



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GGT 2030
GROWING GAUTENG TOGETHER

IsiZulu/English

Uhlelo Lokuthuthukisa Izibalo Zebanga R Grade R Mathematics Improvement Programme



**Umhlangano Wokucobelelana Ngolwazi 6 • Workshop 6
Umhlahlandela 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**.

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

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

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

ACKNOWLEDGEMENTS

Special thanks to:

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



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

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



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

Programme conceptualisation and management: Cally Kuhne and Tholisa Matheza

Translation and publishing project management: Arabella Koopman

Translation co-ordination (Nguni languages): Pumeza Ngobozana

Translation: Busisiwe Pakade

Editing (isiZulu): Bheki Ntuli

Illustrations: Jiggs Snaddon-Wood

Uhlelo Lokuthuthukisa Izibalo neziLim iZeBanga R luyisinyathelo so**Mnyango WezeMfund wesiFundazwe saseGauteng (Gauteng Department of Education)** kanye nomlingani wawo osemqoka, **i-Gauteng Education Development Trust**.

Ukuthuthukisa nokukhiqizwa kokuqequeswa kanye nezinsiza zasekilasini zoHlelo Lokuthuthukisa Izibalo neziLim iZeBanga R kuphumelele ngenxa yoxhaso olunobubele lwephrokethi oluphuma kwi-**United States Agency for International Development** kanye ne-**Zenex Foundation**.

Uhlelo Lokuthuthukisa Izibalo neziLim iZeBanga R luhethwe yi-**Jet Education Services** ehlangene ne-**Schools Development Unit** yase-**UCT** ne-**Wordworks** njengabalingani abangochwepheshe ngamakhono athile.

I-Schools Development Unit (SDU) e-University of Cape Town (UCT) iwumlingani owuchwepheshe wezibalo kuHlelo Lokuthuthukisa Izibalo neziLim iZeBanga R. I-SDU iyingxene ephakathi ku-School of Education sase-UCT exile 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 ezivunywe i-UCT, umsebenzi osekeliwe esikoleni ukuthuthukisa kwezinto kanye nocwaningo ukuze kusekwe ukufundisa nokufunda kuzo zonke izimo zaseNingizimu Afrika.

AMAZWI OKUBONGA

Kubongwa ngokukhethekile:

- Izikhulu zomkhakha woHlelo Lwezfundo, Umkhakha Wokufunda kothisha kanye nomkhakha WokuFunda okukhethekile woMnyango WezeMfund wesiFundazwe saseGauteng, ngokuzinikela kwabo ukulungisa izinsiza kufunda zethu.
- Izikhulu kanye nothisha be-Western Cape Education Department (WCED) ngokuzinikela ekuqaleni okuyimpumelelo kwe-Grade R Mathematics Programme (R-Maths) eNtshonalanga Kapa phakathi konyaka wezi-2016 nonyaka wezi-2019.
- Iqembu lababhali be-R-Maths: Abasebenzi bakwa-SDU nabaxhumanisi.



Uhlelo Lokuthuthukisa Izibalo ZeBanga R lususelwe ku-*R-Maths*, eyashicilewa okokuqala ngonyaka wezi-2017 yi-Schools Development Unit, University of Cape Town. Ilungelo lobunikazi be-*R-Maths* liphethwe yi-University of Cape Town.

Uhlelo Lokuthuthukisa Izibalo Zebanga R luvunyelwe ngaphansi kwe-Creative Commons Attribution 4.0 International Licence [Attribution-NonCommercial-ShareAlike].



Le layisensi ivumela abasebenzisa kabusha ukusabalalisa, ukuxuba kabusha, ukuvumelanisa, nokwakha phezu kokuqkethwe kunoma iyiphi indlela noma ifomethi ngenjongo okungeyona eyentengiso, futhi uma uzonikezwa umsunguli. Uma uxubanisa kabusha, ushitsha, noma wakhela kokuqkethwe, kufanele unikeze ilayisense enimigomo efanayo. Ukuze ubone imibandela egcwele yale layisensi, vakashela ku-: <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Ukucatshangwa kanye nokuphathwa kohlelo: Cally Kuhne kanye noTholisa Matheza

Umphathi wokuhumusha kanye nokushicilela iphrokethi: Arabella Koopman

Ukuhumusha nokuhlanganisa (Izilimi zesiNguni): Pumeza Ngobozana

Ukuhunyushwa kwesiZulu: Bongi Nzimande

Ukuhlela nokuhlolisiswa kwesiZulu: Bheki Ntuli

Imifanekiso: Jiggs Snaddon-Wood

Contents

Overview

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

Workshop content

Opening and reflection	page 10
Session 1: Space and Shape (Geometry)	page 16
Session 2: Measurement	page 22
Session 3: Numbers, Operations and Relationships	page 28
Session 4: Numbers, Operations and Relationships	page 38
Session 5: Term 2 Assessment	page 42
Closing activities	page 44
Appendix A: Term 2 Weekly Content Summary (Weeks 8–10)	page 46
Appendix B: Shapes for sorting	page 50
Workshop 6 Evaluation Form	page 52

Okuqukethwe

Ukubuka ngelibanzi

Inhloso	ikhasi 7
Imiphumela yokufunda	ikhasi 7
Okuqukethwe komhlangano wokucobelelana ngolwazi	ikhasi 7
Ukulungiselela	ikhasi 9
Izinto zokusetshenziswa	ikhasi 9

Okuqukethwe komhlangano wokucobelelana ngolwazi

Ukuvula nokudlinza	ikhasi 11
Iseshini 1: Indawo Nesimo (Ijiyomethri)	ikhasi 17
Iseshini 2: Isilinganiso	ikhasi 23
Iseshini 3: Izinombolo, Izimpawu kanye Nobudlelwane Bazo	ikhasi 29
Iseshini 4: Izinombolo, Izimpawu kanye Nobudlelwane Bazo	ikhasi 39
Iseshini 5: Ukuhlola Ithemu 2	ikhasi 43
Imisebenzi yokuvala	ikhasi 45

Isithasiselo A: Ithemu 2 Iqoqa Lolwazi Lwesonto Ngalinye

(Amasonto 8–10)	ikhasi 47
Isithasiselo B: Izimo zokuhlelwa	ikhasi 50
Ifomu Lokuhlola Lomhlangano Wokucobelelana Ngolwazi 6	ikhasi 53

Overview

Purpose

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

The purpose of this workshop is to assist teachers with the implementation of the Maths Programme in their classrooms, especially the Content Areas covered in Term 2 Weeks 8–10. Participants will reflect on their ongoing assessment of learners' progress and will document developmental concerns related to the learners that may require special interventions and support. Participants will also reflect on teaching strategies that strengthen learners' problem-solving skills.

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 4–7
- ◆ To explore strategies to support teaching maths in Grade R
- ◆ To reflect on the Maths Programme's principles in the weekly plan
- ◆ To engage with the Maths Programme content of Term 2 Weeks 8–10 (Space and Shape (Geometry); Measurement; Numbers, Operations and Relationships)
- ◆ To apply knowledge of informal, continuous assessment to learning and teaching

Workshop content

◆ Opening and reflection	(1 hour)
◆ Session 1: Space and Shape (Geometry)	(1 hour)
TEA	
◆ Session 2: Measurement	(1 hour)
◆ Session 3: Numbers, Operations and Relationships	(1 hour)
LUNCH	
◆ Session 4: Numbers, Operations and Relationships	(45 minutes)
◆ Session 5: Term 2 Assessment	(1 hour)
◆ Closing activities	(15 minutes)

Ukubuka ngelibanzi

Inhloso

Lo owesithupha emihlanganweni yokucobelelana ulwazi eyishumi nambili ngaphansi kwesihloko: Uhlelo Lokuthuthukisa Izibalo ZeBanga R (Uhlelo Lwezibalo), eyingxene YoMnyango WezeMfundu wesiFundazwe saseGauteng (Gauteng Department of Education (GDE Uhlelo Lokuthuthukisa Izibalo neziLimi ZeBanga R.))

Inhloso yalo mhangano wokucobelelana ngolwazi ukusiza othisha ukuthi basebenzise Uhlelo Lwezibalo emakilasini abo, kakhulukazi Izingxene Zolwazi ezenziwe kuThemu 2 Amasonto 8–10. Ababambiqhaza bazodlinza ngenqubekelaphambili yabo yokuhlola abafundi, futhi bazobhala izikhathazo ezithuthukayo ngokuphathelene nabafundi abangadinga ukungenelela nokwesekwa okukhethekile. Ababambiqhaza bazodlinza futhi ngamasu okufundisa azoqinisa amakhono abafundi okuxazulula izinkinga.

Ingxene Yolwazi Yezibalwa zeBanga R zithathwe *kuSitatimende Senqu bomgomo Yohlelo Lwezifundo Nokuhlola (CAPS): Izibalo Zebanga R (Uhlaka Lokugcina)*, 2011, Umnyango Wemfundu Eyisisekelo, eNingizimu Afrika.

Imiphumela yokufunda

- ◆ Ukucabanga ngokusethenziswa kweThemu 2 Amasonto 4–7
- ◆ Ukuhlola amasu okuxhasa ukufundisa izibalo kuBanga R
- ◆ Ukucabanga ngemigomo yoHlelo LweZibalo ohlelweni lwasonto.
- ◆ Ukuzimbandakanya nokuqukethwe koHlelo LweZibalo lukathemu 2 Amasonto 8–10 (Indawo Nesimo (Ijiyomethri); Isilinganiso; Izinombolo, Izimpawu kanye Nobudlelwane Bazo)
- ◆ Ukusebenzisa ulwazi lokuhlola okungahlelekile okuqhube kayo ekufundeni nasekufundiseni.

