



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GGT 2030
GROWING GAUTENG TOGETHER

IsiXhosa/English

INkqubo yeMathematika yokuPhucula yeBanga R Grade R Mathematics Improvement Programme



INdibano yoCweyo 4 • Workshop 4
Incwadi yokuSebenzela yoMthathinxaxheba • Participant's Workbook

The Grade R Mathematics and Language Improvement Project is an initiative of the **Gauteng Department of Education** and its key partner, the **Gauteng Education Development Trust**.

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: Sebolelo Mokapela

Editing (isiXhosa): Pumeza Ngobozana

Illustrations: Jiggs Snaddon-Wood

IProjekthi yeBanga R yokuPhucula yeMathematika noLwimi lilinge **leSebe leMfundo laseGauteng (Gauteng Department of Education)** kunye neqabane layo eliphambili, i**Gauteng Education Development Trust**.

Ukwenziwa nokuveliswa kwezixhobo zoqeqesho nezegumbi lokufundela kwenziwe kwayimpumelelo ngezibele zenkxasomali ye**United States Agency for International Development** kwakunye ne**Zenex Foundation**.

IProjekthi yeBanga R yokuPhucula yeMathematika noLwimi ilawulwa yi**JET Education Services** ne**Schools Development Unit** yase**UCT** kunye ne**Wordworks** njengamaqabane ezobugcisa.

ISchools Development Unit (SDU) kwi**Yunivesithi yaseKapa (UCT)** liqabane lezobugcisa kwimathematika kwiProjekthi yeBanga R yokuPhucula yeMathematika noLwimi. ISDU yiyunithi ngaphakathi kwiSchool of Education kwiYunivesithi yaseKapa egxile kuphuhliso lobungcali bootitshala kwiMathematika, izifundo zeNzululwazi, iLitherasi/uLwimi kunye neZakhono zoBomi ukusuka kwiBanga R ukuya kwiBanga le-12. ISDU inikezela ngeziqinisekiso zootitshala kunye nezifundo ezifutshane ezivunyiweyo zeUCT, umsebenzi osekwe esikolweni, uphuhliso lweemathiriyeli kunye nophando lokuxhasa ukufundisa nokufunda kuzo zonke iimeko eMzantsi Afrika.

IMIBULELO

Senza umbulelo ongazenzisiyo:

- KwiCandelo leKharityhulam kwiSebe leMfundo laseGauteng, Izifundo zooTitshala kunye namagosa eCandelo elikhethekileyo leMfundo ngenkxaso yabo ekuvelisweni kwale mathiriyeli.
- Kumagosa eSebe leMfundo laseNtshona Koloni (WCED) kunye nootitshala ngegalelo labo kwimpumelelo yokuphunyezwa kweGrade R Mathematics Programme (R-Maths) eNtshona Koloni phakathi kweminyaka ka2016 no2019.
- Iqela lababhali beR-Maths: Abasebenzi kwiSDU.



Inkqubo yeMathematika yokuPhucula yeBanga R ilungiselelwe kwi**R-Maths**, yapapashwa okokuqala ngowama2017 yiSchools Development Unit, kwiYunivesithi yaseKapa. Ilungelo loshicilelo leR-Maths ligcinwe yiYunivesithi yaseKapa.

Inkqubo yeMathematika yokuPhucula yeBanga R inelayisensi phantsi kwe-Creative Commons Attribution 4.0 International Licence [Attribution-NonCommercial-ShareAlike].



Le layisensi inika abasebenzisi bezi zixhobo ilungelo lokuba bangazihambisa kwabanye abantu, bangazixuba, bangazitshintsha baze bazandise kodwa oko bangakwenzeli inzuzo okubalulekileyo kukuba bafumane imvume. Xa ubani ethe wazixuba, wazitshintsha okanye wazandisa, kufuneka ke izixhobo ezitshintshiweyo zibe nelayisensi ehambelana noko. Ukujonga imiqathango epheleleyo yale layisenisi, ndwendwela ku:

<https://creativecommons.org/licenses/by-nc-sa/4.0/>

Ukusungulwa nokuphathwa kwenkqubo: Cally Kuhne kunye noTholisa Matheza
Ulawulo lwenguqulelo nopapasho lweprojekthi: Arabella Koopman
Ulungelelaniso lwenguqulelo (iilwimi zesiNguni): Pumeza Ngobozana
Umgququli: Sebolelo Mokapela
Umhleli (isiXhosa): Pumeza Ngobozana
Imizobo: Jiggs Snaddon-Wood

Contents

Overview

Purpose	page 6
Learning outcomes	page 6
Workshop content	page 6

Workshop content

Opening and reflection	page 8
Session 1: Data Handling	page 10
Session 2: Numbers, Operations and Relationships	page 18
Session 3: Space and Shape (Geometry)	page 28
Session 4: Planning for teaching	page 32

Appendix A: Term 1 and 2 Weekly Content Summary:

Term 1 (Week 10) and Term 2 (Weeks 1–3)	page 42
Workshop 4 Evaluation Form	page 46

Isiqulatho

Amagqabantshintshi

Injongo	iphepha 7
Iziphumo zokufunda	iphepha 7
Umxholo wendibano yocweyo	iphepha 7

Umxholo wendibano yocweyo

Ukuvula nocamngco	iphepha 9
Iseshoni 1: ULwazi oluQokelelweyo	iphepha 11
Iseshoni 2: Amanani, iiOpareyshini noLwalamano	iphepha 19
Iseshoni 3: IsiThuba neMilo (iJiyometri)	iphepha 29
Iseshoni 4: Ukucwangcisela ukufundisa	iphepha 33

Isingeniso A: Ikota 1 no2 IsiShwankathelo somXholo weVeki neVeki:

Ikota 1 (Iveki 10) neKota 2 (Iveki 1-3)	iphepha 43
IFomu yokuHlola yeNdibano yoCweyo 4	iphepha 47

Overview

Purpose

This is the fourth 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 to implement the Maths Programme in their classrooms. Participants will have the opportunity to reflect on their observations and explore how the **level principle** informs planning, teaching and learning. Participants will also consider the **level principle** and how to respond to learners with individual developmental and learning needs. The sessions will provide additional knowledge and understanding of teaching and learning in the Content Areas covered in Week 10 of Term 1, and Weeks 1–3 of Term 2.

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 1 Weeks 6–9
- ◆ To explore strategies to support teaching maths in Grade R
- ◆ To start to present solutions to learner progress and developmental levels
- ◆ To apply the Maths Programme principles in weekly planning
- ◆ To engage with the Maths Programme content of Term 1 Week 10 and Term 2 Weeks 1–3 (Data Handling; Numbers, Operations and Relationships; Space and Shape (Geometry))

Workshop content

- ◆ Opening and reflection (1 hour)
 - ◆ Session 1: Data Handling (1 hour)
- TEA
- ◆ Session 2: Numbers, Operations and Relationships (1 hour)
 - ◆ Session 3: Space and Shape (Geometry) (1 hour)
- LUNCH
- ◆ Session 4: Planning for teaching (2 hours)

Amagqabantshintshi

Injongo

Le yeyesine kwezilishumi elinambini iindibano zocweyo zeNkqubo yeMathematika yokuPhucula yeBanga R (iNkqubo yeMathematika) neyinxalenye yeProjekthi yeBanga R yokuPhucula yeMathematika noLwimi yeSebe leMfundo laseGauteng (Gauteng Department of Education (GDE)).

Injongo yale ndibano yocweyo kukuncedisa ootitshala ukuba baphumeze iNkqubo yeMathematika eziklasini zabo. Abathathinxaxheba bazakuba nalo ithuba lokuphawula ngoko bakuqwalaseleyo baze bahlole indelela **umgaqo wenqanaba** olufuthela ngayo ucwangciso, ukufundisa kwanokufunda. Abathathinxaxheba baza kuwuthathela ingqalelo **umgaqo wenqanaba** kwanendlela abanokuthi bajongane ngayo nabafundi abaneemfuno ezikhethekileyo zokukhula kwanezokufunda. Iiseshoni zizakubonelela ngolwazi nengqiqo eyongezelelekileyo yokufundisa nokufunda kwiiNkalo zoMxholo ekugxilwe kuzo kwiVeki 10 yeKota 1, kunye neeVeki 1–3 zeKota 2.

