

Grade R Mathematics Improvement Programme

Activity Guide: Term 3



English

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.

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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 3* offers a structure for teaching maths in the third 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 3

The following features form part of *Activity Guide: Term 3*:

- 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">• Number 7• Oral counting: backwards 10-1• Counting objects 1-10	<ul style="list-style-type: none">• Oral counting: forwards 1-20, backwards 7-1• Sequencing numbers 1-6• Two/three more/fewer• Add, take away• Reinforce number concept 1-6
New maths vocabulary		
seven	as many as	difference between

- 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

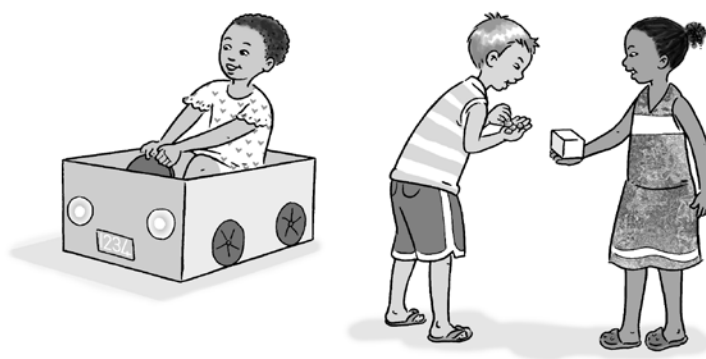
Learners need to know where materials belong. A shelf or table that is dedicated to maths equipment will help learners to be organised. Encourage learners to help each other during tidy-up time. Initially learners will need assistance and you will have to remind them where to put things, but they will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



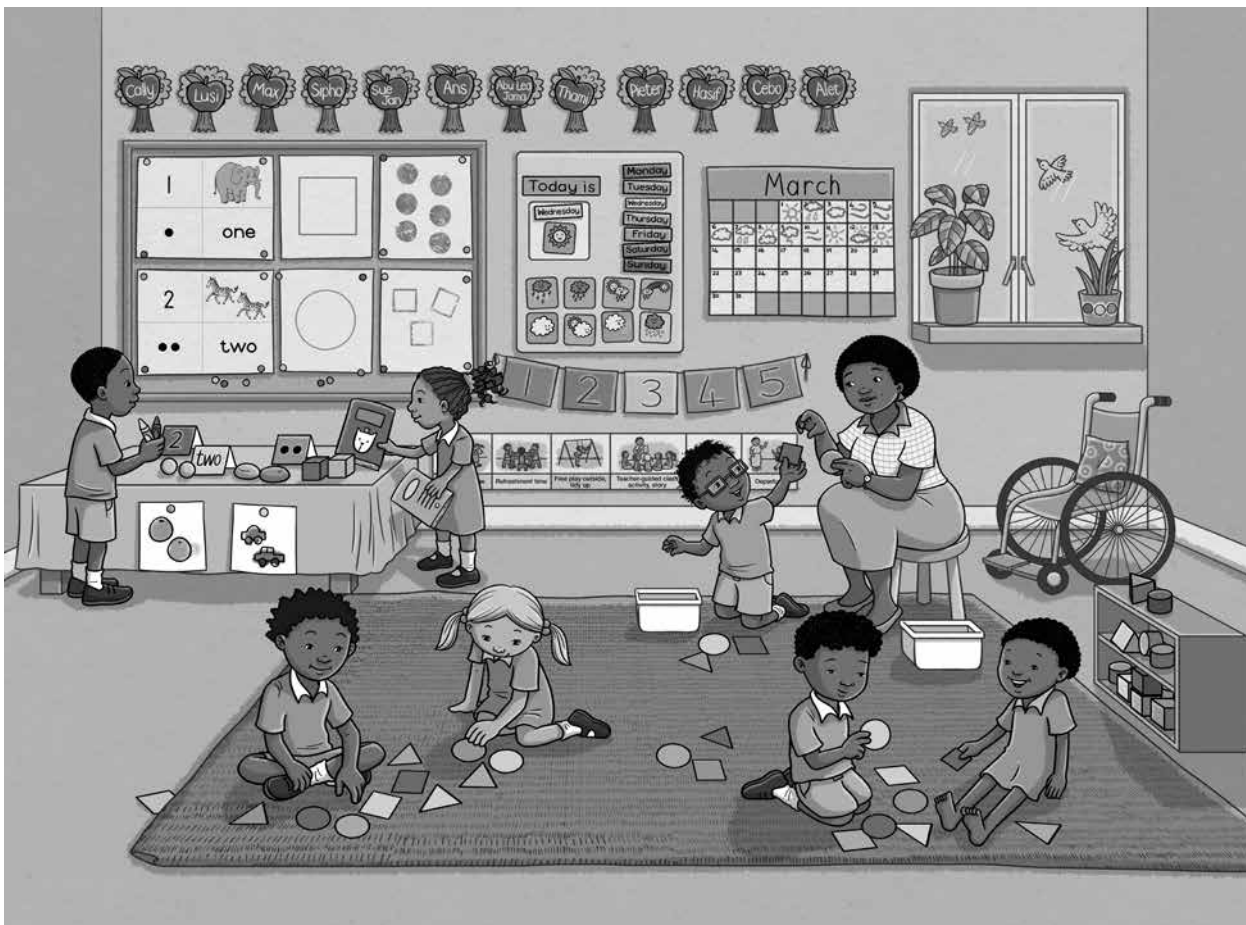
Assessment

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 94–95 of this guide is based on the content that has been taught in Term 3. This template can be used to record each learner's progress during the term.

Grade R Maths in the classroom

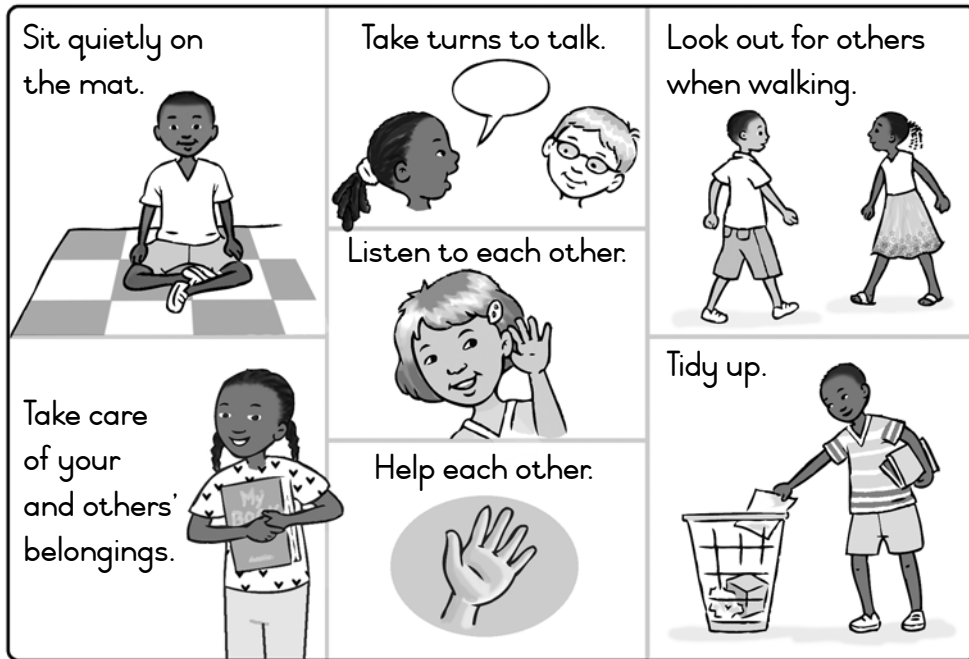
Set up an area in the classroom that is dedicated to maths and is near the mat. This is a shared space where learners can contribute to and engage with the topic they are learning about. An ideal maths area will include:

- 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

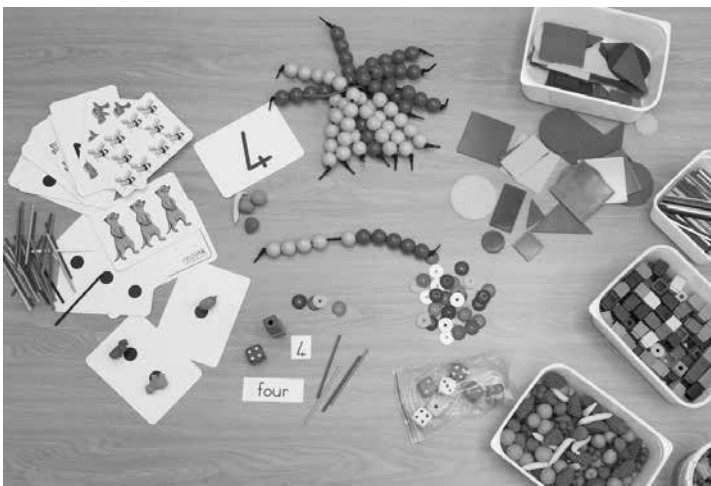


Resources for Grade R Maths

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

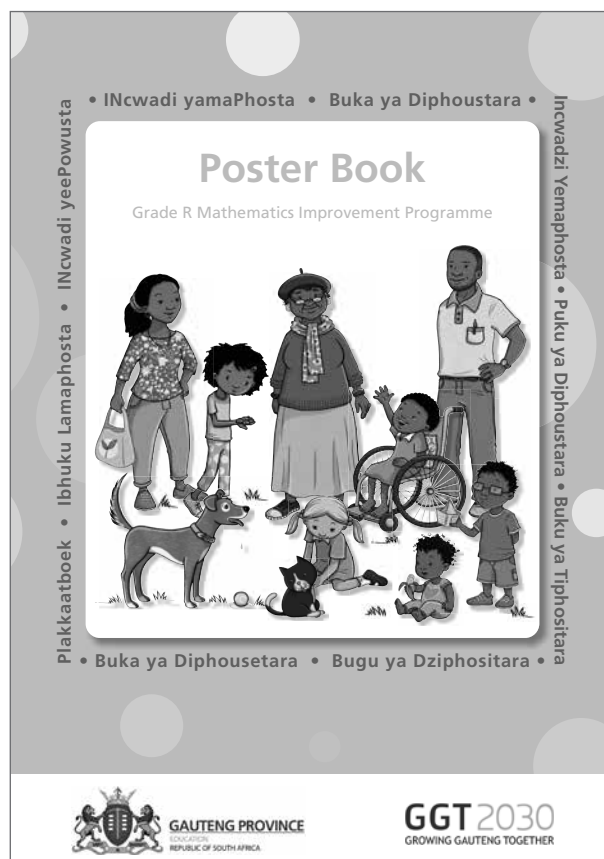
- height chart
- jumbo playing cards
- pretend money: coins and notes (to use in a play shop)
- large analogue wall clock
- balance scale
- beads for sorting, threading and patterning
- equipment for sand and water play
- apparatus for climbing, balancing, swinging and skipping.

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 3

Note: Content Area Focus and New knowledge are in green. 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	Oral counting: forwards 1–20, backwards 7–1 Counting objects 1–7	Number 6 Two/three more/fewer Equal groups Counting on Oral counting: forwards 1–20, backwards 7–1 Counting objects 1–7 Sequencing numbers 1–5 Reinforce number concept 1–5	Number 7 Oral counting: backwards 10–1 Counting objects 1–10 Oral counting: forwards 1–20, backwards 7–1 Sequencing numbers 1–6 Two/three more/fewer Add, take away Reinforce number concept 1–6	Oral counting: forwards 1–20, backwards 10–1 Reinforce number concept 1–7	Oral counting: forwards 1–20, backwards 10–1 Counting objects 1–10 Two/three more/fewer Equal groups
2. Patterns, Functions and Algebra	Copy vertical and horizontal patterns using concrete objects Create and explain own pattern with three or four colours/shapes, etc. Identify patterns Copy and extend patterns				
3. Space and Shape (Geometry)				Shapes: rectangle Direction: left, right Position: middle, bottom Sort objects according to two attributes Eighteen-piece puzzles Shapes: circle, square, triangle Symmetry	
4. Measurement					Mass Light, lighter, lightest Heavy, heavier, heaviest Bigger, smaller
5. Data Handling					

Content Area Focus	Week 6	Week 7	Week 8	Week 9	Week 10
1. Numbers, Operations and Relationships	<p>Number 8</p> <p>Ordinal numbers: fifth, last, next</p> <p>Oral counting: forwards 1–20 and beyond</p> <p>Oral counting: forwards 1–20, backwards 10–1</p> <p>Counting objects 1–10</p> <p>Sequencing numbers 1–7</p> <p>Ordinal numbers first to fifth</p> <p>Add, take away</p> <p>Two/three more/fewer</p> <p>Reinforce number concept 1–7</p>	<p>Oral counting: forwards 1–20 and beyond, backwards 10–1</p> <p>Counting objects 1–10</p> <p>Two/three more/fewer</p> <p>More, fewer, equal</p>	<p>Oral counting: forwards 1–20 and beyond, backwards 10–1</p> <p>Counting objects 1–10</p>	<p>Money – recognise banknotes</p> <p>Problem solving 1–8</p> <p>Oral counting: forwards 1–20 and beyond, backwards 10–1</p> <p>Counting objects 1–10</p> <p>Sequencing numbers 1–8</p> <p>Ordinal numbers first to fifth</p> <p>Reinforce numbers 1–8</p> <p>Add, take away</p> <p>Coins</p>	<p>Grouping, half</p> <p>Up to three more (using dot cards)</p> <p>Order collections from smallest to biggest</p> <p>Oral counting: forwards 1–20 and beyond, backwards 10–1</p> <p>Counting objects 1–10</p> <p>Sequencing numbers 1–8</p> <p>Problem solving 1–8</p> <p>Reinforce number concept 1–8</p> <p>More, fewer, most, least, equal</p> <p>Two/three more/fewer</p>
2. Patterns, Functions and Algebra					
3. Space and Shape (Geometry)			<p>Position of objects in relation to each other</p> <p>Arrow chart</p> <p>Copy and build a construction (picture cards)</p> <p>Shapes: circle, square, triangle, rectangle</p> <p>Boxes, balls</p> <p>Midline crossing</p> <p>Position: forwards and backwards</p>		
4. Measurement				Big, small	
5. Data Handling		<p>Draw a picture to represent data</p> <p>Collect, sort and represent collection of objects</p>			

Content Area Focus: Patterns, Functions and Algebra

Topics

- Geometric patterns: create, copy and extend patterns

New knowledge

- Copy vertical and horizontal patterns using concrete objects
- Create and explain own pattern with three or four colours/shapes, etc.

Practise

- Oral counting: forwards 1–20, backwards 7–1
- Counting objects 1–7
- Identify patterns
- Copy and extend patterns

New maths vocabulary

describe
explain

extend
follow

missing
not a pattern

Getting ready

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

- Unifix blocks put together in a repeating pattern to make a train
- piece of A3 paper to create a train tunnel
- pattern card with colour dots
- a cloth/towel
- 4 groups of instruments – 1 per learner
- 6 large pieces of fruit made from playdough (2 each of 3 different types of fruit)
- 8 Unifix pattern cards
- 8 'What's missing?' attribute block pattern cards
- rectangular strips of coloured paper pasted in a pattern on a sheet of paper: rectangle shapes in two sizes – 5 per learner of tall and short
- pattern cards with incomplete colour patterns in each row (two or three colours)



- paper flower petals and leaves (16 of each per learner)
- flower pattern cards
- dominoes.

