

Grade R Mathematics
Improvement Programme

Activity Guide: Term 2



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.

This edition of the mathematics materials has benefitted from collegial engagement with Wordworks colleagues and has been improved by their alignment with the materials of the Language Improvement Programme. It has been enriched by the work of officials of the Gauteng Department of Education's Early Childhood Development and Foundation Phase Curriculum Sub-Directorates at District and Provincial level who have made valuable contributions to the content of the materials and engaged constructively to ensure alignment with provincial policies, practices and values.

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.
- ★ Colleagues from Wordworks, language technical partners on the Grade R Mathematics and Language Improvement Project, for collaborating on the materials development.
- ★ 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, and WCED officials.

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

Editing and proofreading: Ilse von Zeuner, Kathleen Sutton

Illustrations: Jiggs Snaddon-Wood

Typesetting: Jenny Wheeldon

Inside design: Magenta Media

Cover design: Jacqui Botha

Contents

Introduction	4
Content overview: Term 2	10
Week 1	12
Content Area Focus: Numbers, Operations and Relationships	
Week 2	20
Content Area Focus: Numbers, Operations and Relationships	
Week 3	28
Content Area Focus: Space and Shape (Geometry)	
Week 4	36
Content Area Focus: Space and Shape (Geometry)	
Week 5	45
Content Area Focus: Numbers, Operations and Relationships	
Week 6	53
Content Area Focus: Patterns, Functions and Algebra	
Week 7	61
Content Area Focus: Data Handling	
Week 8	70
Content Area Focus: Space and Shape (Geometry)	
Week 9	78
Content Area Focus: Measurement	
Week 10	87
Content Area Focus: Numbers, Operations and Relationships	
Assessment	96
Resources	98
Songs, rhymes and stories.....	98
Templates	104

Introduction

The Grade R Mathematics Improvement Programme (Grade R Maths) is based on a good knowledge of mathematics, an understanding of the progression in the Grade R curriculum, and a realisation that some teaching approaches are better suited to promote particular learning and outcomes.

The Grade R Maths *Activity Guide: Term 2* offers a structure for teaching maths in the second term of Grade R by:

- sequencing the content of each Mathematics Content Area across ten weeks
- providing progression and pacing within the five Content Areas
- focusing on one main Content Area per week (However, topics from other Content Areas may be introduced and practised during that week. Number-related learning and teaching takes place every day and is integrated into all the Content Areas.)
- suggesting activities for whole class, teacher-guided and independent group work.

Features of Activity Guide: Term 2

The following features form part of *Activity Guide: Term 2*:

- A content overview shows the new knowledge and practice focus per week.
- Term, week and Content Area Focus are clearly stated at the beginning of each week.
- Topics, New knowledge and Practise boxes show what will be covered in the week.
- New maths vocabulary to be taught is listed per week.

Topics	New knowledge	Practise
<ul style="list-style-type: none">• Recognise and identify number symbols and number words• Describe, compare and order numbers	<ul style="list-style-type: none">• More than, fewer than, equal to• Number 4	<ul style="list-style-type: none">• Oral counting 1–10 and 5–1• Counting objects 1–5• Sequencing numbers 1–3• Number concept 1–3
New maths vocabulary		
more than	fewer than	equal to

- A list is given of what you need to prepare for each week.
- Tip boxes give ideas and reminders.
- Integration boxes suggest how the maths can be reinforced in other subjects and daily activities during the Grade R daily programme.
- 'Check that learners are able to' boxes guide observation and continuous assessment.
- A continuous assessment page is based on the term's activities.
- Resources and templates are included at the back of the guide.

Grade R Maths in the daily programme

Routine is important and learners enjoy the repetition and feel secure when they know what to do and what is expected of them.

Planning is also important to ensure that the routine runs smoothly. Read the contents for the week and prepare all the materials you will need for each day in advance. Set out the materials for the day beforehand so that everything is ready in the morning.

Grade R Maths suggests a sequence of activities that are repeated daily over a five-day week.

Classroom organisation and activities that can be used to teach and reinforce maths concepts are suggested per week. These include:

Whole class activities per day

- Rhyme or song
- Oral counting
- Counting concrete objects
- Activities and questions linked to Content Area topics

At the end of the whole class activity, show the learners what they will be required to do at their workstations. All the materials they need should be set out so that they can begin working on the activities.



Transitions: moving between activities

Moving between the mat and the workstations is a great time to practise rhythmic counting and fun, creative ways to move, for example, slowly like tortoises, hopping like rabbits, quietly like mice, one by one with their name/picture symbol cards.

Small group activities

- There is one teacher-guided activity per day.
- There are four small group activities per day. These four independent activities (or side activities) should be set out at four **workstations** around the classroom – either at tables where the learners are seated or stand, or on the mat, or outside. The groups rotate to each **workstation** over the course of a week, depending on how the teacher has planned the activities. Remind learners to take turns, share materials and help each other while working.

Tidy-up time

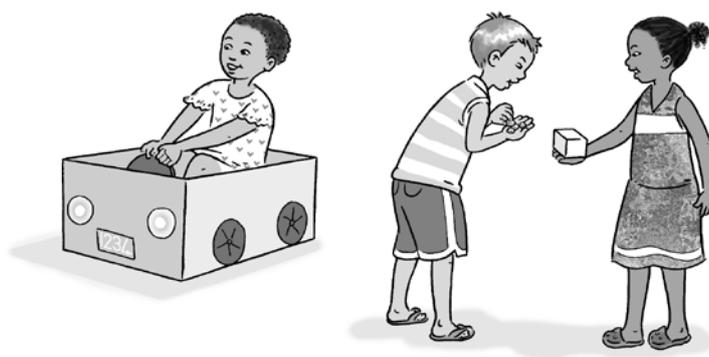
Learners need to know where materials belong. A shelf or table that is dedicated to maths equipment will help learners to be organised. Encourage learners to help each other during tidy-up time. Initially learners will need assistance and you will have to remind them where to put things, but they will soon get into the routine of putting things where they belong.

Choose group leaders and tidy-helpers each week. Give them specific tasks and responsibilities.

Free choice activities

Set out creative, interesting activities that learners can choose from once they have completed their workstation activity. These could include:

- blocks or other construction toys
- puzzles
- playdough
- books in the reading corner
- fantasy play, for example, shopping
- workbook or worksheet pages.



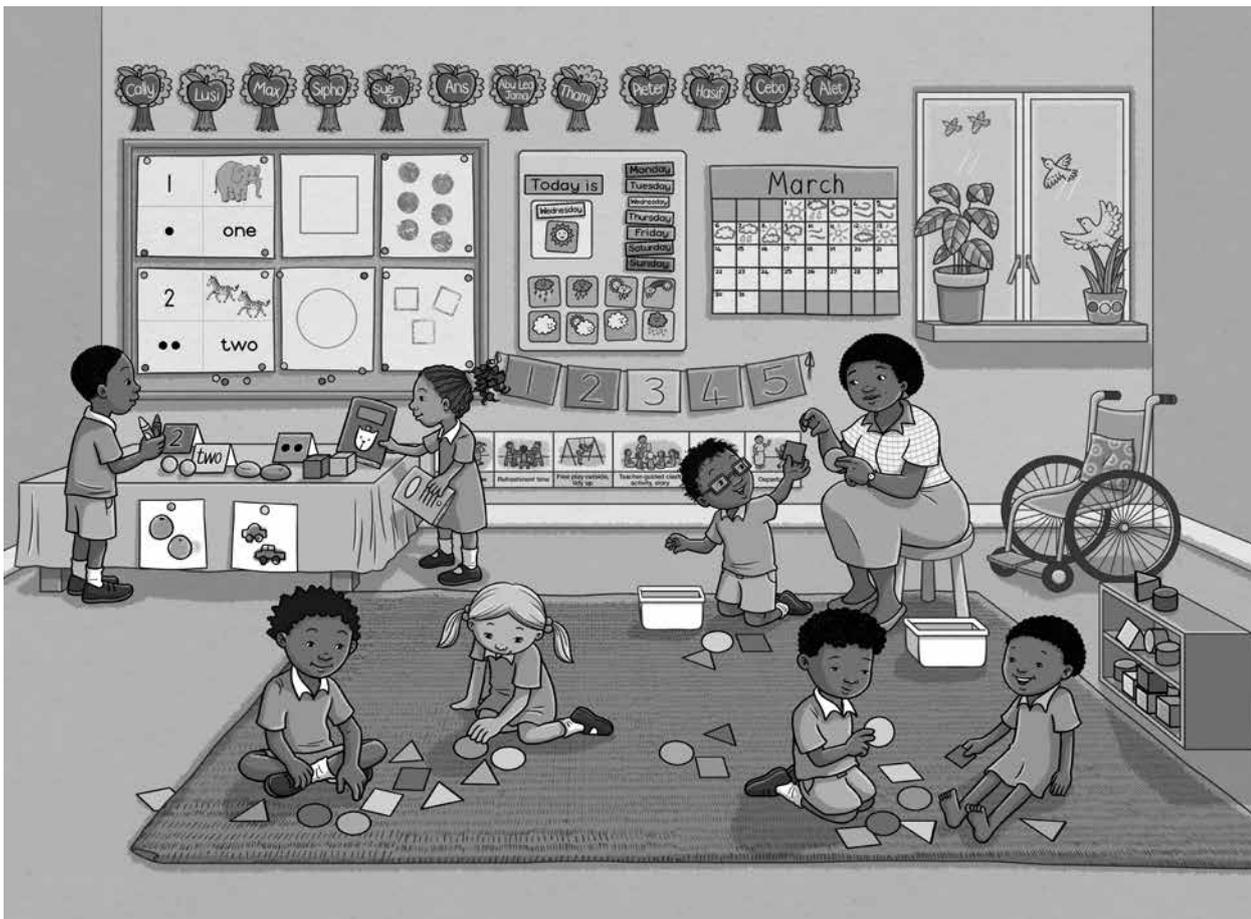
Assessment

Observation and continuous assessment during teacher-guided and whole class activities provides opportunities for insights into and a good overview of each learner's progress. This information is important for guiding further teaching and interventions for individual learners. The continuous assessment checklist on pages 96–97 of this guide is based on the content that has been taught in Term 2. This template can be used to record each learner's progress during the term.

Grade R Maths in the classroom

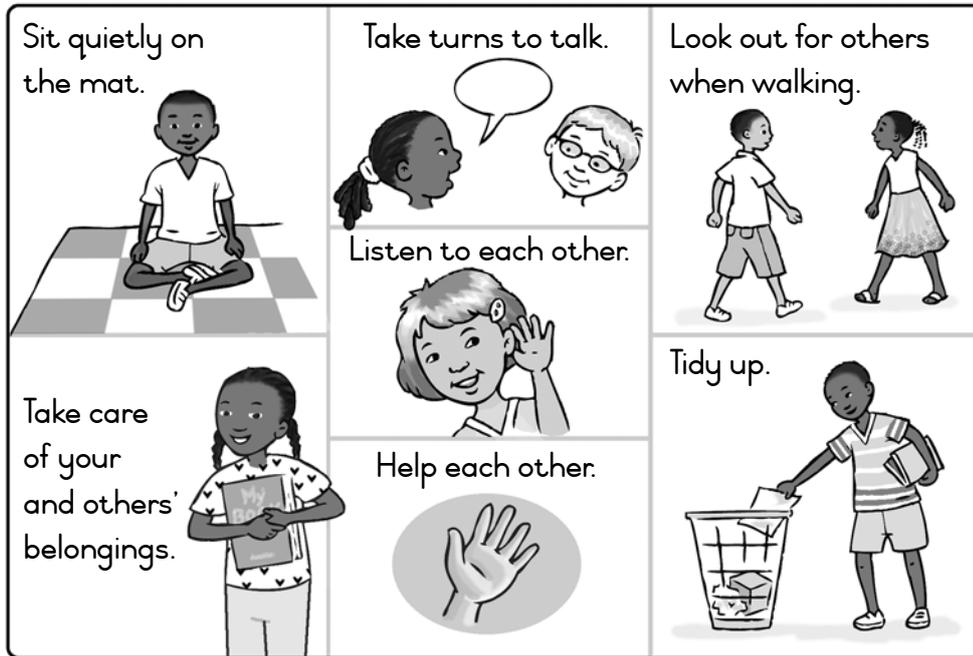
Set up an area in the classroom that is dedicated to maths and is near the mat. This is a shared space where learners can contribute to and engage with the topic they are learning about. An ideal maths area will include:

- small table against a wall
- number line made with string and pegs
- daily weather chart
- calendar for each month with blocks for each day
- chart with the names of the days of the week
- daily programme with pictures for the different activities
- learners' name cards and symbols arranged according to their group names
- helpers' symbols to move between learners' names according to each day of the week
- helpers' chart.



Make a 'classroom rules' poster with the learners. Display it where they can easily see it. There should be no more than six or seven rules.

Our classroom rules

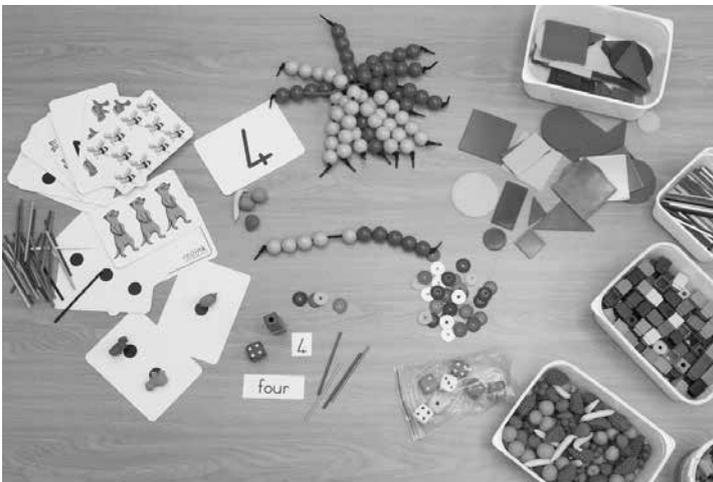


Resources for Grade R Maths

Grade R Maths Resource Kit

Grade R Maths provides a kit for learning and teaching maths that provides apparatus for a small group of six to eight learners to use. The kit includes the following items:

- counting materials, for example, coloured discs and sticks, fruit and animal counters, Unifix blocks
- jumbo dice
- strings of ten structure beads
- dot cards
- number cards: number symbols (0–10) and number words (zero–ten)
- attribute blocks.



These should not be the only resources that teachers and learners use during maths activities. Everyday objects from home are ideal for sorting, counting and exploring shapes.

Recycled materials

Store recycled materials in labelled containers with lids (such as: fruit and vegetable packaging, 2-litre ice-cream containers and 500-ml feta tubs). Place the containers on a shelf or somewhere that the learners can reach. Encourage learners to put the objects away during tidy-up time if they have used them at their workstations or during free choice activities. Here are some ideas for maths resources:

- bottle caps and lids (different shapes, sizes and colours)
- different-sized boxes (toothpaste, matchbox, cereal, medicine, packaging)
- plastic containers (500-ml and 1-litre bottles, margarine tubs, 250-ml and 500-ml yoghurt tubs, ice-cream containers, vegetable packaging)
- tubes and cylinders (cardboard toilet roll inners, paper towel inners, foil roll inners, tins)
- egg boxes
- buttons, old keys, plastic spoons, ice-cream sticks, bread packet tags
- variety of balls, beanbags, hula hoops.



Other resources

Other useful classroom resources for Grade R Maths teaching include:

- crayons, paint, glue, scissors
- playdough or modelling clay
- books that can be used for maths discussions
- building blocks and construction toys (collect wood offcuts if necessary)
- a variety of jigsaw puzzles and games, for example, dominoes, snakes and ladders, Ludo, Lotto

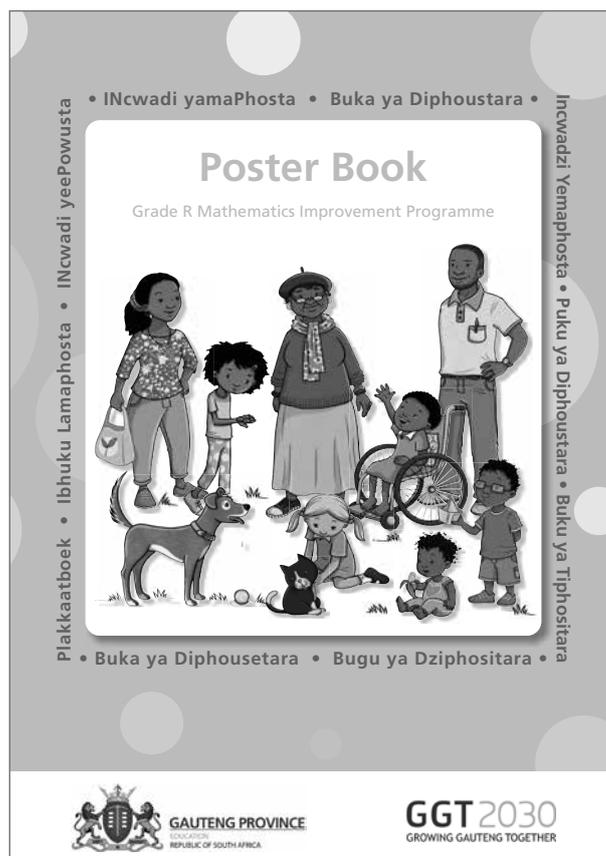
- height chart
- jumbo playing cards
- pretend money: coins and notes (to use in a play shop)
- large analogue wall clock
- balance scale
- beads for sorting, threading and patterning
- equipment for sand and water play
- apparatus for climbing, balancing, swinging and skipping.

The Grade R Maths Poster Book

There are eleven posters in the Grade R Maths *Poster Book*. The posters present familiar contexts that learners can relate to that capture some aspect of maths, for example, in the classroom, on the playground, and in the kitchen. The posters are intended to stimulate interest and discussion on maths topics, including: number, patterns, space and shape, sequencing of time and measurement. The posters can be used to engage learners in critical thinking and reasoning. They are perfect for developing problem-solving skills and for maths investigations.

Teachers can encourage learners to discuss the posters and share their thinking by asking questions to guide them in focusing on a particular aspect of the poster, for example:

- What do you see in the picture?
- Where do you think the children/people are?
- What is happening in the picture?
- Can you tell me a story about the picture?
- How many ... can you see? What if there was one more/fewer ...?
- Where is the ...?
- What would happen if ...?
- What do you think will happen next?
- What do you think ... can see from where they are standing?
- What pattern can you see? Describe the pattern.
- What shapes can you see?
- Which ... is the tallest/shortest?
- Can you use any maths words to describe something in the picture?



Content overview: Term 2

Note: Content Area Focus and New knowledge are in blue. Other content covered in the week is in grey.

Content Area Focus	Week 1	Week 2	Week 3	Week 4	Week 5
1. Numbers, Operations and Relationships	More than, fewer than, equal to Number 4 Oral counting 1–10 and 5–1 Counting objects 1–5 Sequencing numbers 1–3 Number concept 1–3	South African coins Ordinal numbers first to fourth Making groups the same to 4 Counting objects 1–6 Oral counting 1–10 and 5–1 Sequencing numbers 1–4 Number concept 1–4	Oral counting 1–15 Counting objects 1–7 Number concept 1–4 Sequencing numbers 1–4 Counting backwards 5–1	One more, one fewer Oral counting 1–15 and 5–1 Counting objects 1–7 Number concept 1–4	Number 5 Oral counting 1–15 and 5–1 Counting objects 1–7 Number concept 1–4 Sequencing numbers 1–4 More, fewer
2. Patterns, Functions and Algebra					
3. Space and Shape (Geometry)			Position: underneath Position: next to, between, in front of, behind, on top Direction: forwards, backwards Shapes: circle, square, triangle	Sorting 3-D objects: similarities and differences Position: above Position: underneath, on, in, out Shapes: circle, square, triangle Twelve-piece puzzles	
4. Measurement		Biggest to smallest, smallest to biggest			
5. Data Handling			Sorting by one attribute		

Content Area Focus	Week 6	Week 7	Week 8	Week 9	Week 10
1. Numbers, Operations and Relationships	<p>Oral counting 1–20</p> <p>Counting backwards 7–1</p> <p>Counting objects 1–7</p> <p>Number concept 1–5</p> <p>Sequencing numbers 1–5</p> <p>Making groups the same</p>	<p>Oral counting 1–20 and 7–1</p> <p>Counting objects 1–7</p> <p>Number concept 1–5</p> <p>More than, fewer than, equal to</p>	<p>Oral counting 1–20 and 7–1</p> <p>Counting objects 1–7</p> <p>Number concept 1–5</p>	<p>Oral counting 1–20 and 7–1</p> <p>Counting objects 1–7</p> <p>Estimation 1–7</p>	<p>Breaking down and building up numbers</p> <p>Problem-solving techniques</p> <p>Addition and subtraction using concrete objects</p> <p>Numbers in familiar settings</p> <p>Oral counting 1–20 and 7–1</p> <p>Counting objects 1–7</p> <p>Number concept 1–5</p> <p>Sequencing numbers 1–5</p> <p>More than, fewer than</p> <p>What number comes before, after?</p>
2. Patterns, Functions and Algebra	<p>Copy and extend simple repeating patterns</p> <p>Create and explain own pattern</p>				
3. Space and Shape (Geometry)		<p>Shapes: circle, square, triangle</p>	<p>Follow directions</p> <p>Midline crossing</p> <p>Shapes: circle, square, triangle</p> <p>Forwards, backwards</p> <p>Reinforce position</p>		<p>Shapes: circle, square, triangle</p>
4. Measurement				<p>Measuring and comparing: length (long, longer, longest; short, shorter, shortest)</p> <p>Length: tall, short</p>	
5. Data Handling		<p>Collect, sort and represent collections of objects</p> <p>Analyse and report on data</p> <p>Sorting and classifying</p>			

Content Area Focus: Numbers, Operations and Relationships

Topics

- Recognise and identify number symbols and number words
- Describe, compare and order numbers

New knowledge

- More than, fewer than, equal to
- Number 4

Practise

- Oral counting 1–10 and 5–1
- Counting objects 1–5
- Sequencing numbers 1–3
- Number concept 1–3

New maths vocabulary

more than

fewer than

equal to

Getting ready

For the activities this week, you will need to prepare the following:

- number frieze and house template for number 4 (page 104)
- 8 number '4' dot, symbol and word cards
- 1 set of number dot cards 1–4 per learner (with different dot arrangements)
- playdough template: Number 4 per learner (page 106)
- a variety of picture puzzles per learner (Draw or copy a picture onto a sheet of A5-sized paper/cardboard. Cut the picture into four strips and number the strips 1 to 4. See Workstation 2.)
- number symbol and dot strip 1–4: 1 per learner (see the teacher-guided activity, step 3, page 17)
- a set of matching number and picture puzzles 1–4 per pair of learners (see Workstation 4).