Okuqukethwe komhlangano wokucobelelana ngolwazi

- ◆ Ukuvula nokudlinza (1 hora)
- ◆ Iseshini 1: Indawo Nesimo (Ijiyomethri) (1 hora)

ITIYE

- ◆ Iseshini 2: Isilinganiso (1 hora)
- ◆ Iseshini 3: Izinombolo, Izimpawu kanye Nobudlelwane Bazo (1 hora)

ISIDLO SASEMINI

- ◆ Iseshini 4: Izinombolo, Izimpawu kanye Nobudlelwane Bazo (45 imizuzu)
- ◆ Iseshini 5: Ukuhlola Ithemu 2 (1 hora)
- ◆ Imisebenzi yokuvala (15 imizuzu)

Preparation

- ◆ PPT welcome and outcomes
- ◆ Read:
Concept Guide, pages 114–137
Activity Guide: Term 2, pages 18–21 and pages 138–189
Appendix A: Term 2 Weekly Content Summary (Weeks 8–10)
- ◆ Remind participants to bring their *Concept Guide*, *Activity Guide: Term 2*, an example of their assessment of a learner and their evaluation notes from the *Take back to school* task from Workshop 5.
- ◆ Place a *Resource Kit* on each group's table.
- ◆ Cut out a set of shapes from Appendix B for each group. Place the shapes in a separate envelope for each group.

Materials

- ◆ Flipchart paper, kokis
- ◆ A *Resource Kit* for each group
- ◆ A *Poster Book* for each group

Ukulungiselela

- ◆ PPT ukwemukela nemiphumela
- ◆ Funda:
Umhlahlandlela Wokuqonda Isifundo, amakhasi 114–137
Umhlahlandlela Wemisebenzi: Ithemu 2, amakhasi 18–21 namakhasi 138–189
Isithasiselo A: Ithemu 2 Iqoqa Lolwazi Lwesonto Ngalinye (Amaviki 8–10)
- ◆ Khumbuza ababambiqhaza ukuthi balethe *Umhlahlandlela Wokuqonda Isifundo*,
Umhlahlandlela Wemisebenzi: Ithemu 2, isibonelo sokuhlolwa komfundi kanye
namanothi okuhlola akuMsebenzi *obuyela nawo esikoleni woMhangano*
Wokucobelelana Ngolwazi 5.
- ◆ Beka *Ikhithi Yezinsiza* etafuleni ngalinye leqembu.
- ◆ Sikela iqembu ngalinye izimo ezikuSithasiselo B. Beka izimo emvilophini ehlukile
yeqembu ngalinye.

Izinto zokusethenziswa

- ◆ Iphepha leshadi eliphenywayo, amakhokhi
- ◆ *Ikhithi Yezinsiza* yeqembu ngalinye
- ◆ *Ibhuku Lamaphosta* leqembu ngalinye

Opening and reflection

1 hour

Facilitator's notes

- ◆ PPT: Open the session and read through the agenda and learning outcomes for the workshop.
- ◆ Ask participants to reflect on their implementation of Term 2 Weeks 4–7 of the Maths Programme and their observations and assessment of learners.
- ◆ Participants discuss the questions in **Activity 1** in small groups. Spend time with each group during the discussions, joining in where appropriate.

Here is the *Take back to school task* from Workshop 5.



Take back to school task (Workshop 5)

1. Continue to use the Record of Continuous Assessments in *Activity Guide: Term 2* to assess your learners. Make use of your ongoing observation notes to build up evidence of what learners understand and can do.
2. Identify any concerns you have about individual learner's emerging grasp of maths concepts.
3. Bring copies of rubrics that you used for maths assessment to the next workshop.
4. Bring a completed assessment record for one learner to the next workshop.
5. Use *Activity Guide: Term 2* to plan and implement Weeks 4–7 of the Maths Programme, including creating a maths area with a focus on the concept for each week.
6. Make notes on what worked well, what did not work so well and what you could do differently to improve teaching and learning.



Activity 1

1. In your groups, discuss your progress in implementing Term 2 Weeks 4–7.
 - ◆ What worked well (strengths)?
 - ◆ What did not work well (challenges)?
 - ◆ What could you do to improve teaching and learning in your classroom?

Record the main points of your discussion on flipchart paper to share with the other groups later.

Ukuvula nokudlinza

1 ihora

Amanothi omdidiyeli

- ◆ PPT: Vula iseshini bese ufunda uhlelo nemiphumela yokufunda yomhlangano wokucobelelana ngolwazi.
- ◆ Cela ababambiqhaza badlinze ngokwenziwa kuThemu 2 Amasonto 4–7 koHlelo Lwezibalo kanye nokuqaphela nokuhlola kwabo abafundi.
- ◆ Ababambiqhaza baxoxa ngemibuzo eku**Msebenzi 1** ngamaqembu amancane. Chitha isikhathi neqembu ngalinye ngesikhathi sezingxoxo, ubamba iqhaza lapho kufanele.

Nanku *Umsebenzi obuyela nawo esikoleni* ophuma kuMhlangano Wokucobelelana Ngolwazi 5.



Umsebenzi obuyela nawo esikoleni (Ngolwazi 5)

1. Qhubeka ukusebenzisa iRekhodi lokuHlola okuqhubekeyo *kuMhlahlandela Wemisebenzi: Ithemu 2* ukuhlola abafundi bakho. Sebenzisa amanothi akho okuqaphela okuqhubekeyo ukwakha ubufakazi balokho okuqondwa ngabafundi kanye nabakwazi ukukwenza.
2. Hlonza noma yikuphi ukukhathazeka komfundi ngamunye onakho ngokuqala kwabo ukubamba ulwazi lwezibalo.
3. Phatha amakhophi amarubhrikhi owasebenzisele ukuhlola iziBalo emhlanganweni wokucobelelana ngolwazi olandelayo.
4. Phatha emhlanganweni wokucobelelana ngolwazi olandelayo irekhodi eliphelele lokuhlola umfundi oyedwa.
5. Sebenzisa *Umhlahlandela Wemisebenzi: Ithemu 2* Ukulungiselela kanye nokwenza amaSonto 4–7 oHlelo LweziBalo, ubandakanya nokwenza indawo yezibalo egxile olwazini lwesonto ngalinye.
6. Yenza amanothi alokho okusebenze kahle, okungasebenzanga kahle kanye nalokho ongakwenza ngokuhlukile ukwenza ngcono ukufunda nokufundisa.



Umsebenzi 1

1. Emaqenjini enu, xoxani ngenqubekelaphambili yenu ekwenzeni Ithemu 2 Amasonto 4–7.
 - ◆ Yini esebenze kahle (amandla)?
 - ◆ Yini engasebenzanga kahle (izinselelo)?
 - ◆ Yini ongayenza ukwenza ngcono ukufunda nokufundisa ekilasini?

Qopha amaphuzu asemqoka engxoxo yenu ephepheni leshadi eliphenywayo ukuze nabelane namanye amaqembu kamuva.

2. Discuss how successful you were in:
 - ◆ recording notes about individual learners after each teacher-guided activity in Weeks 4–7.
 - ◆ completing the Term 2: Record of Continuous Assessments on pages 190–193 of *Activity Guide: Term 2* for each learner.

Record the main points of your discussion on your flipchart paper.

3. Discuss one learner's areas of success and/or difficulty and how you recorded these. Record the main points of your discussion on your flipchart paper.

Facilitator's notes

- ◆ Ask each group to share the main points from their discussion. Remind participants to only add points that other groups have not already mentioned.
- ◆ This discussion is intended to reflect on the process of capturing learners' progress over a period of weeks. Participants were asked to observe learners as they perform tasks in whole class and small group activities and to capture this information. The discussion is intended to help teachers recognise how to use the Record of Continuous Assessments to look for patterns of competence in the learners and to share the assessment tools and processes they use in their schools.

In the *Take back to school task* in Workshop 5 you were asked to bring copies of the learner assessment rubrics you use as part of the Maths Programme to this workshop. In Activity 2, your group will discuss these rubrics and how assessment information is captured and shared. In Session 5, we will discuss rubrics in more detail.



Activity 2

1. In your groups, share examples of maths rubrics you have used as part of your assessment process.
2. Discuss how you capture the learners' progress on the SA-SAMS system and how this information is shared with parents.

Record the main points of your discussion on flipchart paper to share with the other groups later.

2. Xoxani ukuthi uphumelele kanjani uku-:
- ◆ qopha amanothi ngabafundi ngamunye emva komsebenzi oholwa uthisha eMasontweni 4–7.
 - ◆ qeda uThemu 2: Irekhodi Lokuhlola Okuqhubekayo emakhasini 190–193 *oMhlahlandela Wemisebenzi: Ithemu 2* ngomfundu ngamunye.

Qopha amaphuzu asemqoka engxoxo yakho ephepheni lakho leshadi eliphenywayo.

3. Xoxa ngempumelelo kanye/noma ubulukhuni bomfundu oyedwa nokuthi ukuqophe kanjani lokhu. Qopha amaphuzu asemqoka engxoxo yenu ephepheni lakho leshadi eliphenywayo.
-
-
-

Amanothi omdidiyeli

- ◆ Cela iqembu ngalinye ukuthi labelane ngamaphuzu asemqoka asukela engxoxweni yabo. Khumbuza ababambiqhaza ukuthi banezezele kuphela ngamaphuzu angashiwo amanye amaqembu.
- ◆ Le ngxoxo ihlose ukudlinza ngenqubekelaphambili yabafundi esikhathini samasonto athile. Ababambiqhaza bacelwa ukuthi baqaphele abafundi njengoba benza imisebenzi yekilasi lonke kanye neyamaqembu amancane, bese beqopha lolu lwazi. Ingxoxo ihlose ukusiza othisha babone ukusetshenziswa kweRekhodi Lokuhlolwa Okuqhubekayo ukuze babone amaphethini amakhono kubafundi, futhi babelane ngamathuluzi okuhlola nenqubo abayisebenzisa ezikoleni zabo.