Ubhekiso kwiiNkalo zomXholo weMathematika weBanga R luthathwe kwiNkcazelo yePolisi yeKharithulam nokuHlola (CAPS): IBanga R iMathematika (idrafti yokugqibela), 2011, iSebe leMfundo esiSiseko, yaseMzantsi Afrika.

Iziphumo zokufunda

- ◆ Ukuthetha ngokuphunyezwa kweKota 1 iiVeki 6–9
- ◆ Ukuqwalasela amacebo okunika inkxaso ekufundisweni kwemathematika kwiBanga R
- ◆ Ukuqalisa ukuveza izisombululo kwinkqubela yomfundi kunye namazinga okukhula
- ◆ Ukusebenza imigaqo yeNkqubo yeMathematika kwisicwangciso seveki
- ◆ Ukuqwalasela umxholo weNkqubo yeMathematika weKota 1 kunye neKota 2 iiVeki 1–3 (ULwazi oluQokelelweyo; Amanani, iiOpareyshini noLwalamano; IsiThuba neMilo (iJiyometri))

Umxholo wendibano yocweyo

- ◆ Ukuvula nocamngco (1 iyure)
 - ◆ Iseshoni 1: ULwazi oluQokelelweyo (1 iyure)
- ITI
- ◆ Iseshoni 2: Amanani, iiOpareyshini noLwalamano (1 iyure)
 - ◆ Iseshoni 3: IsiThuba neMilo (iJiyometri) (1 iyure)
- ISIDLO SASEMINI
- ◆ Iseshoni 4: Ukucwangciselela ukufundisa (2 iiyure)

Opening and reflection

1 hour

Reflect on the implementation of the Maths Programme in your daily programme and complete the following activity in your group.



Activity 1

Discuss your progress in implementing the *Take back to school* task from Workshop 3.

Refer to the observation check boxes at the end of each week in *Activity Guide: Term 1*, Weeks 6, 7, 8 and 9.

1. What insights did you gain while observing learners during their Mathematics focus time?

2. What did you find difficult about the observation during the teacher-guided activity?

3. Mention one new thing that is working well with your implementation of Term 1 Weeks 6–9. Have you found that the Maths Programme is assisting with teaching and learning in your Grade R class?

According to the **level principle**, differentiation means that what you teach and how you teach it needs to take into account the different abilities or developmental levels of your learners. To use this approach, you need to continuously observe and record each learner's progress and development in maths.

Ukuvula nocamngco

1 iyure

Phawula ngokuphunyezwa kweNkqubo yeMathematika kwinkqubo yakho yemihla ngemihla uze wenze lo msebenzi ulandelayo neqela lakho.



Umsebenzi 1

Xoxa ngenkqubela yakho ekuphumezeni Umsebenzi *ekubuyelwa nawo esikolweni* weNdibano yoCweyo 3.

Jonga kwiibhokisana ezithikishwayo zengqwalasela

ekupheleni kweveki nganye kwisi*Khokelo semiSebenzi: Ikota 1, iiVeki 6, 7, 8 no9.*

1. Loluphi ukhanyiselo othe waluzuza ngeli lixa uqwalasele abafundi ngexesha lokugxila kwiMathematika?

2. Yintoni oyifumene inzima malunga nengqwalasela ngexesha lomsebenzi okhokelwa ngutitshala?

3. Balula into ibenye ekusebenzela kakuhle ngokuphumeza kwakho iKota 1 iiVeki 6–9. Ingaba ufumanise ukuba iNkqubo yeMathematika iyancedisa ekufundiseni nasekufundeni kwiklasi yakho yeBanga R?

Ngokomgaqo wenqanaba, ukwahlula kuthetha ukuba oko ukufundisayo nendlela okufundisa ngayo kufanele kuthathele ingqalelo izakhono okanye amazinga okukhula awohlukileyo abafundi bakho. Ukuze usebenzise le ndlela, kufuneka uhlale unika ingqwalasela uze urekhode inkqubela yomfundi ngamnye nenkqubela yakhe kwimathematika.

Session 1: Data Handling

1 hour

This workshop focuses on teaching the following Maths Programme content: Term 1 Week 10 and Term 2 Weeks 1–3. This session focuses on Term 1 Week 10: Data Handling.

Term 1 Content overview: Data Handling

Refer to the Data Handling Content Area on pages 136–137 of the *Concept Guide*.



Activity 2

In your group, discuss:

1. What Data Handling content is covered in Term 1?

2. What does the Maths Programme add to the content from CAPS?

Working with data

In this session, you will learn about the Data Handling cycle as a process for solving problems. Data Handling in Grade R focuses on collecting, sorting, organising, representing and analysing information about people or things. The main reason we collect data is to answer a question or to solve a problem.

Iseshoni 1: ULwazi oluQokelelweyo

1 iyure

Le ndibano yocweyo igxile ekufundiseni lo mxholo ulandelayo weNkqubo yeMathematika: iKota 1 iVeki 10 neKota 2 iiVeki 1–3. Le seshoni igxile kwiKota 1 iVeki 10: uLwazi oluQokelelweyo.

Amagqabantshintshi ngomxholo weKota 1: ULwazi oluQokelelweyo

Jonga kwiNkalo yoMxholo woLwazi oluQokelelweyo kumaphepha 136–137 esiKhokelo seeKhonsepthe.



Umsebenzi 2

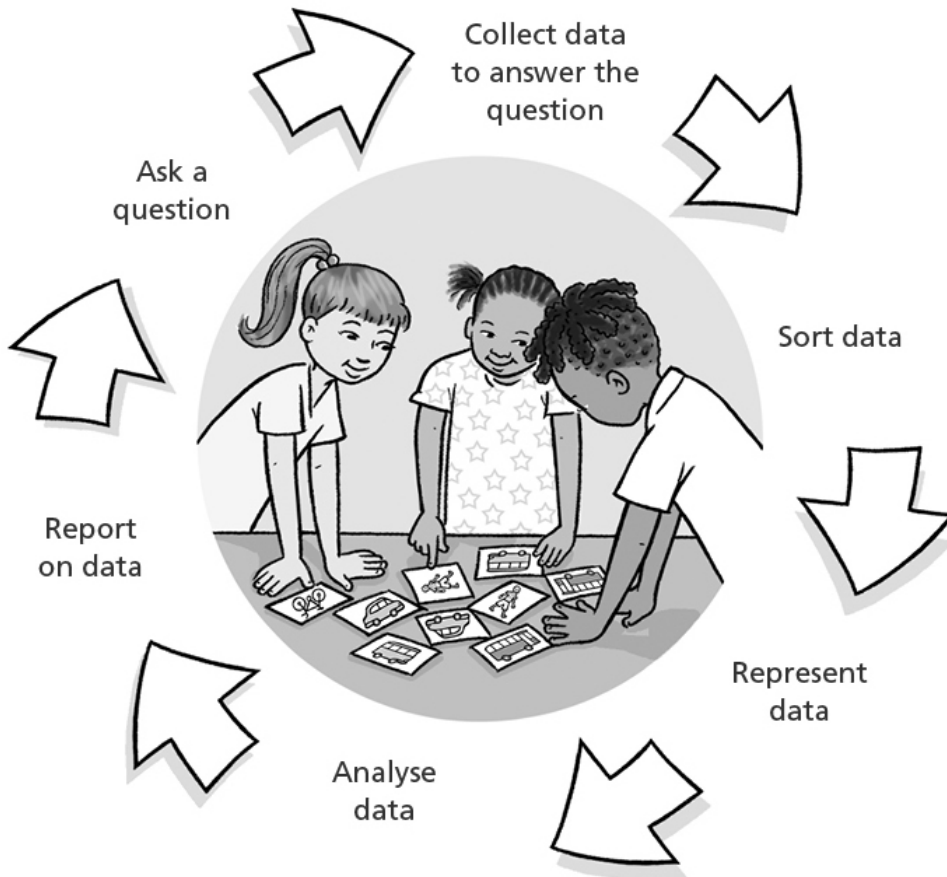
Kumaqela enu, xoxani:

1. Ngowuphi umxholo woLwazi Oluqokelelweyo okwiKota 1?

2. Yintoni eyongezwa yiNkqubo yeMathematika kumxholo kaCAPS?

Ukusebenza ngolwazi (idatha)

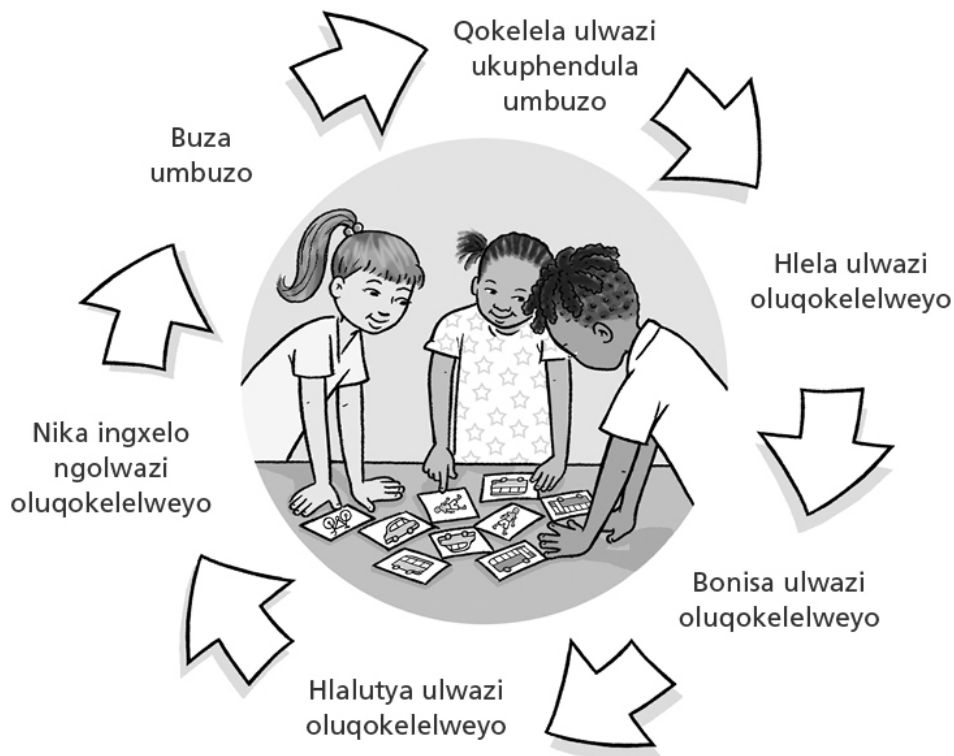
Kule seshoni, uzakufunda ngomjikelo woLwazi oluQokelelweyo njengendlela yokusombulula iingxaki. ULwazi oluQokelelweyo kwiBanga R lugxile ekuqokeleleni, ekuhleleni, ekulungiseni, ekumeleni nasekuhlalutyeni ulwazi olumalunga nabantu okanye izinto. Esona sizathu esenza ukuba siqokelele ulwazi kukuphendula umbuzo okanye ukusombulula ingxaki.



People often refer to the process of Data Handling as a cycle because the events or activities that are involved are repeated in the same sequence for each new question that is to be answered.

1. **Ask a question:** Learners decide what they want to find out about. This is the reason for collecting specific data or information.
2. **Collect data:** Learners decide they want to collect data based on the question or problem.
3. **Sort data:** Learners organise and sort data into groups according to the attribute. In order to answer questions and decide how to represent data that have been collected, decisions need to be made about how things could be sorted.
4. **Represent data:** Learners explore different ways of showing or displaying the information they have collected.
5. **Analyse data:** Learners describe and compare the data that is represented.
6. **Report on data:** Learners answer the question that was initially asked.

Objects can be sorted and classified (grouped) according to their similarities, such as colour, animals, plants. The more learners know about the properties of objects, and their similarities and differences, the more they are able to form different classification groups.



Abantu badla ngokubhekisa kwinkqubo yoLwazi oluQokelelweyo njengomjikelo kuba iziganeko okanye imisebenzi ebandakanyekayo iphindaphindwa ngolandelelwano olufanayo kumbuzo ngamnye omtsha ophendulwayo.

1. **Buza umbuzo:** Abafundi benza isigqibo sokuba yintoni abafuna ukuyazi. Esi sisizathu sokuqokelela ulwazi okanye iinkcukacha.
2. **Qokelela ulwazi:** Abafundi bathatha isigqibo ngendlela abafuna ukuqokelela ngayo ulwazi ngokubhekise kumbuzo okanye ingxaki.
3. **Ukuhlela ulwazi:** Abafundi balungisa baze bahlele ulwazi oluqokelelweyo ngamaqela ngokweathribhyuthi. Ukuze baphendule imibuzo kwaye bathathe isigqibo ngendlela yokubonisa ulwazi abaluqokeleleyo, isigqibo kufuneka senziwe ngendlela izinto ezingahlelwa ngayo.
4. **Bonisa ulwazi:** Abafundi bahlola iindlela ezahlukeneyo zokubonisa iinkcukhacha abaziqokeleleyo.
5. **Hlalutya ulwazi:** Abafundi bachaza kwaye bathelekisa iinkcukacha ezibonisweyo. umz. yeyiphi indlela yokuza esikolweni esetyenziswa kakhulu okanye kancinci.
6. **Ingxelo ngolwazi:** Abafundi baphendula umbuzo obubuziwe ekuqaleni.

Izinto zingahlelwa kwaye zahlulwe (zibekwe ngokwamaqela) ngokokufana kwazo, njengombala, izilwanyana, izityalo. Ngokuye abafundi besazi banzi ngeempawu zezinto, kunye nokufana nokwahluka kwazo, kungokuye bekwazi ukwenza amaqela okwahlula



Video 1

Watch the video of the class creating and analysing a pictograph to represent the weather.

Discuss how the teacher presents each of the steps in the lesson. Notice the types of questions she uses and how she reinforces the use of correct vocabulary.

This next activity will take you through the six stages of the Data Handling cycle.



Activity 3

Take the following animal counters from the Maths Programme *Resource Kit*: three ducks, two chickens and one horse.

1. Consider this question: Are there more ducks or more chickens in the group?
2. Sort and collect data: Organise your animals into groups and then discuss the following with a partner:
 - ◆ Can you see if there are more ducks than chickens now?
 - ◆ How can you check?
3. Represent data: Turn to the grid on page 16. Place animals of the same kind one above the other in a column starting at the bottom of the grid.
4. Analyse and report on data: Look at your columns and discuss with a partner:
 - ◆ Are there more ducks or more chickens? How do you know?
 - ◆ Which column has more animals?
 - ◆ Which column has fewer animals?
 - ◆ Are there the same number of any kind of animal?

Refer to pages 184–187 of *Activity Guide: Term 1* and discuss how this activity is introduced to learners. Refer to pages 212–219 of the *Concept Guide* to read more about Data Handling. Notice the appropriate questions and vocabulary related to the teaching and learning of Data Handling in Grade R.



Ividiyo 1

Bukelani ividiyo yeklasi isenza kwaye ihlalutya ipikthografu (igrafu yemifanekiso) ezakumela imozulu.

Xoxani ngendlela utitshala alichaza ngayo inyathelo ngalinye lesifundo. Qaphelani iindidi zemibuzo ayisebenzisayo nendlela akubethelela ngayo ukusetyenziswa kwesigama esichanileyo.

Lo msebenzi uzakuwenza kula manyathelo mathandathu omjikelo woLwazi oluQokelelwayo.



Umsebenzi 3

Thatha ezi zixhobo zokubala ezizizilwanyana kwi*Kiti yeziXhobo* yeNkqubo yeMathematika: amadada amathathu, iinkukhu ezimbini kunye nehashe elinye.