Whole class activities

Day 1

What you need

- Unifix blocks
- Piece of A3 paper to create a train tunnel
- Unifix pattern train



TIP

Ask the learners if they can remember what number they were counting to before they went on holiday, and what number they were counting backwards from.

1. **Song:** Learners sing a song of their choice from previous terms.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Show learners a Unifix tower made of seven blocks.

Guiding questions:

- ★ How many blocks do you think make up this tower?

Learners estimate the number of blocks. Remove the blocks one at a time as learners count them.

4. **What makes a pattern:** Place the Unifix pattern train inside the tunnel. Pull the train out slowly and ask learners to notice what pattern emerges.

Guiding questions:

- ★ What do you see?
- ★ What colour block do you think will come out of the tunnel next? Why?
- ★ Is this a pattern? What makes it a pattern?

Draw the learners' attention to the repeating part which makes the pattern.

Make another train with Unifix blocks that does not have a pattern. Repeat the activity with the train and the tunnel.

Guiding questions:

- ★ Is this a pattern? Tell me why you think that.
- ★ Can you see any patterns in the classroom?



TIP

Place the tunnel in the block area and encourage learners to make their own pattern trains.

Learners go on a pattern walk outside and discuss patterns.

- ★ Can you see a pattern? Tell me about it.
- ★ Is there a pattern on the ...?
- ★ What makes it a pattern?
- ★ What part of the pattern repeats?
- ★ Can you hear any patterns? Tell me what you hear.

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

Day 2

What you need

- Rhyme: *It's pattern time* (page 96)
- Pattern card with colour dots



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.

1. **Rhyme:** Say the first verse of the rhyme, *It's pattern time*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners count from 1 to 7 while clapping hands with a partner.
4. **Sound patterns from visual patterns:** Show learners the pattern card. Point to each dot and together say the colours. Discuss the pattern.

Guiding questions:

- ★ Can you see the pattern?
- ★ Tell me about the pattern.
- ★ What part of the pattern repeats?
- ★ What will come next in the pattern?

Learners use the visual pattern to make a sound pattern, for example, clap hands for red, snap fingers for yellow.

- ★ What sound should we make on the red/yellow circle?
- ★ What sound should come next?
- ★ What other sounds would you like to make?

Learners suggest other sound pattern ideas, using the same pattern card.

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

Day 3

What you need

- Rhyme: *It's pattern time* (page 96)
- 6 large playdough fruit
- Cloth/towel

1. **Rhyme:** Say the first and second verses of the rhyme, *It's pattern time*, with actions.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Use chalk to draw a straight line on the floor. Five learners stand on one side of the line.

Guiding questions:

- ★ How many learners are there?
- ★ If we add one more learner how many will there be?
- ★ And one more learner?
- ★ What should we do if we want only four learners?



4. **Identifying the missing part of a pattern:** Use the playdough fruit to create a pattern. Together point to each item and say the pattern.

Guiding questions:

- ★ What comes next?
- ★ What is the pattern?

Cover the fruit with a cloth and remove one piece of fruit. Remove the cloth.

- ★ Which fruit is missing from the pattern?
- ★ What kind of fruit should come next in the pattern? Why?

Repeat the activity several times, removing fruit from different parts of the pattern and/or increasing the number of fruit that are missing each time.

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

Day 4

What you need

- Rhyme: *It's pattern time* (page 96)
- 4 groups of instruments – 1 per learner

1. **Rhyme:** Say the rhyme, *It's pattern time*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners fetch instruments. All the learners with the same kind of instrument sit in a group. Play seven beats on a drum.

Guiding questions:

- ★ How many beats did you hear?
- ★ How do you know?

Starting with 1, each group makes one more beat than the previous group, until one group gets to 7.



4. **Rhythm patterns:** Divide learners into groups. Give each group a different musical instrument. The groups make sounds with their instruments and describe these sounds. Then they compare the sounds that the different instruments make.

Guiding questions:

- ★ What does your instrument sound like?
- ★ Can you make a soft/loud sound; a fast/slow sound?
- ★ How do the instruments sound the same/different?

TIP

If you do not have instruments, use blocks, tins, sticks and pieces of paper to flick, or learners can use their bodies, for example, stamp their feet on the floor or slap their legs.

Make a musical pattern with an instrument, for example, loud, soft, soft, loud, soft, soft. Groups play along with you. Groups take turns to copy and extend sound patterns. Groups create new patterns, for example, loud, loud, soft, loud, loud, soft.

- ★ What new pattern can we make?
- ★ What sound should come first?
- ★ How many times should we make that sound?
- ★ How should we carry on?

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

Day 5

What you need

- Rhyme: *It's pattern time* (page 96)
- Musical instrument

1. **Rhyme:** Say the rhyme, *It's pattern time*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Play an instrument as learners move around. When the music stops, call out a number between 1 and 7. Learners form groups of different sizes according to the number.
4. **Extending physical patterns:** Choose six learners to make a body pattern, for example, two sitting, one standing, two sitting, one standing. Discuss the pattern.

Guiding questions:

- ★ Is this a pattern?
- ★ Can you describe the pattern?
- ★ What is the repeating part of the pattern?
- ★ How could we extend the pattern?

Learners continue the pattern by standing or sitting.

- ★ What would come next?
- ★ Can anyone join the line? What will you do?

Repeat the activity using other body positions, for example, kneeling and lying down.

Choose eight learners to arrange themselves into their own pattern.

- ★ How did you decide what to do for your pattern?
- ★ What pattern have you made? How do you know it is a pattern?
- ★ How can we extend this pattern?

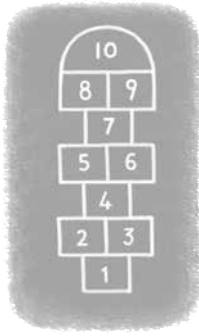
Other learners join the line and extend the pattern.

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



TIP

Make sure that there are movements that all learners are able to participate in, including learners with motor impairments.



Integration

Home Language: Emergent Writing: Draw patterns.

Life Skills: Fine motor development: Identify, copy and extend patterns in the environment. Gross motor development: Paint a hopscotch grid outside or draw one on the ground with chalk. Learners jump on the blocks of the grid following the number sequence, landing with feet together or feet apart, depending on the number of blocks in each row of the grid.

Small group activities

Teacher-guided activity

What you need

- 6 everyday objects
- A tray
- A tub for each learner with:
 - Structure beads (*Resource Kit*)
- ‘What’s missing?’ pattern card
- Unifix pattern card
- Unifix blocks
- 10 attribute blocks

1. **Structure beads:** Ask learners to show you a number of beads between 1 and 7. Learners put the beads into different arrangements of the same number.

Guiding questions:

- ★ How many red/yellow beads are there?
- ★ Can you show me seven beads?
- ★ Show me four beads. What did you do to make four?
- ★ What should you do to have six beads?

2. **What’s missing? (Kim’s game):** Place five objects on a tray, one at a time while learners watch.

Guiding questions:

- ★ What did I put on the tray first?
- ★ What did I put on the tray next?
- ★ What did I put on the tray last?

Now learners should look at the tray and try to remember what objects are on it. Cover the tray with a cloth and then remove one object. Lift the cloth. Learners say which object is missing. Repeat, removing a different object each time.

3. **What’s missing? pattern:** Learners take a ‘What’s missing?’ pattern card from their tub. They say which part of the pattern is missing and arrange their attribute blocks to copy the pattern, filling in the missing part.

Guiding questions:

- ★ What comes first/next/last?
- ★ What is missing?



4. **Copying and extending own pattern:** Learners use their Unifix blocks to copy and extend a pattern from the Unifix pattern card (vertically and horizontally).



Guiding questions:

- ★ What comes before/after/next?
- ★ Can you finish the pattern?
- ★ What part of the pattern repeats?

5. **Create own pattern:** Learners create a pattern with attribute blocks and explain their pattern. For example:

- ★ One attribute: shape: circle, square, triangle.
- ★ Two attributes: colour and shape: red circle, yellow square, green triangle.

Guiding questions:

- ★ Can you describe your pattern?
- ★ What makes it a pattern?
- ★ How can you carry on your pattern?

Make a sequence of attribute blocks that is not a pattern.

- ★ Is this a pattern? Tell me why not.



TIP

If a pattern with two attributes is too difficult for learners, they can make a pattern with one attribute.



Check that learners are able to:

- break down and build up numbers between 1 and 7
- create and explain their own pattern with three colours and shapes
- extend a repeating pattern
- explain whether something is a pattern or not
- show the part of the pattern that repeats

Workstation 1

What you need

- 'Tall' and 'short' colour paper strips pasted in a pattern on a long sheet of paper
- Long sheets of paper – 1 per learner
- Rectangle shapes cut into two sizes: 'tall' and 'short'
- Glue

Learners paste strips of paper to copy and then extend the pattern.



Workstation 2

What you need

- Pattern cards with incomplete colour patterns in each row
- Paint, paintbrushes
- Paper

Learners use paints to copy and extend the patterns on the cards. They create their own patterns.



Workstation 3

What you need

- Flower pattern cards
- Paper flower petal and leaf cut-outs (16 of each per learner)
- Crayons
- Glue, brushes
- A strip of paper per learner



Learners paste the flower petals and leaves on paper to copy and extend the pattern. They use crayons to decorate their page.

Workstation 4

What you need

- A set of dominoes

Learners match the dominoes with the same number of dots.



Content Area Focus: Numbers, Operations and Relationships

Topics

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

New knowledge

- Number 6
- Two/three more/fewer
- Equal groups
- Counting on

Practise

- Oral counting: forwards 1–20, backwards 7–1
- Counting objects 1–7
- Sequencing numbers 1–5
- Reinforce number concept 1–5

New maths vocabulary

six
two more

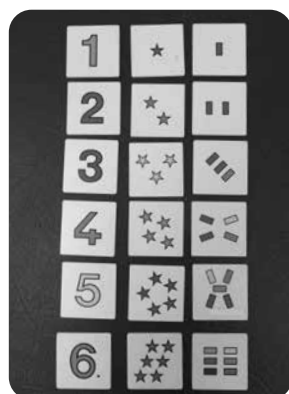
three fewer
enough

same amount
add to

Getting ready

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

- number frieze and house template for number 6 (page 101)
- 5 number 6 dot, symbol and word cards
- 7 large stones
- 7 large playdough/plastic/cardboard ducks
- number symbol card 6 (number line)
- 7 large cardboard snail cut-outs
- a large dice made from a box
- playdough template: Number 6 (page 104) – 1 per learner
- playdough
- blank A4 page in a plastic sleeve – 1 per learner
- a container of Unifix blocks per pair of learners in a group
- number and picture matching cards 1–6 – 1 per learner.



Whole class activities

Day 1

What you need

- Rhyme: *It's pattern time* (page 96)
- Number frieze and house template for number 6 (page 101)
- *Number 6 story* (page 96)



TIP

Practise songs and rhymes learnt in previous weeks throughout the daily programme, for example, during toilet routines.

1. **Rhyme:** Say the rhyme, *It's pattern time* from Week 1.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Ask a learner to flap a few times like a duck.

Guiding questions:

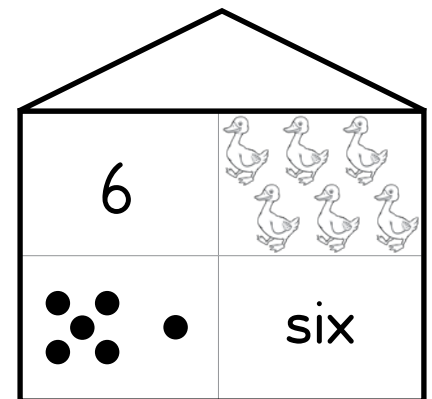
- ★ Was it more or fewer than seven times?
- ★ How do you know?
- ★ Can you all flap seven times?

4. **Introducing number 6:** Point to number friezes 1–5.

Guiding questions:

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

Tell the *Number 6 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 6, 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 ducks together.



Guiding questions:

- ★ Who has seen a duck before? Where?
- ★ What noise does a duck make?
- ★ Can you quack six times? Can you waddle as you quack?
- ★ How many more ducks are there than monkeys?
- ★ How many fewer giraffes are there than monkeys?
- ★ If each duck hatched from an egg, how many eggs would there have been?

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

Day 2

What you need

- Song: *Six little ducks* (page 96)
- 5 number 6 dot, symbol and word cards
- Number picture, symbol and dot cards 1–6 (*Resource Kit*)

1. **Song:** Introduce the song, *Six little ducks*.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Choose two learners to take turns to flap fewer than six times while other learners clap. Compare the number of flaps. Ask the same questions as on Day 1. Learners all flap and count as you clap from 1 to 7.
4. **Dot cards 1–6 game:** Show picture, dot and number symbol cards 1–6. Learners organise themselves into groups according to the card that you show.
5. **Maths table:** Groups of six learners collect six similar small objects outside, for example, twigs or leaves. Learners return to sit on the mat in their groups. Each group says what and how many objects they have found. Discuss the similarities and differences between their collections. Give a number 6 dot, symbol or word card to each group. One group at a time puts their objects and number 6 card on the table.



TIP

When forming groups discuss who has enough for six, how many more, and so on.



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

Day 3

What you need

- Song: *Six little ducks* (page 96)
- 7 large stones
- 7 playdough/plastic/cardboard ducks
- Dot cards 1–6 (*Resource Kit*)

1. **Song:** Sing the song, *Six little ducks* and dramatise it.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Learners sit in a circle. Tell a short story as you place six stones and seven ducks in the middle of the circle where all the learners can see them.

Guiding questions:

- ★ How many stones/ducks do you think there are?
- ★ Are there more/fewer ducks or more/fewer stones?
- ★ How do you know?

 TIP

Remind the learners holding the cards to include themselves when counting the number of learners in the group.

4. **Dot cards and ordering numbers 1–6:** Show learners dot cards 1–6. Give six learners each a dot card from 1 to 6. Ask them to make groups with friends according to the number of dots on their card.

Guiding questions:

- ★ How many will there be if the group of two learners joins with the group of three learners?
- ★ Is there a group who has the same number of learners in their group as the two groups who have joined together?

Repeat with other numbers and other learners. Learners who are not part of a group arrange the groups in order from 1 to 6.

- ★ Which group comes next?
- ★ Which group is last?

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

Day 4**What you need**

- Song: *Six little ducks* (page 96)
- 7 cardboard snails
- 7 playdough/plastic/cardboard ducks
- Number line with number symbol cards 1–6

1. **Song:** Sing the song, *Six little ducks* and dramatise it with another group of learners.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Place seven ducks and seven cardboard snails where all the learners can see them.

Guiding questions:

- ★ How many snails/ducks do you think there are?
- ★ Are there the same number of snails as ducks?
- ★ Are there more/fewer ducks or more/fewer snails? How do you know?