Whole class activities

Day 1

What you need

- Birthday chart
- Number friezes 1–3
- Number frieze: Number 4 (page 104)
- *Number 4 story* (page 98)

1. **Rhyme:** Say a rhyme from Term 1.
2. **Oral counting:** 1–10 and 5–1.



TIP

Oral counting can take place during transitions. Make this counting active and fun.



TIP

Remember to talk about the daily programme. Remember to do the calendar, days of the week, months of the year and birthday chart each day.

3. **Counting objects 1–5:** Learners look at the birthday chart. Together count the first five months of the year. Discuss the fact that learners have just returned from a holiday and draw their attention to the current month of the year.

Guiding questions:

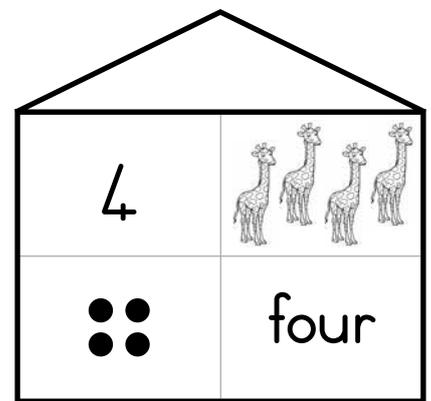
- ★ Which month are we in?
- ★ Which is the first month?
- ★ Are there any months that have five learners' names in it? (If there are, count these together.)

4. **Introducing number '4':** Point to number friezes 1 to 3.

Guiding questions:

- ★ How many animals do you think will live in the next house?
- ★ Will there be more or fewer than 3?

Tell the *Number 4 story*. The animals' house is the focus of the story. Show the parts of the number frieze as you build up the story of the animals and images of the house: the different representations of number 4, for example, the picture, the dots, the symbol and the word. Display the parts of the frieze in the animal house on the wall in the maths area. Count the giraffes together.



Guiding questions:

- ★ Who has seen a giraffe before? Where?
- ★ How do you think they move?
- ★ How does an elephant/a zebra/a meerkat move?
- ★ How many more giraffes are there than meerkats?
- ★ How many fewer meerkats are there than giraffes?
- ★ If one giraffe went to the meerkats' house, how many animals would be in the meerkats' house?

5. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- 5 bananas, 4 oranges, 4 apples, 4 strawberries (*Resource Kit*)
- 8 number '4' dot, symbol and word cards
- Song: *Making fruit salad* (page 98)

1. **Song:** Introduce the song, *Making fruit salad*.

Guiding questions:

- ★ Who has eaten fruit salad before?
- ★ What fruit do you like in your fruit salad?
- ★ How many different kinds of fruit did we sing about?



TIP

Make daily oral counting fun. Include ideas from learners when possible.

2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–5:** Learners sit in a circle. Place four groups of fruit counters on the mat: five bananas, three oranges, two apples and four strawberries.

Guiding questions:

- ★ How many bananas/oranges/apples/strawberries do you think there are?
- ★ Which pile has the most/fewest fruit?

Count each pile of fruit together.

4. **More than/fewer than; equal to:** Focus on the oranges and apples.

Guiding questions:

- ★ What do we need to do so that the number of oranges/apples is equal to the number of strawberries?
- ★ How can we make the group of oranges/apples have four?

5. **Maths table:** Learners go outside in groups of four. Each learner in a group should collect a similar small object, for example, twigs or leaves. Learners return to sit on the mat in their groups. Each group says what, and how many, they have found. Discuss the similarities and differences between collections. Give each group a number 4 dot, symbol or word card. One at a time, each group puts their objects and number 4 card on the table.

6. **Small group activities:** Describe the activities at each workstation.



TIP

The objects that the learners collect must be small enough to fit on the table.

Integration

Home Language and Life Skills: New maths vocabulary can be used throughout the day, for example, during snack time discussions.

Day 3

What you need

- Song: *Making fruit salad* (page 98)
- Fruit counters (*Resource Kit*)
- Number friezes 1–4
- 2 bowls
- 7 fruit counters
- 20 number '1–4' dot, symbol and picture cards (*Resource Kit*)

1. **Song:** Sing *Making fruit salad* with actions.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–5:** Together count the fingers on one hand. Discuss which body parts learners have five and fewer of.

4. **Dot cards and ordering 1–4:** Show learners dot cards 1–4.

Guiding questions:

- ★ What is this? (dot card 3)
- ★ And this? (dot card 1)
- ★ What happens when we put these, 1 and 3, together? (Show dot card 4.)

Repeat with other configurations.

Hold the number dot, picture and symbol cards 1–4 in a fan so that the learners can only see the back of the cards. Learners take turns to take a card. They say the number of dots on the card and show the class.



- ★ Which animals on our number friezes match the card that _____ is holding?

Put the number symbol cards 1–4 on the wall in the incorrect order.

- ★ What do you notice about the order of these cards?
- ★ In what other ways can we arrange them?

5. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- 2 see-through plastic containers each with 5 different-sized objects, for example, beans, stones
- Song: *Making fruit salad* (page 98)
- 4 hula hoops (or chalk/rope to make circles)
- 10 wooden blocks
- 20 number '1–4' symbol, word and dot cards
- 10 Unifix blocks
- Musical instrument

1. **Song:** Sing *Making fruit salad*.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–5:** Learners sit in a circle. Place two containers with five different-sized objects in the middle of the mat.

Guiding questions:

- ★ How many objects do you think there are in each container?
- ★ Do you think each container has the same number of objects?

Together count the objects. Remind learners that the size of the objects does not affect the number of objects.

4. **Practising and ordering 1–4:** Place four hula hoops on the mat with one wooden block in one, two blocks in the next, and so on. Let the learners each fetch a number picture, symbol, word or dot card for 1, 2, 3 or 4, or between one and four Unifix blocks from the mat. Play a song and let the learners move to the music. When the music stops, they sit down next to the hula hoop with the matching number of blocks.

Guiding questions:

- ★ How can we order these hula hoops?
 - ★ Which hula hoop should be first? Why?
 - ★ Which comes before, next, after?
 - ★ Are there more/fewer learners around this hula hoop or around this hula hoop?
5. **Small group activities:** Describe the activities at each workstation.

Day 5

What you need

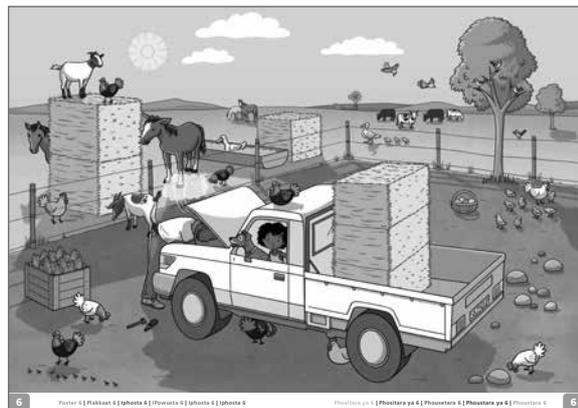
- Groups of five objects placed around the room
- Song: *Making fruit salad* (page 98)
- Poster 6

1. **Song:** Sing *Making fruit salad* and dramatise it.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–5:** Place groups of five objects in clearly visible positions around the classroom. Play 'I spy with my little eye', for example: 'I spy with my little eye five bags.' Count the objects together, and repeat with another group of five objects.

4. **Practising 1–4:** Discuss Poster 6. Talk about what the learners can see.

Guiding questions:

- ★ Where do you think these people are?
- ★ Can you see four, three, two or one of anything?
- ★ Are there more birds in the tree, or more ducks in the water trough?
- ★ How many bales of hay are on the truck?
- ★ How many bales of hay are on the ground?
- ★ How many bales of hay will be left if the horses eat one of these bales?



TIP

Not all learners will be familiar with a farm scene, like this one. Take time to contextualise it.

- Encourage learners to solve the problems on their own. Create opportunities for them to find out for themselves.
5. **Small group activities:** Describe the activities at each workstation.

Small group activities

Teacher-guided activity

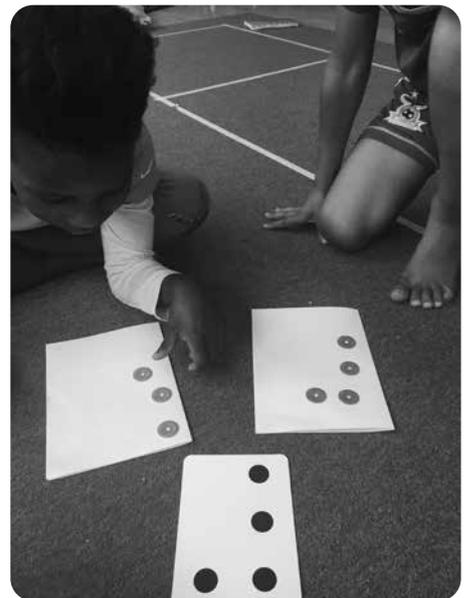
What you need

- A tub per learner with:
 - Number 1–4 dot, symbol and word cards (*Resource Kit*)
 - 5 coloured counters
- Number 4 dot cards (*Resource Kit*)
- Playdough and a mat per learner
- An A4 page per learner
- Crayons

1. **Oral counting:** Learners sit in pairs. They face each other and clap their hands together and count 1–10 and 5–1.
2. **Counting objects 1–5:** Learners each count 5 counters.
3. **Matching 1–4:** Point to the numbers on the friezes. Learners place their matching number dot, symbol and word cards in front of them. They match groups of counters to these, and order them from 1 to 4.

Guiding questions:

- ★ How many counters do you have in each group?
- ★ What is the number before/after 3, between 1 and 3?
- ★ Which group has 1 fewer/more counter than your group with 2 counters?



4. **Practising 4:** Learners arrange their four counters to match different number 4 dot cards.
5. **Practising more than, fewer than, equal to:** Remove a few counters from some of the learners' groups of four.

Guiding questions:

- ★ Do any of you have the same number of counters?
- ★ Does _____ have more/fewer counters than _____?
- ★ How can we make _____ and _____ have an equal number of counters?



TIP

The concept of 'fewer' will need support.

6. **Practising number 4 using playdough:** Learners make the number symbol 4 out of playdough. Support learners who are ready to write 4.



Check that learners are able to:

- count orally 1–10
- count objects 1–5
- identify more than, fewer than and equal to
- recognise, match, name and order number symbol, number word and dot cards 1–4
- match objects with dot cards 1–4

Workstation 1

What you need

- Playdough
- Playdough template: Number 4 per learner (page 106)

Learners use playdough to complete the template.

Workstation 2

What you need

- A tub per learner with puzzle strip pictures

Learners put puzzle strips in the correct order to form a picture. Once complete, they replace these and swap with another learner.



Workstation 3

What you need

- A tub per learner with:
 - Number and dot strip 1–4
 - Number words one to four
- A container with Unifix blocks from the *Resource Kit*

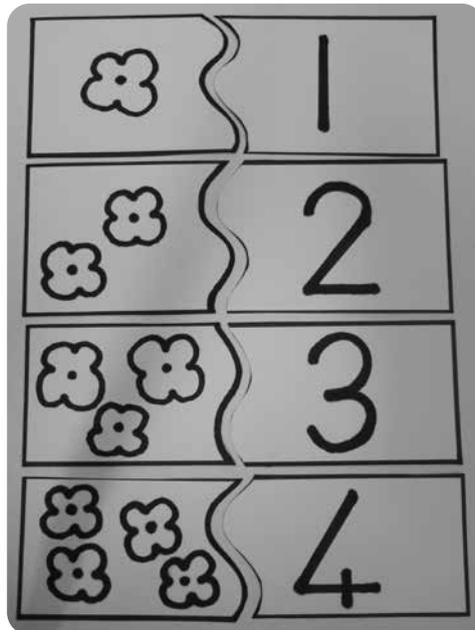
Learners match the number words one to four to the number strip (using the friezes as a reference). They place objects in columns above each number.

Workstation 4

What you need

- A set of matching number and picture puzzles 1–4 per pair of learners

Learners complete the number puzzles. Once complete, they swap with other learners.



Content Area Focus: Numbers, Operations and Relationships

Topics

- Money: develop an awareness of South African coins

New knowledge

- South African coins
- Ordinal numbers first to fourth
- Making groups the same to 4
- Counting objects 1–6

Practise

- Oral counting 1–10 and 5–1
- Sequencing numbers 1–4
- Number concept 1–4
- Biggest to smallest, smallest to biggest

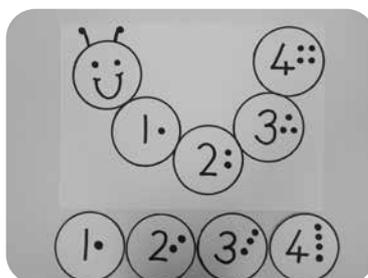
New maths vocabulary

coins	money	springbok	blue crane	lily
rands	10c, 20c, 50c	kudu	protea	price
cents	R1, R2, R5	wildebeest	strelitzia	cost

Getting ready

For the activities this week, you will need to prepare the following:

- pictures of animals and plants found on South African coins
- cardboard cut-out brown and silver coins: 10c, 20c, 50c, R1, R2, R5 (pages 108–109) – 6 per learner, and 4 more of each
- 12 items for 'shopping', for example, cereal/toothpaste boxes, yoghurt tubs, and so on
- a transparent money box with a slot to put cardboard coins in, and an opening to take coins out (Plastic bottles or containers can be used.)
- number symbol cards 1–4
- A4 piece of cardboard or an A4 page with a large circle template drawn on it for each learner
- an A4 page with four circles, each with a number symbol and matching dots 1–4 for each learner
- an A4 page for each learner with a caterpillar outline, each segment with a number symbol and matching dots 1–4
- a number grid page for each learner with number range 1–4 (page 110)
- coin-in-the-bank game (page 99)
- a colour and number posting box.



Whole class activities

Day 1

What you need

- 6 real coins (10c, 20c, 50c, R1, R2, R5)
- 6 cardboard cut-out coins (pages 108–109)
- Poster 7

1. **Song:** Sing a song from previous weeks.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–6 (introducing South African coins):** Shake real coins in your hands.

Guiding questions:

- ★ What do you think I have in my hands?
- ★ What do we use money for?
- ★ How many different South African coins are there? Let's count. Count cardboard coins as you put them on the wall.

4. **Poster 7:** Discuss Poster 7. Discuss what the learners can see.

Guiding questions:

- ★ Have you ever been to a market?
- ★ What are the people on this poster buying?
- ★ How many _____ do you think _____ is buying?
- ★ Do you go shopping? Tell me about it.
- ★ What does your family usually buy at the shops?



5. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- Song: *Five shiny coins* (page 99)
- 6 'shopping' items placed around the classroom
- A container with cardboard cut-out coins (10c, 20c, 50c, R1, R2, R5) – 4 of each
- Prestik
- 4 chairs

1. **Song:** Sing *Five shiny coins*.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–6; recognise and match coins:** Learners create a shopping table together. They select items from the classroom to place on the table to sell. They choose cardboard coins to attach to the selected items.

Guiding questions:

- ★ What have you chosen?
- ★ Which coin do you all think should be attached to the ____? Why?
- ★ Which coin matches the coin on the ____?

4. **Ordinal numbers – first to fourth:** Four learners sit on four chairs placed one behind the other as if they are in a taxi going to the shops.

Guiding questions:

- ★ Who is sitting on the first/third chair?
- ★ Who is sitting on the chair behind the first chair?
- ★ Who is sitting on the last chair?
- ★ Who is sitting between ____ and ____?

Repeat with four other learners.

5. **Small group activities:** Describe the activities at each workstation.



TIP

It is important for learners to sit in a way that they can all see the resources being used.

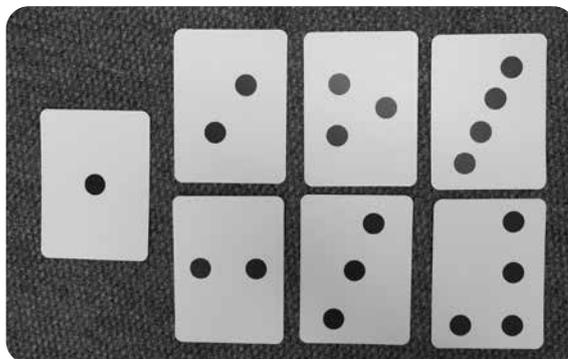


Day 3

What you need

- Song: *Five shiny coins* (page 99)
- 5 cardboard cut-out coins, 1 money box
- 6 'shopping' items placed around the classroom
- A container with cardboard cut-out coins (10c, 20c, 50c, R1, R2, R5) – 4 of each
- Number 1–4 picture, symbol and dot cards (*Resource Kit*)
- Counters (*Resource Kit*)
- Tambourine/shaker

1. **Song:** Sing *Five shiny coins*. Use coins and a money box to do the actions.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–6:** Repeat Day 2, activity 3.
4. **Practising numbers 1–4:** Show dot cards 1–4 individually. Learners call out the number of dots on each card. Put the cards on the mat in a jumbled order. Together order them from 1 to 4. Put the remaining dot cards 1–4 on the mat. Learners match these to the ordered dot cards.



5. **Matching game:** Give a dot card, picture card, number symbol card, or one, two, three or four counters to each learner. Beat the tambourine while learners move to the beat. When the music stops, learners find a partner with the same number.
6. **Small group activities:** Describe the activities at each workstation.



TIP

Give those learners who have not had a turn to shop, a chance to match a coin to an item on the table as they go to their workstations.

Day 4

What you need

- Song: *Five shiny coins* (page 99)
- 5 cardboard cut-out coins, 1 money box
- 2 small transparent plastic bags: 6 cardboard cut-out coins in one and 5 in the other
- Number symbols 1–4 in a box

1. **Song:** Sing *Five shiny coins*. Use coins and a money box to do the actions.

2. **Oral counting:** 1–10 and 5–1.

3. **Counting objects 1–6:** Learners sit in a circle. Show the learners two plastic bags – one containing six cardboard cut-out coins and the other containing five cut-out coins.

Guiding questions:

- ★ How many coins do you think there are in this bag?
- ★ And in this bag?
- ★ Do you think there are more/fewer coins in this bag? How do you know?

Together count the coins in each bag and put them in two groups on the mat.



4. **Practising more than, fewer than, equal to:** Discuss the two groups of coins.

Guiding questions:

- ★ I only want 4 coins in each group. What can we do?

Count 4 coins into each packet. Look at the coins that are left on the mat.

- ★ Are there more coins left in this group or in this group?
- ★ Why does this group have fewer coins left?

5. **Ordering numbers 1–4:** With their eyes closed so they cannot see their number, four learners each take a number symbol card 1–4 out of a box. They stand next to each other and say what they think their number is. The rest of the learners say how they should move to order themselves from 1 to 4. Repeat with four other learners.

Guiding questions:

- ★ Which number comes first?
- ★ Which number comes second/third/fourth?
- ★ Which number comes after ____?
- ★ Who is holding the last number?
- ★ What number is between ____ and ____?

6. **Small group activities:** Describe the activities at each workstation.

Day 5

What you need

- Song: *Five shiny coins* (page 99)
- Number friezes 1–4
- *Number 4 story* (page 98)
- Poster 7
- 10 coloured counters (Resource Kit)

1. **Song:** Sing *Five shiny coins*. Use coins and a money box to do the actions.
2. **Oral counting:** 1–10 and 5–1.
3. **Counting objects 1–6:** Five learners stand in front.

Guiding questions:

- ★ How many learners are standing?
- ★ Are there fewer or more than six? (Count them.)
- ★ Were you right?
- ★ If I want six learners standing, how many more learners must come up?

4. **Practising numbers 1–4:** Together recall the *Number 4 story* and frieze. Role-play the animals' movements and/or sounds, for example, one trumpet for the elephant, two trots for the zebras.
5. **Problem solving 1–4:** Discuss Poster 7. Talk about what the learners see.