KuMsebenzi obuyela nawo esikoleni ngoMhlangano Wokucobelelana Ngolwazi 5 wacelwa ukuthi ulethe amakhophi amarubhrikhi okuhlola abafundi owasebenzisa njengengxenye yoHlelo LweZibalo kulo mhlangano wokucobelelana ngolwazi. KuMsebenzi 2, iqembu lakho lizoxoxa ngala marubhrikhi, nokuthi ulwazi lokuhlola lufakwa kuphi kwabelwana kanjani ngalo. KuSeshini 5, sizoxoxa kabanzi ngamarubhrikhi.



Umsebenzi 2

1. Emaqenjini enu, yabelanani ngeziboneло zamarubhrikhi ezibalo owasebenzise njengengxenye yenqubo yakho yokuhlola.
2. Xoxani ngokuthi niyifaka kanjani inqubekelaphambili ohlelweni lukaSA-SAMS nokuthi kwabelwana kanjani nabazali ngalolu lwazi.

Qopha amaphuzu asemqoka engxoxo yenu ephepheni leshadi eliphenywayo ukuze kamuva nabelane namanye amaqembu.



Video 1

Watch the video of a teacher observing a group of learners completing a maths activity. Listen to her talking about how she observes and records her learners' progress and how she deals with their different levels of competence.

Discuss how you deal with learners who are not achieving success in the structured weekly plans, as well as those learners who exceed expectations.

The level principle: Not all learners progress at the same speed. Some learners need more time to consolidate a skill or concept while others grasp ideas more quickly. The challenge for teachers is to accommodate learners at different levels and to adapt the weekly plan to provide support or extension activities where necessary.



Facilitator's notes

- ◆ Discuss the need for a differentiated approach to teaching and why this is beneficial for all the learners in the class. Link the discussion to the **level principle**.
- ◆ Throughout this workshop make links to the **level principle** and differentiation strategies for dealing with learners who are not achieving success in the structured weekly plans, as well as those learners who exceed expectations.



Ividiyo 1

Buka ividiyo kathisha eqaphela iqembu labafundi liqedela umsebenzi wezibalo. Mlalele ekhuluma ngokuthi uliqaphela kanjani, nokuthi uyiqophe kanjani inqubekelaphambili yabafundi futhi ubhekana kanjani namakhono ahlukene.

Xoxani ukuthi nenza njani ngabafundi abangaphumeleli ezinhlelweni zesonto, kanye nabafundi abenza kahle ngaphezu kokulindelekile.

Umgomo wamazinga: Akubona bonke abafundi abaqhube ka ngesivinini esifanayo.

Abanye badinga isikhathi esiningi ukuqinisa amakhono nolwazi ngesikhathi abanye bebamba ngokushesha kakhulu. Inselelo kothisha kuba ukwamukela abafundi emazingeni ahlukene nokuvumelanisa izinhlelo zamasonto ukuze besekeleke nangemisebenzi enwetshiwe abafundi uma kunesidingo.



Amanothi omdidiyeli

- ◆ Xoxa ngesidingo sendlela ehlukanisayo ekufundiseni, nokuthi kungani lokhu kunenzozo kubo bonke abafundi ekilasini. Xhuma ingxoxo **nomgomo wamazinga**.
- ◆ Kuwo wonke umhlangano wokucobelelana ngolwazi, yakha ukuxhumana **komgomo wamazinga** namasu ahlukanisayo ukubhekana nabafundi abangaphumeleli ezinhlelweni ezihlelekile zamasonto, kanye nokubhekana futhi nabafundi abenza kahle ngaphezu kokulindelekile.

Session 1: Space and Shape (Geometry)

1 hour

This workshop focuses on teaching the content of Term 2 Weeks 8–10. The focus of Term 2 Week 8 is Space and Shape (Geometry).

Terms 1–4 Content overview: Space and Shape (Geometry)

Refer to the content overview for Space and Shape (Geometry) on pages 126–131 of the *Concept Guide* and complete Activity 3.



Activity 3

1. What Space and Shape content has already been introduced in Terms 1 and 2?

2. What concepts still need to be covered in Term 2?

Facilitator's notes

- ◆ The aim of **Activity 3** is to highlight the content of CAPS and the extended content provided in the Maths Programme.
- ◆ Refer participants to pages 126–131 of the *Concept Guide*: follow directions (3.1) and crossing the midline (3.4).
- ◆ Draw participants' attention to the Week 8 content in the New knowledge box on page 138 of *Activity Guide: Term 2*.
- ◆ Remind participants of Space and Shape (Geometry) content covered in previous weeks.

Isehini 1: Indawo Nesimo (Ijiyomethri)

1 ihora

Lo mhlango wokucobelelana ngolwazi ugxile ekufundiseni okuqukethwe kuka Themu 2 Amasonto 8–10. Okugxilwe kukho kuThemu 2 Indawo Nesimo (Ijiyomethri).

Amathemu 1–4 Ukubuka ngelibanzi ulwazi: Indawo Nesimo (Ijiyomethri)

Bhekisa ekubukeni ulwazi ngelibanzi kwe Ndawo Nesimo (Ijiyomethri) emakhasini 126–131 oMhlahlandela Wokuqonda Isifundo bese beqedela Umsebenzi 3.



Umsebenzi 3

- Yiluphi ulwazi lwe Ndawo Nesimo olwethulwe kuThemu 1 nakuThemu 2?

- Yiluphi ulwazi olusadinga ukwenziwa kuThemu 2?

Amanothi omdidiyeli

- Inhloso yoMsebenzi 3 ukuggamisa okuqukethwe kuka CAPS nokuqukethwe okunwetshiwe okwethulwe oHlelweni Lwezibalo.
- Thumela ababambiqhaza emakhasini 126–131 oMhlahlandela Wokuqonda Isifundo: landela izinkomba (3.1) nokweqa umugqa ophakathi (3.4).
- Donsela ababambiqhaza kulwazi lwe Sonto 8 ebhokisini loLwazi olusha ekhasini le-139 lo Mhlahlandela Wemisebenzi: Ithemu 2.
- Khumbuza ababambiqhaza ngolwazi lwe Ndawo Nesimo (Ijiyomethri) olwenziwe emasontweni adlule.

Properties of shapes

Learners need many opportunities to compare and sort shapes according to their properties and to describe the similarities and differences of shapes.

Facilitator's notes

- ◆ Hand out one set of shapes from Appendix B to each group.
- ◆ Ask participants to sort the shapes. Don't prompt them. Once they have sorted them, ask: *How did you sort the shapes?* Ask participants to explain why they sorted the shapes in this way.
- ◆ Now ask participants to sort the shapes in another way. Ask participants to explain why they sorted the shapes in this way.
- ◆ Make sure that the following sorting criteria are mentioned:
 - shape
 - size
 - number of sides
 - number of corners
 - straight or curved lines.
- ◆ Encourage participants to use the correct maths vocabulary to describe the properties of shapes, e.g. *sides, corners, lines*.



Activity 4

The facilitator will give your group a set of shapes.

1. Sort the shapes.
2. Discuss why you sorted them in this way.
3. Sort the shapes in another way.
4. Discuss why you sorted them in this way.

Term 2 Content Summary: Week 8

Refer to Appendix A: Term 2 Weekly Content Summary (Weeks 8–10). Read the content overview for Week 8: Space and Shape (Geometry) on page 20 of *Activity Guide: Term 2*.

The Space and Shape (Geometry) Content Area was also the focus of Term 2 Weeks 3 and 4. In previous workshops, you have discussed the Space and Shape concepts that need to be covered.

The Weekly Content Summary for Week 8 provides an overview of planning for the week: whole class activities, teacher-guided activities and workstation activities done in independent small groups.

Izimpawu zezimo

Abafundi badinga amathuba okuqhathanisa nokuhlela izimo ngezimpawu kanye nokuchaza ukufana nokuhluka kwezimo.

Amanothi omdidiyeli

- ◆ Iqembu ngalinye linikeze iqoqo elilodwa lezimo ezikuSithasiselo B.
- ◆ Cela ababambiqhaza ukuthi bahlele izimo. Ungabajahi. Uma sebezihlelile, buza uthi: *Uzihlele kanjani izimo?* Cela ababambiqhaza ukuthi bachaze ukuthi bazihleleleni izimo ngale ndlela.
- ◆ Manje cela ababambiqhaza ukuthi bazihlele ngenye indlela izimo. Cela ababambiqhaza ukuthi bachaze ukuthi bazihleleleni izimo ngale ndlela.
- ◆ Qinisekisa ukuthi indlela yokuhlela elandelayo iyashiwo:
 - isimo
 - ubungako
 - inombolo yezinhlangothi
 - inombolo yamakhona
 - imigqa eqondile noma egwegwile.
- ◆ Gqugquzela ababambiqhaza ukuthi basebenzise ulwazimagama lwezibalo olufanele ukuchaza izimpawu zezimo, isib. *izinhlangothi, amakhona, imigqa*.



Umsebenzi 4

Umdidiyeli uzonika iqembu lenu iqoqo lezimo.

1. Hlela izimo.
2. Xoxani ukuthi kungani nizihlele ngale ndlela.
3. Hlela izimo ngenye indlela.
4. Xoxani ukuthi kungani nizihlele ngale ndlela.

Ithemu 2 Iqoqa Lolwazi: Isonto 8

Bhekisa kuSithasiselo A: Ithemu 2 Iqoqa Lolwazi lweSonto Ngalinye Amasonto 8–10).

Funda Ukubukwa kolwazi ngelibanzi kweSonto 6: Indawo Nesimo (Ijiyomethri) ekhasini lama- 21 loMhlahlandlela Wemisebenzi: *Ithemu 2*.

Indawo Nesimo (Ijiyomethri) Ingxenye Yolwazi okwakugxilwe kuyo kuThemu 2 Amasonto 3 nelesi-4. Emihlanganweni yokucobelelana ngolwazi eyedlule, naxoxa ngolwazi lweNdawo neSimo okudinga kwensiwe.