4. **Number 6 dance:** Together create a number 6 dance. Clap six times, jump six times, walk backwards six steps, and so on. Ask learners for suggestions.
5. **Number 6 game:** Learners close their eyes while you hide six ducks around the classroom. The learners then take turns to throw a dice. If it lands on number 6, they look for a duck. Give clues by calling out 'hot' if they are very close to finding a duck, 'cold' if they are far away and 'warm' if they are getting closer. The class counts the ducks together as they are found. They put up the matching number symbols 1–6 on the number line. A learner uses one duck to jump from 1 to 6 on the number line as the class counts.

 TIP

Repeat three movements in a sequence a few times before adding new movements.



Guiding questions:

- ★ How many ducks have we found?
- ★ How many learners have had a turn to find a duck?
- ★ How many more ducks do we need to find to make six in the group? How do you know?

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

Day 5

What you need

- Song: *Six little ducks* (page 96)
- 7 learners' snack boxes
- Poster 5
- Masking tape/chalk

1. **Song:** Sing the song, *Six little ducks* and dramatise it.
2. **Oral counting:** 1–20 and 7–1.
3. **Counting objects 1–7:** Together count seven learners as they each fetch their snack box.

Guiding questions:

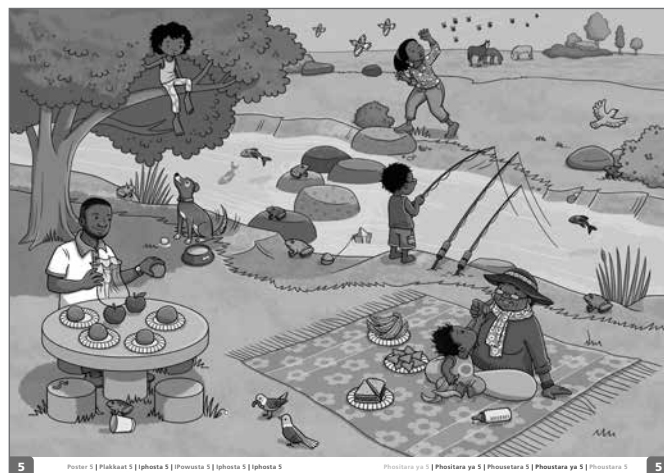
- ★ Are there more learners or more snack boxes? How do you know? Together look inside the boxes.
- ★ Which snack box has two/three/four/five things in it?
- ★ Is this more or fewer than seven things?

4. **Jumping track:** Use masking tape or chalk to create a ladder on the mat for learners to jump as the class counts from 1 to 6.

Guiding questions:

- ★ Can you jump to the number that is one more/two fewer, two more/three fewer than the number you are standing on?
- ★ Can you stand on number 2/3/4 and count from there onwards as you jump?

5. **Practising 1–6:** Discuss Poster 5. Talk about what the learners can see.



Guiding questions:

- ★ Where do you think these people are?
- ★ Is there anything in this picture that you have seen before?



TIP

If learners do not use snack boxes, use other objects, for example, boxes and blocks.



TIP

Take time to discuss picnics. Move between learners to show them the poster.

**TIP**

Encourage learners to think of number questions they would like to ask.

- ★ Can you see five/six, and so on of anything?
- ★ How do you know it is five/six, and so on?
- ★ How many trees do you see? How many more do we need to have six?
- ★ How many birds do you see? What do we need to do to have six birds? And bananas?
- ★ Are there enough rolls for each person? What can we do so that everyone has a roll?
- ★ How many apples do you see? What should Dad do so that all the people get a piece of apple?

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

Integration

Home Language: Stories, songs and rhymes.

Life Skills: Gross motor development and direction.

Small group activities

Teacher-guided activity

What you need

- 6 ducks
- 3 large stones
- Number frieze for 6
- Playdough and boards
- A4 paper and pencils
- A tub per learner with:
 - Number symbol and number word cards 1–6 (*Resource Kit*)
 - 7 animal counters
 - Structure beads

1. **Problem solving:** Show learners six ducks. Put three stones next to three of the ducks.

Guiding questions:

- ★ How many ducks are there?
- ★ How many stones are there?
- ★ Are there enough stones for each duck to sit on?
- ★ How many ducks won't have a stone to sit on?
- ★ How many more stones do we need for each duck to have one?

2. **Counting objects 1–7:**

Guiding questions:

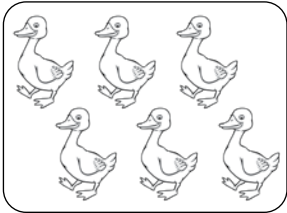
Learners look at the animals in their tubs.

- ★ Do you have more or fewer than six animal counters in your tub?

Learners each count their animals 1–7.

Look at the number frieze with the learners.

- ★ Which number are we learning about this week?
- ★ Is this number more or fewer than the number of animals you have?



Together count the ducks on the animal frieze.

- ★ What do you need to do so that you have only six animals in your group?
- ★ Put three animals back into your tub. How many animals do you now have on the mat in front of you?
- ★ How many eyes do your three animals have altogether? How many ears?

3. **More, fewer, equal:** Learners make two groups with the six animals from their tubs.

Guiding questions:

- ★ Which group has more/fewer?
- ★ Who has the same number of animals in each group?
- ★ What do you need to do to make your groups equal? (If they were not equal.)

4. **Matching number symbols 1–6 to objects:** Learners look at their number symbol cards from their tub and at the number frieze.

Guiding questions:

- ★ Can you show me number 1, 4, and so on?
- ★ Can you show me the number that comes before/after 3/5, and so on?

Play a game by hiding your hands behind your back. Show between one and six fingers. The learners count animals to match your fingers and choose the matching number symbol and word card. Repeat a few times.

5. **Structure beads:** Learners use the structure beads to count.

Guiding questions:

- ★ Can you show me four beads, two more beads than 4, three fewer beads than 6, and so on?

Learners hold two beads in their hand.

- ★ How many more beads do you need to make 4?
- ★ Can you add one/two more beads?
- ★ How many beads do you have now?
- ★ Can you take one/two beads away?
- ★ How many beads do you have now?

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



Check that learners are able to:

- count objects 1–7
- identify more, fewer and make two equal groups
- recognise, name and match objects to number symbols 1–6
- solve problems up to 6

Workstation 1



TIP

Place number cards on the table for learners to copy if the number line is too far away.

What you need

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

Learners write number 1 with kokis using the number line as a guide. They count out the number of counters (one) to match this. Repeat with numbers 2–6.

Workstation 2

What you need

- Playdough
- Playdough template: Number 6 (page 104) – 1 per learner

The learners use playdough to complete the template.

Workstation 3

What you need

- Per pair of learners:
 - One dice
 - A container with Unifix blocks

Learners take turns in pairs to roll the dice and stack the matching number of Unifix blocks to make a tower. They then roll the dice again and add more Unifix blocks to their tower according to the number on the dice.



Workstation 4



TIP

This can be explained as a snap or memory game if learners are able to play independently.

What you need

- Number and picture matching cards 1–6

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

Content Area Focus: Numbers, Operations and Relationships

Topics

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

New knowledge

- Number 7
- Oral counting: backwards 10–1
- Counting objects 1–10

Practise

- Oral counting: forwards 1–20, backwards 7–1
- Sequencing numbers 1–6
- Two/three more/fewer
- Add, take away
- Reinforce number concept 1–6

New maths vocabulary

seven

as many as

difference between

Getting ready

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

- number frieze and house template for number 7 (page 102)
- 7 cardboard cut-outs of frogs (5 brown and 2 green)
- washing line with number symbol cards 1–7
- 5 number 7 dot, symbol and word cards
- number 7 dot cards with the dots arranged differently on each one
- 7 A5 cards each with a number from 1 to 7 and string to make number necklaces
- playdough flies
- number dot cards 1–7, one set per learner
- playdough template: Number 7 (page 105) – 1 per learner
- playdough – enough for two activities
- 1 paper cup per learner
- a container with bottle tops/beads to fill the cups
- an A4 page per learner with a picture of two jars, labelled with a number symbol between 1 and 7 (see Workstation 2)
- paper cut-outs of different coloured sweets (see Workstation 2)
- number puzzles (1–7).



Whole class activities

Day 1

What you need

- Song: *Seven green speckled frogs* (page 96)
- *Number 7 story* (page 97)
- Number frieze and house template for number 7 (page 102)

1. **Song:** Sing the song, *Seven green speckled frogs*.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Hold up one finger at a time and together count 1–10. Learners turn to a partner and take turns to count one another's fingers.



TIP

If possible, ask learners to bring a pair of gloves to school. Show an example and discuss what they understand by the word 'pair' (a set of two things used together). They can think of pairs on their bodies, for example, hands, legs, eyes, and so on.

Guiding questions:

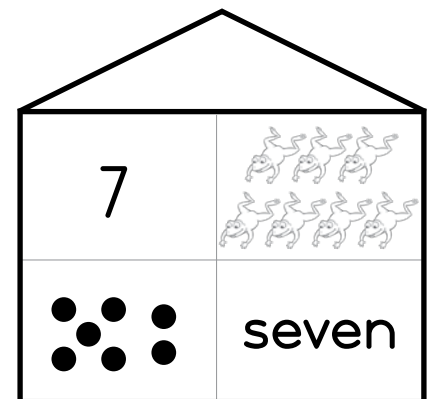
- ★ How many fingers do you have on both hands?
- ★ What else do we have ten of on our bodies?

4. **Introducing number 7:** Point to number friezes 1–6.

Guiding questions:

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

Tell the *Number 7 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 7, for example, the picture, the dots, the symbol and the word. Display the parts of the frieze in the animal house next to number 6 on the wall in the maths area. Count the frogs together.



Guiding questions:

- ★ How many more frogs are there than ducks?
- ★ How many fewer monkeys are there than frogs?
- ★ What number comes before 5/6; after 3/4, and so on?

Dramatise being a frog.

- ★ What noise does a frog make?
- ★ Can you show me how they move/eat?
- ★ How many eyes will one frog/two frogs/three frogs have?

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



TIP

Before introducing new knowledge, ask learners what number they have been counting back from, and how many objects they have been counting up to.

Day 2

What you need

- Song: *Seven green speckled frogs* (page 96)
- Song: *One little, two little* (page 97)
- Dot, picture and number symbol cards 1–7 (*Resource Kit*)
- 5 number 7 dot, symbol and word cards

1. **Song:** Sing the song, *Seven green speckled frogs* and dramatise it.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Sing, *One little, two little*, while showing fingers 1–10.
4. **Dot cards 1–7 game:** Play the 'grouping game' from Week 2 (page 23: Activity 4, Day 3) to get learners into groups of seven. Use dot, picture and number symbol cards 1–7.
5. **Maths table:** Groups of seven learners collect seven similar small objects inside or outside the classroom, for example, blocks, kokis, stones or waste materials. 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 a number 7 dot, symbol and word card to each group. One group at a time puts their objects and number 7 cards on the table.



TIP

Learners can collect seven waste items from home or on the playground for recycling.



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

Day 3

What you need

- Song: *Seven green speckled frogs* (page 96)
- 7 cardboard cut-outs of frogs
- Dot cards for 1–7
- Dot cards for 7 (with different dot arrangements)
- Number friezes 1–6
- Number frieze: Number 7 (page 102)

1. **Song:** Sing the song, *Seven green speckled frogs*. Use the pictures as you sing the song.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Repeat the activity from Day 2.

4. **Dot cards and ordering 1–7:** Slowly show learners the dot cards 1–7. They clap when they see the card with seven dots.

Show learners combinations of dot cards that make seven. Start with the dot cards for 3 and 4.

Guiding questions:

- ★ How many dots are there? (3)
- ★ How many dots are there? (4)
- ★ How many dots are there if we put the cards (3 and 4) together?

Repeat with other dot card combinations.

- ★ Are there any cards that we haven't used that we can put together to make seven dots?

Place the dot cards where learners can see them. They take turns to choose two cards that make up the number 7.

Show the dot cards for 7 that have different arrangements of dots.

Guiding questions:

- ★ How many dots are there on each card?

Learners take turns to match dot cards for 1–7 to numbers on the number friezes. They place these in the correct order on the wall.

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

Day 4

What you need

- Song: *Seven green speckled frogs* (page 96)
- 15 pairs of gloves or cardboard hand cut-outs
- 7 number 1–7 necklaces
- 7 cardboard frogs
- Number friezes 1–7

1. **Song:** Sing the song, *Seven green speckled frogs* together and then look at number friezes 1–7.

Guiding questions:

- ★ How many houses can you see?
- ★ How many frogs are there in the song?
- ★ Are there enough houses for us to put one frog in each house?

Learners attach a frog to each house.

2. **Oral counting:** 1–20 and 10–1.

3. **Counting objects 1–10:** Learners count the fingers on a pair of gloves.

Guiding questions:

- ★ Are there as many fingers on the gloves as you have on your hands?
- ★ Have you seen gloves that have more/fewer than ten fingers?

4. **Practising and ordering 1–7:** Create a 'Number 7' dance, for example, stamp seven times, nod seven times and sway seven times.

TIP

This can be done in pairs, small groups or individually depending on the number of pairs of gloves. Use cardboard hand cut-outs if learners do not bring gloves.

TIP

Discuss with learners why they need to call 'one fewer' than the number written on their necklace.

Seven learners wear a number necklace with a number from 1 to 7 on it. The other learners guide the seven learners with necklaces to stand in order from 1 to 7. Then each learner with a necklace creates a group to match the number on their necklace. Those remaining count the numbers in the groups and point to the matching number frieze.

Guiding questions:

- ★ How many friends do you need to call if you have the number 5/6, and so on?

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

Day 5

What you need

- Song: *Seven green speckled frogs* (page 96)
- 10 pairs of gloves or cardboard hand cut-outs
- Masking tape or chalk
- Poster 3
- Beanbag

1. **Song:** Sing the song, *Seven green speckled frogs* together.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Together count ten learners to sit in a row and place one pair of gloves in front of each learner.

Guiding questions:

- ★ How many pairs of gloves are there on the mat?
- ★ Are there enough for each of these ten learners?
- ★ How can we check?

4. **Jumping track:** Use masking tape or chalk to create a ladder on the mat for learners to jump as the class counts 1–7.

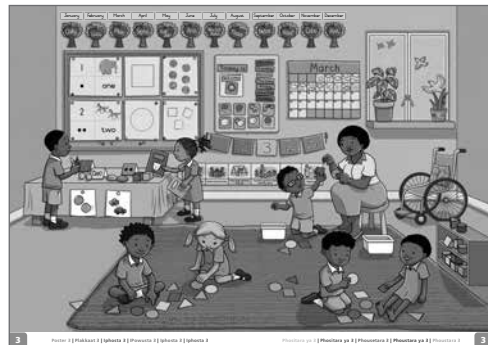
Guiding questions:

- ★ Can you jump to the number that is one more/two fewer/ two more/three fewer than the number you are standing on?
- ★ Can you stand on number 4/5/6 and count from there onwards as you jump?
- ★ Can you throw the beanbag to the number that is one more than 6?

5. **Practising 1–7:** Discuss Poster 3. Talk about what the learners can see.