1. Jonga lo mbuzo: Ingaba kukho amadada angaphezulu okanye iinkukhu ezingaphezulu kwiqela elo?
2. Hlela uze uqokelele ulwazi: Beka izilwanyana zakho ngokwamaqela uze uxoxe nogxa wakho ngoku kulandelayo:
 - ◆ Uyabona ukuba kukho amadada amaninzi kuneenkukhu ngoku?
 - ◆ Ungakuqinisekisa njani oko?
3. Bonisa ulwazi: Tyhila kwigridi ekwiphepha 17. Beka izilwanyana eziluhlobo olufanayo esinye phezu kwesinye kwikhohlamu uqale emazantsi egridi.
4. Hlalutya uze unike ingxelo yedatha: Jonga kwiikhohlamu zakho uze uxoxe nogxa wakho:
 - ◆ Ingaba kukho amadada amaninzi okanye iinkukhu ezininzi? Wazi njani?
 - ◆ Yeyiphi ikhohlamu enezilwanyana ezininzi?
 - ◆ Yeyiphi ikhohlamu enezilwanyana ezimbalwa?
 - ◆ Ingaba kukho inani elilinganayo lwalo naluphi na uhlobo lwesilwanyana?

Jonga kumaphepha 184–187 *esiKhokelo semiSebenzi: Ikota 1* uze uxoxe ngendlela umsebenzi owaziswa ngayo kubafundi. Jonga kumaphepha 212–219 *esiKhokelo seeKhonsepthi* ukuze ufunde ngoLwazi oluQokelelwayo. Qaphela imibuzo nesigama esifanelekileyo esiphathelele ekufundiseni nasekufundeni ngoLwazi oluQokelelwayo kwiBanga R.

Session 2: Numbers, Operations and Relationships

1 hour

The focus of Term 2 Weeks 1 and 2 is Numbers, Operations and Relationships.

Term 2 Content overview: Numbers, Operations and Relationships



Activity 4

Refer to the Numbers, Operations and Relationships Content Area on pages 114–123 of the *Concept Guide*.

1. What concepts are covered in Term 2?

2. What does the Maths Programme add to the content of CAPS?

Activity Guide: Term 2

Activity Guide: Term 2 provides teachers with weekly suggestions for teaching and learning Mathematics.

Look at the Contents page and pages 6–17 of *Activity Guide: Term 2*. You will see that the 'Introduction' in Term 2 is the same as in Term 1.

In Activity 4 you identified the number concepts to be covered in Term 2. In Activity 5 you will make links between these concepts and the New knowledge for the first two weeks of *Activity Guide: Term 2*.

Ishoni 2: Amanani, iiOpareyshini noLwalamano

1 iyure

Okuza kugxilwa kuko kwiKota 2 Iiveki 1 no2 ngaManani, iiOpareyshini noLwalamano.

Amagqabantshintshi ngomxholo weKota 2: Amanani, iiOpareyshini noLwalamano



Umsebenzi 4

Jonga kwiNkalo yoMxholo waManani, iiOpareyshini noLwalamano kumaphepha 114–123 esiKhokelo seeKhonsepthi.

1. Zeziphi iikhonsepthi ezenziwayo kwiKota 2?

2. Yintoni eyongezwa yiNkqubo yeMathematika kumxholo kaCAPS?

IsiKhokelo semiSebenzi: Ikota 2

IsiKhokelo semiSebenzi: Ikota 2 sibonelela ootitshala ngeengebiso zeveki zokufundisa nokufunda iMathematika.

Jonga kwiphepha leSiqulatho nakumaphepha 6–17 esiKhokelo semiSebenzi: Ikota 2. Uzakubona ukuba 'Intshayelelo' kwiKota 2 iyafana neyeKota 1.

KuMsebenzi 4 walathe iingqikelelomanani ezizakwenziwa kwiKota 2. KuMsebenzi 4 uzakwenza uqhagamshelwano phakathi kwezi khonsepthi kunye noLwazi Olutsha kwiiveki ezimbini zokuqala zesiKhokelo semiSebenzi: Ikota 2.



Activity 5

Refer to 'Content overview: Term 2' (*Activity Guide: Term 2*, pages 18–21).

1. What new knowledge is introduced to learners in the Numbers, Operations and Relationships Content Area?

2. Go back to Activity 4 and highlight or circle the concepts covered.

Understanding numbers

In Term 1, the numbers 1, 2 and 3 were taught. You used the same routine for each number taught, adding one more to the number each time a new number was introduced. In Term 2 Week 1, the focus is on the concept of number again. Learners are introduced to the number 4, using the same routine as for numbers 1, 2 and 3.



Activity 6

Refer to the whole class activities that focus on number 4 in Week 1: *Activity Guide: Term 2*: page 24 (Day 1 #4), page 26 (Day 2 #5), page 28 (Day 3 #4), page 30 (Day 4 #4 and Day 5 #4).

1. Discuss how the number '4' is introduced.

2. Think about your own classroom practice and how this routine has been working so far. Complete the table.



Umsebenzi 5

Jonga 'kuMagqabantshintshi ngomXholo: Ikota 2' (*IsiKhokelo semiSebenzi: Ikota 2, amaphepha 18–21*).

1. Loluphi ulwazi olutsha olwaziswayo kwiNkalo yoMxholo yaManani, iiOpareyshini noLwalamano?

2. Buyela kuMsebenzi 4 uze uhayilayithe okanye ufake kwisangqa iikhonsepthi ezenziwayo.

Ukuqonda amanani

KwiKota 1, amanani 1, 2 no3 afundisiwe, usebenzise indlela efanayo kwinani ngalinye elifundisiweyo, usongeza unye kwinani qho kusaziswa ngenani elitsha. KwiKota 2 iVeki 1, kugxilwe kwinqikelelomanani kwakhona. Abafundi baziswa kwinani 4, kusetyenziswa indlela efanayo neyamanani 1, 2 no3.



Umsebenzi 6

Jonga kwimisebenzi yeklasi yonke egxile kwinani 4 kwiVeki 1: *IsiKhokelo semiSebenzi: Ikota 2: iphepha 25 (Usuku 1 #4), iphepha 27 (Usuku 2 #5), iphepha 29 (Usuku 3 #4), iphepha 31 (uSuku 4 #4 noSuku 5 #4)*.

1. Xoxa ngendlela elaziswa ngayo inani '4'.

2. Cinga ngendlela oqhuba ngayo kwiklasi yakho kunye nendlela ibikusebenzela ngayo le ndlela ukuza kuthi ga ngoku. Gcwalisa le theybhile.

Activity	What worked well?	What did not work so well?
Telling the story and building up the number frieze		
Dramatising the story		
Collecting objects for the maths area		
Matching objects to pictures, dot cards, number symbols and number words		
Using the <i>Poster Book</i>		

Umsebenzi	Yintoni esebenze kakuhle?	Yintoni engasebenzanga kakuhle?
Ukubalisa ibali kwanokwakha ifrizi yamanani		
Ukulinganisa ibali		
Ukuqokelela izinto zendawo yemathematika		
Ukutshatisha izinto namakhadi emifanekiso, anamachokoza, anesimboli zamanani kunye nanamanani angamagama		
Ukusebenzisa <i>iNcwadi yeePowusta</i>		

Maths vocabulary

Part of learning new concepts involves new language. Learners need the vocabulary to talk and think about maths concepts (**interaction principle**). You can encourage learners to use maths vocabulary by using it yourself when you speak to them about maths concepts and by rephrasing what they say into maths language.

Money

In Term 2 Week 2 learners are introduced to money. Learners in Grade R are developing an awareness about the features of money and they need opportunities to explore what real South African coins look like.

Activity 7 focuses on helping learners to recognise the similarities and differences between coins: their size, shape and the animals on the coins.



Activity 7



1. What questions could you ask learners to help them recognise the different features of these coins?

2. What new vocabulary will you introduce?

Learners first need to be able to identify and name coins before they are ready to understand their value.

Isigama semathematika

Inxenye yokufunda iikhonsepthi ezintsha iquka ulwimi olutsha. Abafundi badinga isigama ukuze bathethe kwaye bacinge ngeekhonsepthi zemathematika (**umgaqo wentsebenziswano**). Ungabakhuthaza abafundi ukuba basebenzise isigama semathematika ngokuba wena usisebenzise xa uthetha nabafundi ngeekhonsepthi zemathematika kwanokuphinda oko bakuthethayo usebenzisa ulwimi lwemathematika.

