUNCH
- ◆ Session 4: Planning for teaching (1½ hours)
  - ◆ Closing activities (30 minutes)

# Ukubuka ngelibanzi

## Inhloso

Lo oweshumi nanye emihlanganweni yokucobelelana ngolwazi eyishumi nambili ngaphansi kwesihloko: Uhlelo Lokuthuthukisa Izibalo ZeBanga R (Uhlelo Lwezibalo), eyingxenye YoMnyango WezeMfundo wesiFundazwe saseGauteng (Gauteng Department of Education (GDE Uhlelo Lokuthuthukisa Izibalo neziLimi ZeBanga R.

Inhloso yalo mhlango wokucobelelana ngolwazi ukuhlenganisa ukuqonda ingxenye yolwazi yeZibalo efundiswe kuBanga R nokuthi baqhubeke nokusebenzisa Uhlelo Lwezibalo emakilasini abo. Ababambiqhaza bazothola ithuba lokucabanga ngokusebenzisa kwabo Uhlelo Lwezibalo futhi baxoxe ngokuhlela, ukufundisa nokuhlola kwabo. Bazobheka nenqubekelaphambili yomfundi futhi, izidingo zokuthuthuka komuntu ngamunye kanye nezokufunda nje-ke. Ababambiqhaza bazocabangisisa ngamasu afanele okuhlola okukhombisa inqubekelaphambili yomfundi. Umhlangano wokucobelelana ngolwazi uhlola ulwazi lukaThemu 4 Amasonto 4–6 kanye nokusetshenziswa kwalo ekilasini.

Ingxenye Yolwazi Yezibalo zeBanga R ithathwe *Esitatimendeni Senqubomgomo Yohlelo Lwezifundo Nokuhlola (CAPS): Izibalo Zebanga R (Uhlaka Lokugcina)*, 2011, Umnyango Wemfundo Eyisisekelo, eNingizimu Afrika.

## Imiphumela yokufunda

- ◆ Ukujulisa ukuqonda ingxenye yolwazi yeZibalo ZeBanga R
- ◆ Ukudlinza ngokusetshenziswa koHlelo Lwezibalo ekilasini
- ◆ Ukuhlonza izinselelo nezixazululo ekusetshenzisweni koHlelo Lwezibalo
- ◆ Ukudlinza ngezinhlobo zokuhlolwa okungahleliwe eBangeni R
- ◆ Ukuhlela ingxenye yolwazi yoHlelo Lwezibalo ezofundiswa kuThemu 4 Amasonto 4–6

## Okuqukethwe komhlangano wokucobelelana ngolwazi

- ◆ Ukuvula nokuzindla (1 ihora)
  - ◆ Iseshini 1: Ukubuyezwa Kwezixenye Zolwazi Lwezibalo (1 ihora)
- ITIYE
- ◆ Iseshini 2: Izethulo Zengxenye Yolwazi Lwezibalo (1 ihora)
  - ◆ Iseshini 3: Izethulo Zengxenye Yolwazi Lwezibalo (kuyaqhutshwa) (1 ihora)
- ISIDLO SASEMINI
- ◆ Iseshini 4: Ukuhlelela ukufundisa (1½ amahora)
  - ◆ Imisebenzi yokuvala (30 imizuzu)

## Preparation

- ◆ PPT welcome and outcomes
- ◆ Familiarise yourself with all the PowerPoints and videos
- ◆ Read: *Activity Guide: Term 4*, pages 70–119
- ◆ Bring the post box
- ◆ Remind participants to bring their:  
*Concept Guide*  
*Activity Guides* (for Terms 1–4)  
*Poster Book*
- ◆ Prepare the topic sheets from Appendix B

## Materials

- ◆ Flipchart paper, kokis
- ◆ Prestik
- ◆ *A Resource Kit* for each group (Groups will be working with all the apparatus in the *Resource Kit*.)
- ◆ Scissors and glue for each group



## Ukulungiselela

- ◆ PPT ukwemukela nemiphumela
- ◆ Zejwayeze ngawo wonke ama-PowerPoint namavidiyo
- ◆ Funda: *Umhlahlandlela Wemisebenzi: Ithemu 4*, amakhasi 70–119
- ◆ Letha ibhokisi leposi
- ◆ Khumbuza ababambiqhaza ukuthi balethe:
  - Umhlahlandlela Wokuqonda Isifundo*
  - Imihlahlandlela Yemisebenzi (yeThemu 1–4)*
  - Ibhuku Lamaphosta*
- ◆ Lungiselela amakhasi esihloko athathwe kuSithasiselo B

## Izinto zokusetshenziswa

- ◆ Iphepha leshadi eliphenywayo, amakhokhi
- ◆ Iphrestikhi
- ◆ *Ikhithi Yezinsiza* yeqembu ngalinye (Amaqembu azosebenza nazo zonke izinsiza ze*Khithi Yezinsiza*.)
- ◆ Izikele neglu kweqembu ngalinye

# Opening and reflection

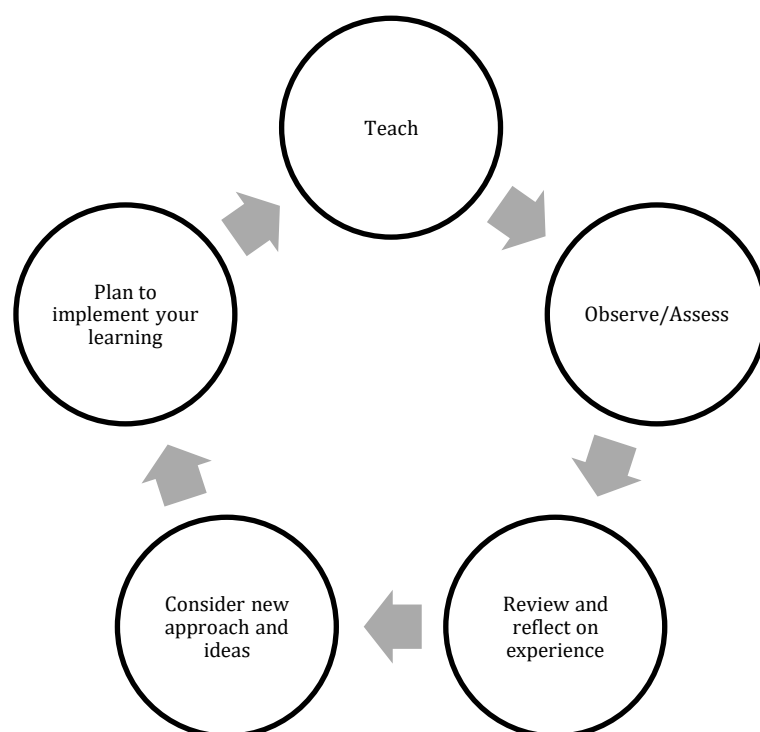
1 hour

When we think about and discuss what worked and how we dealt with any challenges that arose during our teaching, it allows us to recognise our strengths and weaknesses. Reflection on our practice as teachers helps us gain new insights into ourselves and our teaching. Reflective practice allows us to learn from our experiences and encourages us to work with our colleagues to share ideas that improve our teaching.