Guiding questions:

- ★ Can you see six/four/three/two of anything?
 - ★ How many different kinds of fruit can you see?
 - ★ Are there more watermelons or more pineapples? How do you know?
 - ★ How many pineapples will be left if Dad buys three?
 - ★ How many people are standing in the queue at the boerewors roll stand?
 - ★ Where is the boy with the skateboard standing in the queue?
 - ★ If he buys three boerewors rolls for his family and eats two of them, how many will he have left?
 - ★ If he walks away, where will Laylah be standing in the queue?
6. **Small group activities:** Describe the activities at each workstation.



TIP

We want learners to problem solve in order to become critical thinkers.

Integration

Home Language and Life Skills: Set up opportunities for shopping in the fantasy area and outdoors; sing shopping songs and dramatise shopping stories.



Small group activities

Teacher-guided activity

What you need

- 6 cardboard cut-out brown and silver coins
- Counters (*Resource Kit*)
- A tub for each learner with:
 - 6 cardboard cut-out brown and silver coins (10c, 20c, 50c, R1, R2, R5)
 - 2 plastic lids
- Maths table items with coins attached for 'shopping'

1. **Counting objects 1–6:** Place six cardboard cut-out coins on the mat. Learners estimate how many there are. Count the coins together.

Guiding questions:

- ★ Are there more or fewer than the number you thought of?
- ★ Do you have more or fewer than six coins in your tub?

Learners each count out six coins from their tubs.

- ★ What can you tell me about your coins?
- ★ What numbers, animals, birds or plants do you see? Are the coins the same size/colour?

Learners compare coins.

2. **Shake and break:** Place two lids in front of each learner. Learners shake the counters then 'break' them into two groups. They place their counters on their lids as they have been 'broken up'. They take turns to say how many they have on each lid and how many altogether.

Guiding questions:

- ★ How did you break up four?
- ★ Whose groups have the same number of counters?
- ★ Who broke theirs the same/differently?
- ★ Why are the groups the same/different?

Repeat the activity.

3. **Practising making groups equal:** Learners put three counters on one of their lids and one on the other.

Guiding questions:

- ★ How can you make the groups of counters on each lid equal?
- ★ Do you have the same number of counters in each group?

4. **Sorting South African coins:** Learners place the coins in a pile in the middle of the circle.

Guiding questions:

- ★ How can we sort these?
- ★ Can you sort these another way?

5. **Ordering; biggest to smallest:** Learners put the coins in order from the smallest in size to the biggest, and then from biggest to smallest.
6. **Matching coins:** Look at the maths shopping table with the learners. Learners match one of their coins to an item and tell the group how the coins match.



Check that learners are able to:

- make groups equal
- compare two groups and notice differences and similarities using four objects
- recognise South African coins, notice differences and similarities between these, and match them
- order coins according to size

Workstation 1

What you need

- An A4 page or piece of cardboard with a large circle per learner
- A pair of scissors per learner
- Crayons, colour pencils
- Examples of South African coins (poster or cardboard cut-outs), placed where learners can see them

Learners cut out the 'coin' from the paper or cardboard. They draw pictures on both sides of their 'coin'. They write a number of their choice on one side. Make extra circles for those who would like to do more.



Workstation 2

What you need

- An A4 page with four circles, each with a number symbol and matching dots per learner
- An A4 page with a caterpillar outline with number symbols 1–4 on the body per learner
- Glue
- Crayons
- A pair of scissors per learner

Learners colour and cut out the four circles. They match and paste them on the caterpillar's body. They colour in the caterpillar's face, and draw two legs on each circle.

Workstation 3

What you need

- A4 page with number grid 1–4
- Crayons/pencils per learner

Learners draw the correct number of pictures (of what 'they would like to buy') next to the rows numbered 1–4. Learners can also match counters or playdough models to the numbers 1–4.



Workstation 4

What you need

- Posting box
- A tub for each learner with 13 counters from the *Resource Kit* (include at least one red, two blue, three yellow and four green counters)
- Coin-in-the-bank game (page 99)
- A bowl for each pair of learners

Learners choose the correct colour and number of counters to post into the matching colour slot on the box. Once they have finished, they use their remaining three counters to play 'Coin in the bank'.



Content Area Focus: Space and Shape (Geometry)

Topics

- Position, orientation and views
- Describes, sorts and compares 2-D shapes

New knowledge

- Oral counting 1–15
- Counting objects 1–7
- Position: underneath

Practise

- Position: next to, between, in front of, behind, on top
- Direction: forwards, backwards
- Number concept 1–4
- Sequencing numbers 1–4
- Counting backwards 5–1
- Shapes: circle, square, triangle
- Sorting by one attribute

New maths vocabulary

directions

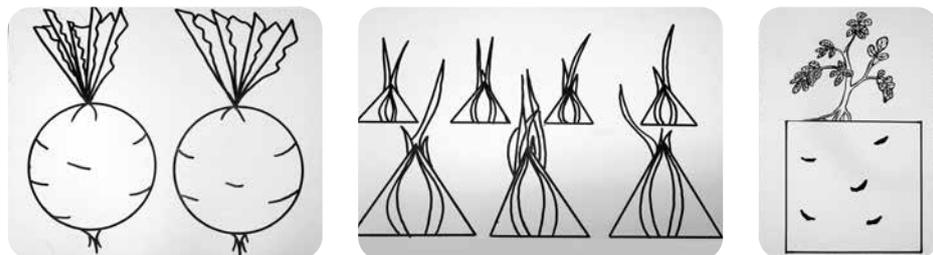
face towards

underneath

Getting ready

For the activities this week, you will need to prepare the following:

- cardboard cut-outs (medium sized): 4 triangles, 3 circles, 7 squares
- 10 cardboard triangles of different sizes and colours
- large cut-outs of vegetables for the story



- playdough
- small cardboard star
- A4 shape page – 1 per learner (Include more triangles of different sizes than other shapes.)
- A4 page with 4 carrots (see Workstation 2)
- 10 green paper strips per learner.



TIP

Consolidate previous space and shape vocabulary.

Whole class activities

Day 1

What you need

- Cardboard cut-outs (medium sized): 4 triangles, 3 circles, 7 squares
- 16 triangle, circle, square attribute blocks (*Resource Kit*)
- Song: *Making fruit salad* (page 98)
- Number 4 labels from maths table (from Week 1)



TIP

Cardboard is three-dimensional. It has length, breadth (width) and height. In Grade R we use cut-outs to show two-dimensional shapes, such as circles, squares, triangles and rectangles. Focus on the shape: the length, how wide the 'shape' is, the lines, the corners or points.

1. **Song:** Sing *Making fruit salad*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Together look at groups of four triangle, three circle and seven square cardboard cut-outs.

Guiding questions:

- ★ How many triangles/circles/squares do you think there are in this group?
- ★ Which group has more/fewer than the group with the triangles/circles/squares?

Count the triangles and circles together 1–7. Then count the squares.

4. **Practising position – next to, between, in front of, behind, on top of:** Learners fetch one shape each from the mat. Play 'Sizwe says'. Give different instructions for each shape as you guide learners.

Guiding instructions:

- ★ All those with circles put their shape *in front of* their knee, face, tummy. (Repeat with squares and triangles.)
- ★ Hold your circle *behind* your back, knee, and so on with one hand/both hands.
- ★ Try to fit your triangle *behind* your ear.
- ★ Walk with your shape balancing *on top of* your head.
- ★ Those with a triangle hold it *between* your knees.
- ★ Those with a circle put it *next to* your body. Now put it on the other side of your body. (Repeat with squares and triangles.)

5. **Position:** Introduce 'underneath'.

Guiding questions:

- ★ Can you sit/lie with your shape *underneath* you, *underneath* your hand on the floor, *underneath* your foot?
- ★ What other part of your body can you place your shape *underneath*?

6. **Small group activities:** Describe the activities at each workstation.



TIP

Learners place shapes on the maths table in groups of four next to number 4 cards, as they go to their workstations.

Day 2

What you need

- Song: *Head, shoulders, knees and toes* (page 99)
- 2 containers
- 7 beanbags/rolled-up socks
- 10 triangle-shaped cut-outs of different sizes and colours, placed around the classroom
- Number symbol cards 1–4 (*Resource Kit*)
- 1 triangle attribute block

1. **Song:** Sing *Head, shoulders, knees and toes*.

Guiding questions:

- ★ Your head is on top of your ____?
- ★ Your nose is between your ____?
- ★ Your nose is next to your ____?
- ★ The floor is underneath your ____?

2. **Oral counting:** 1–15 and 5–1.

3. **Counting objects 1–7; more/fewer:** Learners sit in a circle. Place two shallow containers in the centre. Place five beanbags/socks in one container and two in the other. Learners estimate how many beanbags/socks are in each. Together count seven learners to each take a beanbag and stand back in their places. They take turns to throw their beanbags into either of the containers. Repeat with another seven learners. Discuss which container has more/fewer beanbags.

4. **Practising properties of the triangle; practising 1–4:** Without letting learners see the shape, hold a triangle-shaped cut-out behind your back. Learners must guess what shape it is. Give them clues, for example: 'It has three sides and three straight lines.'

Guiding questions:

- ★ How is the triangle different to other shapes in the classroom? Learners look for 10 triangles hidden in the classroom. They place these on the mat next to number symbol cards 1–4.
- ★ Which group has more/fewer?
- ★ How many triangles does the group between 2 and 4 have?
- ★ How can we make the group of 3 have the same number of triangles as the group of 4?

5. **Small group activities:** Describe the activities at each workstation.

Day 3

What you need

- Song: *Head, shoulders, knees and toes* (page 99)
- 11 wooden blocks from the block area (triangle-, square- and circle-shaped)
- Tambourine

1. **Song:** Sing *Head, shoulders, knees and toes* with actions.

**TIP**

Place containers and beanbags with number symbol and word cards in the maths area.

2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place two groups of blocks on the mat (seven in one group and four in the other).

Guiding questions:

- ★ How many blocks do you think there are in this group?
- ★ And this one?

Together count the blocks in each group.

- ★ Whose estimation was close?

4. **More, fewer, equal to:** Compare the groups of blocks.

Guiding questions:

- ★ Which group has more/fewer?
- ★ What do we need to do to make the groups equal?

5. **Position – next to, between, underneath:** Give a few learners instructions to place blocks around the classroom using ‘next to’ and ‘between’.

Guiding instructions:

- ★ Place a square-shaped block next to the maths table.
- ★ Place a triangle-shaped block between my chair and the door.

Play the tambourine while all the learners move between the blocks. When the music stops they make groups of four and stand next to each other.

Guiding questions:

- ★ Who is standing next to _____?
- ★ Who is between _____ and _____?

Learners stand one behind the other.

- ★ Who is in front of/behind you?

Learners move to music and make new groups of four.

6. **Small group activities:** Describe the activities at each workstation.



TIP

Discuss where the learners who don't have a full group of four should go to make full groups. Ask learners for ideas on how to solve this problem.

Day 4

What you need

- Song: *This is the way we make soup* (page 99)
- Shape story and vegetable pictures: *They pulled and they pulled* (page 100)
- A container on the maths table with 8 circle, 8 square and 8 triangle attribute blocks

1. **Song:** Introduce the song, *This is the way we make soup*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place the vegetable pictures for the story on the mat. Learners estimate and count the number of vegetable pictures that there are.



TIP

Place attribute blocks and vegetable shapes on the maths table for matching.

Guiding questions:

- ★ Have you seen soup being made before?
- ★ Do you notice anything unusual about the shape of these vegetables?

4. **Shape story:** Tell the story using the pictures.

Guiding questions:

- ★ What shape are these vegetables normally?
- ★ Can you think of other vegetables that remind you of a circle/triangle shape?
- ★ Have you ever seen a square-shaped vegetable?
- ★ How many potatoes/carrots are there?
- ★ Are there more carrots or potatoes?

5. **Small group activities:** Describe the activities at each workstation.

Day 5



TIP

Send a note to parents/caregivers suggesting they make vegetable soup with their children.

What you need

- Song: *This is the way we make soup* (page 99)
- Shape story: *They pulled and they pulled* (page 100)
- Vegetable pictures
- Poster 9
- 1 small toy car
- 1 small cardboard star

1. **Song:** Sing *This is the way we make soup*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Count the seven onion pictures from the story for Day 4.
4. **Shape story:** Together recall the story, showing the vegetable pictures.

Guiding questions:

- ★ Did you notice any vegetables or fruit at home or in the shops yesterday that look like squares, circles or triangles?
- ★ Did you talk to your families about how many vegetables they usually use when they make soup?

Look at examples of vegetable pictures and discuss the shapes.

5. **Directions:** Look at Poster 9. Ask the learners to say what they can see.

Guiding questions:

- ★ What can you see that looks like something you have seen before near your home?
- ★ What do you think this is? (Point to a building on the map.)



Place the toy car where Malusi is standing in the picture and a star on his destination. Learners pretend that Malusi is in the car, and direct you as you move the car.

- ★ What does Malusi see around him?
- ★ Should he go straight here? (Point.)
- ★ Which way should he drive to get to _____?
- ★ What will he see on his way?
- ★ When must he turn?

Repeat this, with different destinations.

6. **Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: Ask learners to tell their parents/ caregivers the story, *They pulled and they pulled*, discuss how many vegetables they use when they make soup, and to look at the shapes of fruit and vegetables at home and/or in the shops.

Small group activities

Teacher-guided activity

What you need

- A tub for each learner with:
 - Number 1–4 dot, symbol and word cards
 - 7 mixed attribute blocks (excluding rectangles)
 - 4 animal counters

1. **Oral counting 1–15:** Each learner counts from 1–15.
2. **Counting objects 1–7:** Learners sit in a circle with their tubs. They each count their 7 attribute blocks.
3. **Practising 1–4:** Guide learners to work with their shapes and number 1–4 symbol and dot cards.

Guiding questions:

- ★ Can you make two groups? One group with four shapes and one group with three shapes?
- ★ Can you put your matching dot cards and number symbol cards next to these groups?
- ★ Can you put your hand next to the group that has more/fewer shapes?
- ★ How can we make these groups equal?

4. **Sorting:** Put all the shapes in a pile in the middle of the mat.

Guiding questions:

- ★ What is the same/different about these shapes?
- ★ What colours do you see?
- ★ How can we sort these shapes?



TIP

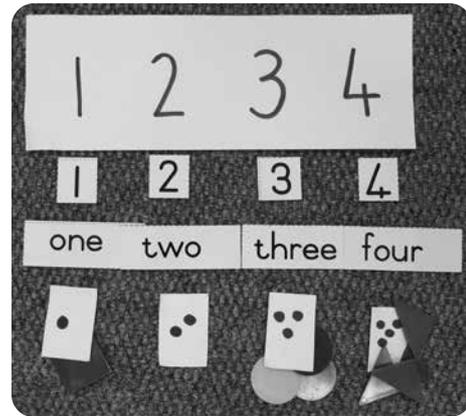
Attribute blocks are three-dimensional objects. In Grade R we talk about 'blocks' that 'look like' two-dimensional shapes, such as circles, squares, triangles and rectangles. Remember to focus on the face of the attribute block when talking about a shape.

5. **Ordering and position – next to, between, underneath using 1–4:**

Learners order number symbol, word and dot cards 1–4.

Guiding questions:

- ★ Can you put your finger on the number next to number 1?
- ★ Is there another number next to 1?
- ★ What number is before/after 3?
- ★ Can you show me the number that is between 1 and 3?
- ★ Can you choose one square to put *underneath* your number 1 dot card?
- ★ How many circles do you need to put *underneath* your number 3 dot card?
- ★ Can you put the right number of triangles *on top of* your number 4 dot card?



6. **Direction and position:** Learners count out four animal counters from their tubs.

Guiding questions:

- ★ Can you make all your animals face forwards towards me?
- ★ Can you put your animals one behind the other facing towards the door?
- ★ Which animal is standing in front of/behind ____?
- ★ Which animal is standing between ____ and ____?
- ★ Can you move the ____ to stand next to the ____?



Check that learners are able to:

- sort according to shapes and colours
- understand the position 'underneath'
- demonstrate an understanding of direction
- count orally 1–15
- count objects 1–7
- order number symbol cards 1–4

Workstation 1

What you need

- Shape page per learner
- Paint or crayons

Learners colour only the triangles on the page.

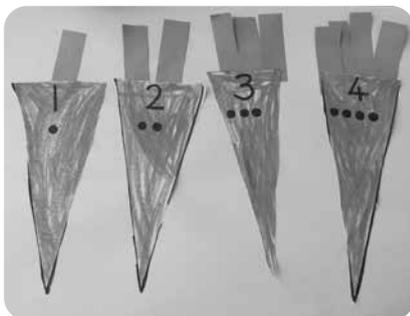


Workstation 2

What you need

- Carrot A4 template per learner
- 10 strips for leaves per learner
- An A4 page per learner
- Glue

Learners cut out four carrots. They paste them onto the page in order from 1 to 4 and paste the correct number of leaves onto each.



Workstation 3



TIP

You could also use beads/mosaics/polystyrene shape cut-outs from your collections of waste for sorting.

What you need

- Per learner:
 - A sorting tray, for example, egg boxes
 - A tub with a mixture of fruit counters, sticks, Unifix blocks, coloured discs (*Resource Kit*)

Learners sort the objects according to one attribute at a time, for example, colour or shape.



Workstation 4



TIP

Discuss the blocks during snack time, using relevant vocabulary, for example, taller, shorter.

What you need

- Blocks

Learners build with blocks.

Content Area Focus: Space and Shape (Geometry)

Topics

- Position, orientation and views
- Describes, sorts and compares 3-D objects

New knowledge

- Sorting 3-D objects: similarities and differences
- One more, one fewer
- Position: above

Practise

- Oral counting 1–15 and 5–1
- Counting objects 1–7
- Number concept 1–4
- Position: underneath, on, in, out
- Shapes: circle, square, triangle
- Twelve-piece puzzles

New maths vocabulary

one fewer

altogether

above

front

back

Getting ready

For the activities this week, you will need to prepare the following:

- a large cardboard circle, square, triangle (big enough for four learners to stand on together)
- 2 small cardboard triangles, squares, circles
- number 3 and 4 dot and symbol cards to add to those in the *Resource Kit* (you need enough for 21 learners)
- create an obstacle course to move an animal counter (from the *Resource Kit*) through (use items such as: boxes, scarves, cardboard tubes and wooden blocks)
- paper cut-outs: circles, squares and triangles of different sizes and colours – approximately 3 per learner
- twelve-piece puzzle (page 112).

Whole class activities

Day 1

What you need

- Rhyme: *Roly Poly* (page 100)
- 1 big ball
- A large cardboard circle, triangle, square
- Poster 11
- Circle-, square-, triangle-shaped objects placed around classroom – 1 per learner
- Attribute blocks (*Resource Kit*)

1. **Rhyme:** Say the rhyme, *Roly Poly*.

2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Roll the ball to seven learners one at a time as the class counts 1–7. Repeat a few times with other learners. The learners who have had a turn, clap as you all count together.



4. **Practising shapes; similarities and differences:** Hold up a large cardboard circle, square and triangle. Look at Poster 11.

Guiding questions:

- ★ Where can you see these shapes on this poster?
- ★ Can you think of anything in your home/in the world that reminds you of any of these shapes?

Learners look for circle-, square- or triangle-shaped objects around the classroom. They return to their places on the mat when they have found something.

Compare differences and similarities between their objects. Place the objects in groups in the maths area on top of the cardboard shapes.

5. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- Rhyme: *Roly Poly* (page 100)
- Story: *They pulled and they pulled* (page 100)
- Pictures for story
- 1 big square, 2 circles, 3 big triangles, 4 small triangles – attribute blocks (*Resource Kit*)
- Bag/box
- 7 coloured counters

1. **Rhyme:** Say the rhyme, *Roly Poly*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Count the vegetable pictures from the story *They pulled and they pulled* from Week 3. Look at 7 counters on the mat.

Guiding questions:

- ★ How many counters do you think there are in this group?
- ★ Do you think there are more counters than there are vegetables?

Count and match the counters to the pictures.



TIP

Remember that each attribute block is three-dimensional, but the learners are focusing on the surface or face of the object that looks like a circle, square or triangle.

4. **Practising shapes:** Show learners a bag with the attribute blocks in it.

Guiding questions:

- ★ If the objects in the bag have the same shape as the ones in the story, what shapes are they?
- ★ How many squares/circles/triangles should be in the bag?

One learner feels inside the bag. Learners take turns to say, 'It feels like a _____ (circle/square/triangle).'

Learners place the attribute block next to the matching vegetable picture on the maths table.

5. **Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: Dramatise the story, *They pulled and they pulled*.

Day 3

What you need

- Song: *If you're holding a square* (page 100)
- 3 containers with 8 circle, 8 square and 8 triangle attribute blocks (*Resource Kit*), as well as 2 cardboard triangles, squares, circles in each



TIP

Oral counting: 1–15 and 5–1 can be done during a transition time.

1. **Song:** Learners stand in a circle. They fetch one shape each from the three containers on the mat. Sing *If you're holding a square*. Learners hold up matching shapes as they sing.
2. **Counting objects 1–7:** Learners organise themselves into three groups: one holding circles, one holding squares and one holding triangles. Give each group a container. They put their shapes on the mat next to the container.
3. **Practising 1–4; more than, fewer than, equal to:** One learner in each group places seven of the group's shapes into the container as the group counts 1 to 7. Learners look at the three shapes on the mat.

Guiding questions:

- ★ How many shapes are on the mat?
- ★ Are there more or fewer than four?
- ★ How many more shapes do you need to make a group of four?
- ★ Can you make another group that has an equal number of shapes to this group?