Guiding questions:

- ★ In what way does this classroom look the same/ different to yours?
- ★ Can you see seven/six, and so on of anything?
- ★ Are there more learners standing, or more learners sitting?
- ★ How many trees on the birthday chart have more than one name?



TIP

Tie each pair of gloves or hand cut-outs together.

- ✦ Which numbers could we add to the number washing line? Why those numbers?
- ✦ Which number comes before/after/between ____?
- ✦ Seven birds fly past the window. If we can see four how many have flown past?
- ✦ Together two learners have seven shapes. If one of the learners has five shapes, how many shapes does the other learner have?

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

Integration

Home Language and Life Skills: Create stories and songs about frogs and numbers using familiar tunes.

Small group activities

Teacher-guided activity

What you need

- 7 cardboard cut-outs of frogs
- 7 playdough flies (small balls of playdough)
- 2 plastic lids or paper plates per learner
- A tub per learner with:
 - Number dot cards 1–7
 - Number symbol and word cards 1–7 (*Resource Kit*)
 - 7 counters
 - A ball of playdough

1. **Word problems:** Look at the seven frogs and seven playdough flies.

Guiding questions:

- ✦ Six frogs each eat a fly. How many flies are left?
- ✦ How do you know? Tell me how you got your answer.

2. **Practising more than, fewer than, equal to:** Look at the seven frogs and seven flies again.

Guiding questions:

- ✦ Are the number of frogs more than, fewer than or equal to the number of flies?

Count the frogs and the flies together.

3. **Add, take away:** Learners use counters to represent the frogs. Ask them to show you seven frogs (using counters).

Guiding questions:

- ✦ How many frogs will be left if you take away three frogs?
- ✦ If we add two frogs. How many frogs do you have now?

Learners use the counters in their tubs to represent and solve problems – for example:

- ✦ Five frogs are looking for flies. Some frogs are green and some are brown. Two of the frogs are brown. How many frogs are green?
- ✦ How do you know? Tell me how you got your answer.



TIP

Always ask learners to explain how they solved the problem, or how they got their answers.

- ★ A green frog has two flies. A brown frog has four flies. How many more flies does the brown frog have than the green frog?
 - ★ How do you know? Tell me how you got your answer.
4. **Counting objects 1–10 and 10–1:** Learners make and count 10 flies each. They count backwards from 10 to 1.
- Guiding questions:**
- ★ Can you show me 4/7, and so on flies?
5. **Practising numbers 1–7:** Learners take out a number symbol card. They build a tower with the Unifix blocks to match this. They match their dot cards and number word cards to their number symbol and tower.
- Guiding questions:**
- ★ Does your tower have the same number of Unifix blocks as the number of flies I have?
 - ★ Does your tower have the same number of Unifix blocks as the number of frogs?
6. **Shake and break:** Learners use seven counters to shake and break. Discuss how the learners have broken up 7.
- Compare groups by asking learners to put three counters on one lid and four on the other.
- Guiding questions:**
- ★ Which lid has the most counters?
- Ask learners to put six counters on one lid and one on the other.
- ★ Which lid has fewer counters?
 - ★ How many fewer?
- Ask learners to put four counters on one lid and one on the other.
- ★ How could we make the counters on each lid equal?
7. **Dice:** Roll the dice. Learners quickly say the number of dots on the dice.
8. **Practising number 7 using playdough:** The learners make the number symbol 7 out of playdough. Support learners who are ready to write 7.



Check that learners are able to:

- count objects 1–10
- count backwards 10–1
- identify more, fewer and equal
- recognise, match, name and order number symbols, number words and dot cards 1–7
- match objects with dot cards 1–7
- solve addition and subtraction problems to 7
- identify dots 1–6 on a dice

Workstation 1

What you need

- Playdough
- Playdough template: Number 7 (page 105) – 1 per learner

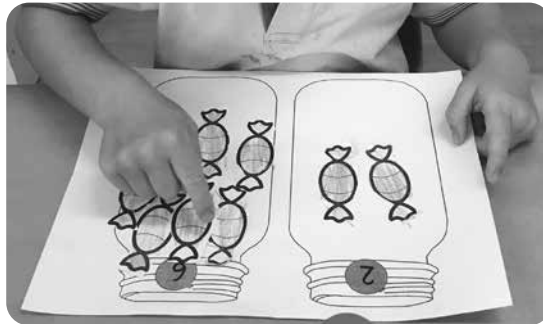
Learners use playdough to complete the template.

Workstation 2

What you need

- Per learner:
- A4 page with picture of jars
 - Paper cut-outs of different coloured sweets
 - Scissors
 - Glue

Learners 'fill' the jars with the correct number of 'sweets' to correspond with the number on each jar.



Workstation 3

What you need

- A cup per learner
- A dice per pair of learners
- Bottle tops/beads in a container

Learners take turns to roll the dice and then put the same number of objects into their cups as the number the dice lands on. Once their cups are full, they roll the dice to empty the cups.



Workstation 4

What you need

- Number puzzles (1–7)

Learners each choose a number puzzle. They find the matching number and picture pieces.



Content Area Focus: Space and Shape (Geometry)

Topics

- Position, orientation and views
- Properties of 2-D shapes and 3-D objects
- Follow directions

New knowledge

- Shapes: rectangle
- Direction: left, right
- Position: middle, bottom
- Sort objects according to two attributes
- Eighteen-piece puzzles

Practise

- Oral counting: forwards 1–20, backwards 10–1
- Shapes: circle, square, triangle
- Symmetry
- Reinforce number concept 1–7

New maths vocabulary

symmetry
left

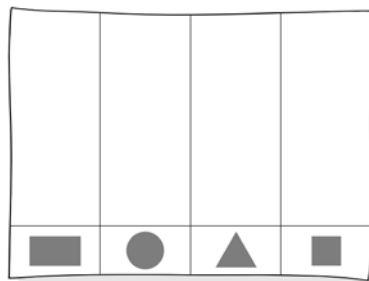
right
middle

rectangle

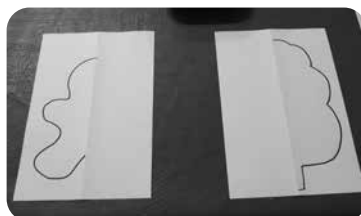
Getting ready

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

- large cardboard shapes of a rectangle and square (maths area)
- paper shapes: circle, square, triangle, rectangle – 1 per learner
- variety of leaves – 1 per learner
- shape book (page 107) – 1 per learner
- paper rectangles in different sizes and colours
- 8 small cardboard circles, squares, triangles and rectangles similar in size to the attribute blocks (used in Term 2, Week 8)
- eighteen-piece puzzles (page 112)
- A4 sheet of paper with 4 columns and picture of a shape (rectangle, circle, triangle, square) at the bottom of each column – 1 per learner



- incomplete pictures.



Whole class activities

Day 1

What you need

- Song: *Seven green speckled frogs* (page 96)
- A ball
- Music
- Large rectangle-shaped box
- Large piece of paper
- Koki
- Chalk
- Attribute blocks

1. **Song:** Sing the song, *Seven green speckled frogs*.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Learners stand in a circle. Call out a number between 1 and 10. Learners take turns to bounce the ball according to the number called. Together count the number of bounces.
4. **Reinforce the circle, square, triangle:** Draw a large circle, square and triangle on the floor. Learners walk along the edges of the shapes. When the music stops, they step into the shape they are walking on.

Guiding questions:

- ★ What is your shape called? How do you know?
 - ★ How is your shape different to the other shapes?
 - ★ How many sides/corners/points does it have?
5. **Introducing rectangles:** Trace around the face of a large rectangle-shaped box to draw a rectangle. Focus on the straight lines, the corners and the number of sides while drawing.

Guiding questions:

- ★ Do you know what this shape is called?
 - ★ How many straight lines does the rectangle have?
 - ★ How many corners does the rectangle have?
 - ★ How many sides does the rectangle have?
- Place the box of attribute blocks on the mat. Hold up a rectangle attribute block.
- ★ What is this shape called?
 - ★ Is this shape the same as the one we have just drawn? Why?
- Pass the eight rectangle attribute blocks around the class for learners to feel and explore the properties.
- ★ How many corners does it have?
 - ★ How many sides does it have?
 - ★ What can you tell me about the sides? Are all sides the same length?
 - ★ Which sides are shorter?
 - ★ Can you tell me how the rectangle is different from the square?
6. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- Song: *It's a rectangle* (page 97)
- Picture of a rectangle
- 10 chairs

1. **Song:** Sing the song, *It's a rectangle*. Show a picture of a rectangle and point to the sides as learners sing.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Ten learners form a circle with ten chairs. Each learner stands up and says a number starting from 1 and then sits down. When the last learner sits the whole class says '10'. Repeat the activity, starting with a different learner.



TIP

The learner who starts the counting can wear a hat.



4. **Rectangle hunt:** Learners play the game, 'I spy ... a rectangle.' Learners guess where the rectangle is in the classroom, for example, pictures, or rectangular shapes, such as the door, window, table, books. Learners predict what rectangle shapes they might find outside and go on a rectangle hunt.

Guiding questions:

- ★ Tell me what the shape looks like?
 - ★ Why is/isn't it a rectangle?
 - ★ How many sides/corners does it have?
 - ★ Are the sides all the same length?
5. **Small group activities:** Describe the activities at each workstation.

Day 3

What you need

- Song: *Looby loo* (page 97)
- 10 everyday objects in a bag
- Musical instrument
- Square and rectangular wooden blocks
- Large cardboard rectangle and square
- Poster 3

1. **Song:** Sing the song, *Looby loo*.
2. **Oral counting:** 1–20 and 10–1.

3. **Counting objects 1–10:** Learners sit in a circle. They count ten objects as you place them in the bag. They pass the bag around as music plays. When the music stops the learner holding the bag puts one or more objects from the bag into the middle of the mat. Other learners guess how many objects there are on the mat. Together count these. Repeat the activity.
4. **Practising shapes:** Learners look for square and rectangular blocks in the classroom. They compare the differences and similarities between these. They place the blocks on the cardboard rectangle or square, as appropriate.



5. **Identifying shapes:** Discuss Poster 3.
- Guiding questions:**
- ★ What do you think the learners on the mat are learning about?
 - ★ What shapes can you see?
 - ★ Is that a rectangle or a square? How do you know?
 - ★ Why is this not a rectangle/square?
 - ★ Can you find a shape that has two short and two long sides?
 - ★ Can you find a shape with four sides that are all the same length?
 - ★ What shape are Malusi's glasses?
 - ★ Can you see any other rectangles?
6. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Song: *Looby loo* (page 97)
- Elastic/wool bands – 1 per learner
- 6 hula hoops

1. **Song:** Sing the song, *Looby loo*.
2. **Oral counting:** 1–20 and 10–1.

3. **Counting objects 1–10:** Five learners stand around the six hula hoops. Play music. When the music stops, learners place the number of body parts you say over the hoop. For example: 'Show me five heads, ten elbows, four feet, nine fingers.'



Learners keep their bands on their arms for the week. Talk to them about which hand they use to draw, eat or catch a ball with.

4. **Position and direction:** Place a loose elastic/wool band on each learner's right hand.

Guiding questions:

- ★ Is your band on your left or right hand?
- ★ Wave at me with your left/right hand?

Sing the song, *Looby loo*. Learners place their right or left hands inside the hoop as they sing the song.

Three learners stand in line in front of the class. Discuss where each learner is standing and introduce the word 'middle'.

- ★ Who is standing in the middle?

Place the cardboard circle, square and triangle in a row and discuss their position.

- ★ Which shape is in the middle?

Play 'Sizwe says' using position and direction vocabulary such as:

- ★ Step forwards with your left foot.
- ★ Jump backwards on your right foot.
- ★ Put your right hand above your head.
- ★ Put your middle finger on your nose.

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

Day 5

What you need

- Song: *It's a rectangle* (page 97)
- A4 piece of paper
- Circle, square, triangle and rectangle paper shapes – 1 per learner
- Leaves – 1 per learner

1. **Song:** Sing the song, *It's a rectangle*.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Learners count as they bend to the left twice and then to the right twice. Repeat until they get to 10.



TIP

A line of symmetry divides a shape into two equal parts.

4. **Symmetry:** Show learners the A4 piece of paper.

Guiding questions:

- ★ What shape is this?

Discuss how the shape can be folded, corner to corner, so the folded sides are exactly the same as each other.

- ★ How can we fold this rectangle so that it has two sides that are exactly the same?

Give each learner a paper shape. Learners fold their shapes so that the two folded sides are the same.

- ★ What shape is your paper?
- ★ How can you fold the circle/rectangle/square/triangle down the middle so that the two sides are exactly the same?
- ★ Are the sides exactly the same?
- ★ What other objects can you see that will have two sides that are exactly the same when you draw a line down the middle?

Give each learner a leaf. They fold their leaf in half lengthwise and carefully pull it apart down the middle.

- ★ Do you think the sides of your leaf are exactly the same?
- ★ How can we find out?



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

Integration

Home Language: Use positional vocabulary when giving instructions, for example: 'Put the book on the middle shelf.'

Life Skills: Paint pictures involving the use of symmetry, for example, patterns on a butterfly's and ladybird's wings (see Term 1 Week 7).

Small group activities

Teacher-guided activity

What you need

- A tub for each learner with:
 - 10 attribute blocks – include all four shapes (*Resource Kit*)
 - 7 fruit counters (*Resource Kit*)
- A4 page with columns for shape sorting – 1 per learner
- A4 paper – 1 piece per learner
- Dot cards 1–7 (*Resource Kit*)

1. **Counting objects 1–10:** Learners count out 10 attribute blocks from their tubs.

Guiding questions:

- ★ How many triangles/circles/squares/rectangles do you see?
- ★ Can you see more/fewer rectangles or squares?

2. **Practising shapes:** Learners sort their attribute blocks according to their similarities and differences. They place them in the correct column on their shape sorting page.



Guiding questions:

- ★ How are the shapes the same/different?

Learners group all the shapes that have four sides into one group on the mat.

- ★ Can you show me a shape that has four sides that are all the same length?
- ★ Can you show me a shape that has two long sides and two short sides?
- ★ Do you remember what this shape is called?
- ★ How are all these shapes the same?

3. **Dot cards (1–7):** Give each learner a dot card. They take turns to use their fruit counters and copy the dot arrangements on their cards. Check each learner’s arrangement before giving them new cards.

Guiding questions:

- ★ Do you think this card has more/fewer dots than the one you had before?

4. **Symmetry:** Give each learner a sheet of A4 paper. Learners fold their piece of paper (rectangles) so that the two sides are the same.

Guiding questions:

- ★ What shape is your page?
- ★ How can you fold the page so that the two sides are exactly the same?



TIP

Learners can help one another fold their pages to make the two sides equal.



Check that learners are able to:

- count 10 objects
- identify and copy arrangement of objects (1–7) to dot cards
- apply a line of symmetry in shapes
- recognise and name rectangles and describe their properties

Workstation 1



What you need

- Incomplete pictures – 1 per learner
- Crayons

Learners complete the shape in the picture so that both sides are the same, which makes the shape symmetrical. They colour the two sides using two different colours.