## Facilitator's notes

- ◆ PPT: Familiarise yourself with the slide pack for 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.
- ◆ Lead a discussion on the importance of reflective practice as part of our teaching.

The process of self-reflection is a cycle that needs to be repeated.



*Figure 1: Stages of the reflection cycle*

The process of self-reflection contains the following stages:

- ◆ Teach.
- ◆ Observe/assess.

# Ukuvula nokuzindla

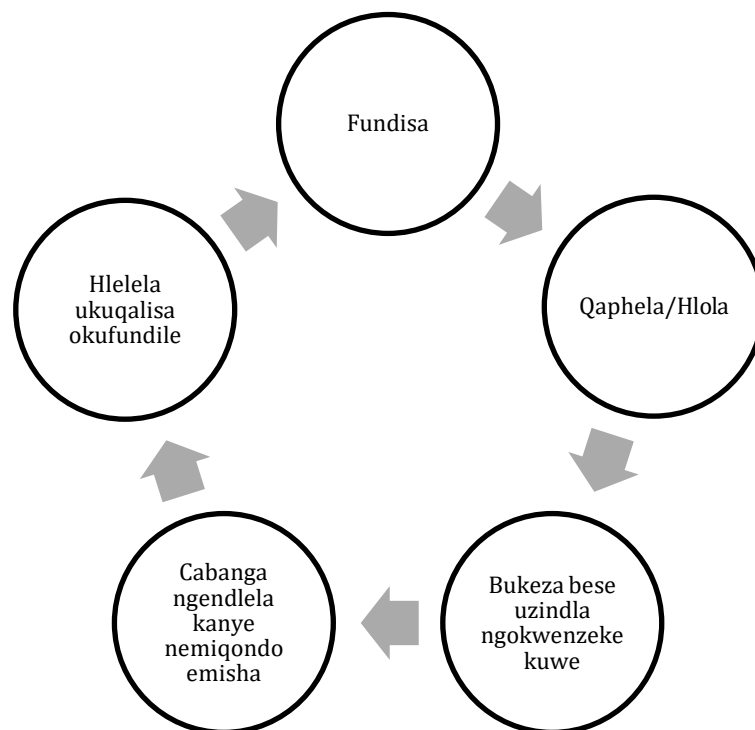
1 ihora

Uma sicabanga futhi sixoxa ngokuthi yini eyasebenza nokuthi sabhekana kanjani nezinsalele ezavela ngesikhathi sokufundisa kwethu, siyakwazi ukubona ukuthi akuphi amandla ethu kanye nobuthakathaka bethu. Ukudlinza ngomsebenzi wethu njengothisha kususisa ukuba sithole imibono emisha ngathi kanye nokufundisa kwethu. Ukujwayela ukudlinza kusenza ukuba sifunde ngesedlula kukho futhi kusikhuthaza ukuba sisebenzisane nozakwethu ukwabelana ngemibono eyenza ngcono ukufundisa kwethu.

## Amanothi omdidiyeli

- ◆ PPT: Kumele wazi ngesethi yamaslayidi omhlangano wokucobelelana ngolwazi.
- ◆ Xoxa ngokuphawulwa ebhokisini leposi kanye nembuyisambiko evela emihlanganweni yokucobelelana ngolwazi yaphambilini. Khumbuza ababambiqhaza ukuthi 'bapose' nanoma yikuphi ukuphawula okusha kanye nembuyisambiko ngesikhathi somhlangano wokucobelelana ngolwazi.
- ◆ Hola ingxoxo ngokubaluleka kokuzejwayeza ukudlinza njengengxenye yokufundisa kwethu.

Inqubo yokuzicabangela iwumjikelezo odinga ukuphindaphindwa.



*Umdwebo 1: Izigaba zomjikelezo wokuzindla*

Inqubo yokuzizindlela iqukethe izigaba ezilandelayo:

- ◆ Fundisa.
- ◆ Qaphela/hlola.

- ◆ Review and reflect on how effective our teaching was, whether the lesson went well, what challenges emerged and whether the learners benefitted.
- ◆ Use the above information to consider new ways of teaching that could improve the quality of teaching and learning.
- ◆ Plan and implement new ideas and/or strategies in the classroom.

The cycle repeats after each teaching experience.

## Reflection in implementation

### Facilitator's notes

- ◆ Remind participants of the *Take back to school task* from the end of Workshop 10.
- ◆ Refer participants to **Activity 1** and read through the instructions aloud.
- ◆ Give each group a sheet of flipchart paper.
- ◆ Groups will present a summary of their discussion of the reflection cycle.

The *Take back to school task* from Workshop 10, required you to:

- ◆ Plan and implement Term 4 Weeks 1–3 of the Maths Programme.
- ◆ Write comments in the book that you use to keep track of each learner's progress (learner observation book), and to use the '**Check that learners are able to**' observation list during each of the teacher-guided activities to guide your observations and comments.
- ◆ Make notes of what worked well, what did not work well and how you resolved any challenges during your implementation of Term 4 Weeks 1–3.
- ◆ Bring your learner observation book and the notes you made when reflecting on each day's teaching to Workshop 11.



### Activity 1

1. In your small group, consider each of the stages in the reflection cycle and discuss the *Take back to school task* from Workshop 10.
  - ◆ How successful was your planning and teaching in Term 4 Weeks 1–3?
  - ◆ Identify challenges and the strategies you used to resolve them.

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- ◆ Buyekeza futhi udlinze ngokuthi ukufundisa kwethu kube yimpumelelo kangakanani, ukuthi isifundo sihambe kahle yini, yiziphi izinselele ezivele nokuthi abafundi bazuzile yini.
- ◆ Sebenzisa lolu lwazi olungenhla ukucabanga ngezindlela ezintsha zokufundisa ezingenza ngcono izinga lokufundisa nokufunda.
- ◆ Hlela futhi usebenzise imibono emisha kanye/noma amasu amasha ekilasini. Umjikelezo uyaphindwa ngemva kwalokho nalokho okuqashelwe ngenkathi kufundiswa.

## Ukuzindla ngokuphathelele nokusetshenziswa kokwenziwayo

### Amanothi omdidiyeli

- ◆ Khumbuza ababambiqhaza ngo*Msebenzi obuyela nawo esikoleni* ovela ekugcineni koMhlangano Wokucobelelana Ngolwazi 10.
- ◆ Bhekisa ababambiqhaza **kuMsebenzi 1** ubuye ufunde imiyalo kuzwakale.
- ◆ Nika iqembu ngalinye iphepha leshadi eliphenywayo.
- ◆ Amaqembu azokwethula iqoqa lengxoxo yawo yomjikelezo wokuzindla.