TIP

Move between the three groups to support learners.

4. **One more, one fewer:** Learners continue to work with the shapes on the mat.

Guiding questions:

 - ★ Can you make one of the groups have one fewer shape than the other group?
 - ★ How many shapes does the group have in it now?
 - ★ How many more shapes does the first group have in it?
5. **Practising shapes and position:** Each learner holds a shape. Use instructions with positional words, for example: 'Those with small triangles, walk sideways and put your triangles behind my chair.'
6. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Song: *If you're holding a square* (page 100)
- Masking tape/chalk
- A large cardboard circle, square, triangle (each big enough for four learners to stand on together)
- Musical instrument
- 24 circle, triangle, square attribute blocks (*Resource Kit*)
- Small cardboard triangles, squares and circles – 2 of each
- Number 3 and 4 dot and symbol cards for 21 learners

1. **Song:** Sing the song, *If you're holding a square* with shapes.
2. **Oral counting:** 1–15 and 5–1. Use masking tape or chalk to create a ladder on the mat for learners to jump along as the class counts. The jumping ladder could be painted in bright enamel paint outside in the Grade R play area.



3. **Counting objects 1–7:** Learners sit in a circle. Place the large cardboard circle, square and triangle on the mat. Count how many straight sides the triangle and the square have each. Count how many they have altogether.



4. **Practising shapes:** Hide shapes around the classroom. In groups of four, learners take turns to be 'Shape detectives' to find shapes. Learners move to a beat between the three large shapes on the floor. When the music stops, they sit around the shape that matches the one they found in the classroom.

Guiding questions:

- ★ How many learners do you think would be able to stand on the circle/square/triangle at the same time?
 - ★ Would more learners fit on the square or the circle? Why?
5. **Practising 1–4; more/fewer:** Three learners stand on each of the cardboard shapes.



Guiding questions:

- ★ Can one more learner fit onto your cardboard shape?
 - ★ If we want one fewer learner standing on the circle, what must we do?
6. **Small group activities:** Describe the activities at each workstation.

Day 5

What you need

- Rhyme: *Roly Poly* (page 100)
- 1 large ball
- Animal counters (*Resource Kit*)
- A small 'obstacle' course (see photo below)

1. **Rhyme:** Say the rhyme, *Roly Poly*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Place a group of seven animal counters on the mat.

Guiding questions:

- ★ How many animals do you think there are in this group?
Count the animal counters together.

4. **Practising position and direction:** Set up a small obstacle course. Follow the learners' instructions to move an animal through the obstacle course.



TIP

Place the animals and obstacle course on a box so that they are raised and all the learners can see them.



Guiding questions:

- ★ Which way should the horse walk to get to the top of this block?
- ★ Which way should the horse move so that he is under the box?
- ★ The horse wants to stand in this circle of blocks, how can he get there?
- ★ Is there a different way to get out?

Encourage the learners to use direction and position vocabulary.

5. **Small group activities:** Describe the activities at each workstation.

Small group activities

Teacher-guided activity

What you need

- A big toy car or doll
- Unifix blocks and circle, square and triangle attribute blocks (*Resource Kit*)
- 4 attribute blocks: 1 triangle, 1 square and 2 circles (*Resource Kit*)
- Circular container lids – 2 per learner
- A tub for each learner with 4 attribute blocks: triangles/squares/circles (*Resource Kit*) (Vary the combination in each tub.)

1. **Oral counting:** Clap and count 1–15. Stamp and count 5–1.
2. **Describing an object from different positions:** Put a toy car or doll on the mat. Ask learners to describe what this looks like from where they are sitting, for example: 'I can see the back of the doll's head.'



Guiding questions:

- ★ What does it look like from above?
- ★ What does it look like from underneath the car/doll?

Integration

Home Language and Life Skills: Discuss views of objects from different positions during daily routines, for example, a book at story time.

3. **Counting objects 1–7; similarities and differences:** Place a pile of Unifix and attribute blocks on the mat. Learners take turns to each count seven items. Discuss their choice of items.

Guiding questions:

- ★ What is the same/different about the items in your group?
 - ★ Can you sort these?
 - ★ Tell me how you sorted them.
 - ★ Could you sort them another way?
4. **Practising shapes and position; on, under, in and out:** Learners take out and count the attribute blocks in their tubs. They say how many blocks look like circles, squares or triangles.

Play 'Sizwe says'. For example:

- ★ Put your square under your foot.
- ★ Put your circle on your head.
- ★ Put your triangle back in the tub.



5. **Practising 1–4; one more/one fewer:** Learners play the 'shake and break' game with four counters and two lids. (See the teacher-guided activity in Week 2, page 25.)

Guiding questions:

- ★ Do I have the same number of counters on each lid?
- ★ How many counters do I have on each lid?
- ★ How many counters do I have altogether?
- ★ If ____ puts one more counter on this lid how many will there be?
- ★ If ____ takes one counter from this lid, how many will there be?
- ★ Which group has one more than 2/3?
- ★ Which group has one fewer than 4/3/2?



Check that learners are able to:

- explain similarities and differences between objects and sort these
- describe an object from different views
- demonstrate an understanding of one more and one fewer
- identify a circle, square and triangle

Workstation 1

What you need

- Paper cut-outs: circles, squares and triangles of different sizes and colours
- Glue
- Paper
- Crayons
- An A4 page per learner

Learners paste a shape or shapes onto their page. They draw details on or around the shapes to create a picture.



Workstation 2

What you need

- Playdough
- Dough cutters (square, circle, triangle)
- Plastic knives
- Dough mats/boards
- Poster 11

Learners make playdough squares, circles and triangles using their dough cutters. They create a picture using the shapes.



Workstation 3

What you need

- Blocks and/or Unifix blocks

Learners build whatever they like from blocks.

Workstation 4

What you need

- An assortment of twelve-piece puzzles

Learners build puzzles.



Provide opportunities for learners with differing abilities to work at their own pace.

Content Area Focus: Numbers, Operations and Relationships

Topics

- Recognise number symbols and number words
- Describe, compare and order numbers

New knowledge

- Number 5

Practise

- Oral counting 1–15 and 5–1
- Counting objects 1–7
- Number concept 1–4
- Sequencing numbers 1–4
- More, fewer

New maths vocabulary

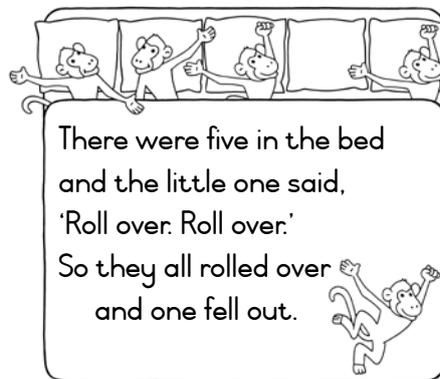
number line

order

Getting ready

For the activities this week, you will need to prepare the following:

- number frieze and house template for number 5 (page 105)
- 5 number '5' dot, symbol and word labels for the maths table (page 105)
- 5 green circle cardboard cut-outs (to fit 5 animal counters)
- *Five in a bed* poster from Term 1, Week 9, adapted to use monkeys



- number washing line made with string, pegs and number symbol cards 1–5 (see Day 3)
- 5 post boxes, marked with number symbols 1–5 (see Day 4)
- playdough template: Number 5 per learner (page 107)
- A4 page per learner with 5 ladybirds drawn on it (see Workstation 2)
- 5 paper plates/lids per learner, each with a number symbol and matching dots 1–5, for example, 1 and one dot, 2 and two dots (see Workstation 3)
- 30 stones
- copy number puzzles (1 per learner in a group) and colour in the pictures (page 111).

Whole class activities

Day 1

What you need

- Rhyme: *Roly Poly* (page 100)
- 2 hula hoops (or draw circles with chalk)
- 14 animal counters (*Resource Kit*)
- Number friezes 1–4
- Number frieze: Number 5 (page 105)
- *Number 5 story* (page 101)

1. **Rhyme:** Say the rhyme, *Roly Poly*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place two hula hoops on the mat. Spread out seven animal counters inside the one hoop, and place seven animal counters close together inside the other hoop.

Guiding questions:

- ★ How many animals are in this group? And in this group?
- ★ Which group has more/fewer animals?

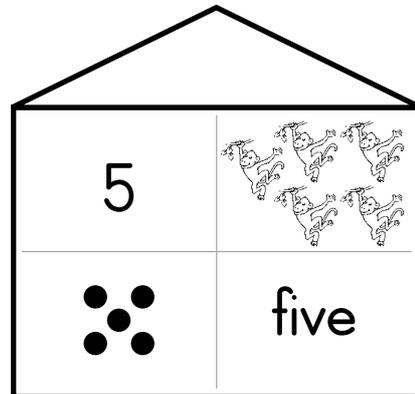
Together count the animals 1–7 in each hula hoop.

4. **Introducing number '5':** Point to number friezes 1–4 on the wall.

Guiding questions:

- ★ Which house has one more animal than the meerkats' house?
- ★ How do you know?
- ★ How many animals live in the house that was built after the elephant's house?
- ★ How many animals do you think will live in the next house?

Tell the *Number 5 story*. The animals' house is the focus of the story. Show the parts of the number frieze as you build up the story of the animals and images of the house: the different representations of number 5, for example, the picture, the dots, the symbol and the word. Display the parts of the frieze in the animal house on the wall in the maths area. Count the monkeys together.



- ★ Who has seen a monkey before? Where?
 - ★ What noise does a monkey make?
 - ★ Show me how they move.
 - ★ How many more monkeys are there than meerkats?
 - ★ If one meerkat went to the monkeys' house, how many meerkats would be left in the meerkats' house?
5. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- Song: *Five monkeys in a bed* (page 101) and pictures
- Number 5 dot, symbol and word cards
- 3 circle cardboard cut-outs
- 19 animal counters (*Resource Kit*)
- 30 animal counters hidden around the classroom (1 per learner)

1. **Song:** Sing the song, *Five monkeys in a bed*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place three cardboard circles on the mat, one with no animals, one with seven animals spread out, and one with seven animals standing close together.

Guiding questions:

- ★ How many animals do you think there are in this group?

Point to one of the groups of seven and count the animals, then point to the other group and ask, 'How many animals?'

- ★ Which of these two groups has more/fewer/the same number of animals?

4. **Practising 5:** Discuss the three groups of animals.

Guiding questions:

- ★ If I only want five animals in each of these groups, what must I do? (Take two away from each group.)

Place four animals on the empty circle.

- ★ How many more animals do we need to add to this group to make five?

5. **Animal hunt:** Place a container with sticks from the *Resource Kit* on the maths table for learners to create 'camps' of five animals. Place animal counters from the *Resource Kit* around the classroom. Learners go on an 'animal hunt' to find the animals. They place these on the table in 'camps' of five.

Guiding questions:

- ★ What could we do with the animals that can't fit into these camps? (Arrange them individually on the maths table.)

6. **Small group activities:** Describe the activities at each workstation.



TIP

Remind learners to move quietly so that they don't frighten the animals.

Day 3

What you need

- Song: *Five monkeys in a bed* (page 101) and pictures
- 7 clothes pegs
- Number washing line with number cards 1–5 to peg onto string
- Number symbols 1–5 (*Resource Kit*)
- 5 hula hoops

1. **Song:** Learners stand in a circle. They dramatise the song *Five monkeys in a bed*.

2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Ask seven learners to each fetch one object from around the classroom. Place the objects on the mat. Arrange learners so that they can all see what is on the mat.

Guiding questions:

- ★ How many objects are on the mat?
- ★ How many objects will be left if we take one away? If we take another one away? If we take two away?
- ★ How many objects do we need to put back to have five? How many more objects do we need to put back to have seven?

4. **Practising and ordering numbers 1–5:** Introduce the number washing line. Take the number cards off the washing line and give them to five learners. Learners arrange themselves in order from 1 to 5.

Guiding questions:

- ★ Which number should come first, next, before, after?

Turn a learner around so that other learners can't see their number card.

- ★ Which number is between 2 and 4?



Place the number symbols 1–5 in a muddle on the floor. Ask learners to help peg the cards in order from 1 to 5 on the washing line. Learners peg numbers to the line as you ask questions.

- ★ Which number should come first, next, after?
- ★ Can you point to the number that is before, between?

5. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Song: *Five monkeys in a bed* (page 101) and pictures
- 30 number '1–5' picture, symbol and dot cards (*Resource Kit*)
- Music or an instrument
- Number washing line with number symbols 1–5 pegged onto string
- 5 post boxes marked 1–5
- Coloured counters
- Number 5 dot cards (*Resource Kit*)

1. **Song:** Dramatise *Five monkeys in a bed*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Clap any number of times between 1 and 7. Learners count the number of claps and say how many claps there were.



TIP

Use the number cards from the maths table if you need more for each learner for activity 4.

4. **Practising 1–5:** Learners call out the number as you show dot cards 1–5. Discuss which dot cards make 5. Show different combinations of dots to make 5. Look at the number 5 dot cards and discuss what is the same/different about each one.

Hand out a number 1–5 symbol, picture or dot card to each learner. Point to the number friezes. Learners hold up their card if it matches the number on the animal frieze as you point. Play some music or shake a tambourine. Learners move to the music. When the music stops, they form groups of learners who have matching number cards. Place post boxes 1–5 below the washing line. Learners post their cards into the correct boxes when the music stops.



Guiding questions:

- ★ Which group should post their numbers first, last, and so on? Why?
5. **Small group activities:** Describe the activities at each workstation.

Day 5

What you need

- Song: *Five monkeys in a bed* (page 101) and pictures
- Poster 2
- Tambourine

1. **Song:** Dramatise *Five monkeys in a bed*.
2. **Oral counting:** 1–15 and 5–1.
3. **Counting objects 1–7:** Repeat the counting activity you did on Day 4.
4. **Practising 1–5:** Use the tambourine to beat counts of 1 to 5. Learners jump to the tambourine beats. Between jumps, give instructions using numbers 1–5. For example: ‘Shake hands with three friends.’ ‘Match five fingers on your one hand to five fingers on your friend’s hand.’
5. **Practising 4 and 5:** Discuss Poster 2. Talk about what the learners can see.

Guiding questions:

- ★ Does our playground look like this?
- ★ Is there anything that is the same/different?
- ★ What games are the children playing?

Count together how many children are playing each game. Choose learners to point as you ask questions.

- ★ Can you see the numbers 4 and 5?
- ★ How many children are playing hopscotch? And in the tyres?

- ★ If one more child joins these children, how many will there be?
- ★ How many things are there in the sandpit?
- ★ If we put one more thing in/took one out, how many things would there be?

6. **Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: When playing outdoor games refer to, for example, five balls, five times, five throws, five catches.



Small group activities

Teacher-guided activity

What you need

- 2 plastic lids per learner
- Number 5 dot cards
- Playdough and a mat per learner
- An A4 page per learner
- Crayons
- A tub per learner with:
 - Number dot, symbol, word cards 1–5
 - 5 stones
 - Red and yellow beads (*Resource Kit*)

1. **Matching dot cards:** Show learners a number 5 dot card. They arrange their stones to match this. Repeat with the other five-dot arrangements.



2. **Practising 5:** Learners count five stones from their tubs. They match their number 5 word and symbol cards to the five stones.

Place two lids in front of each learner. Together play the 'shake and break' game for number 5. Learners place their stones on the two lids in front of them as they have 'broken up' the collection. They take turns to say how many they have on each lid.

Guiding questions:

- ★ How did you break up your stones?
- ★ Who has something different?

Repeat the activity. Show one learner's lids to the group.

- ★ Who has the same?

Choose a matching set of lids and compare these.

- ★ What is the same/different about these two groups?

3. **Structure beads:** Learners show the number of beads as you ask them.

Guiding questions:

- ★ Can you show me two beads?
- ★ Can you show me one more bead?
- ★ Can you show me one less?

Hold two beads in your hand.

- ★ How many more/fewer beads do you need to get to three/four/five?

Encourage learners not to count the beads one at a time but to rather show you the number of beads you have asked for. The beads support learners to count on from a chosen number.

4. **Practising 5 using playdough:** Learners make a 5 using playdough. Support learners who are ready to write 5.





Check that learners are able to:

- identify number 5 dot, symbol and word cards
- match counters to number 5 dot cards
- notice similarities and differences in two groupings of five objects
- show one more, one fewer
- count on from a given number, up to 5



Workstation 1

What you need

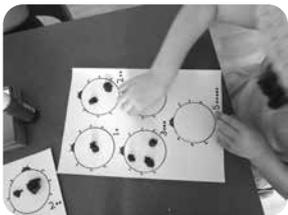
- Playdough
- Playdough template: Number 5 per learner (page 107)

Learners use playdough to complete the playdough template for number 5.

Workstation 2

What you need

- A copy of the A4 page with 5 ladybirds drawn on it per learner
- Paper scraps
- Glue



Learners roll up paper balls. They decorate the ladybirds with the appropriate number of balls.

Workstation 3

What you need

- 15 pegs and counters per learner
- A set of numbered plates or lids 1–5 per learner



Learners attach the appropriate number of pegs to each plate/lid. They put a counter on each dot.

Workstation 4

What you need

- 1 set of number puzzles 1–5 per learner (page 111)

Learners complete the number puzzles.

Content Area Focus: Patterns, Functions and Algebra

Topics

- Copy and extend simple repeating patterns
- Create own patterns
- Describe the repeat in patterns

New knowledge

- Copy and extend simple repeating patterns
- Create and explain own pattern
- Oral counting 1–20
- Count backwards 7–1

Practise

- Counting objects 1–7
- Number concept 1–5
- Sequencing numbers 1–5
- Making groups the same

New maths vocabulary

carry on

continues

the same

Getting ready

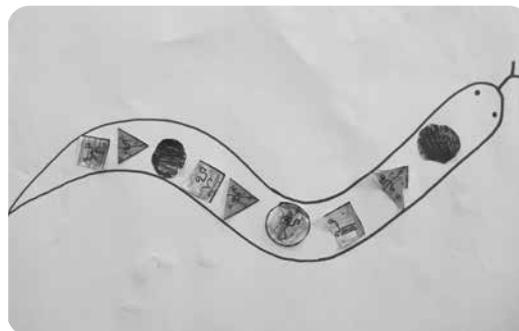
For the activities this week, you will need to prepare the following:

- 30 cards with large red, yellow, blue, green and orange circles (6 of each)
- 7 pictures of potatoes
- a large page with an outline of a tree with 7 leaves (3 big and 4 small), attached in a pattern: big, small, small, big, small, small, big
- 7 other leaf cut-outs
- 6 red and 4 yellow flower cut-outs
- 4 groups of instruments/sound makers (for example, bells, shakers, sticks, drums) – 1 per learner
- 3 pictures of each of the 4 instruments/sound makers (12 altogether)
- string and 12 pegs
- Unifix block pattern cards – 1 per learner for 2 groups
- an A4 page with shape patterns to be extended per learner
- an A4 snake shape and an A4 page with circles, squares and triangles – 1 of each per learner



TIP

Instead of a snake, choose a theme-related animal or object.



- bead-threading pattern cards (the beads on the pattern cards must look like those that will be used, in size and colour – see Workstation 4).

Whole class activities

Day 1

What you need

- Rhyme: *One potato, two potatoes* (page 102)
- 7 pictures of potatoes
- Poster 7

1. **Counting rhyme:** Say the rhyme, *One potato, two potatoes*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Put up the seven pictures of potatoes.

Guiding questions:

- ★ How many potatoes do you see?

Repeat the rhyme as you point to each potato.

4. **Copying and extending patterns:** Whisper in the ears of six learners to ask them to sit as follows: straight legs, crossed legs, straight legs, crossed legs, straight legs, crossed legs.

Guiding questions:

- ★ What can you tell me about the way these learners are sitting?
- ★ Is this a pattern?
- ★ What makes you say that?
- ★ What is this pattern?

Touch each learner as the class chants: 'Straight legs, crossed legs ...'

- ★ How can we make this pattern carry on in the same way?

Add other learners.

Whisper a new pattern to six other learners: one sitting, two standing, one sitting, two standing. Ask questions about this pattern and ask learners to extend the pattern.

5. **Identifying patterns in a picture:** Discuss Poster 7.



Guiding questions:

- ★ What patterns can you see in this picture?

Explain why this is a pattern.

- ★ What can you see that does not have a pattern on it?
- ★ How do we know if something is a pattern?

6. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- Rhyme: *One potato, two potatoes* (page 102)
- 7 pictures of potatoes
- 30 colour circle cards

1. **Counting rhyme:** Say the rhyme, *One potato, two potatoes*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Repeat the rhyme and point to the seven pictures of potatoes.
4. **Identifying patterns in everyday objects:** Learners find patterns on their clothes, and in the classroom.

Guiding questions:

- ★ Why do you say this is a pattern?
- ★ What do you see that is repeated?
- ★ What would come next in the pattern?

5. **Practising patterns:** Give each learner a colour circle card. They find others with matching cards and make groups.

Guiding questions:

- ★ What is the same/different about your cards?
- ★ Are there more/fewer red circles than green circles?
- ★ How do you know?

Guide learners with red and blue cards to stand holding their cards in the following pattern: red, red, blue, blue, red, red, blue, blue.

Learners extend the pattern.

- ★ What pattern do you see?
- ★ What other patterns can we make?

Guide learners to arrange themselves based on their suggestions.

- ★ What will come next?
- ★ What came before?
- ★ How can we carry on in the same way?