Workstation 2

What you need

- Shape book per learner (page 107)
- 8 small cardboard circles, squares, triangles and rectangles
- Crayons

Learners copy or trace the individual shapes and draw a picture using all the shapes.



Workstation 3



Allow learners the freedom to use their own ideas even if this means they do not make a rectangle person, but rather their own creation from the rectangles.

What you need

- Paper rectangles in different sizes and colours
- Paper
- Glue
- Crayons

Learners paste rectangle shapes onto paper to make a rectangle person.

Workstation 4

What you need

- An assortment of eighteen-piece puzzles

Learners build puzzles.

Content Area Focus:

Measurement

Topics

- Mass: direct comparison using non-standard units

New knowledge

- Mass
- Light, lighter, lightest
- Heavy, heavier, heaviest

Practise

- Oral counting: forwards 1–20, backwards 10–1
- Counting objects 1–10
- Two/three more/fewer
- Equal groups
- Bigger, smaller

New maths vocabulary

light, lighter, lightest
heavy, heavier, heaviest

mass
balance scale

Getting ready

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

- balance scale (see photo on page 46)
- variety of everyday objects of different mass for weighing, for example, blown-up balloon, paper clip, cotton wool, empty egg carton, feather, leaf, coins, large sheet of paper, pencil, seeds, twig, rock, block, book, empty and full bottles
- leaves and stones – 1 of each per learner
- 2 containers: a small one filled with stones; a larger one filled with polystyrene chips



- an A4 page divided into 'heavy' and 'light' columns (see photo on page 51) – 1 per learner
- an A4 page with pictures of 'heavy' and 'light' objects and real-life objects to match the pictures
- 5 tins of the same size filled with objects of different mass, for example, sand, buttons, small stones, water, seeds
- containers that can be filled with water/sand for water and sand play
- measuring containers of different sizes and shapes, for example, tall containers (some that are wide and others that are narrow), short containers (some that are flat, others that are wide and others that are narrow), spoons, scoops, milk bottles, small and large yoghurt cups.

Whole class activities

Day 1

What you need

- 2 shopping bags, one with 5 tins of food of the same mass; the other with 5 toilet roll inners
- Everyday objects of different mass

1. **Song:** Learners sing one of the songs from the previous weeks.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Learners count the contents of the first shopping bag (five tins) and then the second shopping bag (five toilet roll inners).

Guiding questions:

- ★ How many items are there in the first/second shopping bag?
- ★ If we count all of these items, how many do you think there will be?

4. **Comparing heavier and lighter:** Tell a story about going shopping at the store and buying tins of food and toilet rolls. Show learners the shopping bags and tell them that the teller packed the toilet rolls into one packet and the tins into another packet.

Guiding questions:

- ★ Which packet would you like to carry? Why?
- ★ Why do you think we need to know how heavy or light things are?

Replace the items in their bags. A few learners take turns to pick up each of the shopping bags.

- ★ Which shopping bag feels lighter/heavier than the other?
- ★ Which is bigger, a tin or a toilet roll?
- ★ Are all big objects lighter than smaller objects?



TIP

Make sure that all learners have a turn so that they can all enjoy the whole class activity.



Place the everyday objects on the mat.

- ★ Which item do you think will be the heaviest/lightest? How can you tell?

Learners take turns to point to two items and predict which one would be heavier and which would be lighter.

- ★ Do you think it will be lighter/heavier than the ____?

Learners then place one item in each hand and say which one feels heavy and which one feels light.

- ★ Was your guess correct?
- ★ How can you tell which one is lighter/heavier?
- ★ Can you find something else that is lighter/heavier than the ____? Why do you think that?

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

Day 2

What you need

- Song: *One elephant went out to play* (page 98)
- Leaves and small stones, 1 of each per learner
- Balance scale
- Everyday objects of different mass (from Day 1)

1. **Song:** Sing the song, *One elephant went out to play*, with actions.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Place a pile of 10 leaves and a pile of 10 stones on the mat.

Guiding questions:

- ★ How many leaves/stones do you think are in each pile?

Count the leaves and stones together.

- ★ How close were you to the correct number of leaves/stones?
- ★ Are there more/fewer stones?

4. **Comparing mass:** Learners sit in a circle, close their eyes and open both hands. Place a leaf in one hand and a stone in the other hand.

Guiding questions:

- ★ Which object feels heavier/lighter?

Learners open their eyes and identify which object is heavier.

5. **Mass: balance scale:** Continue the discussion about finding out how things are light or heavy.

Guiding questions:

- ★ What are some other ways we can find out which things are light and heavy?
- ★ Place the balance scale and everyday objects on the mat. One learner chooses two items to be weighed.
- ★ How can we use the balance scale to find out which of these objects is heavier/lighter?



TIP

Learners often think that the side of the scale that is higher is heavier.

- ★ What is happening to the side with the ____? Why do you think this is so?
- ★ What do you think will happen if you put the ____ on one side and the ____ on the other side?

A few learners take turns to choose objects to be weighed, estimate which will be heavy and light and test their predictions.

- ★ Which object do you think will be heavier/lighter?
- ★ Did you estimate correctly?
- ★ What is happening to this side of the scale? Why do you think that happened?

Ask learners to bring a heavy and a light object from home for the lesson on Day 3.

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

Day 3

What you need

- Song: *One elephant went out to play* (page 98)
- Heavy and light objects brought by learners
- Apple made from playdough
- Balance scale
- A4 light/heavy grid

1. **Song:** Sing the song, *One elephant went out to play*.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Call out a number between 1 and 10. Learners get themselves into groups according to the number that you have called.

Guiding questions:

- ★ How many learners are in your group?

Repeat with other numbers.

4. **Comparing and ordering objects according to mass:** Learners take turns to present the objects brought from home to the class.

Guiding questions:

- ★ Which object is heavy/light?
What makes you say that?

Show learners the apple made from playdough. One learner brings their object to the balance scale and predicts whether it is heavier or lighter than the apple.

- ★ Does it feel heavy or light?
- ★ Why do you think it is lighter/heavier than the apple?



TIP

Bring a few extra objects for learners who are unable to bring objects.

The learner compares the mass of the object and the apple and then places it on the grid (see page 51) according to whether it is lighter or heavier than the apple.

- ★ How will you know which is heavier/lighter than the apple?
- ★ Which objects are lighter/heavier than the apple?
- ★ Which is the heaviest/lightest object?

Repeat a few times.

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

Day 4

What you need

- Song: *One elephant went out to play* (page 98)
- Rope or chalk
- 1 grape counter from the fruit counters (*Resource Kit*)
- Unifix tower of 2 blocks
- 1 small container filled with stones
- 1 large container filled with polystyrene chips
- Balance scale

1. **Song:** Sing the song, *One elephant went out to play*.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** This activity should be done outdoors. Make a long line with rope or chalk. Learners stand behind the line. Say a number between 1 and 10. Learners take big steps forwards while counting to the number that you have said. Make a mark for the learner who has got the furthest away from the rope. Repeat and see if any learner can get further than the marked spot.
4. **Small and heavy, large and light:** Place the grape counter and a Unifix tower of two blocks on the mat with the balance scale.

Guiding questions:

- ★ Which do you think is heavier? Why?

A learner weighs the grape counter and the Unifix tower on the balance scale.

- ★ Which is bigger/smaller?
- ★ Why do you think the grape counter is heavier?

Place the two containers with heavy and light objects (stones and polystyrene chips) on the mat.

- ★ Which container do you think is heavier? Why?
- ★ Are bigger things always heavier than smaller things?

A learner weighs the containers on the scale.

- ★ Which container is bigger/smaller?
- ★ Which container is heavier/lighter?
- ★ Why do you think that is?

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



TIP

Learners may find it difficult to understand that a small object can be heavier than a larger object. Refer to items on the maths table.

Day 5

What you need

- Song: *One elephant went out to play* (page 98)
- Bottle filled with water

1. **Song:** Sing the song, *One elephant went out to play*.
2. **Oral counting:** 1–20 and 10–1.
3. **Counting objects 1–10:** Learners find 10 small objects in the classroom. They sort the objects into the five they think are the heaviest and the five they think are the lightest.
4. **More or less than:** Place the bottle filled with water on the mat.

Guiding questions:

- ★ What objects in our classroom do you think weigh more than/less than this water bottle?

Two learners find one object each in the classroom that they think weighs more than the water bottle and two learners find objects that they think weigh less than the water bottle.

- ★ Do you think the object will weigh more/less than the water bottle? Why?

Learners then compare the mass of their object to the mass of the water bottle on the balance scale.

- ★ Is the _____ heavier/lighter than the water bottle?
- ★ Did you estimate correctly?

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

Integration

Home Language and Life Skills: Incorporate 'heavy' and 'light' into Creative Arts and Language activities, for example, learners mime carrying, pulling and pushing light and heavy objects, label classroom objects using 'light' and 'heavy' labels, collage activities using light (feathers, paper, plastic) and heavy (clay) materials.

Small group activities

Teacher-guided activity

What you need

- Balance scale
- 40 Unifix blocks
- 40 fruit counters
- A stone

1. **Counting objects 1–10:** Place the fruit counters and Unifix blocks in separate piles on the mat. Learners count five fruit counters and five Unifix blocks and place them in groups on the mat.



2. **Estimating mass:** In pairs, learners look at a group of five fruit counters and a group of five Unifix blocks. Ask learners which group of counters they think will weigh more.

Guiding questions:

- ★ Which group do you think is lighter/heavier than the other?
- ★ Why do you think the _____ group is heavier?

Learners take turns to hold a group of fruit counters in one hand and a group of Unifix blocks in the other hand and compare their mass.

- ★ Which feels heavier/lighter?
- ★ Why do you think it is lighter/heavier than the _____?

3. **Using a balance scale to measure mass:** Place the balance scale on the mat.

Guiding questions:

- ★ How can we find out which is the heavier of the two groups?

In pairs, learners use the balance scale to compare the mass of the objects to one another.

- ★ Which group do you think is heavier/lighter?
- ★ Do any groups weigh the same?
- ★ How do you know?
- ★ Did you estimate correctly?



Place the stone on the mat. Learners predict whether a Unifix block/ grape counter will be heavier or lighter than the stone.

- ★ Why do you think it is lighter/heavier than the stone?

Learners take turns to compare the mass of the Unifix block/grape counter to the mass of the stone.

- ★ Which objects are lighter/heavier than the stone?
- ★ Which is the heaviest/lightest object?



Check that learners are able to:

- compare the mass of two objects
- estimate the mass of objects
- use the balance scale to compare the mass of objects
- say which objects are light/heavy, lighter/heavier, lightest/heaviest

Workstation 1



What you need

- A4 page with pictures of 'heavy' and 'light' objects
- Real-life 'heavy' and 'light' objects to match the pictures shown on the A4 page
- A4 page with 'heavy' and 'light' columns
- Scissors
- Glue

Learners decide which objects they think are heavy and which are light. They then cut out the pictures to match these objects and paste them in the appropriate columns.

Workstation 2

What you need

- Balance scale
- Everyday objects to be weighed

Learners use the balance scale to weigh objects and tell one another which is heavier or lighter.



Workstation 3

What you need

- 5 containers of the same size filled with different materials, for example, sand, buttons, small stones, water, seeds

Learners arrange the containers in order from heaviest to lightest.

Workstation 4

What you need

- Container filled with water/sand for water and sand play
- Measuring containers of different sizes and shapes



Learners compare how much water/sand the different containers hold and compare their mass, using the vocabulary: light/heavy, lighter/heavier, lightest/heaviest. Learners may talk about which containers hold more, less, the same amount of water/sand and compare which containers are lighter/heavier.



TIP Preparation for Week 6: Ask learners to each bring seven empty plastic cold drink bottles from home for activities they will do in Week 6. These can be different sizes.

Content Area Focus: Numbers, Operations and Relationships

Topics

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

New knowledge

- Number 8
- Ordinal numbers: fifth, last, next
- Oral counting: forwards 1–20 and beyond

Practise

- Oral counting: forwards 1–20, backwards 10–1
- Counting objects 1–10
- Sequencing numbers 1–7
- Ordinal numbers first to fifth
- Add, take away
- Two/three more/fewer
- Reinforce number concept 1–7

New maths vocabulary

eight
fourth
fifth

last
how many more to make
how many are left/left over

least
the same
exactly

Getting ready

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

- number frieze and house template for number 8 (page 103)
- 4 number 8 dot, symbol and word cards
- number symbol card 8 (number line)
- large cardboard cut-outs of 3 big and 7 small mice
- birthday chart
- days of the week chart
- 10 different-sized bottles
- playdough template: Number 8 (page 106) – 1 per learner
- paper/card crown strips with 8 rectangle shapes – 1 per learner



- set of dot cards 1–8 – 1 per learner



- yoghurt cup with 8 white beans. Mark one side of each bean with a black koki – 1 cup per learner
- 10 × 500 ml cold drink bottles, and 5 smaller empty cold drink bottles that you have collected
- 8 × 2 litre cold drink bottles half filled with sand (label each with a large number symbol and dot/s from 1 and 8).



Whole class activities

Day 1

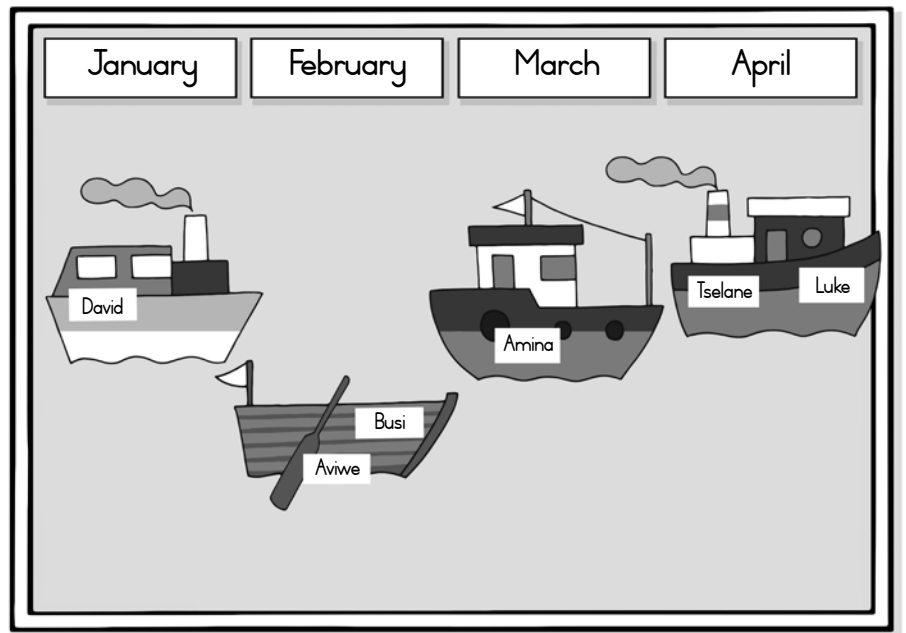
What you need

- Rhyme: *Eight little mice* (page 98)
- Cut-outs of 1 large mouse and 7 small mice
- *Number 8 story* (page 98)
- Number frieze and house template for number 8 (page 103)
- Birthday chart
- Days of the week chart

1. **Rhyme:** Say the rhyme, *Eight little mice* using the mouse cut-outs.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Look at the birthday and the days of the week charts.