*Umsebenzi obuyela nawo esikoleni* ovela eMhlanganweni Wokucobelelana

Ngolwazi 10 wawufuna ukuba:

- ◆ Uhlele futhi usebenzise okweThemu 4 Amasonto 1–3 koHlelo Lwezibalo.
- ◆ Ubhale okuphawulayo encwadini oyisebenzisayo ukuze ulandelele inqubekelaphambili yomfundi ngamunye (incwadi yokuqapha umfundi), bese usebenzisa uhlu lokuqapha u-'**Hlola ukuthi abafundi bayakwazi uku-**' ngesikhathi somsebenzi ngamunye oholwa uthisha ukuqondisa okuqaphele nokuphawulile kwakho.
- ◆ Yenza amanothi alokho okusebenze kahle, nalokho okungasebenzanga kahle nokuthi uzixazulule kanjani izinselele ngenkathi yokusebenzisa kwakho okweThemu 4 Amasonto 1–3.
- ◆ Letha incwadi yakho yokuqapha umfundi kanye namanothi owenzile lapho udlinza ngokufundisa kosuku ngakunye eMhlanganweni Wokucobelelana Ngolwazi 11.



### Umsebenzi 1

1. Eqenjini lakho elincane, cabangela isigaba ngasinye somjikelezo wokudlinza bese uxoxa ngo*Msebenzi ababuyela nawo esikoleni* ovela eMhlanganweni Wokucobelelana Ngolwazi 10.
  - ◆ Ukuhlela nokufundisa kwakho ngeThemu 4 Amasonto 1–3 kube yimpumelelo kangakanani?
  - ◆ Hlonza izinselele namasu owasebenzisele ukuzixazulula.

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- ◆ Have you been able to observe each learner and record his/her progress? Give reasons and examples to support your answer.
- 
- 

2. Imagine that you have been asked by your Department Head to talk to the Grade R teachers at a cluster meeting.
  - ◆ Refer to the reflection cycle in Figure 1.
  - ◆ Draw the cycle on flipchart paper and add notes next to each stage of the cycle.
  - ◆ Your group will present the main points of your discussion to the whole group.

### Facilitator's notes

- ◆ Wrap up the discussion and address any questions raised.



### Video 1

Watch the video of a group of teachers reflecting on their teaching and listen to their opinions about reflective practice.

1. Do you agree with their ideas about reflective practice? Explain your answer.
- 
- 

2. Does reflective practice increase your understanding of your teaching? Explain your answer.
- 
- 

3. Does reflective practice increase your understanding of learning in your class? Explain your answer.
- 
- 

4. Does reflective practice increase your engagement with colleagues? Explain your answer.
- 
- 

### Facilitator's notes

- ◆ Invite comments and responses to the video.

- ◆ Ngabe ukwazile ukuqapha umfundi ngamunye wase uqopha inqubekelaphambili yakhe? Nikeza izizathu nezibonelo zokusekela impendulo yakho.
- 
- 

2. Zicabange ucelwe yiNhloko yoMnyango wakho ukuthi ukhulume nothisha beBanga R emhlanganweni wamaqoqo.
  - ◆ Bhekisa emjikelezweni wokudlinza eMfanekisweni 1.
  - ◆ Dweba umjikelezo ephepheni leshadi eliphenywayo bese ufaka amanothi eduze kwesigaba ngasinye somjikelezo.
  - ◆ Iqembu lakho lizokwethula amaphuzu alo abalulekile engxoxo eqenjini lonke.

### **Amanothi omdidiyeli**

- ◆ Qedela ingxoxo bese ubhekana nanoma yimiphi imibuzo evelayo.



#### **Ividiyo 1**

Bukela ividiyo yeqembu lothisha ebonisa ukudlinza kwabo ngokufundisa kwabo bese ulalela imibono yabo mayelana nokusebenzisa ukuzindla.

1. Ngabe uyavumelana nemibono yabo ngokusebenzisa ukuzindla? Chaza impendulo yakho.
- 
- 

2. Ngabe ukusebenzisa ukudlinza kuyakukhulisa yini ukuqonda kwakho ukufundisa kwakho? Chaza impendulo yakho.
- 
- 

3. Ngabe ukusebenzisa ukudlinza kuyakukhulisa yini ukuqonda kwakho ukufundisa ekilasini lakho? Chaza impendulo yakho.
- 
- 

4. Ngabe ukusebenzisa ukudlinza kuyakukhulisa yini ukuzibandakanya kwakho nozakwenu? Chaza impendulo yakho.
- 
- 

### **Amanothi omdidiyeli**

- ◆ Cela ukuphawula nezimpendulo ngokuphathelene nevidiyo.

# Session 1: Review of the Maths Content Areas

1 hour

## Facilitator's notes

- ◆ Divide the participants into 9 small groups. Allocate a space for each group to set up a table and wall display.
- ◆ Give each group flipchart paper, kokis, scissors and glue.
- ◆ Give one topic from Appendix B to each small group.
- ◆ Participants complete **Activity 2** in their small groups. Assist groups to ensure that content is accurate and that core concepts and skills are included in their presentation.
- ◆ Each group does a presentation to the whole group.
- ◆ After each presentation, draw the participants' attention to the main content focus. Address any issues that were raised or misconceptions that arose in the presentation.

In Sessions 1, 2 and 3 we will review our understanding and knowledge of the five CAPS Grade R Mathematics Content Areas and related topics. We will also discuss the teaching and approaches that form part of the Maths Programme we have been implementing.



## Activity 2

1. Your group will prepare a presentation on a topic that the facilitator gives you.
  - ◆ You will have access to flipchart paper, kokis, scissors, glue and items from the *Resource Kit*. You will also be allocated a space in which to set up your presentation.
  - ◆ You need to refer to the *Concept Guide* and *Activity Guides* in your presentation.
2. Your presentation needs to include:
  - ◆ an overview of the content and how this is developed in Grade R
  - ◆ resources used to model concepts and represent ideas
  - ◆ appropriate learner activities for consolidating and applying new knowledge
  - ◆ areas of concern when teaching the topic
  - ◆ a table and wall display
  - ◆ examples of how learners would solve problems.
3. Your group will facilitate the discussion and answer questions from the whole group.