6. **Small group activities:** Describe the activities at each workstation. Learners place their cards on the maths table as they go to their workstations, according to the colour you say.

Day 3

What you need

- Rhyme: *One potato, two potatoes* (page 102)
- 1 loose leaf
- Tree picture with 6 leaves attached in a pattern (as described on page 53)
- Prestik
- 3 big and 3 small leaves
- 6 red and 4 yellow flower cut-outs

1. **Counting rhyme:** Learners stand in groups of four to eight. They do the actions in the counting rhyme and game, *One potato, two potatoes*, while the whole class says the words of the rhyme together.



TIP

Use real leaves if possible. Place these on the maths table for learners to create patterns.

2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Look at the tree with six leaves attached in a pattern.

Guiding questions:

- ★ How many leaves are there on this tree?
- ★ How many will there be if I add one more leaf?

Add another leaf. Count the leaves together.

4. **Problem solving 1–5 using patterns:** Put four flower cut-outs in a row under the tree in the pattern red, yellow, red, yellow.

Guiding questions:

- ★ How many flowers are there?
- ★ Can you see a pattern? Tell me about the pattern.
- ★ What colour is the first/second/third/fourth flower?
- ★ What colours must I add next to carry on the pattern?
- ★ How many flowers are there now?
- ★ Are there more/fewer red flowers or yellow flowers?
- ★ If we carry on this pattern, what will it look like?

Place extra flower cut-outs on the maths table for learners to use during the day.

5. **Copying and extending patterns:** Learners create a sound and action pattern, for example: clap, pat, clap, pat.

Guiding questions:

- ★ What did you see and hear?
- ★ Is this a pattern? Why/why not?

Together repeat the pattern.

- ★ What do you notice about this pattern?
- ★ What comes after the clap?
- ★ Can you carry on?

Change the pattern, for example: hop, hop, clap, clap, hop, hop, and discuss it.

6. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Rhyme: *One potato, two potatoes* (page 102)
- Tree picture with 6 leaves attached in a pattern
- 7 other leaves
- Everyday objects – such as pens, pencils, books, spoons and forks – to make patterns
- 6 containers each with 30 coloured sticks (*Resource Kit*)

1. **Counting rhyme:** Play the counting game, *One potato, two potatoes*.

2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Look at the tree picture with six leaves, and the seven leaves on the mat.
Guiding questions:
 - ★ Are there more/fewer leaves on the tree or on the mat?
 Count the leaves together.
4. **Copying and extending patterns:** Learners identify the pattern of the leaves on the tree.
Guiding questions:
 - ★ How would we carry on this pattern?
 They discuss patterns they see on their clothes. Create a sound and action pattern as on Day 3.
5. **Practising patterns:** Make patterns using everyday objects, for example: koki, pencil, koki, pencil. Ask guiding questions about the pattern. Learners should describe and extend the pattern.
 Learners gather in groups of five. Give each group a container with coloured sticks. Learners count six sticks each. They create their own patterns and together discuss these. Move between groups to give support.
6. **Small group activities:** Describe the activities at each workstation. Learners place the stick patterns on the maths table as they go to their workstations.

Day 5

What you need

- Rhyme: *One potato, two potatoes* (page 102)
- String and 12 pegs
- 4 groups of instruments/sound makers (for example, bells, shakers, sticks, drums) – 1 per learner
- 3 pictures of each of the 4 sound makers

1. **Counting rhyme:** Play the counting game, *One potato, two potatoes*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place a group of seven shakers and a group of seven bells on the mat.

Guiding questions:

- ★ How many instruments do you think there are in this group?
- ★ And in this group?
- ★ Which group do you think has more/fewer?

Count the instruments together.

- ★ Who said the correct number?

Add two other groups of instruments. Learners fetch instruments and all the learners with the same instruments sit next to each other in the circle.



TIP

Use objects such as yoghurt cups, sticks and blocks if you do not have instruments.



TIP

Ask learners to keep their hands in their laps with their instruments on the floor in front of them. They must not wake them up until all learners have an instrument.

Guiding questions:

- ★ If there are seven shakers, how many learners should we count for each learner to have one?
- ★ How many learners are left who don't have an instrument? (For the last group.) Give these learners an instrument.

4. **Sound patterns:** Show learners four picture cards of the four instrument groups. They play their instruments as you show these cards, one at a time. Place the cards on the washing line in different patterns for them to follow. They play as you point.

Guiding questions:

- ★ What pattern do you see?
- ★ How will this pattern continue?
- ★ Which picture comes next?
- ★ Which group will play first/last in this pattern?

5. **Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: Art activities that focus on pattern (for example: rhythmic patterns, low and high sound patterns, making and decorating picture frames), drawing patterns that develop fine motor skills as part of Emergent Handwriting.

Small group activities

Teacher-guided activity

What you need

- Number washing line with cards 1–5 in the incorrect order
- 2 plastic lids/paper plates per learner
- Unifix blocks sorted by colour into containers
- A tub per learner each with:
 - Structure beads
 - 5 Unifix blocks
 - A Unifix block pattern card

1. **Oral counting:** 1–20 and 7–1.
2. **Practising 5; structure beads:** Learners use the beads from their tubs.

Guiding questions:

- ★ Are there the same number of red and yellow beads? How do you know?
- ★ Count the red beads. How many are there?
- ★ Count the yellow beads. How many are there?
- ★ Show me two. Show me one more bead. Show me one less.
- ★ Hold four beads. How many more beads do you need to show five? Learners count on to five, starting at different numbers. For example, they hold three beads and count from there up to five.



3. **Practising 1–5; number line:**
Together look at the number cards 1–5 on the washing line.

Guiding questions:

- ★ What do we need to do to put these numbers in the correct order?
- ★ Which card should come first, second, third, fourth and fifth?
- ★ Which number is before/after 4?



4. **Practising 1–5; Unifix blocks:**
Learners each count five Unifix blocks. They shake and break these onto the two lids in front of them.

Guiding questions:

- ★ How can you make both of your lids have the same number of blocks?
- ★ Do you need more blocks to make this happen?
- ★ Is there another way?
- ★ What will happen if I take one of your blocks away from this lid? Will your groups still be the same/equal?

Take a block from a lid from each of the learners.

- ★ What do you need to do to make your groups the same/equal again?

5. **Practising patterns:** Create a pattern using Unifix blocks. Discuss the pattern with the learners. Place containers with Unifix blocks on the mat. Learners use the Unifix blocks to copy the pattern. Learners work with a partner to create a Unifix block pattern. Each learner chooses a colour they want to add.

They take turns adding a colour to extend the pattern. Learners use the Unifix blocks and copy pattern cards.

Guiding questions:

- ★ What pattern do you see on your card?
- ★ How can you continue this pattern?
- ★ How many of each colour block do you need to use for each part of this pattern?

6. **Creating and explaining patterns:** Learners create their own pattern using the Unifix blocks. They explain their pattern to the group.

Guiding questions:

- ★ Can you tell us about your pattern?
- ★ Can you explain what you have repeated?



Check that learners are able to:

- count orally 1–20 and 7–1
- count on between 1 and 5, using the structure beads
- order numbers 1–5
- make groups the same/equal up to 5
- identify, copy and extend patterns
- create and explain their own patterns



Workstation 1

What you need

- A shape pattern sheet per learner
- Pencil crayons

Learners extend patterns. If drawing is a challenge, let learners use the attribute blocks from the *Resource Kit*.

Workstation 2

What you need

- 1 snake template (see page 53)
- 1 shape pattern sheet per learner

Learners cut and paste the shapes in a pattern on the snake.



Workstation 3

What you need

- Unifix block pattern cards
- Unifix blocks

Learners use Unifix blocks to copy patterns.

Workstation 4

What you need

- A tub per learner with:
 - Threading beads and string
 - Bead pattern cards

Learners string beads according to the pattern cards.



Content Area Focus:

Data Handling

Topics

- Collect and sort objects
- Represent sorted collections of objects
- Discuss and report on sorted collections of objects

New knowledge

- Collect, sort and represent collections of objects
- Analyse and report on data

Practise

- Oral counting 1–20 and 7–1
- Counting objects 1–7
- Number concept 1–5
- More than, fewer than, equal to
- Sorting and classifying
- Shapes: circle, square, triangle

New maths vocabulary

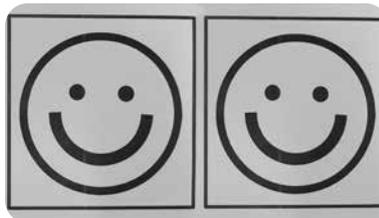
similarities

pictograph

Getting ready

For the activities this week, you will need to prepare the following:

- 10 individual small aeroplane pictures
- 1 picture of a circle and 1 of a square
- 7 A4-sized circles and 5 squares
- 2 small pictures each of: walking, taxi, car and bus (all the same size)
- small 5 cm × 5 cm card with a smiling face (all the same size) – 2 per learner (see Day 3 and Day 4)



- 2 large sheets for pictographs each with 4 columns
- a collection of wooden and plastic construction toys, for example, blocks, Lego
- magazines with transport pictures
- 1 A4 graph page (4 columns and 6 rows) per learner: The left column has number symbols and dots 1–5. The bottom row has a colour in each – red, blue and yellow
- a different shape graph page for each learner (Each should have five columns labelled at the bottom, for example, 2 circles, 3 squares, 1 triangle, 2 squares, 1 circle, with space above each (see Workstation 3))
- cut-out circles, squares and triangles from previous weeks – approximately 12 per learner.

Whole class activities

Day 1

What you need

- An A4 picture of a circle and a square for the maths table
- Circle-shaped objects (for example, cups, wastepaper bin, yoghurt containers, lids) hidden in the classroom
- Square- and rectangle-shaped objects (for example, boxes, dice, blocks, lunch boxes) hidden in the classroom

1. **Rhyme:** Learners choose a song or rhyme from previous weeks to sing or say.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners go on a hunt to find objects in the classroom that look like circles, squares or rectangles. (Make sure that you have enough objects so that there is one per learner.) Learners place the objects in the middle of the mat and sit in a circle. Together sort the objects into two groups: one with objects that are circular and another with objects that have corners, flat sides and straight edges (square and rectangular objects). Discuss why the objects have been sorted into these groups. Focus on the properties of the objects and discuss the shape.

Guiding questions:

- ★ Does this group of objects look as though it has more or fewer than seven objects?

Together count out seven objects that have a circular shape and point out that there are more than seven circle-shaped objects altogether in that group. Repeat this with the other group of square- and rectangle-shaped objects. Put the seven items from each group on the maths table next to the circle and square/rectangle pictures.

4. **Sorting; more than, fewer than, equal to:** Look at the objects that are left.

Guiding questions:

- ★ Do you think there are more objects that look like circles, or more objects that have straight edges and corners?
- ★ What do we need to do to find out?

Together sort the objects into two groups and talk about them.

- ★ Do you think these two groups have an equal number of objects in them?
- ★ Which of these two groups do you think has more/fewer objects?
- ★ Which is the smallest/biggest object in this group?
- ★ What different colours can you see in this group?
- ★ What are the objects in this group made of?
- ★ How else can we sort these objects?



TIP

Properties of 3-D objects include length, width, height. Talk about sides, edges and corners.



TIP

To help learners as they sort, provide two big containers, one labelled with a picture of a square and a rectangle, and another labelled with a picture of a circle.

Learners sort objects into groups, as decided on by the class.
Leave the objects in the maths area for further exploration.

5. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- Song: *Little aeroplanes* (page 102)
- 10 aeroplane pictures
- 7 small toy cars/trucks
- Poster 8
- 7 large circles, 5 large squares

1. **Song:** Sing the song, *Little aeroplanes*. Show the aeroplane pictures.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place seven toy cars or trucks on the mat.

Guiding questions:

- ★ How many vehicles do you think there are?

Together count the cars or trucks from 1 to 7.

4. **Data collection, sorting:** Learners stand in a circle. Call out different questions about how learners came to school today. Ask questions based on what you know of your learners' experience and how they come to school.

Guiding questions:

- ★ Did you walk to school today?
- ★ Did you come to school in a car today?
- ★ Did you come to school in a taxi today?
- ★ Did you come to school by bus today?

Learners who answer yes, step into the circle. Discuss the learners' responses.

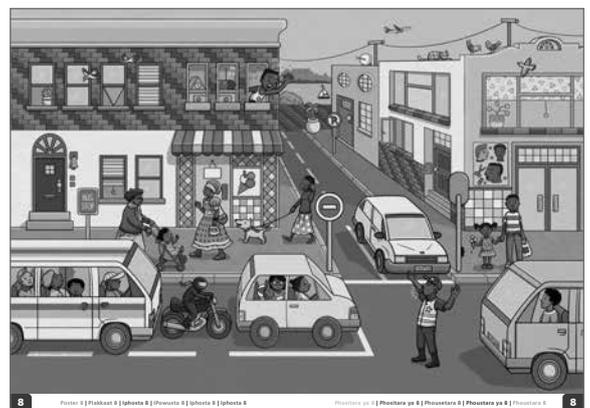
- ★ Who only stepped in once?
- ★ Who stepped in more than once? Why?

Learners think of other ideas, based on transport and call out categories.

5. **Talk about different kinds of transport:** Discuss Poster 8. Talk about what types of transport learners can see.

Guiding questions:

- ★ How many different kinds of transport can you see?
- ★ Are there more/fewer on the ground or in the air?
- ★ What is the same about the transport on the ground?



TIP

If learners do not fit into these categories suggest that they choose the transport that they have used most often or even once in the past to get to school.

- ★ How are they different?
- ★ How many vehicles have four wheels and how many have two wheels?
- ★ What kinds of transport have two wheels?

6. **Small group activities:** Describe the activities at each workstation.

Day 3

What you need

- Song: *Little aeroplanes* (page 102)
- 10 aeroplane pictures
- 7 toy boats
- 4 small pictures: walking, a taxi, a car, a bus
- Small cards with a smiley face (all the same size) – 1 per learner
- Prepared pictograph page

1. **Song:** Sing the song, *Little aeroplanes*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Repeat the counting activity from Day 2 using boats instead of cars and count from 1 to 7. Place the boats on the maths table for learners to sort according to colour.

Note: If you don't have boats, these can be made from polystyrene trays with a stick pushed through the centre and paper for a sail. The sails could be different colours.



4. **Collecting data:** Discuss how learners travelled to school today.

Guiding questions:

- ★ If we want to know if more learners travel to school by taxi than those who walk or who travel by car or bus, what do we need to do?

Show four pictures of different forms of transport, and ask learners what these represent. Place these at each of the four corners of the mat. Learners collect a smiley face from a container on the mat and sit next to the picture that represents how they travel to school.

Guiding questions:

- ★ Which group do you think has the most learners?
- ★ Which group has the fewest learners?

5. **Representing data; more than, fewer than, equal to:** Ask learners how they can make a picture of how many learners use each type of transport. Guide them to place the four transport pictures in four columns to make a pictograph. Learners place their smiley face cards in the appropriate column above the correct mode of transport to complete the pictograph. Cards must be placed touching one another without spaces between them (see page 65).



TIP

The question about types of transport must be appropriate to the context of your learners.



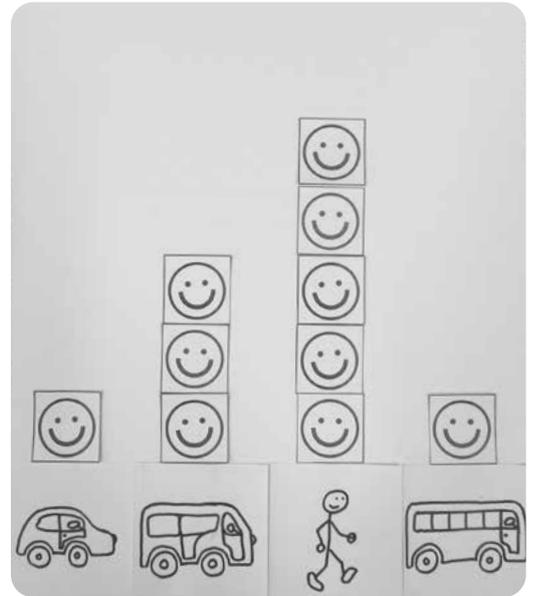
TIP

Learners' cards must be the same size.

6. **Interpreting data:** Look at the pictograph.

Guiding questions:

- ★ Do more learners travel to school by taxi than any other form of transport?
- ★ How do you know?
- ★ Do more learners travel to school by car or by bus?
- ★ How do you know?
- ★ Do more learners walk or come by car?



7. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Song: *Little aeroplanes* (page 102)
- 10 aeroplane pictures
- Transport pictograph from Day 3
- Another pictograph as on Day 3 with the same four pictures of transport
- Small cards with a smiley face (all the same size) – 1 per learner
- Boats and cars from the maths table

1. **Song:** Sing the song, *Little aeroplanes*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Whisper '6 boats' into a learner's ear. He/she fetches these from the maths table, and places them on the mat. Whisper '7 cars' into another learner's ear. He/she does the same as the first learner. Learners estimate how many objects there are in each group. Together count the objects from 1 to 6 and 1 to 7.
4. **Interpreting data:** Discuss the information shown on the pictograph learners completed on Day 3.

Guiding questions:

- ★ What did we do yesterday to find out how you all come to school?
 - ★ How do most learners come to school?
 - ★ What kind of transport is used by the fewest learners?
5. **Practising data collection and representation:** Discuss whether the learners used a different form of transport to get to school today. Create a pictograph as you did on Day 3, activity 4 and 5. Compare the pictographs for Day 3 and Day 4.

Guiding questions:

- ★ What do you see on our transport pictograph today?
- ★ What is the same as yesterday?
- ★ What is different?

6. **Small group activities:** Describe the activities at each workstation.

Day 5**What you need**

- Song: *Little aeroplanes* (page 102)
- 10 aeroplane pictures
- A collection of wooden and plastic construction toys, for example, blocks, Lego

1. **Song:** Sing the song, *Little aeroplanes*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners stand in a circle. Touch seven learners, as the class counts 1–7. Learners sit down as you touch them. Move around the circle until everyone has had a turn. When you get to the last group, learners estimate whether there are still seven learners standing before you count.
4. **Sorting, classifying and comparing:** Show the learners a plastic object and a wooden object from the classroom, for example, a building block and a Lego block.

Guiding questions:

- ★ What can you tell me about these things?

Invite some learners to feel and describe the objects.

- ★ What do they feel like?
- ★ What is the same or different about them?

Place a collection of wooden and plastic blocks and construction toys on the mat. Learners each take an object from the group. Ask the learners to make two groups, one of wooden objects and the other of plastic objects.

- ★ Which group do you think has more/fewer?
- ★ Has anyone got anything in their group that is exactly the same? What is the same about them?
- ★ How else could we sort these items?

5. **Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: Learners use the construction toys to make cars, boats, taxis and other vehicles. They create groups of these to place on the maths table and talk about the vehicles they made and the groups that they sorted them into.

**TIP**

Consider attributes such as colour, size, shape and texture when sorting objects.

Small group activities

Teacher-guided activity

What you need

- 60 animal counters (*Resource Kit*)
 - A4 graph grid per learner
 - A tub per learner with red, yellow and blue animals, in groups of 5, 4 and 3 animals
- (*Resource Kit*) (Vary the combinations for each learner, for example, 5 red, 4 yellow and 3 blue animals.)
- Red, yellow and blue crayons

1. **Counting objects 1–7:** Place animal counters on the mat. Each learner chooses and counts out seven animals.

Guiding questions:

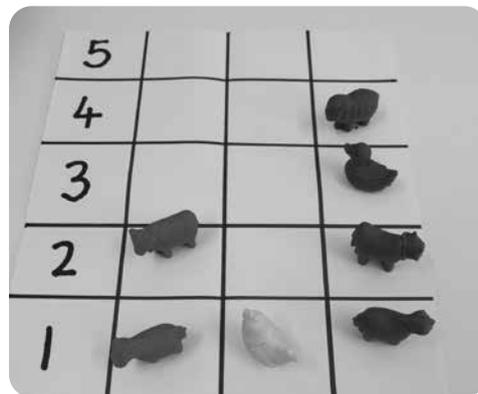
- ★ Is there anything the same/different about the animals in your group?
- ★ Do you have any that are the same as the learner sitting next to you? How many are the same?
- ★ What colour animals have you chosen?
- ★ How many of each colour do you have?

2. **More/fewer:** Learners compare the number of different-coloured animals they have in their groups.

Guiding questions:

- ★ Do you have more/fewer red animals than other colour animals in your group?

3. **Collecting and sorting:** Learners put their animal counters from their tubs on the mat.



Guiding questions:

- ★ Do you have more red animals than other colour animals in your group?
 - ★ How can we find out the answer to this question?
- They sort their animals into colour groups.

4. **Representing data:** Show learners the A4 graph.

Guiding questions:

- ★ How can we show what colour animals each of you has in your groups?



TIP

Learners' graphs will be different. They will answer according to the colour of the animals in their tub.

Guide learners towards putting the animals into the red, blue and yellow columns. They colour in the blocks where each animal is standing.

5. **Interpreting data:** Learners look at their graphs together and compare them.

Guiding questions:

- ★ Do you have more red animals than other colour animals?
- ★ Who has fewer red animals than other colour animals?
- ★ Do you have more yellow or more blue blocks on your page?
- ★ Does anyone have the same number of red animals?
- ★ Who has fewer/more than this number of animals?
- ★ What is the difference/the same between ____'s and ____'s graphs?