Imali

KwiKota 2 iVeki 2 abafundi baziswa kwimali. Abafundi kwiBanga R bandisa ingqinqo ngeempawu zemali kwaye badinga amathuba okuhlola ukuba iingqekembe zemali yaseMzantsi Afrika zijongeka njani na.

Umsebenzi 7 ugxile ekuncedeni abafundi ukuba bakwazi ukubona ukufana nokwahluka phakathi kweengqekembe zemali: ubungakanani bazo, ukumila kunye nezilwanyana ezikwiingqekembe zemali.



Umsebenzi 7



1. Yeyiphi imibuzo osenokuyibuza abafundi ukubancedisa ukuba bakwazi ukubona iimpawu ezahlukileyo kwezi ngqekembe zemali?

2. Sesiphi isigama esitsha ozakuthi usazise?

Abafundi badinga ukuqale bakwazi ukwalatha baze banike amagama eengqekembe zemali ngaphambi kokuba babe bakulungele ukuqonda ixabiso lazo.

Learners need to be exposed to the purpose of money. Teachers can help learners understand that money is used to buy things like food and clothes and to do different things like travelling by taxi or bus. Expose learners to money and its purpose by setting up a play-shop with pretend coins and notes and items that can be bought.

Refer to the whole class activities and small group activities that focus on money on pages 40–51 of *Activity Guide: Term 2*. In your group, complete Activity 8.



Activity 8

1. What money concepts are being taught and learnt in the whole class activities?

2. How are learners encouraged to explore the purpose of money?

3. How does the teacher consolidate this new knowledge in the small group activities?

Abafundi kufuneka baziswe ngomsebenzi wemali. Ootitshala bangancedisa abafundi ukuba bayiqonde into yokuba imali isetyenziselwa ukuthenga ukutya nempahla kunye nokwenza izinto ezahlukileyo njengokuhamba ngeteksi okanye ngebhasi. Bazise ngemali nomsebenzi wayo ngokuthi wenze ivenkile yokudlala neengqekembe namaphepha emali yokudlala kunye nezinto ezithengiswayo nezo ezizezokudlala.

Jonga kwimisebenzi yeklassi yonke nemisebenzi yamaqela amancinci egxile kwimali kumaphepha 40–51 *esiKhokelo semiSebenzi: Ikota 2*. Kumaqela enu, yenzani Umsebenzi 8.



Umsebenzi 8

1. Zeziphi iikhonsepthi zemali ezifundiswayo nezifundwayo kwimisebenzi yeklassi yonke?

2. Bakhuthazwa njani abafundi ukuba baphonononge umsebenzi wemali?

3. Utitshala ukuyondelelanisa njani oku nolwazi olutsha kwimisebenzi yamaqela amancinci?

Session 3: Space and Shape (Geometry)

1 hour

The focus of Term 2 Week 3 is Space and Shape (Geometry).

Term 2 Content overview: Space and Shape (Geometry)

Refer to pages 126–131 of the *Concept Guide*.



Activity 9

1. What Space and Shape (Geometry) concepts are covered in Term 2?

2. What does the Maths Programme add to the content of CAPS?

Triangles

In Term 2 Week 3, learners continue their exploration of two-dimensional shapes as they describe, sort and compare them. In this session you will deepen your understanding of the properties of triangles.

Refer to Day 2 #4 on page 58 of *Activity Guide: Term 2* and then complete Activity 10 in your group.



Activity 10

'How is the triangle different to other shapes in the classroom?' What answers would you expect from your learners?

Iseshoni 3: IsiThuba neMilo (iJiyometri)

1 iyure

Ekugxilwe kuko kwiKota 2 Iveki 3 sisiThuba neMilo (iJiyometri).

Amagqabantshintshi ngomxholo weKota 2: IsiThuba neMilo (iJiyometri)

Jonga kumaphepha 126–131 esiKhokelo seeKhonsepthi.



Umsebenzi 9

1. Zeziphi iikhonsepthi zesiThuba neMilo (iJiyometri) ezenziwayo kwiKota 2?

2. Yintoni eyongezwa yiNkqubo yeMathematika kumxholo kaCAPS?

Oonxantathu

KwiKota 2 iVeki 3, abafundi baqhubeka nokuhlola kwabo iimilo ezineenkangeleko ezimbini njengoko bechaza, behlela kwaye bezithelekisa. Kule seshoni uzakwandisa ingqiqo yakho ngeempawu zoonxantathu.

Jonga kuSuku 2 #4 kwiphepha 59 lesiKhokelo semiSebenzi: Ikota 2 uze wenze Umsebenzi 10 kwiqela lakho.



Umsebenzi 10

'Unxantathu wahluke njani kwezinye iimilo eziseklasini?' Zeziphi iimpendulo onokuzilindela kubafundi bakho?

When learners are given opportunities to sort and group different shapes, they need to focus on the properties of the shapes to make their decisions, e.g. the number of sides, whether the sides are straight or curved and the number of corners.

Stories are a great way to introduce shape concepts to learners. Listen to the story, *They pulled and they pulled*, from Week 3 (*Activity Guide: Term 2*, pages 62 and 198) as told by your facilitator and then complete Activity 11 in your group.



Activity 11

1. What questions could you ask learners to help them learn more about the properties of triangles?

2. Are most of these questions open-ended or closed questions?

Note: Use *Activity Guide: Term 1* and *Term 2* to help you plan for teaching these weeks. The ideas and activity suggestions are a guide and resource. Set up the maths area with the content focus for each week.

Xa abafundi benikwe amathuba okuhlela nokubeka iimilo ezahlukileyo ngokwamaqela, kufuneka bagxile kwiimpawu zeemilo ukuze bathathe izigqibo zabo, umz. inani lamacala, nokuba amacala angqalile okanye anegophe kunye nenani leekona.

Amabali ayindlela encomekayo yokwazisa abafundi kwiikhonsepthe zemilo. Mamelani ibali, *Batsala batsala*, leVeki 3 (*IsiKhokelo semiSebenzi: Ikota 2*, amaphepha 63 no199) njengoko libaliswa ngumbhexeshi wenu nandule ukwenza Umsebenzi 11 kwiqela lenu.



Umsebenzi 11

1. Yeyiphi imibuzo onokuyibuza abafundi ukubanceda bafunde banzi ngeempawu zoonxantathu?

2. Ingaba uninzi lwale mibuzo yimibuzo evulekileyo okanye evalekileyo?

Qaphela: Sebenzisa *IsiKhokelo semiSebenzi: Ikota 1 neKota 2* ukukuncedisa ucwangcisele ukufundisa kwezi veki. Izimvo neengcebiso zomsebenzi sisikhokelo nezixhobo. Lungisa indawo yemathematika enomxholo ekugxilwe kuwo iveki nganye.

Session 4: Planning for teaching

2 hours



Video 2

Watch the video of the teacher-guided activity. Observe how the teacher uses questions to prompt and guide the learners during the activity.

Discuss how you have managed your teacher-guided activities in Term 1. Have you faced any challenges? If so, what strategies have you used to resolve them?

Terms 1 and 2 Content Summary (Term 1 (Week 10) and Term 2 (Weeks 1–3))

Appendix A: Term 1 and 2 Weekly Content Summary: Term 1 (Week 10) and Term 2 (Weeks 1–3) outlines the main Content Area Focus for each week, the topics to be covered, the new knowledge and practise focus for each week, and suggested activities for whole class, teacher-guided and independent group work for the week.



Activity 12

Look at Appendix A: Term 1 and 2 Weekly Content Summary: Term 1 (Week 10) and Term 2 (Weeks 1–3). Answer the questions.

Ishoni 4: Ukucwangcisa ukufundisa

2 iiyure



Ividiyo 2

Bukela le vidiyo yomsebenzi okhokelwa ngutitshala. Qwalasela indlela utitshala ayisebenzisa ngayo imibuzo ukukhuthaza nokukhokela abafundi ngexesha lomsebenzi.