# Iseshini 1: Ukubuyekezwa Kwezingxenywe Zolwazi Lwezibalo

1 ihora

## Amanothi omdidiyeli

- ◆ Hlukanisa ababambiqhaza ngamaqembu amancane ayi-9. Iqembu ngalinye linike indawo ukuze libeke itafula nobonda lokubonisa.
- ◆ Nikeza iqembu elingalinye iphepha leshadi eliphenywayo, amakhokhi, izikelo neglu.
- ◆ Nikeza iqembu elincane ngalinye isihloko esisodwa esivela kuSithasiselo B.
- ◆ Ababambiqhaza baqedela **Umsebenzi 2** emaqenjini abo amancane. Siza amaqembu ukuqinisekisa ukuthi ulwazi lokuqukethwe luyanemba nokuthi imiqondo namakhono okusemqoka kufakiwe kulokho abakwethulayo.
- ◆ Iqembu ngalinye lenza isethulo eqenjini lonke.
- ◆ Ngemuva kwesethulo ngasinye, tshela ababambiqhaza ukuba banamathele engxenyeni yolwazi okugxilwe kuyo. Bhekana nanoma yiziphi izinkinga eziveziwe noma imibono ephaphalazayo evela ezethulweni.

KumaSeshini 1, 2 no-3 sizohlola ukuqonda kwethu nolwazi lweZingxenywe ezinhlanu Zolwazi Lwezibalo ze-CAPS eBangeni R kanye nezihloko ezihlobene nazo. Sizoxoxa futhi ngokufundisa kanye nezindlela ezakha ingxenywe yoHlelo Lwezibalo ebesilusebenzisa.



## Umsebenzi 2

1. Iqembu lakho lizolungiselela isethulo ngesihloko umdidiyeli akunika sona.
  - ◆ Uzothola iphepha leshadi eliphenywayo, amakhokhi, izikelo, iglu nezinto ezitholakala ku*Khithi Yezinsiza*. Uzokwabelwa nendawo lapho ungasenzela khona isethulo sakho.
  - ◆ Udinga ukubhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye no*Mhlahlandlela Wemisebenzi* esethulweni sakho.
2. Isethulo sakho kumele sibandakanye:
  - ◆ ukubuka ngelibanzi ulwazi oluqukethwe nokuthi lokhu kuthuthukiswa kanjani eBangeni R
  - ◆ izinsiza ezisetshenziselwa ukuveza imiqondo nokumela imibono
  - ◆ imisebenzi efanele yomfundi yokuhlanganisa nokusebenzisa ulwazi olusha
  - ◆ izindawo ezikhathazayo lapho ufundisa ngesihloko
  - ◆ itafula nobonda lokubonisa
  - ◆ izibonelo zendlela abafundi abazoxazulula ngayo izinkinga.
3. Iqembu lakho lizosiza ukuqhuba ingxoxo bese liphendula imibuzo evela kulo lonke iqembu.





## Session 2: Maths Content Area presentations

1 hour

### Facilitator's notes

- ◆ Each group makes its presentation to the whole group.
- ◆ After each group's presentation, draw participants' attention to the main content focus. Address any issues that were raised or misconceptions that arose in the presentation.

Each group will have 15 minutes to present their topic and respond to questions from the whole group.

# Iseshini 2: Izethulo Zengxenywe Yolwazi Lwezibalo

1 ihora

## Amanothi omdidiyeli

- ◆ Iqembu ngalinye lenza isethulo salo kulo lonke iqembu.
- ◆ Ngemuva kwesethulo seqembu ngalinye, yenza ukuthi ababambiqhaza banamathele engxenyeni yolwazi okugxilwe kuyo. Bhekana nanoma yikuphi okuvusiwe noma imibono engashayi khona evela esethulweni.

Iqembu ngalinye lizoba nemizuzu eyi-15 yokwethula isihloko salo libuye liphendule imibuzo evela kulo lonke iqembu.

## Session 3: Maths Content Area presentations (continued)

1 hour

### Facilitator's notes

- ◆ Each group makes its presentation to the whole group.
- ◆ After each group's presentation, draw participants' attention to the main content focus. Address any issues that were raised or misconceptions that arose in the presentation.

Each group will have 15 minutes to present their topic and respond to questions from the whole group.

# **Iseshini 3: Izethulo Zengxenywe Yolwazi Lwezibalo (kuyaqhutshwa)**

**1 ihora**

## **Amanothi omdidiyeli**

- ◆ Iqembu ngalinye lenza isethulo salo kulo lonke iqembu.
- ◆ Ngemuva kwesethulo seqembu ngalinye, yenza ukuthi ababambiqhaza banamathele engxenyeni yolwazi okugxilwe kuyo. Bhekana nanoma yikuphi okuvusiwe noma imibono engashayi khona evela esethulweni.

Iqembu ngalinye lizoba nemizuzu eyi-15 yokwethula isihloko salo libuye liphendule imibuzo evela kulo lonke iqembu.

# Session 4: Planning for teaching

1½ hours

This workshop session prepares participants for implementing Term 4 Weeks 4–6 and provides an opportunity for small groups to plan ahead. It is important to:

- ◆ address differences in learners’ levels of progress
- ◆ support those learners who need additional assistance
- ◆ provide enrichment activities for more advanced learners.

The goal is to ensure that all learners are competent in the Grade R Mathematics content and are well prepared for Grade 1.

## Facilitator’s notes

- ◆ Move between the small groups as participants discuss the planning and preparation for teaching Term 4 Weeks 4–6 in **Activity 3**. Assist by making suggestions on overcoming challenges.
- ◆ Each small group plans the three weeks and completes the templates in Appendix A.
- ◆ Lead a whole-group discussion on differentiation and how to manage learners at different levels of competence. Write these ideas on flipchart paper.



### Activity 3

1. In your group, complete the planning templates for Term 4 Weeks 4–6 (Appendix A).
2. Discuss how you will plan for and manage learners who have different levels of competence.

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## Iseshini 4: Ukuhlelela ukufundisa

1½ amahora

Le seshini yomhlangano wokucobelelana ngolwazi ilungiselela ababambiqhaza ukuthi basebenzise okukuThemu 4 Amasonto 4–6 futhi inikeza ithuba amaqembu amancane ukuthi ahlele kusenesikhathi. Kubalulekile ukuthi:

- ◆ kubhekanwe nomehluko okhona emazingeni enqubekelaphambili yabafundi
- ◆ ukubasekela labo bafundi abadinga usizo olwengeziwe
- ◆ bahlinzekwe ngemisebenzi yokunothisa abafundi asebephambili ngolwazi.

Inhloso ukuqinisekisa ukuthi bonke abafundi sebenalo ulwazi lweZibalo zeBanga R futhi balilungele kahle iBanga 1.