**Check that learners are able to:**

- sort objects according to colour
- colour a graph according to concrete objects in a group
- answer questions based on their own picture
- compare their picture with others and notice similarities and differences

Workstation 1**What you need**

- Magazines with transport pictures
- Scissors
- 3 containers, each with a picture label for air travel, water travel and road travel

Learners cut out pictures and place them into the container with the matching picture.

Integration

Home Language and Life Skills: These pictures can be discussed as a Listening and Speaking activity and/or as a Beginning Knowledge activity.

Workstation 2**What you need**

- Masking tape/string to create 4 columns on the mat/table
- A box with polystyrene, plastic, foil and paper/cardboard waste items
- Place one of each kind of waste item in each of the 4 columns

Learners sort objects according to what they are made of.

Workstation 3

What you need

- Shape graph page – different for each learner
- A container with cut-out circles, squares and triangles
- Glue

Learners paste or draw the correct number of shapes in each column.



Workstation 4

What you need

- Items from the *Resource Kit*: fruit, counters, sticks, Unifix blocks, coloured discs
- 5 containers with red, blue, yellow, green and black stickers/labels – a different colour on each
- Egg box with 6 spaces – 1 per learner

Learners sort the items from the *Resource Kit* according to colour. They then replace these and sort and classify the items in any other way using the egg boxes.



Integration

Home Language and Life Skills (outdoor play): Make a grid in the outdoor play area. Learners collect and sort different outdoor objects in the grid.

Content Area Focus: Space and Shape (Geometry)

Topics

- Properties of shapes – compare same and different, sort according to properties
- Position
- Orientation and views

New knowledge

- Follow directions
- Midline crossing

Practise

- Oral counting 1–20 and 7–1
- Counting objects 1–7
- Number concept 1–5
- Shapes: circle, square, triangle
- Forwards, backwards
- Reinforce position

New maths vocabulary

opposite

around

along

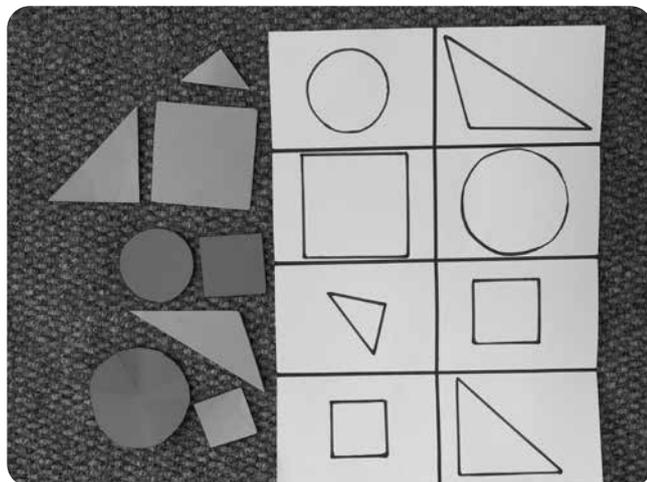
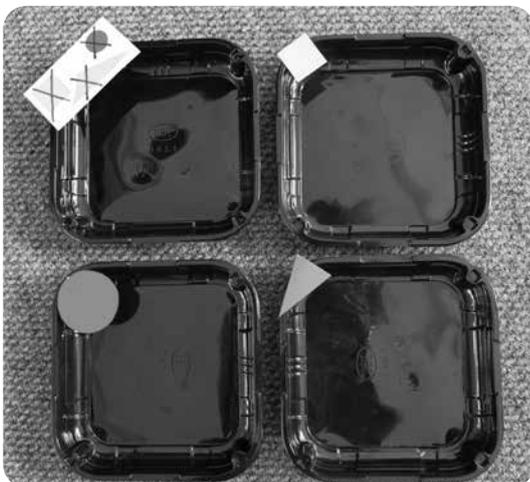
through

over

Getting ready

For the activities this week, you will need to prepare the following:

- pictures of 7 ducklings
- 2 large cardboard circles – 1 red, 1 green
- big cardboard circles, squares and triangles – 3 of each
- 7 playdough/plastic ducks
- 40 cardboard triangles, circles and squares similar in size to the attribute blocks
- 30 cardboard circles, squares and triangles of various sizes and colours
- 30 other cardboard shapes, for example, diamonds, hearts, stars
- 4 labelled containers – 1 with a circle, 1 with a square, 1 with a triangle, 1 with a picture of the 3 shapes with a cross through them
- shape matching boards and shapes that can be placed on the board – a different board for each learner.



Whole class activities

Day 1

What you need

- Song: *Seven little ducks* (page 102)
- Pictures of 7 ducklings
- 5 hula hoops
- 1 red and 1 green cardboard circle

1. **Song:** Sing the song, *Seven little ducks* with pictures.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Count the duckling pictures from 1 to 7.
4. **Practising position:** Learners sit in a circle. Put five hula hoops in the middle of the circle. Learners move *between* the hula hoops when you show a green circle and sit *next to* a hula hoop when you show a red circle.



TIP

This activity can be done outside.

Then let five learners stand together *in* each of the hula hoops. Learners demonstrate actions according to the guiding questions.

Guiding questions:

- ★ How high/low can you reach?
- ★ How wide can you stretch?
- ★ Do you all have the same amount of space in your hula hoops?
- ★ Why/why not?

Let another learner stand *in* each hoop.

- ★ Now that there is one more learner in your hula hoop, has the amount of space that you each have changed?
- ★ How many more learners do you think could fit into the space in your hula hoop before all the space is taken?

Learners move *between* the hula hoops again, *forwards* and *backwards*. Then let five different learners stand together *in* each of the hula hoops.

- ★ How many learners could sit *inside* the hula hoop to fill up all the space?

Learners sit *in* the hula hoop to see how many will fit into one hula hoop. They move *around* the hula hoop they have been sitting in. They sit *outside* the hula hoop with their feet *on* the hula hoop.

5. **Small group activities:** Describe the activities at each workstation.



Day 2

What you need

- Song: *Seven little ducks* (page 102) and pictures
- 7 plastic/playdough ducks
- Plastic lid
- Big cardboard circles, squares and triangles – 3 of each

1. **Song:** Sing the song, *Seven little ducks* with pictures.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Put a lid with a group of seven ducks on the mat. Learners estimate how many ducks there are. Together count the ducks.
4. **Practising shapes:** Learners play the game, 'I spy ... (shape)' and identify circles, triangles and squares around the classroom. For example: 'I spy with my little eye a shape that has three corners and is stuck up on the wall.'
5. **Practising shapes and direction:** Place large cardboard shapes on the ground. Learners follow instructions to move to a specific shape. For example: 'Jump and stop at a circle, crawl to a shape with three corners, twirl to a shape with four straight sides.'
6. **Small group activities:** Describe the activities at each workstation.



TIP

This activity could be done outside. Use chalk to draw shapes instead of using cardboard shapes.

Day 3

What you need

- Song: *Seven little ducks* (page 102) and pictures of ducks and ducklings
- 7 plastic/playdough ducks
- 7 circle attribute blocks (*Resource Kit*)
- Dot cards 1–5 (*Resource Kit*)
- Big cardboard circles, squares and triangles – 3 of each
- 3 beanbags

1. **Song:** Sing the song, *Seven little ducks*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Place seven ducks and a group of seven circles on the mat. Learners estimate how many there are in each group. Together count each group.

Guiding questions:

- ★ Do you think these groups have an equal number of objects?

4. **Practising circles and 1–5:** Discuss the ducks and circles with the learners.

Guiding questions:

- ★ Can you see any part of the ducks or ducklings that look like circles?
- ★ Where in the room do you see circle shapes?

Show the learners dot cards 1–5.

- ★ What shape are the dots?
- ★ How many dots do you see on these cards?

Show two cards with different numbers of dots.

- ★ Does this card have more/fewer dots than this one?

5. **Practising shapes:** Place cardboard shapes in the middle on the mat. Play a beanbag game. Give three learners each a beanbag. They follow instructions, for example: 'Throw your beanbag onto the shape that has three corners, the shape that has one more than three corners, the shape that has four sides.' The learners name the shape on which the beanbag lands and discuss the properties. Repeat with other learners.
6. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Song: *If you're holding a square* (page 100)
- 24 circle, square, triangle attribute blocks (*Resource Kit*)
- Big cardboard circles, squares and triangles – 2 of each
- 7 boxes (3 that have square faces and 4 that have rectangular faces)
- Song: *What can I do?* (page 103)

1. **Song:** Hand out 24 circle, square and triangle attribute blocks and 6 cardboard shapes. Sing *If you're holding a square*. Learners cross their midline by passing their shapes from one hand to the other when they stand up.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Place seven different-sized boxes on the mat. Learners estimate how many boxes there are and then count them.

Guiding questions:

- ★ Do any of the boxes have square-shaped sides?
- ★ How do you know? How many?
- ★ Are all the sides of the box square?
- ★ Are there any boxes that don't have square sides? How many?

4. **More than, fewer than, equal to:** Sort the boxes into two groups: those that have a square side and those that don't.

Guiding questions:

- ★ Which group has more/fewer boxes? How many are there in each group?
- ★ What do we need to do to make these groups equal?

5. **Practising shapes:** Learners sit in a circle. Place a triangle, circle and square attribute block behind three learners. One learner skips around the outside of the seated learners as the class sings the song *What can I do?* He or she picks up the correct attribute block from behind a learner and places it behind another learner. Repeat with different learners.
6. **Small group activities:** Describe the activities at each workstation.

Day 5

What you need

- Song: *What can I do?* (page 103)
- Hula hoops, boxes, chairs and other objects for obstacle course

1. **Song:** Learners sing the song, *What can I do?* while you play the game as described in Day 4, activity 5. Choose different learners from those who played the game on Day 4.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Clap your hands any number of times from 1 to 7. Learners count the claps.
4. **Practising direction – backwards, forwards:** Learners follow a simple obstacle course outdoors, for example, moving over, under, around, between, along, through, in and out. They follow directions to move forwards and backwards on the course.
5. **Small group activities:** Describe the activities at each workstation.



TIP

Learners cross their midline when following instructions, like touch your foot with your opposite hand, or touch your shoulder with your opposite hand.



Integration

Home Language and Life Skills: Play a game of musical shapes. Place large shape cut-outs in a circle on the floor. Learners step from shape to shape when the music plays. When it stops, they say what shape they are standing on.

Small group activities

Teacher-guided activity

What you need

- 24 attribute blocks (triangle, circle, square)
- Sticks (*Resource Kit*)
- A tub for each learner with:
 - 7 plastic/cardboard shapes (triangles, circles, squares)
 - 1 small car or animal counter

1. **Counting objects 1–7:** Place 24 attribute blocks on the mat. Learners take turns to each count seven attribute blocks. They count how many of each shape they have in their group of seven attribute blocks.

Guiding questions:

- ★ Which shape does _____ have one of/two of?

2. **Practising shapes; creating images:** Place attribute blocks on the mat to make an image. Learners copy the image using their attribute blocks.

Guiding questions:

- ★ Do you have all the shapes you need for this?
- ★ Which shapes are you missing?
- ★ How many of each of these do you need?



TIP

Learners practise crossing the midline by having their shapes on one side of their body and building their shape image on the other side.



Learners use the attribute blocks and cardboard shapes from their tubs to create their own image.

- ★ What shapes did you use?
- ★ Why did you use a triangle for a hat?
- ★ What if we added this circle here?
- ★ How many shapes did you use?
- ★ Who used the most circles?
- ★ Is there anyone who doesn't have a square?

3. **Practising shapes; using sticks:** Create a triangle or square using coloured sticks. Discuss it with the learners. Cover it and ask them to copy it. Repeat the activity, varying the size of the shape. Attempt to create a circle with the sticks.

Guiding questions:

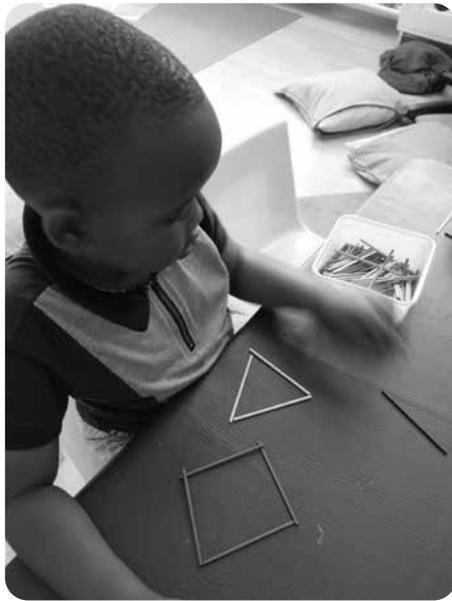
- ★ Does this look like a circle? Why do you think so/not?
- ★ Could you make a circle in any other way? (Trace around a cup.)



TIP

Encourage the use of position and direction vocabulary.

4. **Directions and position:** Learners use the sticks to create their own shapes. They follow instructions using the car or animal counter from their tubs. For example: 'Move the car/animal forwards around your shapes, backwards in between your shapes, forwards over the green/blue/yellow stick, reverse to park/stand inside a shape.' Ask each learner to give an instruction to the group.



Check that learners are able to:

- copy images made with shapes
- create images using shapes and respond to related questions
- respond to instructions with different directions and positions

Workstation 1

What you need

- 40 cardboard circles, triangles and squares
- 30 other shapes (for example, rectangle, kite, oval)
- 4 labelled containers – 1 with a circle, 1 with a square, 1 with a triangle, 1 with a picture of the 3 shapes with a cross through them (see page 70)

Learners sort shapes into the 4 labelled containers. They create their own images using the shapes.

Workstation 2



What you need

- Wooden blocks (triangle-, square- and circle-shaped)
- 1 plastic knife or stick (*Resource Kit*) per learner
- Playdough

Learners press the playdough flat. They cut around the blocks and create images with their shapes.



TIP

Use other objects if you don't have blocks, for example, tiles, plastic cups or rulers, to create shapes such as triangles, circles and squares.

Workstation 3

What you need

- Masking tape/hula hoops
- Unifix blocks/Duplo/wooden blocks

Use hula hoops and masking tape to make shapes on the floor. Learners place blocks along the hoops and tape.



Workstation 4

What you need

- 1 shape board per learner (see page 70)
- Matching shape cut-outs

Learners match shapes to those on their boards. They swap boards once they have finished.

Content Area Focus:

Measurement

Topics

- Length – compare and order objects using appropriate vocabulary

New knowledge

- Measuring and comparing: length (long, longer, longest; short, shorter, shortest)

Practise

- Oral counting 1–20 and 7–1
- Counting objects 1–7
- Estimation 1–7
- Length: tall, short

New maths vocabulary

long

short

longer

longest

length

Getting ready

For the activities this week, you will need to prepare the following:

- pictures of 4 long worms and 3 short worms
- 4 × 20–30 cm long, and 3 shorter playdough worms
- a length of string per learner and learners' names
- scarves, ribbons, belts, shoelaces, string – 7 of each, all different lengths
- lengths of cardboard that should all be the same width, but different lengths – 1 per learner
- strips of coloured paper of the same width, but different lengths – 10 per learner
- A4 page per learner with line down the middle; a short strip pasted to the top of one side and a long strip pasted to the top of the other side
- A3/A4 page per learner with a different length worm on each
- A4 page per learner with 5 lines of different lengths running across the page.


TIP

Place various items from nature on the maths table during the week, for example, feathers, sticks, leaves. These can be used for measuring and ordering.

Whole class activities

Day 1

What you need

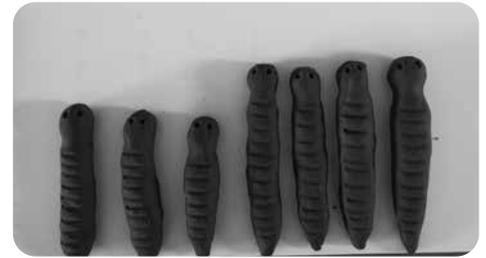
- Song: *Long and short* (page 103)
- 7 worm pictures
- 7 playdough worms
- 1 A3 page
- 2 A4 pages
- Term 1 height chart
- String and names for one group of learners

1. **Song:** Sing the song, *Long and short* with pictures.

2. **Oral counting:** 1–20 and 7–1.

3. **Counting objects 1–7:**

Learners sit in a circle. Look at the seven playdough worms on an A3 page.



Guiding questions:

- ★ How many worms do you think there are?

Count the worms together.

4. **Long and short:** Place a long and a short worm on an A4 page.

Guiding questions:

- ★ What is the same/different about these worms?
- ★ What else can you see in our classroom that is long/short?
- ★ How can we find out if an object is longer or shorter than another object?
- ★ What are some of the different ways we can measure objects?

5. **Reinforcing length:** Look at the height chart from Term 1. Measure the height of one group of learners and add their measurements to the height chart. Discuss and compare similarities and differences in learners' heights.

Guiding questions:

- ★ Is your height the same as the last time we measured you, or are you taller than you were?
- ★ How can we find out how tall you are?
- ★ Is there another way?

6. **Small group activities:** Describe the activities at each workstation.



TIP

Remember to measure from the ground to the top of the learner's head. Measure one group each day.

Day 2

What you need

- Song: *Long and short* (page 103)
- 7 worm pictures
- String and names for one group
- Sticks (*Resource Kit*)
- Scarves, ribbons, belts, shoelaces, string – 7 of each, all different lengths
- Masking tape/chalk

1. **Song:** Sing the song, *Long and short* with pictures.

2. **Oral counting:** 1–20 and 7–1.

3. **Counting objects 1–7:** Display seven belts and six scarves in two separate groups.

Guiding questions:

- ★ How many belts/scarves do you think there are in each group?
- ★ Do you think each group has an equal number of objects?

Count the belts and scarves and discuss.

- ★ What do we need to do to make the groups equal? (Add one more scarf.)

Count the items again. Put them in two rows, matching the belts and scarves to show that each group has the same number of objects.

4. **Exploring length:** Display the scarves, ribbons, belts, shoelaces and string.

Guiding questions:

- ★ How did you measure your objects (in Day 1)?

Learners compare the length of the scarves, ribbons, belts, shoelaces and string by placing them next to each other and discussing which is longer/shorter.

- ★ How do you know that one is short and one is long?

- ★ Can you use your hand/foot/a stick to measure your object?

Learners sit in five groups. They measure scarves, belts and so on, and discuss length using hands/feet/sticks.



Use masking tape or draw a line with chalk. Learners place the items on the line and arrange them from longest to shortest.

- ★ Why did we put all the belts and scarves on the line when we arranged them from longest to shortest?

5. **Height chart:** Measure the next group of learners and add their measurements to the height chart.
6. **Small group activities:** Describe the activities at each workstation.

Day 3

TIP

If there is not enough time to complete measuring the learners' height and adding the measurements to the height chart, continue to do this at other times in the daily programme, for example, at snack time.

What you need

- Song: *Long and short* (page 103)
- 7 worm pictures
- 7 wooden sticks of different lengths
- 23 coloured plastic sticks (*Resource Kit*)
- String and names for one group of learners
- Lengths of cardboard of the same width and different lengths – 1 per learner
- Masking tape/chalk

1. **Song:** Sing the song, *Long and short* with pictures.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place seven coloured plastic sticks (from the *Resource Kit*) and the seven wooden sticks on the mat in two separate groups.

Guiding questions:

- ★ How many sticks do you think there are in each of these groups?

Count the sticks and discuss.
Compare the lengths of the sticks.

- ★ What do you think we could measure in our classroom with the short plastic sticks/longer wooden sticks?
- ★ Why?

Learners measure objects in the classroom with sticks.



4. **Reinforcing measurement – length:** Discuss the items that learners measured with sticks.

Guiding questions:

- ★ What did you find in the classroom that is long/short?
- ★ Whose object was longest/shortest?
- ★ What object can you think of outside of our classroom that is long/short?

Place the cardboard strips in the middle of the mat. Show the learners two of the strips.

- ★ Which of these two strips is long/short?

Repeat with two other strips.

Learners each fetch one strip from the middle of the mat. Put one strip down as a guide.

- ★ If we want to arrange our strips according to length from shortest to longest what do we need to do?
- ★ How should we line them up?



Line the strips up alongside a masking tape or a chalk line. Learners take turns to place their strips from shortest to longest. Remind learners why it is important to align the ends of the strips with the bottom of the masking tape/chalk line when measuring. They estimate where their strip will go, and help each other if a strip needs to be moved.

- ★ What do you think about where _____ has put their strip?
- ★ Should we move _____'s strip? Why?

5. **Height chart:** Measure the next group of learners and add their measurements to the height chart.
6. **Small group activities:** Describe the activities at each workstation.



Use questions to guide the learners to problem solve around the arrangement of the strips.

Day 4

What you need

- Song: *Long and short* (page 103)
- 7 worm pictures
- 7 different lengths of rope
- String and names for one group of learners

1. **Song:** Sing the song, *Long and short* with pictures.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:**

Learners sit in a circle, while you stand holding five pieces of rope. Learners estimate how many you are holding. Count these together.

Guiding questions:

- ★ How many more pieces of rope do we need to have seven pieces?

Add two more and count again.

4. **Exploring length:** Discuss the pieces of rope you are holding.

Guiding questions:

- ★ How many of these pieces of rope are touching the floor?
- ★ Why don't they all touch the floor?
- ★ How can we find out which is the shortest/longest piece of rope?

Draw a line on the floor and ask learners to guide you in arranging the pieces of rope from longest to shortest. Remove five pieces of rope.