Xoxa ngendlela oyilawule ngayo imisebenzi ekhokelwa ngutitshala kwiKota 1.

Ingaba ibenemingeni? Ukuba kunjalo, zeziphi iindlela ozisebenzisileyo ekuyisombululeni?

IsiShwankathelo somXholo weKota 1 no2 (iKota 1 (Iveki 10) neKota 2 (Iiveki 1-3))

Isingeniso A: Ikota 1 no2 IsiShwankathelo somXholo weVeki: Ikota 1 (Iveki 10) neKota 2 (Iiveki 1-3) ichaza eyona Nkalo yoMxholo kuGxilwe kuyo kwiveki nganye, izihloko ezizakwenziwa, ulwazi olutsha kunye nokuziqhelisa okuza kugxilwa kuko kwiveki nganye, kwakunye nemisebenzi ecetyiswayo yeklasi yonke, ekhokelwa ngutitshala neyokuzisebenzela kwamaqela kwiveki leyo.



Umsebenzi 12

Jonga kwiSingeniso A: Ikota 1 no2 IsiShwankathelo soMxholo weVeki: Ikota 1 (Iveki 10) kunye neKota 2 (Iiveki 1-3). Uphendule imibuzo.

Questions	Week 10 Term 1	Week 1 Term 2	Week 2 Term 2	Week 3 Term 2
What is the Content Area Focus for the week?				
What are the key concepts that learners will be learning?				
What new knowledge is introduced?				
What skills are being practised?				

Imibuzo	Iveki 10 Ikota 1	Iveki 1 Ikota 2	Iveki 2 Ikota 2	Iveki 3 Ikota 2
Ithini iNKalo yoMxholo ekuGxininiswa kuyo kule veke?				
Zithini iikhonsepthe ezingundoqo ezizakufundwa ngabafundi?				
Loluphi ulwazi olutsha oluzakwaziswa?				
Zeziphi izakhono ekuqheliswa ngazo?				

Activity Guide: Term 1: Week 10 and Activity Guide: Term 2: Weeks 1–3

Refer to Week 10 in *Activity Guide: Term 1* and Weeks 1, 2 and 3 in *Activity Guide: Term 2*. Complete Activity 13 in your group.



Activity 13

Find Week 10 in *Activity Guide: Term 1*. Answer the questions.

1. What is the Content Area Focus for the week?
2. What topics and new knowledge are taught in this week?
3. How does the 'Practise' content link to the previous week?
4. What do you need to get ready before teaching this week?
5. Read the whole class activities and small group activities.
6. Discuss in your small group how you will plan and organise your class for this week of teaching.
7. In your small group refer back to Week 10 in Appendix A. Match the whole class activities and small group activities in Week 10 of *Activity Guide: Term 1* to the Weekly Content Summary in Appendix A.



Activity 14

Find Weeks 1, 2 and 3 in *Activity Guide: Term 2*. Answer the questions.

1. What is the Content Area Focus for each week?
2. What topics and new knowledge are taught in each week?
3. How does the 'Practise' content link to the previous week?
4. What do you need to get ready before teaching each week?
5. Read the whole class activities and small group activities.
6. Discuss in your small group how you will plan and organise your class for these three weeks of teaching.
7. In your small group refer back to Weeks 1–3 in Appendix A. Match the whole class activities and small group activities in Weeks 1–3 of *Activity Guide: Term 2* to the Weekly Content Summary in Appendix A.



Remember that the eye in the shaded block at the end of the teacher-guided activities (**Check that learners are able to**) reminds us that we need to observe the learners while they are busy, and we need to listen carefully while they are talking to us and to their peers.

Make a mental note of each learner and once the learners have left for the day, write down your observations in a dedicated observation book that has space for each learner's notes.

IsiKhokelo semiSebenzi: iKota 1: Iveki 10 nesiKhokelo semiSebenzi: iKota 2: Iveki 1–3

Jonga kwiVeki 10 kwisiKhokelo semiSebenzi: Ikota 1 neeVeki 1, 2 no3 kwisiKhokelo semiSebenzi: iKota 2. Yenza Umsebenzi 13 kwiqela lakho.



Umsebenzi 13

Fumana iVeki 10 kwisiKhokelo semiSebenzi: Ikota 1. Uphendule le mibuzo.

1. Yintoni iNkalo yomXholo ekugxilwe kuyo kule veiki?
2. Zeziphi izihloko nolwazi olutsha olufundiswayo kule veiki?
3. Umxholo ka'Ziqhelise' unxibelelana njani noweveki egqithileyo?
4. Yintoni oyidingayo ukuzilungiselela ngaphambi kokufundisa kule veiki?
5. Funda imisebenzi yeklasi yonke nemisebenzi yamaqela amancinci.
6. Xoxani kumaqela enu amancinci ngendlela eniza kuyicwagcisa nize niyilungise ngayo iklasi yenu ngokufundisa kwale veiki.
7. Kwiqela lenu elincinci buyelani kuMsebenzi 10 kwiSingeniso A. Tshatisa imisebenzi yeklasi yonke nemisebenzi yamaqela amancinci kuMsebenzi 10 wesiKhokelo semiSebenzi: Ikota 1 kwiSishwankathelo somXholo weVeki kwiSingeniso A.



Umsebenzi 14

Fumana iiVeki 1, 2 no 3 kwisiKhokelo semiSebenzi: Ikota 2. Phendula imibuzo.

1. Yintoni iNkalo yomXholo ekugxilwe kuwo yeveki nganye?
2. Zeziphi izihloko nolwazi olutsha olufundiswayo kwiveki nganye?
3. Umxholo ka'Ziqhelise' unxibelelana njani noweveki engqithileyo?
4. Yintoni oyidingayo ukuzilungiselela ngaphambi kokufundisa kwiveki nganye?
5. Funda imisebenzi yeklasi yonke nemisebenzi yamaqela amancinci.
6. Xoxani kumaqela enu amancinci ngendlela eniza kuyicwagcisa nize niyilungise ngayo iklasi yenu kwezi veiki zintathu zokufundisa.
7. Kwiqela lenu elincinci buyelani kwiiVeki 1–3 kwiSingeniso A. Tshatisani imisebenzi yeklasi yonke nemisebenzi yamaqela amancinci kwiiVeki 1–3 zesiKhokelo semiSebenzi: Ikota 1 kwisiShwankathelo somXholo weVeki kwiSingeniso A.



Khumbula ukuba iliso kwibhloko ekhuhliweyo ekupheleni kwemisebenzi ekhokelwa ngutitshala (**Qwalasela ukuba abafundi bayakwazi uku-**) lisikhumbuza ukuba kufuneka sibaqwalasele abafundi xa bexakekile, kwaye kufuneka siphulaphule ngononophelo xa bethetha nathi okanye bethetha noontanga babo.

Gcina engqondweni oko ukuqwalaseleyo ngomfundi ngamnye uze uthi bakuhamba abafundi ekupheleni kosuku, ubhale phantsi oko ukuqwalaseleyo kwincwadi elungiselelwe uqwalaselo enendawo yokubhala amanqaku ngomfundi ngamnye.

Closing activities



Activity 15

Lessons learnt: Think about what you learnt during the workshop and complete the table.

Things I am already doing that work well	New ideas that I would like to try

Imisebenzi yokuqukumbela



Umsebenzi 15

Izifundo ezifundiweyo: Cinga malunga noko ukufundileyo ngexesha lendibano yocweyo uze ugcalise le theybhile.

Izinto esele ndizenza ezisebenza kakuhle	Iimbono ezintsha endingathanda ukuzizama



Take back to school task

1. Continue with your observations to build up a complete picture of each learner.
2. During the teacher-guided activities complete the *Check that learners are able to* section (after the teacher-guided activity in each week) for each learner being observed.
3. Make a copy of the Exemplar Record of Continuous Assessments in *Activity Guide: Term 1* (pages 190–193).
4. Use the information collected in your observation notes to date and record each learner's development. (Remember that patterns of development need to be recorded over time.)
5. Use *Activity Guide: Term 1* (Week 10) and *Activity Guide: Term 2* (Weeks 1–3) to plan and implement Term 1 Week 10 and Term 2 Weeks 1–3 of the Maths Programme, including creating a maths area with a focus on the concept for each week.
6. Write an evaluation of what worked well, what did not work so well and what you could do differently to improve teaching and learning. Bring your evaluation report to the next workshop.