### Amanothi omdidiyeli

- ◆ Hamba phakathi kwamaqembu amancane ngesikhathi ababambiqhaza bexoxa ngokuhlela nokulungiselela ukufundisa kuThemu 4 Amasonto 4–6 ku**Msebenzi 6**. Balekelele ngokwenza iziphakamiso zokunqoba izinselelo.
- ◆ Iqembu ngalinye elincane lihlele amasonto amathathu bese liqedela amathempulethi akuSithasiselo A
- ◆ Hola ingxoxo yeqembu lonke ngokuphathelene nokuhlukanisa nendlela yokuphatha abafundi emazingeni ahlukeni okwazi ukusebenza. Bhala le mibono ephepheni leshadi eliphenywayo.



### Umsebenzi 3

1. Egenjini lakho, qedela amathempulethi okuhlela kaThemu 4 Amasonto 4–6 (Isithasiselo A).
2. Xoxa ngokuthi uzobahlelela futhi ubalawule kanjani abafundi abanamazinga ahlukeni okwazi ukusebenza.

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# Closing activities

30 minutes

## Facilitator's notes

### Workshop reflection:

- ◆ Ask participants to stand in two circles, one inside the other. Participants in the outer circle should stand facing inwards and participants in the inner circle should stand facing outwards.
- ◆ Participants take a few minutes to reflect on and discuss the workshop with the person opposite them. Invite them to mention highlights and also any questions they may have that have not yet been answered.
- ◆ Ask the inner circle to move one person to the right and to repeat the discussion. Repeat this a few times.
- ◆ Ask participants to volunteer something relevant that another participant mentioned to them.
- ◆ Encourage participants to add any comments and feedback not shared during the discussion to the post box.

## Facilitator's notes

- ◆ **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.



### Take back to school task

1. Invite other Grade R teachers at your school (or from another school) to join you in planning Term 4 Weeks 4–6 of the Maths Programme.
2. Implement these three weeks and use the reflection cycle (Figure 1) to review your experience. Write your reflections in a journal and bring it to the next workshop.

## Evaluation

Complete the Evaluation Form.

## Amanothi omdidiyeli

### Ukudlinza ngomhlangano wokucobelelana ngolwazi:

- ◆ Cela ababambiqhaza ukuthi bame ezindilingeni ezimbili, eyodwa ngaphakathi kwenye. Ababambiqhaza besiyingi sangaphandle kufanele bame babheke ngaphakathi kuthi ababambiqhaza besiyingi sangaphakathi bame babheke ngaphandle.
- ◆ Ababambiqhaza bathatha imizuzu embalwa ukuba kebadlinze futhi baxoxe ngomhlangano wokucobelelana ngolwazi nabantu ababhekene nabo. Bameme ukuba basho okugqame kakhulu futhi bethule noma yimiphi imibuzo abangase babe nayo engakaphendulwa.
- ◆ Cela isiyingi sabangaphakathi ukuba sinyakazele ngakwesokudla ngomuntu oyedwa bese bephinda ingxoxo. Phinda lokhu izikhathi ezimbalwa.
- ◆ Cela ababambiqhaza ukuthi bakhethe ngokuzinikela ukusho okuthile okunosizo omunye umbambiqhaza akukhulume kubo.
- ◆ Khuthaza ababambiqhaza ukuthi bathasisele noma yikuphi ukuphawula nembuyisambiko okungabelwananga ngakho ngesikhathi sengxoxo ebhokisini leposi.

## Amanothi omdidiyeli

- ◆ **Umsebenzi obuyela nawo esikoleni:** Funda lo msebenzi. Buza ukuthi kukhona yini okungacacile futhi okudinga incazelo eyengeziwe.
- ◆ **Ukuhlola:** Nikeza amakhophi eFomu Lokuhlola Lomhlangano Wokucobelelana Ngolwazi bese ucela ababambiqhaza ukuthi bagcwalise leli fomu.
- ◆ **Umhlangano wokucobelelana ngolwazi olandelayo:** Nikeza izinsuku zomhlangano olandelayo wokucobelelana ngolwazi, bese uwuvala umhlangano wokucobelelana ngolwazi.



### Umsebenzi obuyela nawo esikoleni

1. Mema abanye othisha beBanga R esikoleni sakho (noma kwesinye isikole) ukuthi bahlanganyele nawe ekuhleleni Ithemu 4 Amasonto 4–6 oHlelo Lwezibalo.
2. Sebenzisa la masonto amathathu ubuye usebenzise umjikelezo wokudlinza (Umdwebo 1) ukuze ubuyekeze okwenzeke kuwe. Bhala imidlinzo yakho kujenali bese uya nayo emhlanganweni wokucobelelana ngolwazi olandelayo.

### Ukuhlola

Gcwalisa Ifomu Lokuhlola.

**APPENDIX A: TERM 4 WEEKLY PLANNING TEMPLATE**

**Term 4: 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>				

**ISITHASISELO A: ITHEMU 4 ITHEMPULETHI YOKUHLELA KWAMASONTO ONKE**

**Ithemu 4: Uhlelo Lomsebenzi: Isonto \_\_\_\_**

<b>INGXENYE YOLWAZI:</b>				
<b>ISIHLOKO:</b>				
<b>YETHULA ULWAZI OLUSHA:</b>				
<b>ZEJWAYEZE:</b>				
<b>Imisebenzi yekilasi lonke</b>		<b>Umsebenzi oholwa nguthisha</b>	<b>Imisebenzi yesiteshi sokusebenzela (imisebenzi yokuzimela yamaqembu amancane)</b>	
<b>Usuku 1</b>			<b>Umsebenzi 1</b>	
<b>Usuku 2</b>			<b>Umsebenzi 2</b>	
<b>Usuku 3</b>			<b>Umsebenzi 3</b>	
<b>Usuku 4</b>			<b>Umsebenzi 4</b>	
<b>Usuku 5</b>				

**Term 4: 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>				

**Ithemu 4: Uhlelo Lomsebenzi: Isonto \_\_\_\_**

<b>INGXENYE YOLWAZI:</b>				
<b>ISIHLOKO:</b>				
<b>YETHULA ULWAZI OLUSHA:</b>				
<b>ZEJWAYEZE:</b>				
<b>Imisebenzi yekilasi lonke</b>		<b>Umsebenzi oholwa nguthisha</b>	<b>Imisebenzi yesiteshi sokusebenzela (imisebenzi yokuzimela yamaqembu amancane)</b>	
<b>Usuku 1</b>			<b>Umsebenzi 1</b>	
<b>Usuku 2</b>			<b>Umsebenzi 2</b>	
<b>Usuku 3</b>			<b>Umsebenzi 3</b>	
<b>Usuku 4</b>			<b>Umsebenzi 4</b>	
<b>Usuku 5</b>				