Iqoqa Lolwazi Lwesonto leSonto 8 linikeza ukubuka ngelibanzi ukuhlelwa kwesonto: imisebenzi yekilasi lonke, imisebenzi eholwa uthisha nemisebenzi yasesiteshini sokusebenzela eyenziwa emaqenjini amancane azimele.

Facilitator's notes

- ◆ The aim of **Activity 5** is for teachers to recognise the link between:
 - the CAPS content in the Term 1–4 content overview on pages 126–131 of the *Concept Guide*
 - the content overview on page 20 of *Activity Guide: Term 2*
 - Appendix A: Term 2 Weekly Content Summary (Weeks 8–10)
 - the daily activities in Week 8 of *Activity Guide: Term 2* (pages 138–153).
- ◆ In the whole group feedback session make sure that participants are familiar with the structure of and planning for the teaching of Week 8. Help them to identify the links between the suggested activities in *Activity Guide: Term 2* and the content overview. Link this discussion back to how the content of the week fits with CAPS.



Activity 5

1. Take a few minutes to familiarise yourself with the Week 8 content in Appendix A: Term 2 Weekly Content Summary (Weeks 8–10).
2. Match this with the content on pages 138–153 of *Activity Guide: Term 2*. Identify how the whole class, teacher-guided and workstation activities link with the Week 8 content in Appendix A.

Amanothi omdidiyeli

- ◆ Inhloso yo**Msebenzi 5** ukuthi othisha bakwazi ukubona ukuxhumana okukhona:
 - kokuqukethwe kukaCAPS kuThemu 1-4 Ekubukeni ulwazi ngelibanzi emakhasini 126–131
oMhlalhlandlela Wokuqonda Isifundo.
 - lapho kubukwa ulwazi ngelibanzi ekhansi lama-20 lo*Mhlalhlandlela Wemisebenzi: Ithemu 2*
 - kuso Isithasiselo A: Ithemu 2 Iqoqa Lolwazi Lwesonto Ngalinye (Amasonto 8–10)
 - nasemisebenzini yansukuzonke kwiSonto 8 lo*Mhlalhlandlela Wemisebenzi: Ithemu 2* (amakhasi 138–153).
- ◆ Kuseshini yembuyiso-mbiko yeqembu lonke qinisekisa ukuthi ababambiqhaza basijwayele isakhiwo nokuhleleka kokufundisa kweSonto. Basize ukuthi bakhombe ukuxhumana phakathi kwemisebenzi ephakanyisiwe ku*Mhlalhlandlela Wemisebenzi: Ithemu 2* kanye nokubuka ulwazi ngelibanzi. Xhumanisa le ngxoxo nangasemuva kubonakale ukuthi okuqukethwe kwsonto kungena kanjani kuCAPS.



Umsebenzi 5

1. Thatha imizuzu embalwa uzijwayeza ngokuqukethwe kwiSonto 8 kuSithasiselo A: Ithemu 2 Iqoqa Lolwazi Lwesonto Ngalinye (Amasonto 8–10).
2. Qondanisa lokhu nokuqukethwe emakhasini 138 –153 *Umhlalhlandlela Wemisebenzi: Ithemu 2*. Hlonza ukuthi imisebenzi yekilasi lonke eholwa uthisha, nemisebenzi yasesiteshini sokusebenzela iyaxhumana nokuqukethwe kwiSonto 8 kuSithasiselo A.

Session 2: Measurement

1 hour

The focus of Term 2 Week 9 is Measurement.

Terms 1–4 Content overview: Measurement

Refer to the content overview for Measurement on pages 132–135 of the *Concept Guide*.

Facilitator's notes

- ◆ The aim of **Activity 6** is to highlight the content of CAPS.
- ◆ Remind teachers that assessment in Grade R should be based on CAPS, and that the additional Maths Programme content is for enriching the teaching and learning experience.



Activity 6

1. What Measurement concepts are covered in Term 2?

2. What are the differences between the Maths Programme content and the CAPS content?

Directly comparing objects: length

In Term 1 of the Maths Programme the focus of the Measurement Content Area was time (day, night, days of the week, sequencing events, etc.) and the height chart. In Term 2 Week 9, the focus is on using non-standard units to measure and compare length.



Activity 7

1. **Direct comparison**

Choose a partner to stand next to. The rest of your group members should compare your heights.

- ◆ Who is taller? _____
- ◆ Who is shorter? _____
- ◆ Find a third person who is taller than both of these people.

IseShini 2: Isilinganiso

1 ihora

Okugxilwe kukho kuThemu 2 Isonto 9 Isilinganiso.

Amathemu 1–4 Ukubuka ngelibanzi ulwazi: Isilinganiso

Bhekisa Ekubukeni Ulwazi Ngelibanzi kweSilinganiso emakhasini 132–135
oMhlahlandela Wokuqonda Isifundo.

Amanothi omdidiyeli

- ◆ Inhloso yoMsebenzi 6 ukugqamisa okuqukethwe kuCAPS.
- ◆ Khumbuza othisha ukuthi ukuhlola eBangeni R kumele kwesekelwe kuCAPS, nokuthi okuqukethwe koHlelo LweZibalo olwengeziwe kungokokunothisa ulwazi lokufundisa nokufunda.



Umsebenzi 6

1. Yiluphi ulwazi lweSilinganiso olwenziwe kuThemu 2?

2. Yimuphi umehluko okhona phakathi koHlelo lweziBalo kanye nokuqukethwe kuka-CAPS?

Ukuqhathanisa okuqondile izinto: ubude

KuThemu 1 oHlelweni LweZibalo okugxilwe kuko Ezingxenjeni Zolwazi lweSilinganiso okugxilwe kuzo isikhathi (usuku, ubusuku, izinsuku zesonto, ukulandelanisa izigameko) kanye neshadi lokuphakama. KuThemu 2 Isonto 9, kugxilwa ekusetshenzisweni kwesikali esingekho emthethweni ukulinganisa nokuqhathanisa ubude.



Umsebenzi 7

1. **Ukuqhathanisa okuqondile**

Khetha uphathina ozoma eduze kwakhe. Abanye abasele egenjini kumele baqhathanise ukuphakama kwenu.

- ◆ Ubani omujana? _____
- ◆ Ubani omfushanyana? _____
- ◆ Thola umuntu wesithathu omujana kunabo bobabili laba bantu.

2. Using non-standard units of measurement

Choose three objects (e.g. a key, a cellphone, a purse).

- ◆ Use one of these items at a time to measure this *Participant's Workbook*.
 - ◆ Report your findings to the group.
-
-
-

Facilitator's notes

- ◆ Point out that the non-standard units used to measure the *Participant's Workbook* are not the same size. When participants compare their measurements (how many units, e.g. the key), they will recognise that the choice of the unit determines how many of a unit there are in the total number of units – so, the different objects used for measuring will result in a different number of units in the answer (total number of units), e.g. the *Participant's Workbook* measures 17 keys versus 4 cellphones.
- ◆ Make participants aware that the size of a non-standard unit can vary between people, e.g. one person may have a smaller cellphone than another. This will also result in a different total number of units.
- ◆ Observe participants as they measure and make sure that the non-standard unit is being used accurately (end-to-end).

Term 2 Content Summary: Week 9

Refer to Appendix A: Term 2 Weekly Content Summary (Weeks 8–10). Read the content overview for Week 9: Measurement on page 20 of *Activity Guide: Term 2*.

Read the whole class activities for Week 9 on pages 154–165 of *Activity Guide: Term 2*.

2. **Ukusebenzisa amayunithi okulinganisa angenasilinganiso**

Khetha izinto ezintathu (isib. ukhiye, umakhalekhukhwini, isikhwama semali).

- ◆ Sebenzisa lezi zinto ngesikhathi ukulinganisa lokhu kuyo *Incwadi Yokusebenzela Yababambiqhaza.*
 - ◆ Bika okutholile egenjini.
-
-

Amanothi omdidiyeli

- ◆ Phawula ukuthi amayunithi angenasilinganiso asetshenziswa ukulinganisa *Incwadi Yokusebenzela Yababambiqhaza* awanabo ubungako obufanayo. Uma ababambiqhaza beqhathanisa izilinganiso zabo (mangaki amayunithi, isib. ukhiye), bangaki abalonayo ukuthi ukukhetha iyunithi kuchaza ukuthi mangaki amayunithi esambeni samayunithi – ngakho-ke izinto ezihlukene ezisetshenziswa ukulinganisa kuzobanga ukuthi impendulo ibe ngamayunithi ahlukene, (isamba samayunithi), isib. *Incwadi Yokusebenzela Yababambiqhaza* ilinganisa okhiye abayi-17 ngokumelene nomakhalekhukhwini aba-4.
- ◆ Qwashisa ababambiqhaza ukuthi ubungako beyunithi engenasilinganiso ingahluka phakathi kwabantu, isib. umuntu oyedwa angaba nomakhalekhukhwini omncanyana kunomunye. Lokhu kuzobanga ukuthi kube nesamba samayunithi esihlukene.
- ◆ Qaphela ababambiqhaza ngesikhathi balinganisa bese uqinisekisa ukuthi iyunithi engenasilinganiso isetshenziswa ngokuyikho. (ekugcineni-ekupheleni).

Ithemu 2 Iqoqa Lolwazi: Isonto 9

Bhekisa kuSithasiselo A: Themu 2 Iqoqa Lolwazi Lwesonto Ngalinye (Amasondo 8-10).

Funda ukubuka ulwazi ngelibanzi kweSonto 9: Ukulinganisa ekhasini lama-21

loMhlahlandlela Wemisebenzi: Themu 2.

Funda imisebenzi yekilasi lonke yeSonto 9 emakhasini 154-165 oMhlahlandlela

Wemisebenzi: Themu 2.