Evaluation

Complete the Evaluation Form.



Umsebenzi ekubuyelwa nawo esikolweni

1. Qhubeka nengqwalasela yakho ukuzoba umfanekiso opholeleyo womfundi ngamnye.
2. Ngexesha lemisebenzi ekhokelwa ngutitshala gcwalisa iseshoni ka*Qwalasela ukuba abafundi bayakwazi uku-* (emva komsebenzi okhokelwa ngutitshala kwiveki nganye) yomfundi ngamnye onikwa ingqwalasela.
3. Yenza ikopi yoMzekelo werekhodi yohlolo oluqhubekayo kwisi*Khokelo semiSebenzi: Ikota 1* (amaphepha 190–193).
4. Sebenzisa ulwazi oluqokelelweyo kumanqaku akho engqwalasela ukuza kutsho ngoku uze urekhode ukukhula komfundi ngamnye. (Khumbula ukuba iipateni zokukhula zidinga ukuba zirekhodwe ekuhambeni kwexesha.)
5. Sebenzisa *isiKhokelo semiSebenzi: Ikota 1* (Iveki 10) nesi*Khokelo semiSebenzi: Ikota 2* (Iiveki 1–3) ukulungiselela nokuphumeza iNkqubo yeMathematika yeKota 1 iVeki 10 neKota 2 iiVeki 1–3, kuquka nokwenza indawo yemathematika egxile kwikhonsepthe yeveki nganye.
6. Bhala ingxelo ngezinto ezisebenze kakuhle, ezo zingasebenzanga kakuhle kunye noko ninokukwenza ngendlela eyahlukileyo ukuphucula ukufundisa nokufunda. Yiza nengxelo yakho kwindibano yocweyo elandelayo.

Uhlolo

Gcwalisa iFomu yoHlolo.

APPENDIX A: TERM 1 AND 2 WEEKLY CONTENT SUMMARY: TERM 1 (WEEK 10) AND TERM 2 (WEEKS 1–3)

Term 1: Activity Plan

Week 10				
CONTENT AREA: DATA HANDLING				
TOPIC: Collect and sort objects, represent sorted collections of objects, discuss and report on sorted collections of objects				
INTRODUCE NEW KNOWLEDGE: Collect, sort and represent collections of objects (weather); discuss and report on sorted collections; create own pattern				
PRACTISE: Oral counting 1–10, counting backwards from 5, sequencing numbers 1–3, counting objects 1–5, number concept 1–3, copy patterns, problem-solving techniques				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Sorting and classifying, waste items.	Oral counting. Touch and count – one-to-one correspondenc Sorting and classifying activities – animals. Representing and interpreting data.	Activity 1	Sorting waste.
Day 2	Data collection, sorting clothing items.		Activity 2	Sorting colours.
Day 3	Sorting and classifying, group game.		Activity 3	Sorting tray, natural items.
Day 4	Use data collected from the weather discussions, represent and analyse how many days were sunny, raining etc.		Activity 4	Copy pattern using concrete objects and then create own pattern.
Day 5	Weather data collection, representing and analysing.			

Term 2: Activity Plan

Week 1				
CONTENT AREA: NUMBERS, OPERATIONS AND RELATIONSHIPS				
TOPIC: Recognise number symbols and number words, describe, order and compare numbers				
INTRODUCE NEW KNOWLEDGE: More than/fewer than/equal to, introduce number 4				
PRACTISE: Oral counting 1–10, sequencing numbers 1–3, counting objects 1–5, reinforce number concept 1–3				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Introduce 4 (giraffes).	Counting objects 1–5. Matching objects to number dot, symbol and word cards 1–4. Arrange counters to match dot cards. Practise more than, fewer than, equal. Write number 4 (as with numbers 1 to 3).	Activity 1	Playdough mat 4 (as for previous numbers).
Day 2	Introduce more than/less than/equal to, maths table.		Activity 2	Number ordering puzzle activity to 4 (forms a picture).
Day 3	Reinforce 1–4, dot cards and ordering.		Activity 3	Matching number symbols, words and concrete objects to 4.
Day 4	Reinforce 1–4, Unifix blocks and hoops.		Activity 4	Number puzzles (no number words).
Day 5	Reinforce number 4, Poster 6.			

ISINGENISO A: IKOTA 1 NO2 ISISHWANKATHELO SOMXHOLO WEVEKI NEVEKI: IKOTA 1 (IVEKI 10) NEKOTA 2 (IIVEKI 1-3)

Ikota 1: Isicwangciso somSebenzi

Iveki 10				
INKALO YOMXHOLO: ULWAZI OLUQOKELELWEYO				
ISIHLOKO: Qokelela uze uhlele izinto, bonisa ingqokelela ehleliweyo yezinto, xoxa uze unike ingxelo yengqokelela ehleliweyo yezinto				
YAZISA ULWAZI OLUTSHA: Qokelela, hlela uze ubonise iingqokelela zezinto (imozulu); xoxa uze unike ingxelo yeengqokelela ezihleliweyo; yenza ezakho iipateni				
ZIQHELISE: Ukubala ngomlomo 1-10, ukubala ubuyela umva ukusulka ku5, ukulandelelanisa amanani 1-3, ukubala izinto 1-5, iingqikelelo-manani 1-3, khuphela iipateni, iindlela zokusombulula iingxaki				
Imisebenzi yeklassi yonke		Umsebenzi okhokelwa ngutitshala	Imisebenzi yesitishi sokusebenzela	
Usuku 1	Ukuhlela nokwahlula, izinto ezilahliweyo.	Ukubala ngomlomo. Chukumisa uze ubale – ukuhambelana kwenye nanye. Imisebenzi yokuhlela nokwahlula – izilwanyana. Ukubonisa nokutolika ulwazi.	Umsebenzi 1	Ukuhlela izinto ezilahliweyo.
Usuku 2	Ukuqokelela ulwazi, ukuhlela impahla enxitywayo.		Umsebenzi 2	Ukuhlela imibala.
Usuku 3	Ukuhlela nokwahlula, umdlalo weqela.		Umsebenzi 3	Itreyi yokuhlela, izinto zendalo.
Usuku 4	Ukusebenzisa ulwazi oluqokelelwe kwiingxoxo ngemozulu, ukubonisa nokuhlalutya ukuba zingaphi iintsuku ezinelanga, ezinethayo, njlnjl.		Umsebenzi 4	Khuphela ipateni usebenzisa izinto eziphathekayo uze wenze eyakho ipateni.
Usuku 5	Ukuqokelelwa kolwazi lwemozulu, ukubonisa nokuhlalutya.			

Ikota 2: Isicwangciso somSebenzi

Iveki 1				
INKALO YOMXHOLO: AMANANI, IOPAREYSHINI NOLWALAMANO				
ISIHLOKO: Nakana iisimboli zamanani kunye namanani angamagama, chaza, landelelanisa uze uthelekise amanani				
YAZISA ULWAZI OLUTSHA: Ngaphezulu kune-/ngaphantsi kune-/lingana ne-, yazisa inani 4				
ZIQHELISE: Ukubala ngomlomo 1-10, ukulandelelanisa amanani 1-3, ukubala izinto 1-5, bethelela ingqikelelo-manani 1-3				
Imisebenzi yeklassi yonke		Umsebenzi okhokelwa ngutitshala	Imisebenzi yesitishi sokusebenzela	
Usuku 1	Yazisa u4 (iindulamthi).	Ukubala izinto 1-5. Ukutshatisa izinto namakhadi anamachokoza, aneesimboli namakhadi amagama 1-4. Dwelisa izixhobo zokubala ukuzitshatisa namakhadi anamachokoza. Ziqhelanise ungaphezulu kune-, ngaphantsi kune-, lingana. Bhala inani u4 (njengakumanani 1 ukuya ku3).	Umsebenzi 1	Imethi yentlama yokudlala 4 (njengakumanani agqithileyo).
Usuku 2	Yazisa ungaphezulu kune-/ngaphantsi kune-/ lingane ne-, itafile yemathematika.		Umsebenzi 2	Umsebenzi wokulandelelanisa iphazili ka 4 (yenza umfanekiso).
Usuku 3	Bethelela u1-4, amakhadi anamachokoza nolandelelaniso.		Umsebenzi 3	Ukutshatisa iisimboli zamanani, amagama kunye nezinto eziphathekayo no4.
Usuku 4	Bethelela u1-4, iibhloko ze <i>Unifix</i> neehuphu.		Umsebenzi 4	Iiphazili zenani (kungabikho magama amanani).
Usuku 5	Bethelela inani 4, iPowusta 6.			