TIP

Place the charts at eye level so learners can clearly see the information and share ideas with each other.



Guiding questions:

- ★ Are there more or fewer than 10 months of the year on the birthday chart?
- ★ Do any months have 10 birthdays?
- ★ How many birthdays are there in _____?
- ★ Which month has the most/least birthdays?
- ★ How many birthdays would there be in _____ if we added/took away one/two/three names?
- ★ Are there more or fewer than 10 days of the week?

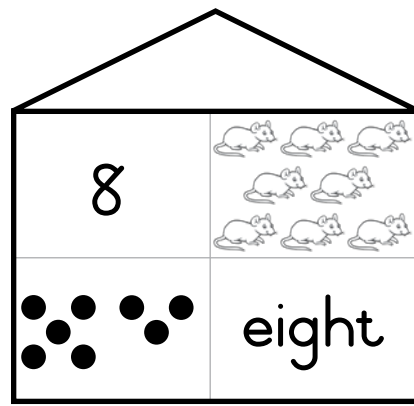
Count together and say the names of the months and days of the week.

4. **Introducing number 8:** Point to number friezes 1–7.

Guiding questions:

- ★ How many animals do you think will live in the next house?

Tell the *Number 8 story*. Show the different representations of number 8, for example, the picture, the dots, the symbol and the word. Add this house to the animal house frieze. Count the mice together. Dramatise mouse movements and sounds.



- ★ How many more mice are there than frogs?
- ★ Which house has three fewer animals than the frogs' house?

5. **Add the number 8 to the number washing line:** Show the learners the number 8 card.

Guiding questions:

- ★ Where should we put the number 8 on the number washing line?
- Talk about the position of number 8 in relation to number 7: it comes after number 7.

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

Day 2

What you need

- Rhyme: *Eight little mice* (page 98)
- Cut-outs of 3 big mice and 7 small mice
- 4 number 8 dot, symbol and word cards
- Number line

1. **Rhyme:** Say the rhyme, *Eight little mice* dramatising it using the mouse cut-outs.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Show cut-outs of big and small mice.

Guiding questions:

- ★ How many big/small mice do you think there are?
- ★ How many are there of each?

Count the pictures together.

4. **More than, fewer than, equal to:** Look at the cut-outs again.

Guiding questions:

- ★ Are there more/fewer big or small mice?
- ★ If two/three/four small mice were to run away, would there be the same number of big and small mice?

5. **Maths table:** Groups of eight learners each collect eight similar small objects. Each group says what objects they have found and how many objects they have found. Give a number 8 dot, symbol or word card to each group. One group at a time puts their objects and number 8 card on the table.

Guiding questions:

- ★ Where is the number 8 on the number line?
- ★ Can you draw it in the air/on your friend's back?

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



TIP

If one group has fewer than eight learners, help them to decide how many objects they each need to choose to make eight altogether.

Day 3

What you need

- Rhyme: *Eight little mice* (page 98)
- Cut-outs of 3 big mice and 7 small mice
- 10 × 500 ml bottles
- 8 × 2 litre bottles
- Ball
- Number dot cards 1–8 (*Resource Kit*) displayed on the wall

1. **Rhyme:** Say the rhyme, *Eight little mice* dramatising it using the mouse cut-outs.
- Guiding questions:**
- ★ Which mouse is second, third, fifth?
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Place 10 × 500 ml bottles and 8 × 2 litre bottles in separate groups where learners can see them.



Guiding questions:

- ★ Which group has more/fewer bottles?
- ★ How do you know?

Count the bottles in each group together.

4. **Dot cards and ordering 1–8; skittles:** Place 8 numbered 2 litre bottles in the incorrect order on the floor, in a line close to the dot cards that are displayed on the wall.

Guiding questions:

- ★ Are these bottles in the correct order?

Together place the bottles in the correct order from 1 to 8. Learners take turns to knock down bottles with the ball and say which numbers have fallen.



- ★ Which number comes between 6 and 8; after 2; before 5?
- ★ If you knock down the number 2 and 3 bottles, how many dots does this add up to? (Learners point to dot card 5.)
- ★ How many bottles are left standing?
- ★ How many more do you need to knock over to get to 8?
- ★ Which three bottles could we choose if we want the number of dots to add up to 8?
- ★ How many bottles do we need to knock over so that there are exactly the same number of bottles lying down as there are standing up?
- ★ How many bottles will be left if I take one away?

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

Day 4

What you need

- Rhyme: *Eight little mice* (page 98)
- Cut-outs of 8 mice
- Pictures of 8 ducks
- Number friezes 1–8
- 8 × 2 litre bottles
- 10 × different-sized bottles
- Ball
- Number line and number symbols 1–8
- Dot cards 1–8

1. **Rhyme:** Repeat the activity from Day 3.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Place eight 2 litre bottles in a group and 10 different-sized bottles in a separate group.

Guiding questions:

- ★ Which group has more/fewer bottles?
- ★ How many bottles do you think are in each group?
- ★ How can we find out?

Count the bottles in each group together.

4. **Ordinal numbers first to fifth:** Look at the number friezes.

Guiding questions:

- ★ Which animals live in the second house, third house, fourth house?

5. **Practising and ordering 1–8; ordinal numbers first to fifth; skittles:** Repeat the activity from Day 3. Handout dot cards 1–8. Learners say what dot card they have and match these to the bottles.

Guiding questions:

- ★ Can you knock down the first/second/fifth bottle?
- ★ Can you show me the first/second/fifth number on the number line?
- ★ Can you put the first/second/fifth bottle next to the first/second/fifth house?

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

Integration

Home Language and Life Skills: Place skittles in the maths area/outdoors for learners to play with.

Day 5

What you need

- Rhyme: *Eight little mice* (page 98)
- Masking tape/chalk
- Cut-outs of 8 mice
- A variety of bottles
- Poster 6

1. **Rhyme:** Repeat the activity from Day 3.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Place a variety of bottles in a group.

Guiding questions:

- ★ Are there more/fewer big bottles?
- ★ How many do you think there are?
- ★ How do you know?

Count the bottles together.

4. **Jumping track 1–8:** Use masking tape or chalk to create a ladder on the mat for learners to jump as the class counts 1–8.

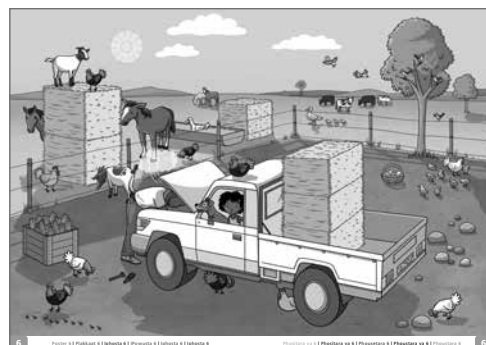
Guiding questions:

- ★ How many more jumps to get to 8?
- ★ Can you jump to the number that is one more/two fewer, two more/three fewer than the number you are standing on?
- ★ Can you stand on number 4/6 and count on from there as you jump?

5. **Practising 1–8:** Discuss Poster 6. Move between the learners to show them the picture.

Guiding questions:

- ★ What is the difference between a duck and a duckling?
- ★ How many ducks/ducklings can you see?



- ✦ Are there more/fewer ducks on the poster than on the number frieze?
- ✦ If two ducklings joined the big duck in the water, how many ducks and ducklings would there be?
- ✦ How many ducklings are walking in the line?
- ✦ How many ducklings would there be if two walked away?
- ✦ Are there more/fewer big ducks or chickens?

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

Small group activities

Teacher-guided activity

What you need

- Number dot, symbol and word cards 1–8 (*Resource Kit*)
- Ball
- Playdough
- Boards
- Paper
- Pencils
- A tub per learner with:
 - 10 counters
 - Playdough
 - 3 lids
 - A yoghurt cup with beans marked with black koki on one side
 - 5 animal counters

1. **Oral counting 1–20:** Learners roll the ball to each other as they count from 1 to 20 (and beyond if they are able to).
2. **Word problems:** Present learners with problems to solve. They can use the counters in their tub to represent and help them solve the problems.

Guiding questions:

- ✦ There are ten mice in a cupboard. If three mice run away, how many mice will be left in the cupboard?
- ✦ If one mouse comes back, how many mice will be in the cupboard?

Ask learners to tell you how they got their answers.

3. **Practising 1–8; more/fewer/equal:** Show a number symbol card from 1 to 8. As quickly as they can, learners make the same number of balls with their playdough. They find the number word and dot card to match.

Ask learners to take out two of the lids from their tubs. They should place two balls on one lid and four on the other lid.

Guiding questions:

- ✦ Which lid has more/fewer balls?
- ✦ How many more/fewer does this lid have?
- ✦ Add to the lid with more balls so that it has two more than four balls. How many did you add?
- ✦ Take away from the lid with fewer balls so that it has no balls. How many did you take away?



TIP

If a learner has made an error in the calculation, ask if they want to use counters to show you what they have done. Don't simply say the learner is 'wrong'. Guide them to the correct answer.

Learners each make eight balls. Place three balls on one lid and two on the other.

- ★ How many of the group of eight balls are left over?
- ★ What do we need to do to make the lids have the same number of balls?

Learners take out their third lid. They put one ball on the first lid and three balls on the second lid.

- ★ How many balls must go on the third lid to make eight balls altogether?

Repeat with other number combinations.

4. **Practising number 8 using playdough:** Learners make the number symbol 8 out of playdough. Support learners who are ready to write 8.
5. **Shake and spill bean game:** Learners take their yoghurt cups from their tubs. They each count out eight beans. Draw attention to the fact that the beans have been marked on one side. Ask learners to shake the cup and spill the beans.



Guiding questions:

- ★ How many beans are white? How many beans have a black mark?
- ★ How many beans are there altogether?

Learners shake and spill the beans again, using their cups and saying, 'Shake, shake, shake, and spill.' They count the beans together.

Learners compare combinations of white and black beans to make eight. Repeat a few times.

6. **Ordinal numbers first to fifth:** Learners place the animal counters in a line facing left. Ask individual learners which position different animals are standing in.

Guiding questions:

- ★ Which animal is first/third/fifth/last in line?
- ★ If you move _____ to behind _____ what position will it be in?



Check that learners are able to:

- count orally 1–20 and beyond
- identify first to fifth, last
- match objects 1–8 to number symbols, dot and word cards
- identify different combinations to make 8
- create the numeral 8 using playdough

Workstation 1

What you need

- Playdough
- Playdough template: Number 8 (page 106) – 1 per learner

Learners use playdough to complete the template.

Workstation 2

What you need

- Paper/card strips with 8 rectangles – 1 per learner
- Crayons
- Numbers from the number washing line

Learners colour in the correct number of rectangles for their age and write the number symbol to match. They draw one picture in each of the coloured rectangles for this birthday crown 'wish list'.



Workstation 3

What you need

- A set of dot cards (1–8)
- A tub with 8 coloured counters per learner

Learners each take a card and use their counters to replicate the arrangement of dots on the card. They compare cards to see if their numbers match. Repeat using all the cards from 1 to 8.

Workstation 4

What you need

- Large number symbol cards (*Resource Kit*)
- A tub for each learner with at least 36 counters (*Resource Kit*)

Each learner takes a number symbol card. They use counters to form the number symbol. They repeat this using different number symbol cards.



TIP

Discuss what each group has drawn on their crown's 'wish list' during whole class sessions.

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

- Draw a picture to represent data

Practise

- Oral counting: forwards 1–20 and beyond, backwards 10–1
- Counting objects 1–10
- Two/three more/fewer
- More, fewer, equal
- Collect, sort and represent collection of objects

New maths vocabulary

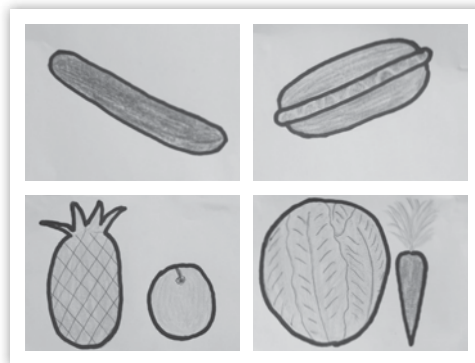
belongs

does not belong

Getting ready

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

- pictures of hot dog, boerewors, fruit and vegetables pasted on cardboard



- pictures of a red, blue, green and yellow hat pasted on cardboard
- small 5 cm × 5 cm card with a smiling face (see Term 2, Week 7) – 1 per learner
- a small red, blue, green and yellow paper/cardboard circle
- pictograph template with 4 columns and a space for food pictures/colour counters at the bottom
- A4 pictograph grid with 3 columns and red, blue and green blocks in the bottom row – 1 per learner
- fruit graph paper – 1 per learner (see page 68)
- weather calendar for the current month on which the daily weather is recorded
- name tags for each learner
- picture cards to represent the different types of learners' shoes: sandals; closed shoes with laces, Velcro or buckles

- paper cut-outs of fish: 6 each of orange, red, blue and green. Attach paper clips to these for their mouths
- cardboard pictograph grid with the same colours as the fish – 1 per learner
- 6 fishing rods: piece of string tied to a stick with a magnet at one end
- a dice with orange, red, blue and green sides (two colours repeated).

Whole class activities

Day 1

What you need

- Poster 7
- 4 pictures: hot dog, boerewors, fruit, vegetables
- Smiley face cards – 1 per learner
- Pictograph template

1. **Song/rhyme:** Learners choose a song or rhyme from previous weeks.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** In pairs, learners face each other and count up to 10 while:
 - ✦ clapping right hands together
 - ✦ clapping left hands together
 - ✦ clapping both hands together.

4. **Collecting and sorting data:** Talk about Poster 7.

Guiding questions:

- ✦ What foods are being sold at the market?
- ✦ What food would you choose to buy?

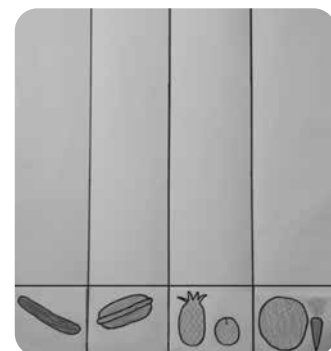


Show the four pictures of the different kinds of food. Place these at each of the four corners of the mat. Learners sit next to the picture of the food they would buy.

- ✦ Which food do you think most learners like most/least?
- ✦ How do you know?
- ✦ How could we arrange our smiley faces so that we can easily see how many learners like each food?

Give each learner a smiley face.

5. **Representing data:** Place the food pictures at the bottom of each column on the pictograph template. Learners place their smiley face cards one at a time above the picture of the food they have chosen to complete the pictograph.
6. **Small group activities:** Describe the activities at each workstation.



TIP

Make sure the smiley faces are placed neatly so that there are no spaces between them in each column.

Day 2

What you need

- Rhyme: *Five little hotdogs* (page 98)
- Weather calendar
- Poster 7
- Pictograph from Day 1

1. **Rhyme:** Say the rhyme, *Five little hotdogs* with finger movements.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Learners stand facing a partner with one hand behind their backs. On a given signal learners each put forward a number of fingers. Pairs count the total number of fingers they are showing. Repeat the activity, with learners showing a different number of fingers each time.
4. **Reading, interpreting and reporting on data:** Talk about the weather calendar for the month.