Activity 9

In your groups, discuss how length is taught during the whole class activities in Week 9.

1. What could you do if a learner is not yet able to compare and order objects according to length – long/longer and short/shorter by the end of Week 9?

Focus on language, on practical activities. Provide more repetition, more discussion, more input from the teacher. Pair learner with a peer.

2. What could you do if some learners complete a workstation activity successfully quicker than planned?

Prepare appropriate free choice activities. Give them a 'big' task to do e.g. use your shoe to measure one side of the classroom.



Umsebenzi 9

Emaqenjini enu, xoxani ukuthi ubude bufundiswa kanjani ngesikhathi semisebenzi yekilasi lonke kwiSonto 9.

1. Yini ongayenza uma umfundi engakakwazi ukuqhathanisa kanye nokuhlela izinto ngobude – ende/ enjana kanye nemfishane/ nemfishanyana ngokuphela kweSonto 9?

Gxila olimini, emisebenzini eyenziwayo. Nikeza ukuphindaphinda okuningi, ingxoxo eningi, okuningi okufakwe nguthisha. Bhangqa umfundi nontanga.

2. Yini ongayenza uma abanye abafundi beqeda umsebenzi osesiteshini sokusebenzela ngokushesha ngempumelelo kunalokhu obekuhleliwe?

Lungisa imisebenzi efanele ekhethwe ngokukhululeka. Banike umsebenzi “omkhulu” ukuthi bawenze, isib. sebenzisa isicathulo sakho ukulinganisa uhlangothi olulodwa lwekilasi.

Session 3: Numbers, Operations and Relationships

1 hour

The focus of Term 2 Week 10 is Numbers, Operations and Relationships.

Terms 1–4 Content overview: Numbers, Operations and Relationships

The Numbers, Operations and Relationships Content Area was also the focus in Weeks 1, 2 and 5 of Term 2, and you discussed the number concepts that need to be covered in previous workshops. Look at the content overview for Numbers, Operations and Relationships on pages 114–123 of the *Concept Guide*.



Activity 10

What number concepts still need to be covered in Term 2?

Problem solving

Teachers need to provide learners with many opportunities to solve problems so that they can apply their maths knowledge and skills in new contexts. All games and activities involve problem solving. Word problems in maths introduce a specific type of problem solving that involves solving addition, subtraction, multiplication and division problems. In Grade R learners solve addition and subtraction problems by counting and using concrete apparatus to help them find a solution. They use grouping and one-to-one sharing to solve multiplication and division problems.

The biggest challenge in presenting word problems to learners, is to ensure that there is appropriate questioning and use of language. When teachers present a word problem, they need to listen carefully to learners' responses and guide them to solve the problem using a strategy that is suitable for their level of understanding.

The posters in the *Poster Book* have been designed to provide learners with a set of pictures that relate to their lives and provide contexts for solving real-life problems.

In Week 10 Day 4 (page 180 of *Activity Guide: Term 2*), Poster 1 is used to encourage learners to solve problems that involve numbers 1–5.

Iseshini 3: Izinombolo, Izimpawu kanye Nobudlelwane Bazo

1 ihora

Okugxilwe kukho kuThemu 2 Isonto 10 Izinombolo, Izimpawu kanye Nobudlelwane Bazo.

Amathemu 1–4 Ukubuka ulwazi ngelibanzi: Izinombolo, Izimpawu kanye Nobudlelwane Bazo

Izinombolo, Izimpawu kanye Nobudlelwano Bazo, Ingxenye Yolwazi obekugxilwe kuyo kumaSonto 1, 2, no-5 kuThemu 2, futhi waxoxa ngolwazi lwezinombolo okumele lwenziwe emihlanganweni yokucobelelana ngolwazi eyedlule. Bheka Ukubuka ulwazi ngelibanzi lweziNombolo, izimpawu kanye Nobudlelwane emakhasini 114–123 oMhlahlandela Wokuqonda Isifundo.



Umsebenzi 10

Yiluphi ulwazi lwezinombolo olusadinga ukuba lwenziwe ngeThemu 2?

Ukuxazulula izinkinga

Othisha badinga ukunika abafundi amathuba amanigi ukuxazulula izinkinga ukuze bakwazi ukusebenzisa ulwazi lwabo lwezibalo kanye namakhono ezimweni ezintsha. Yonke imidlalo nemisebenzi ibandakanya ukuxazulula izinkinga. Izinkinga zamagama ezibalweni zethula inkinga ethile yohlobo lokuxazulula izinkinga oluangularisa izinkinga zokuhangularisa kanye nokususa ngokubala kanye nokusebenzisa amathuluzi abambekayo ukubalekelela ukuthi bathole isixazululo. Basebenzisa amaqoqo kanye nokwabelana kwabantu ngamunye-ngamunye ukuxazulula izinkinga zokuphindaphinda nezokuhlukanisa.

Inselelo enkulu ekwethuleni izinkinga zamagama kubafundi, ukukwazi ukuqiniseka ukuthi kubuzwe ngendlela efanele nokusetshenziswa kolimi. Uma othisha bethula izibalo zendaba, kudingeka balalele izimpendulo zabafundi ngokucophelela, bese bebahola ukuba baxazulule inkinga besebenzisa isu elihambelana nezinga labo lokuqonda.

Amaphosta eBhuku *Lamaphosta* enzelwe ukunika abafundi iqoqo lezithombe ezihamisanayo nezimpilo zabo, lethule izimo zokuxazululwa kwezinkinga zangempela zempilo.

ESontweni 10 uSuku 4 (ikhasi le-181 loMhlahlandela Wemisebenzi: Ithemu 2) iPhosta 1 isetshenziselwe ukugqugquzelu abafundi ukuxazulula izinkinga ezibandakanya izinombolo 1–5.

Facilitator's notes

- ◆ In **Activity 11** participants refer to Poster 1 to generate a series of appropriate number-related questions.
- ◆ These questions cover the following skills: comparing, matching, counting, addition, subtraction, grouping and equal sharing. They should involve a range of vocabulary. Remind participants that the focus of their questions should be on maths and that the language used should be clear and simple. Use the examples below to wrap up **Activity 11**.

Comparing/one-to-one correspondence (matching)

- Are there enough spoons for each bowl?
- How many more spoons do we need so that there is one spoon for each bowl?
- Are there more glasses on the top shelf or on the bottom shelf?

Counting

- How many glasses are there in the cupboard?
- Are there enough chairs for the number of people in the kitchen?

Addition

- There are four green apples and four red apples in the fridge. How many apples are there in the fridge?
- Thami has three blocks. There are four blocks on the floor. How many blocks are there altogether?

Subtraction

- There are six eggs in the door of the fridge. Dad cooks four eggs. How many eggs will be left in the fridge?
- There are five mugs in the kitchen. Four mugs are white. How many mugs are yellow?
- There are eight apples in the fridge. Four apples are green. How many apples are red?

Grouping

- Each child has two eyes. How many eyes would there be altogether on three children?

Equal sharing

- There are three oranges in a bag. Three children share the oranges. How many oranges will each child get?



Activity 11

In your groups, refer to Poster 1. Think of appropriate word problems for each of these skills:

- ◆ comparing
- ◆ matching
- ◆ counting
- ◆ addition
- ◆ subtraction
- ◆ grouping
- ◆ equal sharing.

Amanothi omdidiyeli

- ◆ KuMsebenzi 11 ababambiqhaza basebenzisa iPhosta 1 ukwakha uchungechunge lwemibuzo ehlobene nezinombolo elandelana ngokufanele.
- ◆ Le mibuzo ihlanganisa makhono alandelayo: ukuqhathanisa, ukuqondanisa, ukubala, ukuhlanganisa, ukususa, amaqoqo kanye nokwabelana ngokulinganayo. Kumele abandakanye ulwazimagama olwahlukahlukene. Khumbuza ababambiqhaza ukuthi imibuzo yabo kumele igxile ezibalweni, nokuthi ulimi olusetshenzisiwe lube lula ukuze kucace.

Sebenzisa izibonelo ezingezansi ukusonga **Umsebenzi 11**.

Ukuqhathanisa/okukodwa okuqondene nokunye (ukuqondanisa)

- *Ngabe izipuni zilingene indishi ngayinye?*
- *Sidinga izipuni ezingaki ukuze kube nesipuni esisodwa endishini ngayinye?*
- *Ngabe izingilazi eziningi ziseshalofini elingaphezulu noma eshalofini elingaphansi?*

Ukubala

- *Zingaki izingilazi ezisekhabeteni?*
- *Ngabe inani lezhhlalo lizobanelo abantu abasekhishini?*

Ukuhlanganisa

- *Kunama-aphula amane aluhlaza satshani kanye nama-aphula amane abomvu efrijini. Mangaki ama-aphula akhona esiqandisini?*
- *UTHami unamabholokhi amathathu. Kunamabholokhi amane phansi. Mangaki amabholokhi akhona esewonke?*

Ukususa

- *Kunamaqanda ayisithupha esicabheni sesiqandisi. Ubaba upheka amaqanda amane. Mangaki amaqanda azosala esiqandisini?*
- *Kunezimagi eziyisihlanu ekhishini. Izimagi ezine zimhlophe. Zingaki izimagi eziphuzi?*
- *Kunama-aphula ayisishiyagalombili esiqandisini. Ama-aphula amane aluhlaza satshani. Mangaki ama-aphula abomvu?*

Ukuqoqana

- *Ingane ngayinye inamehlo amabili. Azoba mangaki amehlo esehlangene ezinganeni ezintathu?*

Ukwabelana ngokulinganayo

- *Kunamawolintshi amathathu esikhwameni. Izingane ezintathu zabelana amawolintshi. Ingane ngayinye izothola amawolitshi amangaki?*



Umsebenzi 11

Emaqenjini enu, bhekisani kuPhosta 1. Cabangani izinkinga zamagama ezifanele ngazinye zala makhono:

- ◆ ukuqhathanisa
- ◆ ukuqondanisa
- ◆ ukubala
- ◆ ukuhlanganisa
- ◆ ukususa
- ◆ ukuqoqana
- ◆ ukwabelana ngokulinganayo.