**Term 4: 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>				



**Ithemu 4: Uhlelo Lomsebenzi: Isonto \_\_\_\_**

<b>INGXENYE YOLWAZI:</b>				
<b>ISIHLOKO:</b>				
<b>YETHULA ULWAZI OLUSHA:</b>				
<b>ZEJWAYEZE:</b>				
<b>Imisebenzi yekilasi lonke</b>		<b>Umsebenzi oholwa nguthisha</b>	<b>Imisebenzi yesiteshi sokusebenzela (imisebenzi yokuzimela yamaqembu amancane)</b>	
<b>Usuku 1</b>			<b>Umsebenzi 1</b>	
<b>Usuku 2</b>			<b>Umsebenzi 2</b>	
<b>Usuku 3</b>			<b>Umsebenzi 3</b>	
<b>Usuku 4</b>			<b>Umsebenzi 4</b>	
<b>Usuku 5</b>				

## APPENDIX B: ACTIVITY 2 TOPICS

### Topic 1: Number concept development and counting (Numbers, Operations and Relationships)

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

#### Points to consider in your presentation:

- ◆ What is number concept?
- ◆ How do children acquire number concept?  
What does counting involve? Refer to:
  - the difference between sequencing number names and counting objects
  - matching one-to-one
  - comparing groups in terms of 'more than', 'less than', 'fewer than' and 'the same number as'
  - cardinal and ordinal numbers from 1–10
  - introducing the concept of the empty set with the number word 'zero' and number symbol '0'.
- ◆ What is the value of representing number in multiple ways? Provide and explain concrete examples.
- ◆ Discuss estimation in relation to the development of number concept.

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.

### Topic 2: Calculations (Numbers, Operations and Relationships)

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

## ISITHASISELO B: IZIHLOKO ZOMSEBENZI 2

### **Isihloko 1: Ukuthuthukiswa komqondo wenombolo kanye nokubala (Izinombolo, Izimpawu kanye Nobudlelwane Bazo)**

Lungiselela ukwenza isethulo esibandakanya:

- ◆ ukufaka ephepheni leshadi eliphenywayo ibalazwe lemiqondo esemqoka/amakhono
- ◆ indlela lesi sihloko esifundiswa ngayo eBangeni R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukwesekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uphathe ukuqhubeka kwengxoxo bese uphendula imibuzo evela kulo lonke iqembu.

#### **Amaphuzu okufanele uwacabange esethulweni sakho:**

- ◆ Uyini umqondo (*concept*) wezinombolo?
- ◆ Izingane ziwuthola kanjani umqondo wezinombolo?

Ngabe kubandakanya ini ukubala? Bhekisa kulokhu:

- umehluko phakathi kokuhlela ngokulandelana amagama ezinombolo kanye nokubala izinto
- ukuqondanisa okukodwa okuqondene nokunye
- ukuqhathanisa amaqembu mayelana nokuba 'ngaphezu kuna-', 'ngaphansi kuna-', 'kuyingcosane kuna-' kanye nokuthi 'kuyinani elifanayo na-'
- izinombolonhloko kanye nezinombolo ezisho isikhundla ezisuka ku-1-10
- ukwethula umqondo wesethi engenalutho nenombolo 'uziro' kanye nophawu lwenombolo '0'.
- ◆ Kusiza ngani ukuba inombolo imelwe ngezindlela eziningi? Nikeza futhi uchaze izibonelo zokuphathekayo.
- ◆ Xoxa ngokulinganisela mayelana nokuthuthukiswa komqondo wenombolo.

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

### **Isihloko 2: Ukubala (Izinombolo, Izimpawu kanye Nobudlelwane Bazo)**

Lungiselela ukwenza isethulo esibandakanya:

- ◆ ukufaka ephepheni leshadi eliphenywayo ibalazwe lemiqondo esemqoka/amakhono
- ◆ indlela lesi sihloko esifundiswa ngayo eBangeni R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukwesekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uphathe ukuqhubeka kwengxoxo bese uphendula imibuzo evela kulo lonke iqembu.

**Points to consider in your presentation:**

- ◆ Breaking down numbers and building up numbers.
- ◆ Representing partitioned groups of objects.
- ◆ Introducing the concept of addition as combining two collections.
- ◆ Introducing the concept of subtraction as taking away from a collection.
- ◆ Comparing two collections of objects by matching one-to-one to find the difference.
- ◆ Using the number washing line and a jumping track to solve addition problems – ‘adding on’ or ‘counting on’.
- ◆ Using the number washing line and a jumping track to solve subtraction problems – ‘counting back’.
- ◆ Introducing the concept of equal sharing and grouping.
- ◆ Promoting rapid recall and number facts.

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.

**Topic 3: Patterns, Functions and Algebra**

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and ‘examples’ of learners’ work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

**Points to consider in your presentation:**

- ◆ Introducing the idea of a repeated pattern.
- ◆ Identifying the pattern unit.
- ◆ Explaining the meaning of ‘variable’ and what is appropriate in Grade R.
- ◆ Making linear patterns with one variable.
- ◆ Discuss the process of introducing pattern in Grade R. Provide concrete and pictorial examples to support your discussion.

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.

### **Amaphuzu okufanele uwacabange esethulweni sakho:**

- ◆ Ukuhlakaza izinombolo nokwakha izinombolo.
- ◆ Ukumelela amaqembu ezinto ahlukenisiwe.
- ◆ Ukwethula umqondo wokuhlanganisa njengokudidiyela amaqoqo amabili.
- ◆ Ukwethula umqondo wokususa njengokuthatha okuthile eqoqweni.
- ◆ Ukuqhathanisa amaqoqo amabili ezinto ngokuqondanisa okukodwa nokunye ukuze uthole umehluko.
- ◆ Ukusebenzisa ulayini wokweneka wezinombolo kanye nomkhondo wokugxuma ukuxazulula izinkinga zokuhlanganisa – ‘ukuhlanganisa (ngaphezulu)’ noma ‘ukubala (ngaphezulu)’.
- ◆ Ukusebenzisa ulayini wokweneka wezinombolo kanye nomkhondo wokugxuma ukuxazulula izinkinga zokususa – ‘ukubala ubuyele emuva’.
- ◆ Ukwethula umqondo wokwabelana ngokulinganayo nokubeka ngamaqoqo.
- ◆ Ukukhuthaza ukukhumbula okusheshayo kanye namaqiniso ezinombolo.

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye no*Mhlahlandlela Wemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

### **Isihloko 3: Amaphethini, Amafankshini kanye ne-Aljebra**

Lungiselela ukwenza isethulo esibandakanya:

- ◆ ukufaka ephethini leshadi eliphenywayo ibalazwe lemiqondo esemqoka/amakhono
- ◆ indlela lesi sihloko esifundiswa ngayo eBangeni R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye ‘nezibonelo’ zomisebenzi wabafundi ukwesekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uphathe ukuqhubeka kwengxoxo bese uphendula imibuzo evela kulo lonke iqembu.