Week 2				
CONTENT AREA: NUMBERS, OPERATIONS AND RELATIONSHIPS				
TOPIC: Money: develop an awareness of South African coins				
INTRODUCE NEW KNOWLEDGE: South African coins, ordinal numbers first to fourth, making equal groups the same to 4, counting objects 1–6				
PRACTISE: Oral counting 1–10 and 5–1, sequencing numbers 1–4, reinforce number concept 1–4, biggest to smallest/smallest to biggest				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Introduce South African coins (cents and rands), Poster 7.	Number concept 1–4. Estimation. Shake and break with 4. South African coins – match coins to ‘goods in shop’. Use cut-out coins; sorting, ordering, matching. Make equal groups to 4 – using counters.	Activity 1	Make own coin (give a circle shape).
Day 2	Maths table – shopping, ordinal numbers first to fourth.		Activity 2	Number caterpillar – sequencing numbers 1–4.
Day 3	Matching number/dot cards and number words.		Activity 3	Draw or paste objects to match numbers 1–4.
Day 4	Ordering number 1–4, shopping.		Activity 4	Posting activity using number and colour 1–4.
Day 5	Problem solving up to 4 (Poster 7).			

Week 3				
CONTENT AREA: SPACE AND SHAPE (GEOMETRY)				
TOPIC: Position, orientation and views; describes sorts and compares 2-D shapes				
INTRODUCE NEW KNOWLEDGE: Position: underneath, oral counting 1–15, counting objects 1–7, orientation and views				
PRACTISE: Oral counting 1–10 and 5–1; sequencing numbers 1–4; reinforce number concept 1–4; count backwards 5–1; shapes: circle, square, triangle; position: in front of, behind, on top, between, next to; direction: forwards, backwards				
Whole class activities		Teacher-guided activity	Workstation activities	
Day 1	Positions, shape game.	Counting. Use shapes to show correct number (1–4). Position: next to, between, in front of, behind, on top, underneath. Direction: forwards, backwards.	Activity 1	Colour triangles.
Day 2	Reinforce the triangle.		Activity 2	Carrot activity (cut out triangles and add correct number of leaves).
Day 3	Position (next to, between, in front of, behind, on top, underneath).		Activity 3	Sorting tray – according to colour, shape or size (one attribute).
Day 4	Reinforce all the shapes done, shape story.		Activity 4	Building towers with construction blocks.
Day 5	Following direction: How do I get to ...? Poster 9. Orientation and views using a toy car.			

Iveki 2				
INKALO YOMXHOLO: AMANANI, IOPAREYSHINI NOLWALAMANO				
ISIHLOKO: Imali: khulisa ingqiqo ngeengqekembe zemali yaseMzantsi Afrika				
YAZISA ULWAZI OLUTSHA: Iingqekembe zemali yaseMzantsi Afrika, amanani olandelelwano elokuqala ukuya kwelesine, ukwenza amaqela alinganayo afana no4, ukubala izinto 1-6				
ZIQHELISE: Ukubala ngomlomo 1-10 no5-1, ukulandelelanisa amanani 1-4, ukubethelela ingqikelelo-manani 1-4, eyona inkulu ukuya kweyona incinci/eyona incinci ukuya kweyona inkulu				
Imisebenzi yeklasi yonke		Umsebenzi okhokelwa ngutitshala	Imisebenzi yesitishi sokusebenzela	
Usuku 1	Yazisa ngeengqekembe zemali yaseMzantsi Afrika (iisenti neerandi), iPowusta 7.	Ingqikelelo-manani 1-4. Uthekelelo. Hlukungela uchithe ngo4. Iingqekembe zemali yaseMzantsi Afrika – tshatisa iingqekembe nempahla esevenkileni'. Sebenzisa iingqekembe zemali ezisikiweyo zakhutshwa: ukuhlela, ukulandelelnaisa, ukutshatisa. Yenza amaqela alinganayo no4 – usebenzisa izixhobo zokubala.	Umsebenzi 1	Zenzele eyakho ingqekembe yemali (gqithisa imilo esisangqa).
Usuku 2	Itafile yemathematika – ukuthenga, amanani olandelelwano elokuqala ukuya kwelesine.		Umsebenzi 2	Umbungu wamanani – ukulandelelnaisa amanani 1-4.
Usuku 3	Ukutshatisa amanani/amakhadi anamachokoza kunye namanani angamagama.		Umsebenzi 3	Zoba okanye uncamathelise izinto ukutshatisa namanani 1-4.
Usuku 4	Ukulandelelanisa inani 1-4, ukuthenga.		Umsebenzi 4	Ukupowusta umsebenzi usebenzisa inani nombala 1-4.
Usuku 5	Ukusombulula iingxaki ukuya kuma ku4 (iPowusta 7).			

Iveki 3				
INKALO YOMXHOLO: ISITHUBA NEMILO (IJYOMETRI)				
ISIHLOKO: Indawo, indawobume neembonakalo; chaza, hlela uze uthelekise iimilo ezingu2-D				
YAZISA ULWAZI OLUTSHA: Indawo: ngaphantsi, ukubala ngomlomo 1-15, ukubala izinto 1-7, indawobume neembonakalo				
ZIQHELISE: Ukubala ngomlomo 1-10 no5-1; ukulandelelanisa amanani 1-4; ukubethelela ingqikelelo-manani 1-4; ukubala ubuya umva 5-1; iimilo: isangqa, isikwere, unxantathu; indawo: ngaphambi kwe-, ngasemva, ngaphezu, phakathi, ecaleni kwe-; isalathiso: phambili, emva				
Imisebenzi yeklasi yonke		Umsebenzi okhokelwa ngutitshala	Imisebenzi yesitishi sokusebenzela	
Usuku 1	Indawo, umdlalo weemilo.	Ukubala. Sebenzisa iimilo ukubonisa inani elichanekileyo (1-4). Indawo: ecaleni kwe-, phakathi, ngaphambi kwe-, ngasemva, ngaphezu, ngaphantsi. Isalathiso: phambili, emva.	Umsebenzi 1	Faka umbala koonxantathu.
Usuku 2	Bethelela unxantathu.		Umsebenzi 2	Umsebenzi womnqathe (sika oonxantathu uze wongeze inani elichanekileyo lamagqabi).
Usuku 3	Indawo (ecaleni kwe-, phakathi, ngaphambi kwe-, ngasemva, ngaphezu, ngaphantsi).		Umsebenzi 3	Itreyi yokuhlela – ngokombala, imilo okanye ubungakanani (iathribhyuthi enye).
Usuku 4	Bethelela kuzo zonke iimilo ezisele zenziwe, ibali leemilo.		Umsebenzi 4	Ukwakha iithawa kusetyenziswa iibhloko zokwakha.
Usuku 5	Ukulandela isalathiso: Ndifikelela njani e...? IPowusta 9. Indawobume neembonakalo kusetyenziswa imoto yokudlala.			

Workshop 4 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 yokuHlola yeNdibano yoCweyo 4

1. Ingaba indibano yocweyo ifikelele koko ubukulindele?

2. Ufunde ntoni kule ndibano yocweyo ekuncede kakhulu?

3. Ingaba ikhona into ongakhange uyithande okanye obenobunzima bokuyiqonda?

4. Uzakukusebenzisa njani oko ukufundileyo apha kwiklasi yakho yeBanga R?

5. Ingaba unazo iingcebiso zokuphucula nangakumbi iindibano zocweyo?