When you do word-problem activities with your learners, allow them to use their fingers or counters to help them solve the problems.

Facilitator's notes

- ◆ In a whole group session ask for examples of questions for each of the categories. Write these on a flipchart for further discussion.
- ◆ Main point to discuss include:
 - The way that you structure the language in a word problem determines whether it is easy or difficult for the learners to understand and solve, e.g.:
 - * *There are 10 sweets. I eat 4. How many are left?* (This uses a simple language structure.)
 - * *I bought some sweets. I ate 6 sweets. There are 4 left. How many sweets did I buy?* (This uses a more difficult structure.)
 - Learners need to be exposed to different word-problem structures so that they are able to apply their skills and reasoning in different contexts.

One of the sections in Numbers, Operations and Relationships is, 'Solve problems in context'. In your groups, read the content overview for Term 2 for this section on page 120 of the *Concept Guide*. Then complete Activity 12.



Activity 12

Reflect on Activity 11.

1. What concepts and skills are taught and learnt in the topic: Problem-solving techniques?

Counting using concrete apparatus, i.e. counters, physical number ladder, ten structure beads.

2. What concepts and skills are taught and learnt in topic: Addition and subtraction?

Use counters; orally solve problems.

Uma wenza imisebenzi yezinkinga zamagama nabafundi bakho, bavumele basebenzise iminwe noma izinto zokubala ukubalekelela ukuxazulula izinkinga.

Amanothi omdidiyeli

- ◆ Kuseshini yeqembu lonke cela izibonelo zemibuzo zesigaba ngasinye. Zibhale zonke ephepheni leshadi eliphenywayo ukuze kubuye kuxoxwe ngazo.
- ◆ Amaphuzu asemqoka okuzoxoxwa ngawo abandakanya:
 - Indlela ohlela ngayo ulimi kuzinkinga zamagama inquma ukuthi kulula noma kulukhuni kubafundi ukuqonda kanye nokuxazulula, isib.
* *Kunoswidi abayi-10. Ngidla aba-4. Kusele abangaki?* (Le ndlela isebezisa ulimi olulula)
 - * *Ngithenge uswidi. Ngidle uswidi oyisi-6. Kusele o-4. Mngaki uswidi engiwuthengile?* (Le ndlela isebezisa ulimi oluluhunyana.)
 - Abafundi badinga ukuvezelwa izinhlelo zokuxazulula izinkinga ezihlukahlukene zamagama ukuze bakwazi ukusebezisa amakhono nokucabanga ezimweni ezhelukene.

Eyodwa yezingxenye zeziNombolo, Izimpawu kanye Nobudlelwane, ‘Ukuxazulula izinkinga esimnwani esithile’. Emaqenjini enu, fundani ukubuka ngelibanzi ulwazi kwithemu 2 engxenyeni esekhasini le-121 *loMhlahlandela Wokuqonda isifundo*. Beseniqedela Umsebenzi 12.



Umsebenzi 12

Cabanga ujule ngoMsebenzi 11.

1. Yiluphi ulwazi namakhono olufundiwe lwafundiswa kulesi sihloko: Amasu okuxazulula izinkinga?
-

Ukubala usebezisa amathuluzi aphethekayo, isib. Izinto zokubala, iladi lenombolo ebonakalayo, ubuhlu bokuhlela obuyishumi.

2. Yiluphi ulwazi namakhono olufundiwe lwafundiswa kulesi sihloko: Ukuhlanganisa kanye nokususa?
-

Sebenzisa izinto zokubala: xazulula izinkinga ngomlomo

Estimation

Learners develop estimation skills and make a ‘sensible’ guess about ‘how many objects’ there are in a collection. During measurement activities, they estimate how heavy or how long something is, or how many cups will fill a jug before they do the actual measuring.

Facilitator’s notes

- ◆ Find two see-through containers (e.g. peanut butter jars). Fill one with eight small objects and the other with eight larger objects.
- ◆ Ask:
 - *How many objects do you think are in this jar?*
 - *How many objects do you think are in the other jar?*
 - *Do you think there are the same number of objects in each jar?*
 - *How can we find out which jar has more objects?* (Count the objects.)
- ◆ Remind participants that estimation is a reasonable guess. By showing the same number of objects in the bottles but using different-sized objects, learners are focusing on the number rather than the size of the object or the amount of space they fill in the container (volume).



Activity 13

The facilitator will show you two jars. Estimate how many objects are in each jar and respond to her questions.

Learners need to be able to use terms such as: *too few, too many, more than, enough, not enough, nearly, close to, about the same, just under, just over*.

Teachers can plan estimation activities that encourage learners to make sensible guesses about the quantity of a group of objects or the measurement of an object.

Term 2 Content Summary: Week 10

Refer to Appendix A: Term 2 Weekly Content Summary (Weeks 8–10). Read the content overview for Week 10: Numbers, Operations and Relationships on page 20 of *Activity Guide: Term 2*.

Ukulinganisela

Abafundi bathuthukisa amakhono okulinganisela bese beqagela “ngokukhalipha” bathi ‘zingaki izinto’ eziseqoqwani. Ngesikhathi sokulinganisa, babheka ukuthi into isinda kanjani noma yinde kangakanani, noma zingaki izinkomishi ezizogcwalisa ujeke ngaphambi kokulinganisa kwangempela.

Amanothi omdidiyeli

- ◆ Thola izitsha okwazi ukubona kuzo ngale (isib. Isitsha sebhotela lamantongomane) Gcwalisa esisodwa ngezinto ezincane eziyisishiyagalombili, enye ngezinto ezinkulu eziyisishiyagalombili.
- ◆ Buza:
 - *Zingaki izintoocabanga ukuthi zikulesi sitsha?*
 - *Zingaki izintoocabanga ukuthi zikulesi esinye isitsha?*
 - *Ucabanga ukuthi kunezinto ezilinganayo ngenani esitsheni ngasinye?*
 - *Singathola kanjani ukuthi yisiphi isitsha esinezinto eziningi?* (Bala izinto)
- ◆ Khumbuza ababambiqhaza ukuthi ukulinganisela kuwukuqagela okunengqondo. Ngokukhombisa inombolo efanayo yezinto ezisebhodleleni kodwa usebenzisa izinto ezinobungako obehlukene, abafundi mabagxile enombolweni kunobungako bento noma besikhala esigcwaliswa esitsheni (ivolumu).



Umsebenzi 13

Umdidiyeli uzokhombisa izitsha ezimbili. Linganisela ukuthi zingaki izinto ezisesitsheni ngasinye, bese uphendula imibuzo yakhe.

Abafundi badinga ukukwazi ukusebenzisa amagama abanjengo-: *kumbalwa kakhulu, kunungi kakhulu, kunungi kuno-, kwanele, akwanele, kucishe, eduze kwe-, okucishe kufane, ngaphansi nje, sekuphelile/ngaphezulu nje.*

Othisha bangahlela imisebenzi yokulinganisela egquqquzelu abafundi ukuthi bakwazi ukuqagela ngokukhalipha mayelana nobuningi bezinto eziseqoqwani noma isilinganiso sento.

Ithemu 2 Iqoqa Lolwazi: Isonto 10

Bheka Isithasiselo A: Ithemu 2 Iqoqa Lolwazi Lwesonto Ngalinye (Amasonto 8-10)
Funda Ukubuka ulwazi ngelibanzi lweSonto 10: Izinombolo, Izimpawu kanye
Nobudlelwane Bazo ekhasini lama-21 kuMhlahlandlala Wemisebenzi: *Ithemu 2.*



Activity 14

1. What are the topics for Week 10?

2. What new knowledge is introduced in this week?

3. What skills from previous weeks are practised?

Refer to the estimation activities in Week 10 (*Activity Guide: Term 2*, pages 174 (Day 1), 176 (Day 2) and 178 (Day 3)).



Umsebenzi 14

1. Zithini izihloko zeSonto 10?

2. Yiluphi ulwazi olusha olwethulwe kuleli Sonto?

3. Yimaphi amakhono esonto eledlule ajwayezwayo?

Bheka emisebenzini yokulinganisela kulo iSonto 10 (*Umhlahlandlela Wemisebenzi: Ithemu 2*, Umhlahlandlela Wemisebenzi: Ithemu 2, ikhasi 175 (Usuku 1), ikhasi 177 (Usuku 2) kanye nekhasi 179 (Usuku 3)).

Session 4: Numbers, Operations and Relationships

45 minutes

The Maths Programme focuses on one main Content Area each week. You will have noticed that even though when the weekly Content Area Focus is not ‘number’, the number routines continue every day of each week. The reason for this is that repetition and practice are essential for consolidating the learners’ developing number skills.

The whole class activities for each day of the week always start with three number routines:

- ◆ a song or rhyme
- ◆ oral counting
- ◆ counting objects.

These three number routines are planned to match the number range for each term.

Facilitator’s notes

- ◆ In **Activity 15**, participants will use *Activity Guide: Term 2* to find the daily number routines and complete the table. This is to highlight the fact that number routines are practised every day of each week regardless of the Content Area Focus and to show the progression in number range across the term.



Activity 15

Find the Term 2 daily number routines in *Activity Guide: Term 2* and complete the table. Week 1 has been done for you.

Week	Content Area Focus	Song or rhyme	Oral counting	Counting objects
1	Numbers, Operations and Relationships	A rhyme from Term 1	1–10 5–1	1–5 (birthday chart)
2				

Iseshini 4: Izinombolo, Izimpawu kanye Nobudlelwane Bazo

45 imizuzu

Uhlelo lweziBalo lugxile kweyodwa Ingxenye Yolwazi esemqoka esontweni ngalinye. Uzoqaphela ukuthi noma Ingxenye Yolwazi Okugxilwe Kuyo ngesonto kungeyona ‘inombolo’, inqubo yenombolo iyaqhube ka zonke izinsuku zesonto ngalinye. Isizathu salokhu ukuthi ukuphindaphinda kanye nokuzejwayeza kubalulekile uma kuhloswe ukuqinisa ukuthuthukiswa kwamakhono enombolo kubafundi.