### **Amaphuzu okufanele uwacabange esethulweni sakho:**

- ◆ Ukwethula umqondo wephethini eliphindaphindiwe.
- ◆ Ukuhlonza iyuniti yephethini.
- ◆ Ukuchaza ‘okuguququkayo’ nokuthi yini efanele eBangeni R.
- ◆ Ukwenza amaphethini omugqa onokukodwa okuguququkayo.
- ◆ Xoxa ngenqubo yokwethula iphethini eBangeni R. Nikeza izibonelo eziphathekayo nezezithombe ukwesekela ingxoxo yakho.

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

## Topic 4: Space and Shape (Geometry)

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

### Points to consider in your presentation:

- ◆ Discovering the general properties of 2-D shapes and 3-D objects.
- ◆ Collecting shapes and objects that have these shapes on their faces.
- ◆ Sorting shapes and objects and describing the 'rule' (criterion) for sorting.
- ◆ Introducing symmetry.
- ◆ Making symmetrical shapes with one or two lines of symmetry through drawing, folding and cutting.

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.

## Topic 5: Measurement

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

### Points to consider in your presentation:

- ◆ Using vocabulary associated with time.
- ◆ Ordering (sequencing) events and activities according to the time at which they take place.
- ◆ Comparing objects according to their size.
- ◆ Identifying the attribute to be measured.

## Isihloko 4: Indawo Nesimo (Ijijomethri)

Lungiselela ukwenza isethulo esibandakanya:

- ◆ ukufaka ephepheni leshadi eliphenywayo ibalazwe lemiqondo esemqoka/amakhono
- ◆ indlela lesi sihloko esifundiswa ngayo eBangeni R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukwesekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uphathe ukuqhubeka kwengxoxo bese uphendula imibuzo evela kulo lonke iqembu.

### Amaphuzu okufanele uwacabange esethulweni sakho:

- ◆ Ukuthola izakhiwo ezejwayelekile zezimo ezingu-2-D kanye nezinto ezingu-3-D.
- ◆ Ukuqoqa izimo nezinto ezinalezi zimo kubuso bazo.
- ◆ Ukuhlunga izimo nezinto nokuchaza 'umthetho' (umbandela) wokuhlunga.
- ◆ Ukwethula ukuvumelanisa.
- ◆ Ukwenza izimo ezivumelanayo ngomugqa owodwa noma emibili yokuvumelanisa ngokudweba, ukugoqa kanye nokusika.

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye no*Mhlahlandlela Wemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

## Isihloko 5: Isilinganiso

Lungiselela ukwethula inkulumbo okuhlanganisa:

- ◆ ibalazwe lemiqondo eyinhloko/amakhono ephepheni leshadi eliphenywayo
- ◆ indlela lesi sihloko esifundiswa ngayo kuBanga R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukusekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uqhube ingxoxo bese uphendula imibuzo evela kulo lonke iqembu.

### Amaphuzu okufanele uwacabange esethulweni sakho:

- ◆ Ukusebenzisa ulwazimagama oluphathelele nesikhathi.
- ◆ Ukuhlela ngokulandelana (ukulandelanisa) izigameko kanye nemisebenzi ngokuphathelele nesikhathi okwenzeka ngaso.
- ◆ Ukuqhathanisa izinto ngokuphathelele nobukhulu bazo.
- ◆ Ukuhlonza ama-athribhuthi okumele alinganiswe.

- ◆ Using maths vocabulary to compare height, length and width.
- ◆ Using maths vocabulary to compare the mass of different objects.
- ◆ Using maths vocabulary to compare capacity and volume.
- ◆ Explain what non-standard measurement is and how it relates to each of the following Measurement topics:
  - time
  - length
  - mass
  - capacity/volume.

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.

## Topic 6: Data Handling

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

### Points to consider in your presentation:

- ◆ Direct representation of situations using learners, objects and pictures.
- ◆ How does the idea of one-to-one matching relate to representing information/data in pictures or pictographs?
- ◆ What is the purpose of the pictures in the bottom row of the pictograph?
- ◆ What is the advantage of arranging the pictures in columns?
- ◆ Why do the pictures need to be the same size?
- ◆ Why do the pictures have to be evenly spaced?
- ◆ Discuss interpreting the information on a pictograph.

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.



- ◆ Ukusebenzisa ulwazimagama lwezibalo ukuze kuqhathaniswe ukuphakama, ubude kanye nobubanzi.
- ◆ Ukusebenzisa ulwazimagama lwezibalo ukuze kuqhathaniswe isisindo sezinto ezehlukene.
- ◆ Ukusebenzisa ulwazimagama lwezibalo ukuze kuqhathaniswe umthamo nevolumu.
- ◆ Chaza izindlela zokulinganisa ezingenabungako obuqondile nokuthi kuhlobana kanjani nalezi Zihloko Zokulinganisa ezilandelayo:
  - isikhathi
  - ubude
  - isisindo
  - umthamo nevolumu.

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

## **Isihloko 6: Ukusetshenziswa Kolwazi**

Lungiselela ukwethula inkulumbo okuhlanganisa:

- ◆ ibalazwe lemiqondo eyinhloko/amakhono ephepheni leshadi eliphenywayo
- ◆ indlela lesi sihloko esifundiswa ngayo kuBanga R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukusekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uqhube ingxoxo bese uphendula imibuzo evela kulo lonke iqembu.

### **Amaphuzu okufanele uwacabange esethulweni sakho:**

- ◆ Ukumeleka ngqo kwezimo usebenzisa abafundi, izinto kanye nezithombe.
- ◆ Ngabe umqondo wokuqondanisa into nenye uhlobene kanjani nokumela ulwazi/idatha ezithombeni noma kugrafu yezithombe?
- ◆ Iyini inhloso yezithombe emgqeni osezansi wegrafu yezithombe?
- ◆ Yini insizakalo yokuhlela izithombe kumakholomu?
- ◆ Kudingeka ngani ukuba izithombe zibe nobukhulu obufanayo?
- ◆ Kungani kumele ukuba izithombe zibekwe zehlukane ngokulinganayo?
- ◆ Xoxa ukutolika ulwazi olukugrafu yezithombe.

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

## Topic 7: Classroom management

Prepare a presentation that includes:

- ◆ a mapping of this topic on flipchart paper
- ◆ this topic in relation to Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

### Points to consider in your presentation:

- ◆ How do you create a stimulating learning environment? Refer to:
  - the classroom walls
  - the classroom floor space
  - the carpet area
  - the maths area.
- ◆ How do you manage and arrange resources (concrete apparatus) in the classroom?
- ◆ Describe how teaching in whole class and small groups is implemented.
- ◆ Outline the different types of planning that are required for successful teaching and learning.
- ◆ How are different levels of learner competence managed?