5. **Height chart:** Measure the next group of learners and add their measurements to the height chart.
6. **Small group activities:** Describe the activities at each workstation.



Day 5

What you need

- Song: *Long and short* (page 103)
- 7 worm pictures
- String and names for the last group of learners
- Term 1 height chart
- Birthday chart

1. **Song:** Sing the song, *Long and short* with pictures.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Clap any number of times between 1 and 7. As you clap, learners count and say how many claps there are.

4. **Height chart:** Measure the last group of learners and add their measurements to the height chart. Discuss the Term 2 height chart.

Guiding questions:

- ★ Who is taller/shorter than you?
- ★ How do you know?
- ★ Are there any learners that are the same height as each other?

Compare Term 1 and 2 height charts.

- ★ Has anything changed since Term 1?
- ★ Who is taller this term than they were last term?

Look at the birthday chart and count together how many months have passed since you did the Term 1 height chart.

- ★ Do you think the height chart will look different if we do it again at the end of the year, in the last month?
- ★ Why?

5. **Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: Outdoor activities can include measuring long and short breaths before and after running, and measuring long and short shadows at different times of the day. When reading stories to the learners, point out words that are long (have a lot of letters in them) and words that are short (have only one or two letters in them).

Small group activities

Teacher-guided activity

What you need

- 7 toilet roll tubes
- 1 small chair per learner
- Unifix blocks (*Resource Kit*)
- Different lengths of string and paper, sticks (*Resource Kit*)

1. **Practising length; sorting objects:** Place string, paper and sticks in a pile on the mat. Learners sort these into two groups: long and short.

Guiding questions:

- ★ How did you decide what to put into each group?

2. **Practising length; comparing objects:** Place a toilet roll tube lengthways on the mat.



Guiding questions:

- ★ Can you find anything in the classroom that is longer/shorter than this?

Learners each fetch two things, and take turns to explain what they have found and why they are longer/shorter than the toilet roll tube.

3. **Counting objects 1–7; measuring chairs:** Place seven toilet roll tubes in a line lengthways touching one another.

Guiding questions:

- ★ How many toilet roll tubes do you think there are?

Count the toilet roll tubes together.

- ★ Can you see anything in the classroom that you think is the same length as these seven toilet roll tubes lined up together?
- ★ How can we use one toilet roll tube to measure the height of your chair?

Learners explore this.

- ★ Where could we start measuring?

Discuss and guide them in marking where they start and end. Together count how many toilet roll tubes were needed to measure the height of the chair.

- ★ How many toilet roll tubes do you think we will need to measure the length of the seat of the chair?
- ★ Do you think we will need more or fewer toilet roll tubes to measure the seat?
- ★ What else could we use to measure different parts of your chairs?

Learners find something in the classroom that they would like to use to measure with. They explore measuring different parts of the chair using the objects they found, paper and string lengths.



4. **Reinforcing length; Unifix blocks:** Show learners a length of five Unifix blocks joined together. They choose string and pieces of paper that are longer than the blocks. Repeat with lengths of up to seven Unifix blocks.



Guiding questions:

- ★ How do you know that this is longer than the blocks?
- ★ Can you find something that is shorter/the same length?

Learners create their own lengths using the blocks and arrange these from shortest to longest.



TIP

Use appropriate non-standard units to measure objects, for example, small blocks to measure books, plastic sticks to measure the seat of the chair and longer objects or pieces of string to measure the top of the desk.



Check that learners are able to:

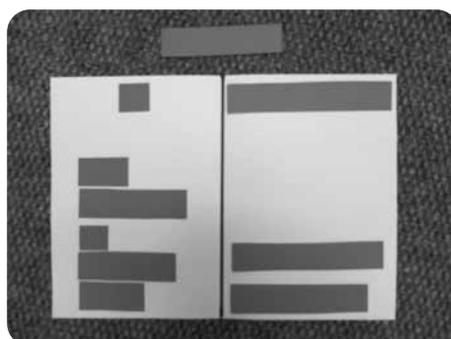
- compare and order objects according to length – long and short
- show an understanding of long and short; tall and short

Workstation 1

What you need

- 10 strips of paper per learner
- Sheet of paper
- Glue
- Kokis
- 1 medium-length cardboard strip placed in the middle of the table

Learners measure paper strips against the cardboard strip. They paste strips onto the 'long' or the 'short' side of the page. They use kokis to turn the strips into anything they like.

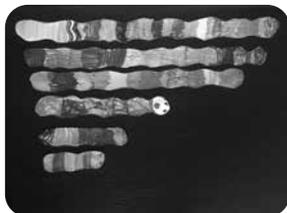


Workstation 2

What you need

- Template of different length worms – 1 page per learner
- Scissors
- Crayons

Learners decorate and cut out the worms.

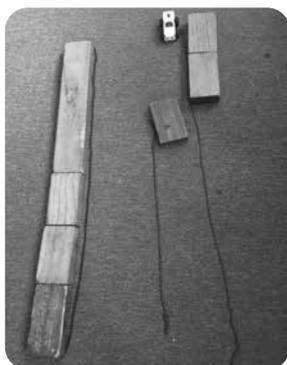


Workstation 3

What you need

- Wooden blocks
- Lengths of string

Learners build long and short trains/trucks/roads in the block area. They use lengths of string to measure these.



Workstation 4

What you need

- Playdough
- A4 page per learner with 5 lines of different lengths
- Sticks (*Resource Kit*)

Learners make lengths of playdough that match each of the lines on the template. They decorate these using sticks to make patterns.



Content Area Focus: Numbers, Operations and Relationships

Topics

- Describe, compare and order numbers
- Addition and subtraction (oral)
- Problem solving

New knowledge

- Breaking down and building up numbers
- Problem-solving techniques
- Addition and subtraction using concrete objects
- Numbers in familiar settings

Practise

- Oral counting 1–20 and 7–1
- Counting objects 1–7
- Number concept 1–5
- Sequencing numbers 1–5
- More than, fewer than
- What number comes before, after?
- Shapes: circle, square, triangle

New maths vocabulary

add

take away

Getting ready

For the activities this week, you will need to prepare the following:

- 7 plastic cups and 7 plastic saucers (from fantasy area)
- small boxes/containers numbered 1, 2, 3, 4, 5
- 2 plates
- 7 Unifix blocks
- 7 Duplo blocks
- 5 chairs
- 5 A4 sheets with animal frieze phone numbers for houses 1–5: Elephant: 53 412, Zebras: 43 215, Meerkats: 33 212, Giraffes: 41 224, Monkeys: 21 543
- learners' phone numbers on individual sheets
- a different shape-tracing page for each learner in a group
- 1 set of dot cards 1–5 per learner
- 1 set of number symbol cards 1–5 per learner
- 10 boxes/cups each with a variety of small objects up to 5. Cut the toe-end off a stocking and put the stocking over the open end of each box/cup. The objects inside should not be visible. (see Workstation 3)
- 1 set of matching number and picture cards 1–5 per learner (similar to Week 5)
- ask learners to find out their address and phone number.



Whole class activities

Day 1

What you need

- Song: *Long and short* (page 103)
- 7 plastic cups and 7 plastic saucers (fantasy area)
- A variety of counters from the *Resource Kit*
- Dot cards 1–5
- Small boxes/containers numbered 1, 2, 3, 4, 5

1. **Song:** Sing the song, *Long and short*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place seven cups and seven saucers on a box in the middle of the circle.

Guiding questions:

- ★ How many cups and saucers do you think there are in these two groups?
- ★ Do you think there are the same number in each group?

Together count the cups and saucers, discuss learners' estimations and match the cups to the saucers.



TIP

Make sure all learners are able to see the cups and saucers.



4. **Practising numbers 1–5:** Show learners the dot cards quickly without holding them up for a long time. Learners say how many dots are on each card. Show a dot card with an instruction linked to the number of dots on the card, for example: 'Find two friends wearing shoes.' 'Clap your hands three times.' Learners take turns to think of action instructions linked to the number of dots.
5. **Ordering numbers 1–5; more than, fewer than, equal to:** Place the dot cards face down. Learners take turns to pick up two cards. If the cards match, they keep them and if not they put the cards back. When learners find a matching pair they put them in the appropriate box.

Guiding questions:

- ★ How many dots are on _____'s cards?
- ★ Are the cards the same?
- ★ Which card has more dots?
- ★ Which card has fewer dots?
- ★ What would we need to do to make both cards have the same number of dots?

6. **Small group activities:** Describe the activities at each workstation.

Day 2**What you need**

- 2 plates with 7 Unifix blocks on one and 7 Duplo blocks on another
- 5 chairs

1. **Song/rhyme:** Learners choose a song or rhyme from Term 1 or 2 to sing or say.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place two plates on a box in the middle of the circle, one with seven Unifix blocks, and one with seven Duplo blocks. Learners estimate the number of blocks on each plate.

**TIP**

Make sure all learners are able to see the blocks on the plates.

**Guiding questions:**

- ★ Do you think there are more/fewer blocks on this plate?
 - ★ How can we tell if they have the same number of blocks?
- Count the blocks on each plate and discuss learners' estimations.

4. **Adding using objects:** Two learners stand.

Guiding questions:

- ★ How many learners are standing?
- ★ If we add one more learner, how many will there be?

One more learner stands. Together count the learners who are standing. Continue adding one learner at a time, until there are five, counting them together each time you add one. Repeat the activity using chairs. A learner fetches two chairs.

- ★ If _____ fetches one more chair, how many will there be?
- ★ If three learners have a chair, how many more chairs will we need for all of them to have a chair?

5. **Small group activities:** Describe the activities at each workstation.

Day 3

What you need

- 1 container with 7 paint brushes and 1 container with 5 kokis
- 5 chairs
- Game: Musical chairs (page 103)
- Tambourine/music

1. **Song/rhyme:** Learners choose a song or rhyme from Term 1 or 2 to sing or say.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Place the two containers on a box in the middle of the circle, one containing seven paint brushes, and the other containing five kokis. Discuss the containers.

Guiding questions:

- ★ How many things do you think are in this container?
- ★ Do you think there are more/fewer in this container?

4. **Subtracting objects:** Five learners stand.

Guiding questions:

- ★ How many learners are standing?
- ★ If _____ goes and sits at his/her table, how many learners will be left standing?
- ★ How do you know?
- ★ If we take another learner away, how many learners will be left standing?

Repeat this with up to five learners. Take away one learner at a time.

5. **Subtraction game:** Play the game, Musical chairs.
6. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Number washing line 1–5
- Poster 1

1. **Song/rhyme:** Learners choose a song or rhyme from Term 1 or 2 to sing or say. Let learners 'vote' for the song/rhyme they want. Count how many hands are held up for different song/rhyme options.

2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Two learners stand with their backs to the class. The class says, 'Ready, steady, number!' On 'number', the learners turn and hold up any number of fingers from 1 to 7. Discuss who has the most/fewest fingers showing. Together count the number of fingers each learner is showing. Repeat with other learners.



Guiding questions:

- ★ Who is showing more/fewer fingers?
- ★ Who is showing the same number of fingers?
- ★ How do you know?
- ★ How many fingers is _____ showing?

Ask learners to show numbers 1–5 on the number washing line for those learners who show fingers between 1 and 5.

- ★ Does this number come before/after/between 2, 3, 4?

4. **Talk about number:** Discuss Poster 1. Talk about what learners see in the picture. Learners use their fingers to show their answers.

Guiding questions:

- ★ How many people are missing from the family in this picture? Who is missing?
- ★ Are there enough chairs for the number of people in the kitchen?
- ★ If one chair is taken away, how many chairs will be left?
- ★ How many bowls are on the table?
- ★ If two bowls are taken away, how many will be left on the table?
- ★ How many spoons are on the table?
- ★ If Granny joined them at the table and needed a spoon, how many spoons should we add? How many would there be altogether?

5. **Small group activities:** Describe the activities at each workstation.



Learners may use their fingers to solve the problems.

Day 5

What you need

- Number friezes 1–5
- Number symbol and dot cards 1–5 (*Resource Kit*)
- 5 A4 sheets with animal frieze phone numbers for houses 1–5
- 2 old/toy phones
- Learners' phone numbers on individual sheets

1. **Song/rhyme:** Learners choose a song or rhyme from Term 1 or 2 to sing or say.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Repeat the activity from Day 4 with guiding questions.
4. **Practising numbers 1–5; addition, subtraction:** Show dot cards and number symbol cards 1–5. Learners organise themselves into groups according to the dot card or number symbol card that you show.



Support learners based on their level of number knowledge.

Guiding questions:

- ★ How many learners are in your group?
- ★ If one learner joins another group, how many learners will be left in your group?
- ★ If one more learner joins your group, how many will there be in your group altogether?
- ★ How many groups of five learners are there?
- ★ This group has one learner too few. Who can we ask to join this group so that they have the correct number?

5. **Practising addresses and phone numbers; reinforcing numbers 1–5:** Tell the learners that the meerkats phoned the animals in house numbers 1, 2, 4 and 5 to invite them to a party. Place the phone numbers for each house below the correct house.

Dramatise calling the animals. Dramatise the animals in house numbers 1, 2, 4 and 5 phoning the meerkats to say they would love to go to the party. Learners repeat the numbers with you as you role-play phoning each number.

Guiding questions:

- ★ If you had a party, where would you tell your friends to go?
- ★ If they got lost, what number could they phone you on?

Guide two learners to dramatise telling each other their phone number on the phone. Write these on paper. Repeat with other learners.

- ★ Are any numbers repeated in this phone number?

- Practising phone numbers; reinforcing numbers 1–5:** Learners each hold a copy of their phone number. They follow your directions, for example: 'Stand if you have a 4 in your phone number.' 'Wave if you have a 3.'
- Small group activities:** Describe the activities at each workstation.

Integration

Home Language and Life Skills: Write numbers 1 to 5 in a circle outdoors with chalk. Learners count as they move around the circle and step on each number. Create an outdoor pathway of number words from one to five by writing them in order over and over again. Let the learners 'read' the words as they walk down the path.

Small group activities

Teacher-guided activity

What you need

- Number washing line
- Dot cards 1–5
- Animal counters
- Unifix blocks
- A tub per learner with number symbol cards 1–5 and 5 coloured counters

- Point and count 1–5:** Learners look at the number washing line. Give instructions to individual learners, for example: 'Show me number 1/3/5, show me the number that comes before/after 4, show me the number that is between 1 and 3.'
- Dot cards 1–5; matching numbers; estimating:** Place 10 dot cards face down on the mat. Each learner has a turn to pick up a card and to say how many dots there are. Together count the dots.



- Ordering numbers 1–5:** Together order the dot cards 1–5. Learners count animal counters to match the number of dots. They each order their number symbol cards 1–5. They build Unifix towers to match each number.

4. **Counting; more than/fewer than; using counters:** Each learner counts five counters from their tub. Give instructions, for example: 'Show me three counters; one fewer than three; one more than four.'
5. **Matching counters to dot cards:** Learners use their counters to match the dot cards 1–5. Discuss the different ways each number is shown.
6. **Dot cards; breaking up numbers:** Show learners a dot card with 3 dots and a dot card with 1 dot. They put their counters into two groups matching these.



Guiding questions:

- ★ How many counters are there in each of your groups?
- ★ How many counters are there altogether?
- ★ Show me the dot card that matches this group.

Now show them dot card 5.

- ★ How many more counters do you need to add to the group to have this many?
- ★ How many counters do you need to take away from this group if you only want three counters left?

Repeat with dot cards and matching counters 4 and 1; 3 and 2; 2 and 2, using guiding questions.

7. **Familiar numbers:** Guide learners in remembering their phone numbers and addresses.



Check that learners are able to:

- break down and build up numbers between 1 and 5
- solve problems with numbers 1–5
- demonstrate an understanding of more and fewer
- demonstrate an understanding of what number comes before and after
- demonstrate an understanding of their address and phone number



Workstation 1

What you need

- 1 blank A4 page in a plastic sleeve per learner
- Whiteboard kokis
- A cloth for each pair of learners
- Number washing line
- Sticks (*Resource Kit*)

Learners write the numbers 1 to 5 with kokis using the number washing line as a guide. They count out the number of sticks to match each number.

Workstation 2

What you need

- Circle, square and triangle attribute blocks (*Resource Kit*)
- Shape-tracing page – a different page for each learner

Learners trace around the attribute blocks from the *Resource Kit* according to the number symbols on the page.



Workstation 3

What you need

- 1 set of dot cards 1–5 per learner
- 1 set of number symbol cards 1–5 per learner
- 10 boxes/cups with stocking over the open end of each and objects inside (up to 5)

Learners reach into the cups and feel how many objects there are. They match dot cards and number symbol cards according to the number of objects in each cup.

Workstation 4

What you need

- Number and picture matching cards

Learners choose cards. They find the matching number or picture cards.

Key	PATTERNS, FUNCTIONS AND ALGEBRA	SPACE AND SHAPE (GEOMETRY)	MEASUREMENT	DATA HANDLING	COMMENTS
<p>✓ = competent</p> <p>● = partially competent</p> <p>✗ = not yet competent</p>	<p>Identifies simple repeating patterns</p> <p>Copies and extends simple repeating patterns</p> <p>Creates own pattern with pictures</p>	<p>Describes position: underneath</p> <p>Sorts 3-D objects according to similarities and differences</p> <p>Distinguishes between one more, one fewer</p> <p>Follows directions</p> <p>Recognises and applies crossing the midline</p>	<p>Measures and compares objects according to length</p> <p>Distinguishes between long, longer, longest and short, shorter, shortest</p>	<p>Collects objects according to sizes</p> <p>Sorts collections of objects</p> <p>Represents collections of objects</p> <p>Analyses data using questions</p> <p>Reports on data based on own pictures or own sorted objects</p>	<p>Final coding</p>
Learners' names					
Date					

Resources

Songs, rhymes and stories

Week 1

Counting song: *Making fruit salad*

(To the tune of *Here we go round the mulberry bush*)

This is the way we make salad, make salad, make salad,

This the way we make salad,

Let us get the fruit.

We fetch one banana, one banana, one banana,

We fetch one banana,

Let's get more fruit.

We fetch two apples, two apples, two apples,

We fetch two apples,

Let's get more fruit.

(Repeat with three oranges, four grapes.)

We fetch five berries, five berries, five berries,

We fetch five berries,

And add some juice.

Story: *Number 4 story (with Number 4 frieze template)*

Next came the Giraffes. There were four of them. They looked at the other three houses and wondered how they would manage to fit into a house with their long necks. They decided that because there were four of them, they would need four high windows so that they could open them wide and stretch their long necks out.

The number symbol 4 and number word four, went on the front of the house where everyone could see them. And the four doorbells went on the door.

When the Giraffes went outside, they had to bend down very low to fit through the door, just as they did when they drank water from the nearby stream. When they stood up straight, they were tall enough to look into their house through the high windows, and could almost see over the top of their house. They loved living next to the Meerkats and chatted to them every day.

Week 2

Money song: *Five shiny coins*

(To the tune of *Ten green bottles hanging on the wall*)

Five shiny coins in my pocket today,
Five shiny coins in my pocket today,
Five shiny coins and with one of them I pay,
Now there are four shiny coins in my pocket today.

(Repeat with four, three, two, one, no shiny coins – nothing to pay.)

Game: Coin in the bank

Place a bowl ('bank') on the table that learners are seated at, or in the middle of the circle of learners on the mat. Each learner attempts to flip counters into the bowl. They then count how many times they got their counters into the bowl, and which colour counters (out of the two colours they have) they got in more often.

Week 3

Song: *Head, shoulders, knees and toes*

Head, shoulders, knees and toes, knees and toes
Head, shoulders, knees and toes, knees and toes
And eyes and ears and mouth and nose
Head, shoulders, knees and toes, knees and toes.

Counting song: *This is the way we make soup*

(To the tune of *Here we go round the mulberry bush* – adaptation of *Making fruit salad* from Week 1)

This is the way we make soup, make soup, make soup,
This the way we make soup,
Let us get the veggies.
We fetch one potato, one potato, one potato,
We fetch one potato,
Let's get some more.
We fetch two carrots, two carrots, two carrots,
We fetch two carrots,
Let's get some more.

(Repeat with three big onions.)

We fetch four small onions, four small onions, four small onions,
We fetch four small onions,
And add some stock.

Shape story: *They pulled and they pulled*

One day a farmer went to his fields to pull up some vegetables for supper. He went to the potatoes and began to pull one out of the ground. The farmer pulled and pulled, but he couldn't pull up the potato. He called his wife to help. The farmer pulled and his wife pulled and finally the potato came out of the ground. 'What is going on?' asked the farmer. 'This potato is square!'

Next, the farmer and his wife went to get some carrots. They pulled and they pulled and they pulled and finally two carrots came out of the ground. 'What is going on?' asked the farmer's wife. 'These carrots are circle-shaped!'

The farmer and his wife wanted onions with their supper so they went to the onion patch. The farmer pulled and his wife pulled. They both pulled and pulled, but the onions wouldn't come out. They called their four children to help. Then the family pulled and pulled and finally three onions came out of the ground. 'What is going on?' they asked. 'These onions are triangle-shaped!'

They decided to make vegetable soup, so they needed four more onions. They needed more help and called one neighbour. It took them a long time to pull four more onions out of the ground. And even though they were smaller, they were also triangle-shaped!

The farmer and his wife took their potato, carrots and onions to the kitchen and made soup for supper. They invited their neighbour. 'Delicious!' all seven of them said at the same time.

Week 4

Rhyme: *Roly Poly*

(Learners roll their hands around each other as they move them according to the directions.)