Imisebenzi yekilasi lonke yosuku ngalunye lwesonto njalo iqala ngenqubo yezinombolo ezintathu:

- ◆ iculo noma umlolozelo
- ◆ ukubala ngomlomo
- ◆ ukubala izinto.

Le nqubo yezinombolo ezintathu ihlelelw ukuqondanisa ububanzi bezinombolo ethemini ngayinye.

Amanothi omdidiyeli

- ◆ **Kumsebenzi 15**, ababambiqhaza bazosebenzisa *Umhlahlandlela Wemisebenzi: Ithemu 2* ukuthola inqubo yezinombolo zosuku, bese beqedela ithebula. Lokhu kugqamisa iqiniso lenqubo yezinombolo ngokuzejwayewza ithebula ngalinye zonke izinsuku zesonto, kungakhathaleki ukuthi yiNgxenye Yolwazi Okugxilwe Kuyo noma ukukhombisa ukukhula kobubanzi bezinombolo ethemini yonke.



Umsebenzi 15

Thola inqubo yezinombolo zikaThemu 2 *kuMhlahlandlela Wemisebenzi: Ithemu 2* kanye nokuqedela ithebula. ISonto 1 sewenzelwe lona.

Isono	Ingxenye Yolwazi Okugxilwe Kuyo	Iculo noma umlolozelo	Ukubala ngomlomo	Ukubala izinto
1	Izinombolo, Izimpawu kanye Nobudlelwano Bazo	Umlolozelo osuka kuThemu 1	1–10 5–1	1–5 (Ishadi losuku lokuzalwa)
2				

3				
4				
5				
6				
7				
8				
9				
10				

Having looked through the number content for Term 2, you will have noticed that the number routines are practised every day of each week regardless of the Content Area Focus and that the progression in number range increases across the term.

3				
4				
5				
6				
7				
8				
9				
10				

Uma sewulubonile ulwazi lwezinombolo kuThemu 2, uyoqaphela ukuthi inqubo yezinombolo yejwayezwa zonke izinsuku zesonto ngalinye kungakhathaleki ukuthi ikhona ingxene Yolwazi Okugxilwe Kuyo, nokuthi ukukhula kobubanzi bezinombolo kuyanda yini ethemini yonke.

Session 5: Term 2 Assessment

1 hour



Video 2

Watch the video of a teacher presenting word problems to a small group of learners.

Observe how each learner solves the problem. Notice how the teacher uses prompts when a learner has difficulty.

Facilitator's notes

- ◆ PPT: Rubric with the 1–7 rating scale.
- ◆ Discuss how the descriptions in the rubric provide distinguishing assessment criteria for each rating code.



Activity 16

Look at the rubric on page 106 of the *Concept Guide*.

In your groups, discuss how you would score each of the learners using this scale. Give reasons for your decisions based on the assessment criteria for each rating code.

Isehini 5: Ukuhlola Ithemu 2

1 ihora



Ividiyo 2

Buka ividiyo kathisha ethula isixazululo sezinkinga egenjini elincane labafundi.

Qaphela ukuthi umfundi ngamunye uyixazulula kanjani inkinga. Qaphela ukuthi uthisha uzisebenzisa kanjani izexwayiso uma umfundi enobunzima.

Amanothi omdidiyeli

- ◆ PPT: Irubhrikhi enophawu lokulinganisa 1–7
- ◆ Xoxa ukuthi izincazelozekurubhrikhi zikusiza kanjani ukuhlukanisa indlela yokuhlola yophawu lokulinganisa ngalunye.



Umsebenzi 16

Bheka kurubhrikhi ekhasini le-107 kuMhlahlandlela Wokuqonda Isifundo.

Emaqenjini enu, xoxani ukuthi nizobaklomelisa kanjani abafundi ngamunye nisebenzisa lesi silinganiso. Nika izizathu zesinqumo senu nisusela endleleni yokuhlola yophawu lokulinganisa ngalunye.

Closing activities

15 minutes

Facilitator's notes

- ◆ **Workshop reflection:** Ask participants to take a few minutes to reflect on the day and to page through their *Participant's Workbook*. Ask them to jot down any questions or comments to share with the whole group.
- ◆ **Take back to school task:** Read through this task. Ask if there is anything that is not clear and that requires more explanation.
- ◆ **Evaluation:** Hand out copies of the Workshop Evaluation Form and have participants complete the form.
- ◆ **Next workshop:** Give dates for the next workshop and close the workshop.



Activity 17

Workshop reflection: Take a few minutes to reflect on the day. Page through your *Participant's Workbook* to remind yourself of what was covered. Write down any questions or comments to share with the group.



Take back to school task

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 your evaluation to the next workshop.

Evaluation

Complete the Evaluation Form.

Imisebenzi yokuvala

15 imizuzu

Amanothi omdidiyeli

- ◆ **Ukudlinza ngomhlangano wokucobelelana ngolwazi:** Cela ababambiqhaza ukuba bathathe imizuzu embalwa badlinze ngosuku lolo, bese bepheqa amakhasi *eNcwadi Yokusebenzela Yababambiqhaza*. Bacele babhale phansi imibuzo abazokwabelana ngayo neqembu lonke.
- ◆ **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 wokucobelelana ngolwazi olandelayo, bese uvala umhlangano wokucobelelana ngolwazi.



Umsebenzi 17

Ukudlinza ngomhlangano wokucobelelana ngolwazi: Thatha imizuzu embalwa udlinze ngosuku lolo. Phenza amakhasi *eNcwadi Yokusebenzela Yababambiqhaza* ukuzikhumbuza ngokwenziwa. Bhala phansi noma iyiphi imibuzo noma imibono ukuze wabelane eqembu.



Umsebenzi obuyela nawo esikoleni

1. Sebenzisa *Umhlahlandlela Wemisebenzi: Ithemu 2* ukuhlela kanye nokwenza AmaSonto 8–10 oHlelo lweziBalo.
2. Bhala ukuhlola okusebenze kahle, okungasebenzanga kahle nongakwenza ngokuhlukile ukwenza ngcono ukufundisa nokufunda.
3. Phatha ukuhlola emhlanganweni wokucobelelana ngolwazi olandelayo.

Ukuhlola

Gcwalisa ifomu Lokuhlola.

APPENDIX A: TERM 2 WEEKLY CONTENT SUMMARY (WEEKS 8-10)

Term 2: Activity Plan

Week 8				
CONTENT AREA: SPACE AND SHAPE (GEOMETRY)				
TOPIC: Properties of shapes – compare same and different, sort according to properties; position; orientation and views				
INTRODUCE NEW KNOWLEDGE: Follow direction and midline crossing				
PRACTISE: Oral counting 1-20, counting backwards from 7, sequencing numbers 1-5, counting objects 1-7, reinforce number concept 1-5, what number comes before/after, practise using all shapes		Teacher-guided activity	Workstation activities	
Whole class activities			Activity 1	Sorting activity – using cut-out shapes.
Day 1	Forwards/backwards.	Counting – show me 1-3, 5-7 counters.	Activity 2	Make shapes using playdough and make a copy.
Day 2	Reinforce all shapes (I spy ...).	Working with all taught shapes.	Activity 3	Masking tape shapes – learners follow shapes using blocks.
Day 3	Shape game.	Midline crossing. Position – direction.	Activity 4	Match shapes using shape cards.
Day 4	What can I do: Lost my ... (shape).	Forwards/backwards.		
Day 5	Obstacle course (requires a big space/outdoors). Midline crossing.			
Week 9				
CONTENT AREA: MEASUREMENT				
TOPIC: Length – compare and order objects using appropriate vocabulary to describe length				
INTRODUCE NEW KNOWLEDGE: Measuring and comparing length (long/short, longer/shorter, longest/shortest)				
PRACTISE: Oral counting 1-20, counting backwards from 7, counting objects 1-7, estimation 1-7, tall/short				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Longer/shorter (height).	Longer than/shorter than.	Activity 1	Shorter/longer (pre-cut strips of different length).
Day 2	Comparing lengths of ribbons.	Taller than/shorter than.	Activity 2	Wiggly worms (to make a poster shortest to longest).
Day 3	Sorting objects by length (coloured paper strips).	Measurement with everyday objects.	Activity 3	Measure blocks using string.
Day 4	Height chart comparison (from Term 1).		Activity 4	Playdough and lined paper (different lengths).
Day 5	Height chart comparison (taller/shorter than you).			