Refer to the *Concept Guide* and *Activity Guides* to support your discussion.

## Topic 8: Assessment

Prepare a presentation that includes:

- ◆ a mapping of this topic on flipchart paper
- ◆ this topic in relation to Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

### Points to consider in your presentation:

- ◆ What forms of assessment are implemented in Grade R?
- ◆ Describe how these are used for tracking learner progress and for reporting purposes.

## Isihlobo 7: Ukuphathwa kwekilasi

Lungiselela ukwethula inkulumo okuhlanganisa:

- ◆ ibalazwe lalesi sihloko ephepheni leshadi eliphenywayo
- ◆ lesi sihloko maqondana neBanga R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukusekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uqhube ingxoxo bese uphendula imibuzo evela kulo lonke iqembu.

### Amaphuzu okufanele uwacabange esethulweni sakho:

- ◆ Uyakha kanjani indawo yokufunda evuselelayo? Bhekisa kulokhu:
  - izindonga zekilasi
  - indawo ephansi yekilasi
  - indawo enokhaphethi
  - indawo yezibalo.
- ◆ Uzilawula futhi uzihlele kanjani izinsiza (izinto eziphathekayo) ekilasini?
- ◆ Chaza ukuthi kusetshenziswa kanjani ukufundisa ekilasini lonke nakumaqembu amancane.
- ◆ Chaza izinhlobo ezahlukene zokuhlela ezidingekayo ekufundiseni nasekufundeni okuyimpumelelo.
- ◆ Alawulwa kanjani amazinga ahlukene okwazi kwabafundi ukufunda?

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze usekele ingxoxo yakho.

## Isihloko 8: Ukuhlola

Lungiselela ukwenza isethulo esibandakanya:

- ◆ ibalazwe lalesi sihloko ephepheni leshadi eliphenywayo
- ◆ indlela lesi sihloko esifundiswa ngayo eBangeni R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomsebenzi wabafundi ukwesekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uphathe ukuqhubeka kwengxoxo bese uphendula imibuzo evela kulo lonke iqembu.

### Amaphuzu okufanele uwacabange esethulweni sakho:

- ◆ Yiziphi izinhlobo zokuhlola ezisetshenziswa eBangeni R?
- ◆ Chaza ukuthi zisetshenziselwa kanjani ukulandelela inqubekelaphambili yabafundi kanye nezinhloso zokubika.

- ◆ Provide examples and illustrations to support your presentation.
- ◆ Describe in detail one learner's solution to a word problem and describe how you would use a rubric to assess this learner.
- ◆ Clarify the use of checklists.
- ◆ How do the various forms of assessment, guide our reporting to parents?

Refer to the *Concept Guide* and *Activity Guides* to support your discussion.

## Topic 9: Problem solving

Prepare a presentation that includes:

- ◆ a mapping of the main concepts/skills on flipchart paper
- ◆ how this topic is taught in Grade R
- ◆ a display with concrete objects, pictures and 'examples' of learners' work to support your discussion
- ◆ important points to note about this topic.

You will need to facilitate a discussion and answer questions from the whole group.

### Points to consider in your presentation:

- ◆ What does problem solving involve in Grade R?
- ◆ What are the language considerations involved in framing word problems?
- ◆ Why is problem solving included in Grade R?
- ◆ What skills do learners need to develop to become successful problem solvers?
- ◆ Give examples of different kinds of word problems that could be presented in Grade R.
- ◆ What strategies or techniques do Grade R learners use when solving word problems?
- ◆ What is the teacher's role?

Refer to the *Concept Guide* and *Activity Guides* for examples of activities, and discuss how these were implemented in the classroom.

- ◆ Hlinzeka ngezibonelo nemifanekiso ukwesekela isethulo sakho.
- ◆ Chaza ngemidati isixazululo somfundi oyedwa enkingeni yegama bese uchaza ukuthi ungayisebenzisa kanjani irubrikhi ukuhlola lo mfundi.
- ◆ Cacisa ukusetshenziswa kohlu lwezinto okumele zenziwe.
- ◆ Izinhlobo ezahlukehukene zokuhlola, zikulawula kanjani ukubika kwethu kubazali?

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze usekele ingxoxo yakho.

### **Isihloko 9: Ukuxazulula izinkinga**

Lungiselela ukwenza isethulo esibandakanya:

- ◆ ukufaka ephepheni leshadi eliphenywayo ibalazwe lemiqondo esemqoka/amakhono
- ◆ indlela lesi sihloko esifundiswa ngayo eBanga R
- ◆ umbukiso onezinto eziphathekayo, izithombe kanye 'nezibonelo' zomisebenzi wabafundi ukwesekela ingxoxo yakho
- ◆ amaphuzu abalulekile okufanele uwaqaphele ngalesi sihloko.

Kuzodingeka ukuthi uphathe ukuqhubeka kwengxoxo bese uphendula imibuzo evela kulo lonke iqembu.

#### **Amaphuzu okufanele uwacabange esethulweni sakho:**

- ◆ Kubandakanyani ukuxazulula inkinga eBanga R?
- ◆ Yiziphi izinto ezicatshangelwayo ngolimi ezibandakanyekayo ekwethulweni kwezinkinga zamagama?
- ◆ Kufakelweni ukuxazulula inkinga eBanga R?
- ◆ Yimaphi amakhono abafundi okudingeka bawathuthukise ukuze babe abaxazululi bezinkinga abaphumelelayo?
- ◆ Nikeza izibonelo zezinhlobo ezahlukehukene zezinkinga zamagama ezingethulwa eBanga R.
- ◆ Yiziphi izindlela noma amasu abafundi beBanga R abawasebenzisayo lapho bexazulula izinkinga zamagama?
- ◆ Liyini iqhaza likathisha?

Bhekisa ku*Mhlahlandlela Wokuqonda Isifundo* kanye ne*Mhlahlandlela Yemisebenzi* ukuze uthole izibonelo zemisebenzi, bese uxoxa ngendlela lokhu okusetshenziswe ngayo ekilasini.

# Workshop 11 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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# Ifomu Lokuhlola Lomhlangano Wokucobelelana Ngolwazi 11

1. Ngabe umhlangano wokucobelelana ngolwazi uhlangabezene nalokho obukulindele?

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2. Yini oyifundile kulo mhlango wokucobelelana ngolwazi ekusize kakhulu?

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3. Ngabe kukhona ongakuthandanga noma okuthola kunzima ukukuqonda?

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4. Uzokusebenzisa kanjani lokho okufundile ekilasini lakho leBanga R?

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5. Ngabe unazo iziphakamiso zokuthuthukisa eminye imihlangano yokucobelelana ngolwazi?

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