Roly Poly, Roly Poly, up, up, up. *(hands move up)*

Roly Poly, Roly Poly, down, down, down. *(hands move down)*

Roly Poly, Roly Poly, out, out, out. *(hands move away from each other)*

Roly Poly, Roly Poly, in, in, in. *(hands move towards each other)*

Roly Poly, Roly Poly, hide both hands.

Shape song: *If you're holding a square*

(To the tune of If you're happy and you know it)

If you're holding a square, stand up!

If you're holding a square, stand up!

If you're holding a square, if you're holding a square,

If you're holding a square, stand up.

(Repeat with other shapes.)

Week 5

Counting song: *Five monkeys in a bed*

There were five in the bed
and the little one said,
'Roll over. Roll over.'
So they all rolled over and one fell out.
(Repeat for four, three, two.)
There was one in the bed
and the little one said,
'Good night. Sleep tight.'

Story: *Number 5 story (with Number 5 frieze template)*

The five Monkeys love to swing between the five branches of the tree in their garden. They also have five poles in between the tree and their house. To get inside they often swing from these onto the roof of their house and in through the windows. They do this instead of going through the door. Next to the door is a big flowerpot with five flowers. When the Monkeys get tired and need a rest, they often swing down from the roof through one of the five windows instead of going into the house through one of the five doors. Otherwise they rest on their five hammocks outside. There are five so each one has their own.

All the animals stood in the road together to look at their marvellous houses: Elephant was in number 1, the Zebras were in number 2, the Meerkats were in number 3, the Giraffes were in number 4 and the Monkeys were in number 5. They had a party to celebrate their friendship and their smart houses.

Week 6

Counting rhyme and game: *One potato, two potatoes*

One potato, two potatoes,
Three potatoes, four,
Five potatoes, six potatoes,
Seven potatoes, I want more!

Playing the potato game:

Eight learners stand in a circle, each holding out one fist in front of their bodies. Walking around the inside of the circle, one learner uses his or her fist and begins saying the rhyme to count off each fist by gently tapping it. The learner then counts back from 7 to 1 as they return to their place in the circle. The next learner then has a turn.

Week 7

Counting song: *Little aeroplanes*

One little, two little, three little aeroplanes
Four little, five little, six little aeroplanes
Seven little, eight little, nine little aeroplanes
Ten little aeroplanes fly.

Ten little, nine little, eight little aeroplanes
Seven little, six little, five little aeroplanes
Four little, three little, two little aeroplanes
One little aeroplane flies.

Week 8

Counting song: *Seven little ducks*

Seven little ducks went waddling one day
over the hill and far away.
Mother duck said, 'Quack, quack, quack,'
and only six little ducks came back.

Six little ducks went waddling one day
over the hill and far away.
Mother duck said, 'Quack, quack, quack,'
and only five little ducks came back.

(Repeat counting backwards each time.)

Shape song and game: *What can I do?*

(To the tune of *Skip to my Lou*)

I've lost my circle, what can I do?

I've lost my triangle, what can I do?

I've lost my square, what can I do?

Can you help me, please?

Week 9

Length song: *Long and short*

(To the tune of *Three blind mice*)

Long and short (*hold hands wide apart and then close together*)

Long and short (*hold hands wide apart and then close together*)

See the worms (*wiggle hands*)

See the worms (*wiggle hands*)

I like to see them wiggle around

I like to see them dig in the ground

I like them 'cos they don't make a sound

Long and short. (*hold hands wide apart and then close together*)

Week 10

Game: Musical chairs

Each learner has one chair.

Learners move between all their chairs while the teacher plays music.

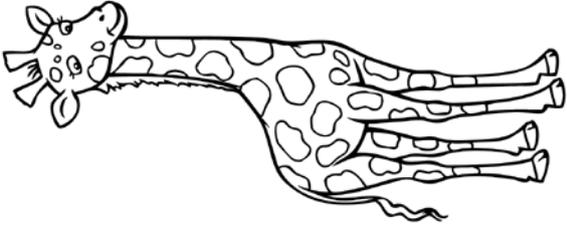
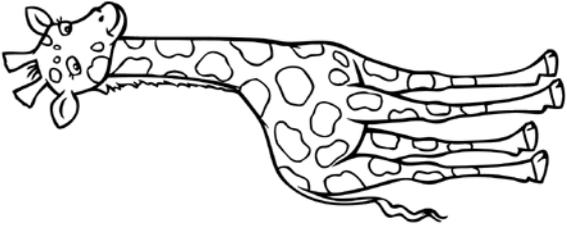
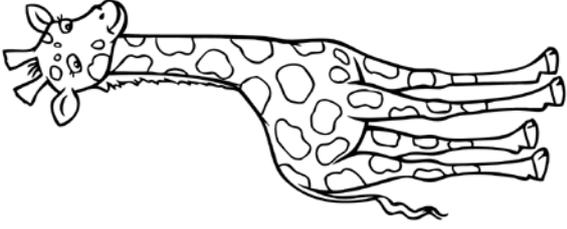
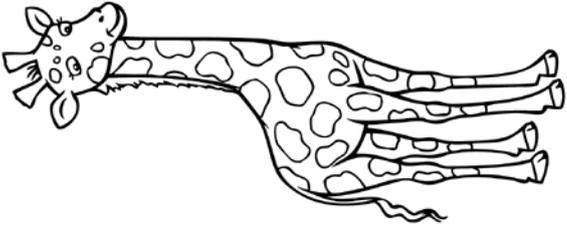
When the music stops, they sit on a chair.

Before starting the music again remove between one and five chairs.

Learners count with you as you do this and say how many fewer learners will be able to sit down the next time the music stops.

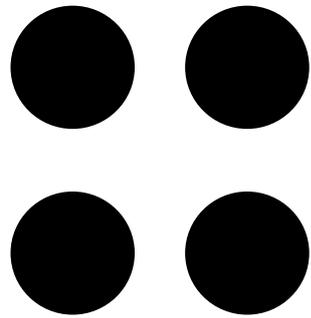
Those who don't find a chair, sit and clap with the beat.

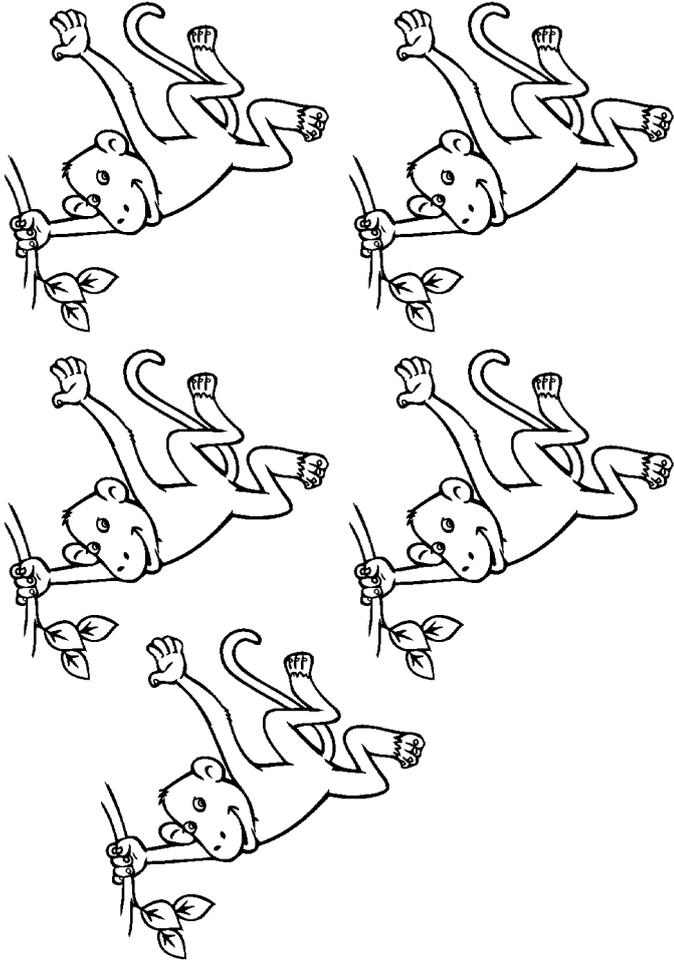
Repeat until there is only one chair remaining.



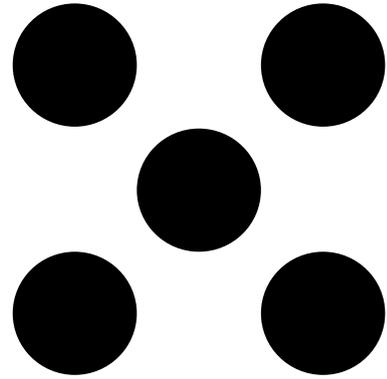
four

4



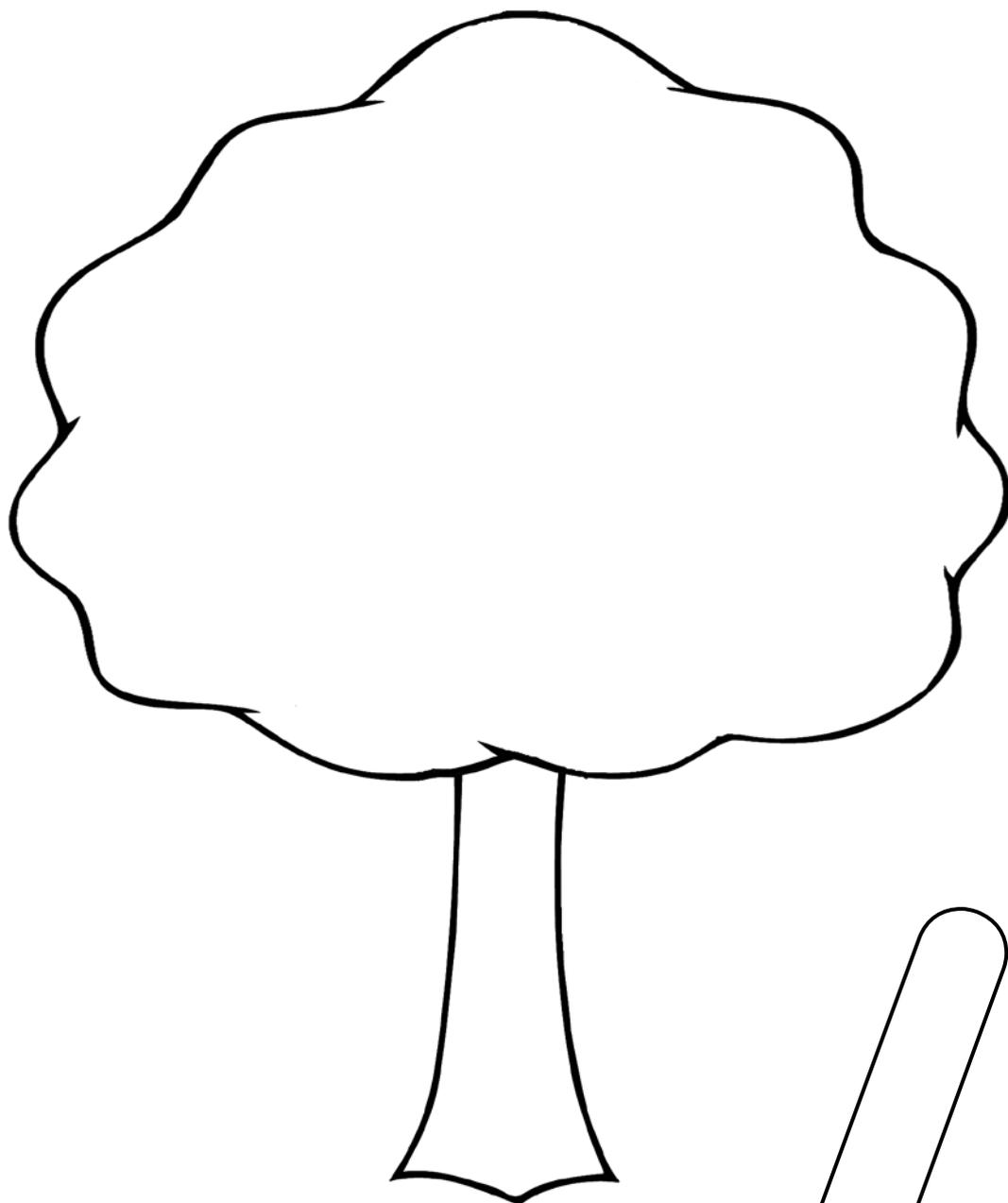


5

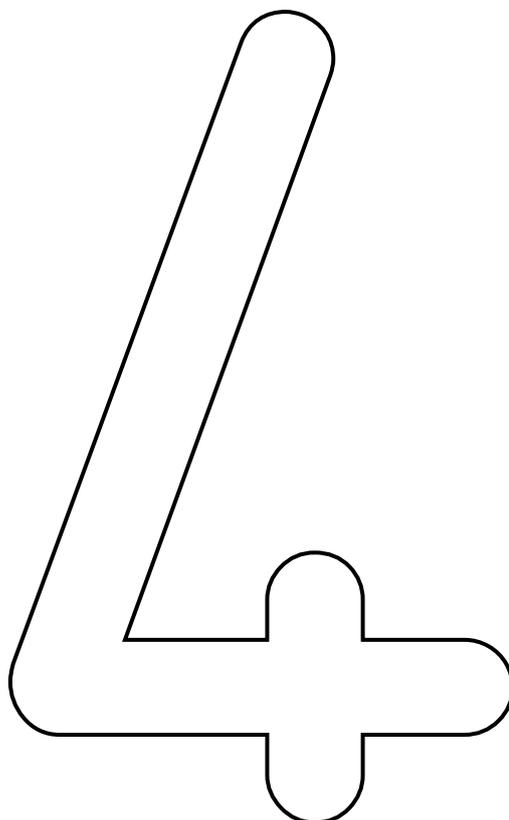
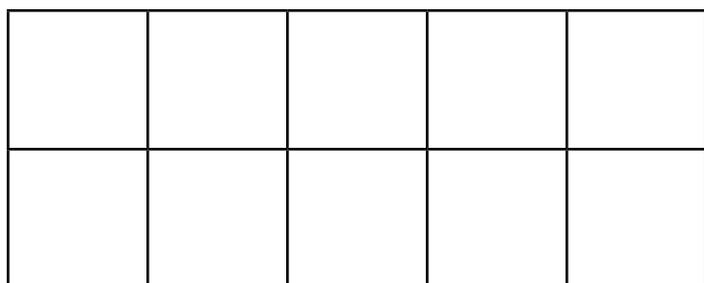


five

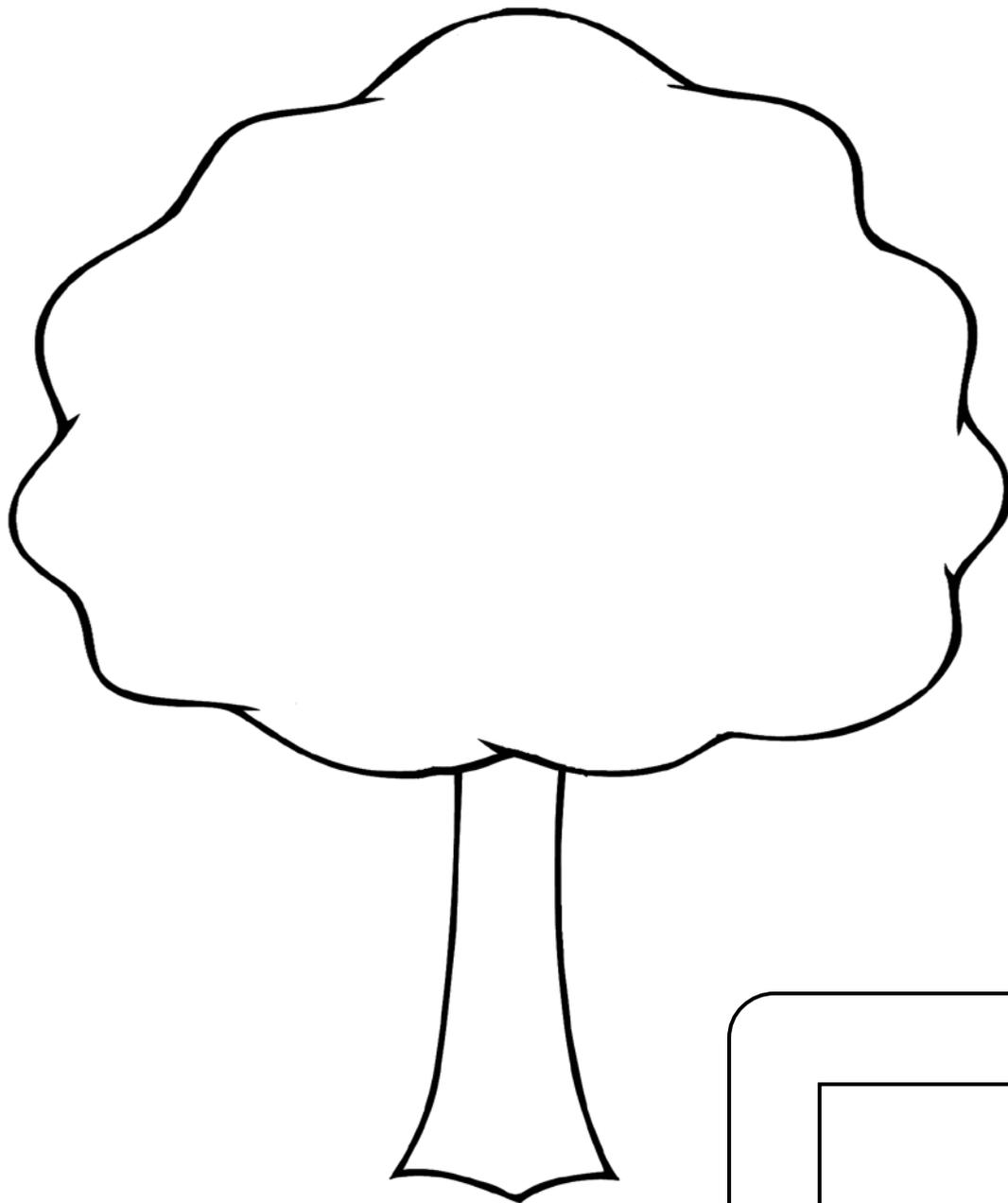
Playdough template: Number 4



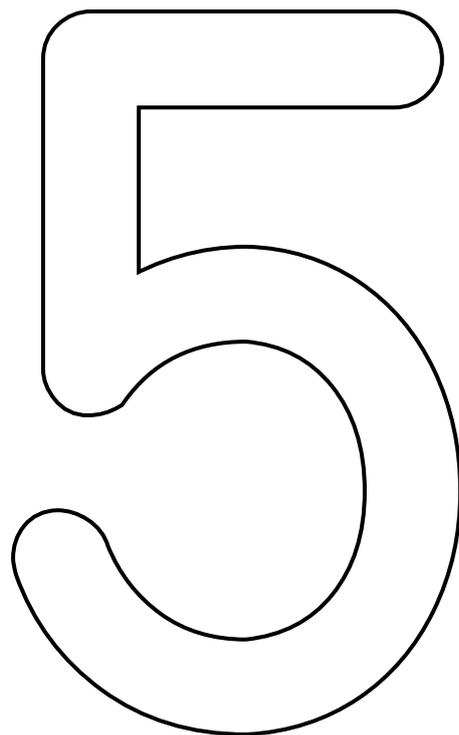
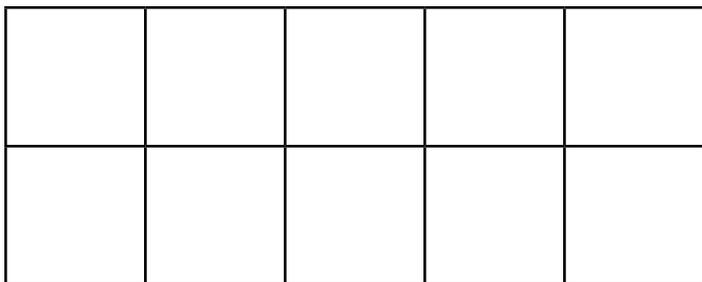
four



Playdough template: Number 5



five



Coins (Week 2)



Coins (Week 2)



Number grid (Week 2)

4	
2	
1	
3	

Number puzzle (Week 5)

1

one



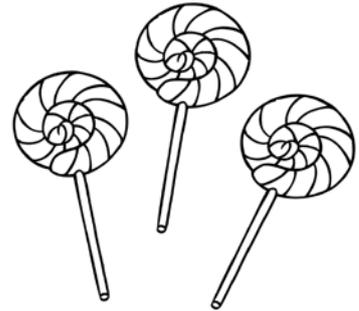
2

two



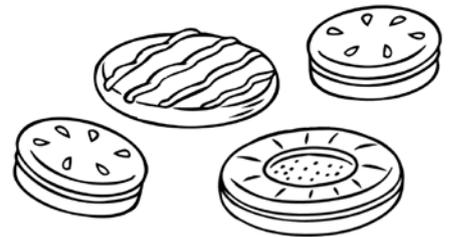
3

three



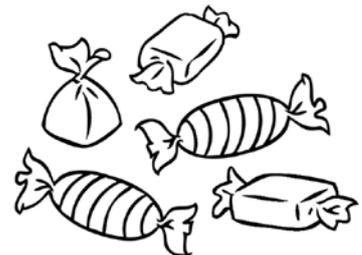
4

four



5

five



Twelve-piece puzzle