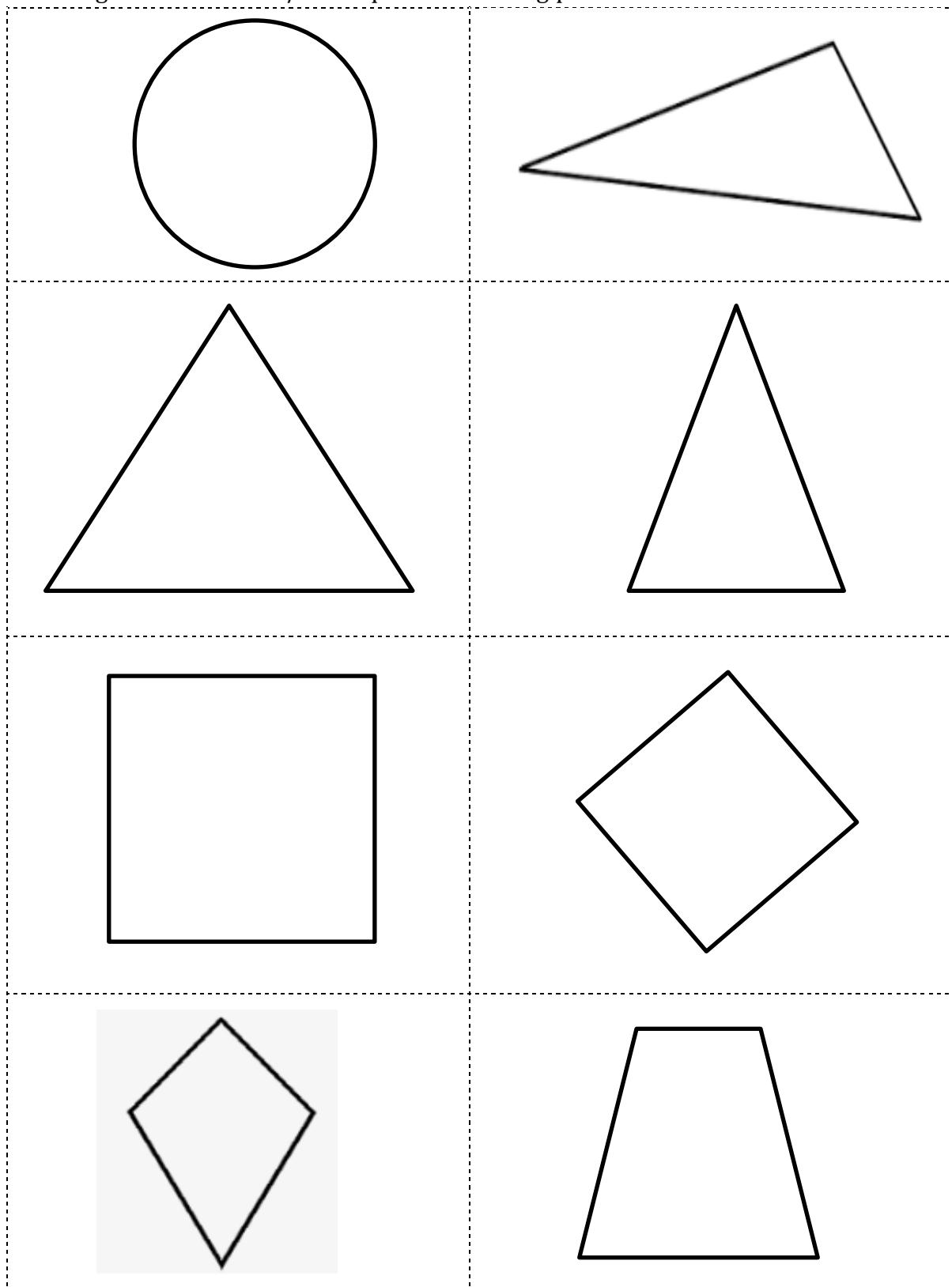
ISITHASISELO A: ITHEMU 2 IQOQA LOLWAZI LWESONTO NGALINYE (AMASONTO 8-10)

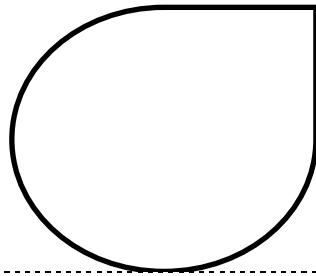
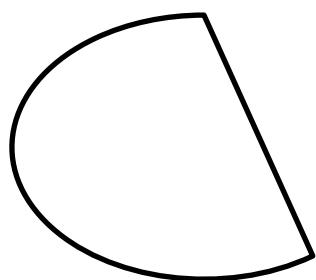
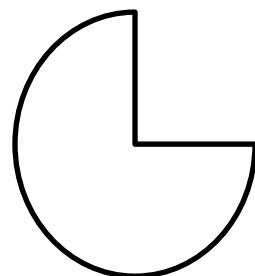
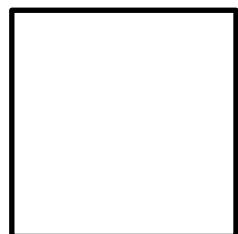
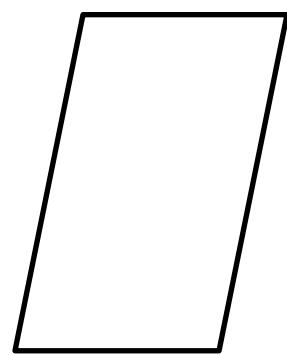
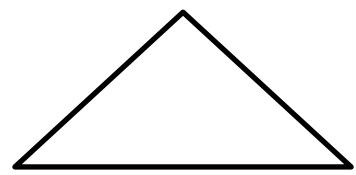
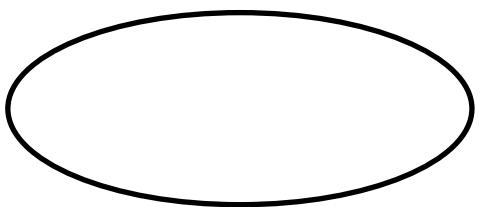
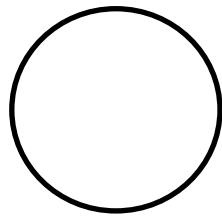
Ithemu 2: Uhlelo Lomsebenzi

Isonto 8			
INGXENYE YOLWAZI: INDAWO NESIMO (JIYOMETHRI)			
ISIHLOKO: Izimpawu zezimo - qhathanisa okufanayo kanye nokwehlukile, hlela ngokwezimpawu; ukuma nokubuka YETHULA ULWAZI OLUSHA: Landela inkomba Umugqa ophakathi oweqiwayo ZEJWAYEZE: Ukubala ngomlomo 1–20, ukubala uya emuva usuka kokuyisi-7, ukulandelanisa 1–5, ukubala izinto 1–7, gxilisa ulwazi lwenombolo 1–5, iyiphi inombolo ephambi/esemuva, zejwayeze ukusebenzia zonke izimo			
Imisebenzi yekilasi lonke	Umsebenzi oholwa nguthisha	Imisebenzi yesiteshi sokusebenzela	Imisebenzi yesiteshi sokusebenzela
Usuku 1 Phambili/emuva.	Ukubala – ngikhombise izinto zokubala 1–3, 5–7.	Umsebenzi 1	Umsebenzi wokuhlela – usebenzisa izimo ezisikiwe.
Usuku 2 Gxilisa zonke izimo (Ngilingisa inhloli ...)	Sebenza ngazo zonke izimo ezifundisiwe.	Umsebenzi 2	Ukwenza izimo usebenzisa inhlama yokudlala bese wenza ikhophi.
Usuku 3 Umdlalo wesimo.	Ukweqela kolunye uhlangothi. Isikhundla – inkomba.	Umsebenzi 3	Izimo zetheyiphu eyimaski – abafundi balandela izimo besebenzisa amabhlulokhi Qondanisa izimo usebenzisa amakhadi ezimo.
Usuku 4 Yini engingayenza: Ngilahlekelwe yi ... (isimo).	Phambili/emuva.	Umsebenzi 4	
Usuku 5 Indlela eneziphazamiso (idinga indawo enkulu/ngaphandle). Ukweqela kolunye uhlangothi.			
Isonto 9			
INGXENYE YOLWAZI: ISILINGANISO			
ISIHLOKO: Ubude: ukuqhathanisa kanye nokuhlela izinto uchaza ubude ngokusebenzisa ulwazimagama olufanele YETHULA ULWAZI OLUSHA: Ukulunganisa kanye nokuhathanisa ubude (okude/okufishane, okujana/okufishanyana, okude kakhulu okufishane kakhulu) ZEJWAYEZE: Ukubala ngomlomo 1–20, ukubala uye emuva usuka kokuyisi-7, ukubala izinto 1–7, ukulunganisela 1–7, okude/okufishane			
Imisebenzi yekilasi lonke	Umsebenzi oholwa nguthisha	Imisebenzi yesiteshi sokusebenzela	Imisebenzi yesiteshi sokusebenzela
Usuku 1 Okujana/okufishanyana (ukuphakama).	Okujana kuno-/okufishanyana kuno-.	Umsebenzi 1	Okufishanyana/okujana (imichilo esikiwe enobude obuhlukene).
Usuku 2 Ukuqhathanisa ubude bamaribhini.	Okude kuno-/okufishane kuno-.	Umsebenzi 2	Izikelemu ezinyakazayo (ukwenza iPhosta yokufishane kakhulu kuya kokude kakhulu).
Usuku 3 Ukuhlela izinto ngobude (imicu yamaphepha anemibala).	Isilinganiso ngezinto zansuku zonke.	Umsebenzi 3	Lunganisa amabhlulokhi usebenzisa intambo.
Usuku 4 Ukuqhathanisa ishadi lobude (Kusukela kuThemu 1).		Umsebenzi 4	Inhlama yokudlala kanye nephepha elinomugqa (ubude obungafani).
Usuku 5 Ukuqhathanisa ishadi lobude (omujana/omfushanyana kunawe).			

APPENDIX B: SHAPES FOR SORTING/ISITHASISELO B: IZIMO ZOKUHLELWA

Cut along the dotted lines./Sika uqondanise nemigqa enamachashazi.





Workshop 6 Evaluation Form

1. Did the workshop meet your expectations?

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

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

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

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

Ifomu Lokuhlola Lomhlangano Wokucobelelana

Ngolwazi 6

1. Ngabe umhlangano wokucobelelana ngolwazi uhlangabezene nalokho obukulindele?

2. Yini oyifundile kulo mhlangano wokucobelelana ngolwazi ekusize kakhulu?

3. Ngabe kukhona ongakuthandanga noma okuthole kunzima ukukuqonda?

4. Uzokusebenzisa kanjani lokho okufundile ekilasini lakho leBanga R?

5. Ngabe unazo iziphakamiso zokuthuthukisa eminye imihlangano yokucobelelana ngolwazi?