Guiding questions:

- ★ What can you tell me about the weather this month?
- ★ What kind of weather have we had the most/least of?
- ★ Were there more sunny days or rainy days? How many more? How do you know?

Learners look at Poster 7 and the food pictograph from Day 1. They compare the column heights on the pictograph and count to find out how many of each type of food different learners like.

- ★ What do you notice about the pictograph?
- ★ Which column is the tallest/shortest? What does this mean?
- ★ How many learners chose hot dogs/boerewors/fruit/vegetables?
- ★ Are there more/fewer learners who chose hot dogs or more/fewer learners who chose boerewors? How many more?
- ★ Do any of the columns have equal numbers?
- ★ Which food is the most/least popular?
- ★ What would happen if two more learners chose hot dogs/boerewors, and so on?

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

Day 3

What you need

- Rhyme: *Five little hotdogs* (page 98)
- Name tag – 1 per learner
- Pictures of 4 hats (red, blue, green, yellow)
- Story: *Shopping for a hat* (page 98)
- Red, blue, green, yellow counters (*Resource Kit*)
- 4 containers labelled: red, blue, green, yellow
- 4 strips of white paper
- Pictograph template

1. **Rhyme:** Say the rhyme, *Five little hotdogs*.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Learners stand in a circle and count from 1 to 10, clapping each time they say a number. The learner who says '10' sits down and the counting starts again from '1'. Repeat until only one learner is standing.
4. **Representing data:** Tell the story *Shopping for a hat*. Look at the pictures of the four hats. Discuss which colour hat learners would choose. Learners choose a counter to match the colour of the hat they have chosen. They place the counter into the container with the label for that colour.

Guiding questions:

★ How can we find out how many learners like each colour hat?

Ask four learners to arrange the counters from each container in a line on a strip of paper. Discuss the data.



★ How many learners like a red/blue/yellow/green hat?

★ How can we find out what the favourite colour is in our class?

Put a different coloured counter in the bottom row of the pictograph template. Learners place their name tags on the pictograph in the column above the colour of the hat they chose.



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

Day 4

What you need

- Rhyme: *Five little hotdogs* (page 98)
- Pictures of 4 hats (red, blue, green, yellow)
- Pictograph from Day 3

1. **Rhyme:** Say the rhyme, *Five little hotdogs*.
2. **Oral counting:** 1–20 and beyond, 10–1.

3. **Counting objects 1–10:** Play 'Sizwe says', calling out classroom objects for learners to find, touch and count, for example, three chairs, ten crayons, two windows, one door, eight shoes, five books.
4. **Discussing and reporting on collection:** Place the pictures of the hats on the wall and ask learners to help you retell the story of the hats.

Guiding questions:

- ★ Which colour hat do you think most/least learners chose? Why do you think that?

Discuss the pictograph from Day 3.

- ★ What does the pictograph tell us?
- ★ Which is the tallest column?
- ★ How many learners chose that colour hat?
- ★ Are there any colours that no one chose?
- ★ Did more people choose red or blue hats, and so on?
- ★ Are there any colours that the same number of learners chose?
- ★ What would happen if two more/three fewer learners chose green, and so on?

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

Day 5

What you need

- Rhyme: *Five little hotdogs* (page 98)
- Masking tape or chalk
- Picture cards to represent the different types of learners' shoes

1. **Rhyme:** Say the rhyme, *Five little hotdogs*.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Five learners line up in front of the class.

Guiding questions:

- ★ How many shoes are there altogether?
- ★ How many pairs of shoes are there?

4. **Sorting data:** Ask learners to say whether they are wearing sandals or closed shoes. If they are wearing closed shoes, do they have laces, Velcro or buckles? Say, 'I wonder how many learners are wearing sandals today?' Learners arrange themselves into groups according to their shoe type.

Guiding questions:

- ★ How many learners have shoes with laces/Velcro/buckles?
- ★ Are there more/fewer learners who have shoes with laces/Velcro/buckles, and so on?
- ★ Are any groups equal?



TIP

If learners wear different shoes to school, they can also group themselves according to shoe colour.



5. **Organising data:** Learners organise themselves into lines according to their shoe type.

Guiding questions:

- ★ Which line is longest/shortest?
- ★ What does that tell us?
- ★ What type of shoe is worn by most/least learners? How do you know?
- ★ Do any lines have the same number of learners?

Together count the number of learners in each line.

- ★ How many learners are there in this line?

Place pictures of the types of shoes in a row on the mat. Learners take off their right shoe and place it in the column above the picture that represents their shoe.

- ★ Which column has the most/least shoes?
- ★ Are there more learners who have sandals than learners who have shoes with laces, and so on?
- ★ How many more learners have closed shoes than sandals, and so on?

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

Integration

Home Language: Sharing ideas, Listening and Speaking.

Life Skills: Sort objects when tidying up and packing away.

Small group activities

Teacher-guided activity

What you need

- A tub per learner with a variety of:
 - 10 Unifix blocks (red, blue and green: a different combination for each learner)
 - Counting sticks
 - Coloured counters
- A tub of crayons per learner with an assortment of red, blue and green crayons
- A4 pictograph grid per learner with red, blue and green blocks in the bottom row

1. **Oral counting:** 1–20 and beyond, 10–1.
2. **Counting objects 1–10:** Learners each count out 10 Unifix blocks from their tubs. They build a tower.

Guiding questions:

- ★ How many blocks make up your tower?
- ★ How many red/blue/green blocks are there?
- ★ Are there more/fewer red or blue blocks?

3. **Collecting and sorting objects:** Learners decide for themselves how to sort all the objects (Unifix blocks, sticks and counters) in their tubs.

Guiding questions:

- ★ What groups can you make with your objects?
- ★ How are you sorting them?
- ★ Why did you put your _____ in this group?
- ★ How are these things alike?
- ★ Can you sort these in a different way?

Learners sort their objects according to a given attribute.

- ★ Can you sort your objects by colour/shape/size?
- ★ Which one belongs/does not belong in this group? Why?



TIP

Repeat with different colour combinations linked to the Unifix block colours.

4. **Sorting, representing and interpreting data:** Give each learner an A4 pictograph grid, and a tub of red, blue and green crayons. Learners sort their crayons according to colour.

Guiding questions:

- ★ Can you sort your crayons by colour?
- ★ What name can you give to this group of crayons?

Learners count how many crayons there are in each group. They put the number of matching colour Unifix blocks into the columns above the matching colour on their pictograph grids.

- ★ Are there more blue or green/red/crayons?
- ★ Which colour crayon do you have the most/least of?
- ★ How many more _____ crayons are there than _____ crayons?



Check that learners are able to:

- compare objects according to one or more attribute, for example, colour, size, type
- sort objects into groups according to different attributes
- describe the attributes of the sorted objects
- explain how they sorted the objects
- decide in which column objects belong
- know 'how many' based on the data represented

Workstation 1



What you need

- A tub per learner with:
 - Animal counters
 - Attribute blocks
 - Coloured counters
 - Coloured sticks

Learners sort the objects in their tubs according to different attributes to make groups.

Workstation 2



What you need

- A dice with orange, red, blue and green sides (repeat two colours)
- A long piece of string
- Per learner:
 - Orange, red, blue, green fish
 - A 'fishing rod'
 - Cardboard pictograph grid with the same colours as the fish
 - Counters (orange, red, blue and green)

Make a pond with the string. Place the fish in the pond. Learners roll the dice and 'catch' the fish that matches the colour on the dice. They place a matching counter on their pictograph grid. Repeat until learners have caught six fish each.

Workstation 3

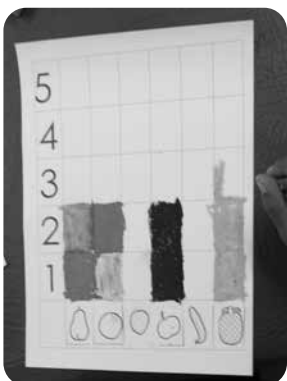


What you need

- Blocks of different colours and/or shapes
- Crayons
- Paper

Learners sort the blocks according to shapes. They draw a picture to show how the blocks were sorted.

Workstation 4



What you need

- Crayons
- Fruit graph paper – 1 per learner
- 1 tub of fruit counters per learner

Learners shade in the boxes to show how many of each different type of fruit they have.

Content Area Focus: Space and Shape (Geometry)

Topics

- Position, orientation and views
- Properties of 2-D shapes and 3-D objects
- Follow directions

New knowledge

- Position of objects in relation to each other
- Arrow chart
- Copy and build a construction (picture cards)

Practise

- Oral counting: forwards 1–20 and beyond, backwards 10–1
- Counting objects 1–10
- Shapes: circle, square, triangle, rectangle
- Boxes, balls
- Midline crossing
- Position: forwards and backwards

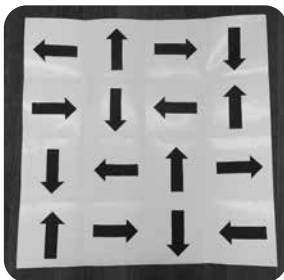
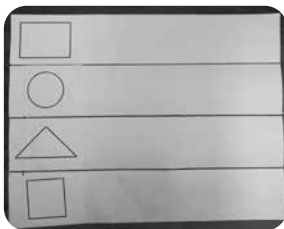
New maths vocabulary

arrow

inside

outside

Getting ready



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

- 3-D objects to trace: circle, square, triangle, rectangle – 1 per learner
- A3 paper with four rows and a shape at the start of each row: circle, square, triangle, rectangle
- shape grid on the floor (created with masking tape/chalk) (see page 73)
- cardboard box with a lid and doll inside
- arrow chart
- 3-D blocks/objects, for example, 1 triangle attribute block, 3 square-shaped and 2 rectangle-shaped wooden building blocks/boxes, 4 cans/toilet roll tubes – 1 per learner
- tennis balls
- small colour paper cut-outs: circles, squares, triangles and rectangles
- shape Bingo boards – 1 per learner (page 108)
- small shape cards (copies of each shape on the Bingo boards).


TIP

Learners will further explore position and direction this week and should wear the elastic/wool bands (used in Week 4).

Whole class activities

Day 1

What you need

- Rhyme: *Going on a lion hunt* (page 99)
- A tin
- 10 attribute blocks (*Resource Kit*)
- 3-D objects to trace: circle, square, triangle, rectangle – 1 per learner
- A3 paper with four rows and a shape at the start of each row: circle, square, triangle, rectangle
- Musical instrument

1. **Rhyme:** Say the rhyme, *Going on a lion hunt*. Learners join in.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Learners sit in a circle. Drop a number of attribute blocks between 1 and 10 into a tin one at a time. Learners count as they hear each block hit the bottom of the tin. Repeat.
4. **Properties of shapes:** Put up the picture of a square.

Guiding questions:

- ★ What is this shape?
- ★ What can you remember about this shape?
- ★ How do you know it is a square?
- ★ Can you see any square-shaped objects in the classroom?

As music plays, learners move around the classroom looking for square-shaped objects. When the music stops learners find the object and bring it to the mat.

- ★ Was this object easy to find? Why?/Why not?
- ★ How many sides/corners/edges does it have?

They trace around the base of the object in the grid.

- ★ How is your drawing the same/different from the _____ you have drawn around?

The learners who found the squares sit down. Repeat with each shape until all learners have had a turn.

Look at the completed grid.

- ★ How many circles/triangles/squares/rectangles do you see?
- ★ Which shape do we have the most/least of?
- ★ How is the square/triangle/circle the same/different from the rectangle, and so on?
- ★ Which shapes have four/three sides?
- ★ Which shapes have no sides?

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



Learners should be able to trace around the face of each of the 3-D objects.

Day 2

What you need

- Rhyme: *Going on a lion hunt* (page 99)
- Triangle, square, circle and rectangle-shaped objects
- Elastic/wool bands – 1 per learner
- Poster 8



TIP

This movement strengthens learners' midline crossing. Encourage other movements, such as alternating stamping feet, swaying from side to side, 'swimming' and 'climbing the stairs' with left-right movements.

1. **Rhyme:** Say the rhyme, *Going on a lion hunt*. Learners slap their right thighs with their left hands to keep the rhythm. Say the rhyme a second time. Learners slap their left thighs with their right hands.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Place the bands on learners' right hands. Learners stand in a row with their legs apart. They raise their right hands, then bend from the waist and touch their left foot with their right hand as they count to 10. Repeat, with learners touching their right foot with their left hand.



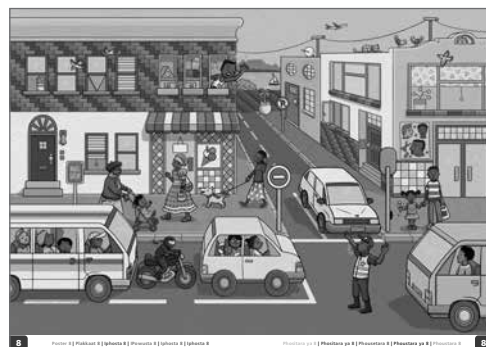
4. **Properties of shapes:** Hide a triangle, square, circle or rectangle-shaped object behind your back. Describe the shape. For example:
 - ✦ It has three sides and three corners.
 - ✦ It has four sides that are the same length.
 - ✦ It has no sides and no corners. It is round.

Learners guess the shape. The learner who correctly guesses has a turn to hide another shape behind their back and give clues. Support them by asking questions where necessary.

Talk about Poster 8.

Guiding questions:

- ✦ What shapes can you see?
 - ✦ Can you find a shape with three/four sides? What is it called?
 - ✦ How many sides does this window have? What shape is it?
 - ✦ Can you find a shape that has two long sides and two short sides/ four sides that are the same length? What is it called?
 - ✦ What shape are the bricks on the wall?
 - ✦ Where can you see ice cream? What shape is the cone/ice cream?
 - ✦ Can you see any small blue/yellow squares? Count them.
5. **Small group activities:** Describe the activities at each workstation.



Day 3

What you need

- Rhyme: *Going on a lion hunt* (page 99)
- 2 dice
- Container with attribute blocks – 1 block per learner

1. **Rhyme:** Say the rhyme, *Going on a lion hunt*. Learners move forwards two paces and backwards two paces to keep the rhythm.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Learners sit in a circle and take turns to roll the two dice. All learners show as many fingers as dots on the dice, counting together. If the total number of dots on the dice is more than 10, learners shout 'Uh, oh!' and suggest what they need to do to solve this problem (include their nose, ears, use their toes, and so on).
4. **Position: forwards and backwards:** Learners dramatise *Going on a lion hunt*. Every time they hear the words 'Uh, oh!' learners step backwards two paces. They continue moving forwards as the story continues.
5. **Properties of shapes:** Learners sit in a circle. Pass around the container for each learner to choose an attribute block. Learners who have chosen the shape you describe, should hold it up.

Guiding questions:

- ★ Who has a blue triangle, and so on?

Learners pass on their attribute block to the learner on their left. As they do so, they should chant, 'Let's find out what shape is next. Let's find out what shape is next. Let's find out what shape is next, I'm holding in my hand.'

Repeat with similar questions. For example:

- ★ Who has a red shape with no sides?
- ★ Who has a yellow shape with four corners?
- ★ Who has a green shape with two long sides and two short sides?
- ★ Who has a shape that is not square?

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

Day 4

What you need

- Rhyme: *Going on a lion hunt* (page 99)
- Shape grid on the floor
- Building block for each learner (same size and shape)
- Chalk or masking tape

1. **Rhyme:** Say the rhyme, *Going on a lion hunt*.
2. **Oral counting:** 1–20 and beyond, 10–1.



TIP

Do this activity outside. Learners should keep looking ahead while they take steps backwards.

3. **Counting objects 1–10:** Place 10 blocks in a row where learners can see them.

Guiding questions:

- ★ How many blocks do you think there are in this row?

Learners count the blocks. Place another 10 blocks beneath the first row, spacing them wider apart.

- ★ Do you think there are more blocks in the first or second row?
- ★ How many blocks do you think there are in the second row?

Learners count the blocks.



TIP

This activity works well outdoors.

4. **Follow directions:** Each learner should have a block. Play 'Sizwe says', calling out positional words, for example, Sizwe says, 'Put your block:

- ★ on your head.'
- ★ next to your right/left foot.'
- ★ under your foot.'
- ★ in the middle of your lap.'
- ★ on top of your hand.'
- ★ between your legs.'
- ★ in front of your chest.'
- ★ behind your back.'
- ★ below your knee.'

5. **Shape movements:** Learners take turns to move along the shape grid on the floor as directed.

- ★ Hop twice in each triangle.
- ★ Jump over all the squares.
- ★ Stand in the middle shape.
- ★ Jump up and down five times in the circle.
- ★ Turn to the left/right and jump into the next three squares.
- ★ Hop with one foot across each of the bottom three shapes.



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

Day 5

What you need

- Rhyme: *Going on a lion hunt* (page 99)
- Cardboard box with a lid and doll inside

1. **Rhyme:** Say the rhyme, *Going on a lion hunt*, with actions.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Learners form a row and stand and sit alternately as they count. Once they have counted to 10 they start a new row.

Guiding questions:

- ★ How many learners are in the first/second/third row?
 - ★ Which row has more/fewer learners?
 - ★ How many learners are sitting/standing in the second row?
 - ★ Are more learners sitting or standing?
4. **Position and direction:** Put the closed box with the doll on the mat.

Guiding questions:

- ★ What do you think is inside the box?

Take the doll out of the box. Place it in different positions. Learners tell you where it is, for example, under/above/on/in/behind/in front of the box.

- ★ Where is the doll now?



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

Small group activities

Teacher-guided activity

What you need

- Selection of 3-D blocks/objects
- Chairs – 1 per learner
- Tennis balls
- Cardboard box with a lid
- Arrow chart
- Doll

1. **Counting objects 1–10:** Place blocks on the mat. Learners take turns to count from 1 to 10.



2. **Building a shape:** Build a construction on the mat using 3-D blocks/objects.

Guiding questions:

- ★ What can you tell me about what I have built?
- ★ What shapes do you see?
- ★ Can you arrange your blocks in the same way?

Learners build the same construction with their blocks.

- ★ Which objects have you used?
- ★ Is yours the same/not the same as mine? Why?

3. **Position:** Instruct learners to place the doll in different positions in relation to the box and say where the doll is. Repeat with other learners.

Guiding questions:

- ★ Can you put the doll in front of/under/next to/on top of/behind the box?

Learners take turns to place the doll in different positions and the rest of class say where the doll is.

4. **Arrow chart:** Put the arrow chart on the wall. Learners will move in the same direction as the arrows.

Guiding questions:

- ★ Which way is the arrow pointing?
- ★ How will you move?

Guide learners through all the directions and movements before starting the game.

Point to the arrow and give directions such as:

(Row 1) Stretch your arms. → ← ↓ ↑

(Row 2) Stand on a chair and jump ↓ then stand on the floor

and jump. ↑ ← →



TIP

Encourage learners to use direction words like 'left and right', 'forwards and backwards'.

Integration

Home Language: Vocabulary development.

Life Skills: Toilet routine and walking to/from places.



Check that learners are able to:

- build a construction by copying an example
- describe the position of objects in relation to each other
- use position words such as in front of/under/next to/on top of/behind/inside/outside
- use direction words such as left/right, up/down

Workstation 1



What you need

- Paper and glue
- Small colour paper cut-outs: circles, squares, triangles and rectangles

Learners make pictures from the shapes provided, for example, a house or an animal.

Workstation 2

What you need

- Playdough
- Coloured sticks (*Resource Kit*)

Learners lay out sticks in a shape. They place the ends of the sticks into a piece of playdough at the corners to hold their shape.



TIP

If pegboards are available, learners can make shapes by stretching elastic bands between pegs.

Workstation 3

What you need

- Bingo cards
- Shape Bingo boards
- Counters

Learners place the pile of cards face down in the middle of the table or floor. They take turns to choose a card. If they have that shape on their board, they place a counter on that shape. The first player to get four in a row, wins.



Workstation 4

What you need

- Blocks or objects of different shapes

Learners build a construction using four or five blocks or objects. They take turns to copy the arrangement a friend has made.



Content Area Focus: Numbers, Operations and Relationships

Topics

- Describe, order and compare whole numbers
- Number relationships
- Number recognition
- Solving problems in context

New knowledge

- Money – recognise banknotes
- Problem solving 1–8

Practise

- Oral counting: forwards 1–20 and beyond, backwards 10–1
- Counting objects 1–10
- Sequencing numbers 1–8
- Ordinal numbers first to fifth
- Reinforce numbers 1–8
- Add, take away
- Coins
- Big, small

New maths vocabulary

banknote
lion

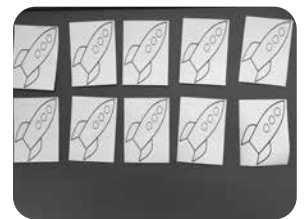
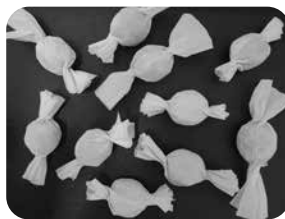
rhino
buffalo

Nelson Mandela
count back

Getting ready

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

- 10 balls of playdough wrapped in cellophane/plastic to make 'sweets'
- 10 spaceships made with paper plates – each spaceship should have 10 windows
- 10 pictures of rockets



- 5 A4 pictures of things to buy (from magazines)
- cardboard cut-out brown and silver coins: 10c, 20c, 50c, R1, R2, R5 (from Term 2)
- 10 cardboard banknotes, 2 of each: R10, R20, R50, R100, R200 (pages 110–111)
- 10 recycled grocery containers, for example, cereal box, yoghurt tub, and so on
- A4 size paper/cardboard page with a large rectangle – 1 per learner
- orange playdough
- A4 page with tortoise template (page 109) – 1 per learner.

Whole class activities

Day 1

What you need

- Song: *Five shiny coins* (Activity Guide: Term 2, page 99)
- 6 cardboard coins (from Activity Guide: Term 2, pages 108–109)
- Playdough sweets
- 2 sets of 5 cardboard banknotes (approximately A4 size) – place one set on the wall, smallest to biggest in size (pages 110–111)

1. **Song:** Sing the song, *Five shiny coins*. Discuss the coins.
2. **Oral counting:** 1–20 and beyond, 10–1. Count 1–10, but miss out a number and/or say a number twice, and so on.

Guiding questions:

- ★ What went wrong with my counting?

Repeat the activity, missing and/or repeating different numbers.

3. **Counting objects 1–10:** Learners sit in a circle. Place ten playdough sweets on the mat.

Guiding questions:

- ★ How many sweets do you think there are?

Count together.

4. **Introducing banknotes:** Show the learners the banknotes.

Guiding questions:

- ★ Where have you seen this before?
- ★ Does anyone know what it is called?
- ★ Have you ever used one of these? What did you use it for?
- ★ What do you see on the notes?
- ★ How is this banknote the same/different to the other banknotes?
- ★ Which is smaller/bigger in size?
- ★ How many different South African banknotes are there?

Count the banknotes as you match them to the notes on the wall.

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



TIP

Place the five notes and blank paper in the maths area so that learners can draw things they have bought (or wish to buy).

Day 2

What you need

- Rhyme: *Spaceship* (page 100)
- 10 playdough sweets
- 2 sets of 5 banknotes
- 5 pictures of things to buy
- Prestik

1. **Rhyme:** Say the rhyme, *Spaceship*.



TIP

Discuss what space is. Talk about the stars and planets that we can see at night. Ask learners whether they think it is possible to go to space and how they might get there – in a spaceship. Ask learners what they think they would be able to buy on the moon.

2. **Oral counting:** 1–20 and beyond, 10–1. Start with 5 and count back to 2, start with 10 and count back to 6, and so on.
3. **Counting objects 1–10:** Learners sit in a circle. Place ten playdough sweets and five banknotes on the mat.

Guiding questions:

- ✦ How many banknotes do you think there are?
- ✦ Are there more/fewer sweets or banknotes?
- ✦ How many more/fewer banknotes are there than sweets?
- ✦ How do you know?



TIP

Make sure that the value being attached to the object is appropriate, for example, a table might be R200 and a 500 ml cool drink might be R10.

4. **Recognise and match banknotes:** Five learners each find a picture of something to buy hidden in the classroom. Five other learners take turns to choose a banknote to attach to each picture. Five other learners take turns to show which banknote on the wall matches each of these.

Guiding questions:

- ✦ Which banknotes have/have not been used yet?
- ✦ Which banknote has the rhino on it?

5. **Ordinal numbers first to fifth:** Look at the five banknotes on the wall.

Guiding questions:

- ✦ Which banknote is first, second, and so on in the row on the wall?
- Five learners place the pictures and banknotes on the mat in order to match the banknotes on the wall.
- ✦ Which note should be placed first, second, and so on?

Learners who have not had a turn, take turns to jump. For example: ask them to jump from the first note to the second to the fourth, and so on. Place the banknotes on the maths table.

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

Day 3

What you need

- Rhyme: *Spaceship* (page 100)
- 10 paper-plate spaceships placed on the wall
- 2 sets of 5 banknotes
- Number washing line
- Number dot, picture, symbol and word cards 1–8 (*Resource Kit*)

1. **Rhyme:** Say the rhyme, *Spaceship*.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Ten learners stand. Look at the paper-plate spaceships on the wall.

Guiding questions:

- ✦ Do you think there are enough spaceships for each learner to go to the moon?

Count the spaceships.

4. **Add to/take away:** Look at the banknotes on the wall.

Guiding questions:

- ★ If I take away one/two note/s how many will be left on the wall? Hold five banknotes in a fan in your hand.
- ★ Are there more/fewer on the wall or in my hand?
- ★ If I add another note to the those in my hand how many will I be holding?
- ★ What are the names of the notes that are left on the wall?



5. **Ordering 1–8:** Learners sit in a circle. Quickly flash dot cards 1–8 for learners to identify. Hand out dot, picture, symbol and word cards. Stand in the middle of the circle with your eyes closed. Raise both arms and turn with your hands pointing out. The learners you point to when you open your eyes match their cards to numbers on the number washing line. Repeat, giving a few learners a turn to point. Learners take turns to place their picture, dot and symbol cards in order from 1–8 on the mat.



Guiding questions:

- ★ Which number is between 3 and 5, before 8, after 6, three fewer than 4, two more than 5, and so on?
 - ★ How do we know that the picture with four giraffes should come after the picture of three meerkats, and so on?
 - ★ If we count 2 on from 3 how many will we have?
6. **Small group activities:** Describe the activities at each workstation.

Day 4

What you need

- Rhyme: *Spaceship* (page 100)
- 10 pictures of rockets
- 5 chairs with a banknote attached to each
- Tambourine
- Dot cards 1–8

1. **Rhyme:** Say the rhyme, *Spaceship*.
2. **Oral counting:** 1–20 and beyond, 10–1.



TIP

Talk about rockets and spaceships and what learners think it would be like to go to the moon in one of these.

3. **Counting objects 1–10:** Look at the pictures of 10 rockets and 10 spaceships.

Guiding questions:

- ★ Are there more/fewer rockets or spaceships?
- ★ How many of each do you think there are? Let's count.

4. **Recognition of banknotes:** Place five chairs on the mat, each with a banknote stuck to it. Explain to learners that these are their 'banks'. Explain what a bank is. Learners sit in their class groups next to a chair that is labelled with a banknote, for example, R10, R20. Play the tambourine as they move between the 'banks'. When the music stops they return to their 'bank'. Repeat.

When the music stops, show two notes, for example, R50 and R200. These groups swap places. Repeat.

- ★ How many learners are sitting in your 'bank'?



5. **Add to/take away:** Talk about the different 'banks'.

Guiding questions:

- ★ If I take two learners away from the 'R100 bank' how many will there be in the bank?
- ★ If I add one learner to the 'R50 bank' how many will be sitting in this bank?

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

Day 5

What you need

- Rhyme: *Spaceship* (page 100)
- Masking tape/chalk
- 10 recycled grocery containers, for example, cereal box, yoghurt tub, and so on
- Poster 1

1. **Rhyme:** Say the rhyme, *Spaceship*.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Attach a few containers to the wall and place some on the maths table.

Guiding questions:

- ★ How many grocery containers do you see on the table/on the wall? Count together.
- ★ Did you estimate too many/too few?



4. **Jumping track:** Use masking tape/chalk to create a 1–8 number ladder. Learners take turns to jump as the class counts 1–8. Learners stand on number 5 and jump to number 8.

Guiding questions:

- ★ How many jumps did you make?

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



Guiding questions:

- ★ What do you see in the picture that you/your family have bought before?
- ★ Do you think there are enough oranges for each person in the family?
- ★ How many more oranges do they need to buy to each have one?
- ★ If there are two small yoghurts in the fridge and each person wants one, how many more will they need to buy?

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

Integration

Home Language: Solve problems and explain solutions.

Life Skills: Beginning Knowledge, Personal and Social Wellbeing.

Small group activities

Teacher-guided activity

What you need

- Poster 7
- 5 banknotes (R10, R20, R50, R100, R200)
- 8 dough mats
- A tub per learner with:
 - 10 structure beads
 - 8 fruit counters (*Resource Kit*)

1. **Problem solving:** Discuss Poster 7.

Guiding questions:

- ★ There are four pineapples on the table. Dad buys three pineapples. How many pineapples will be left on the table?
- ★ Dad buys two bags of oranges. How many oranges does he buy?
- ★ The fruit seller had three watermelons. Now she has one. How many did she sell?

TIP

Encourage learners to show you the total number of beads without counting in ones.

TIP

Learners use counters to solve the problems. Ask learners how they got their answers and let them explain their thinking. Learners need time to explain their reasoning and hear the strategies of others in the group.

2. **Structure beads:** Show learners a number of structure beads between 1 and 10, for example, 6, 3, 7, 4 or 8. Flash these for a few seconds, and then hide them away.

Guiding questions:

- ★ How many beads did you see?

Ask learners to show a number of beads between 1 and 6.

3. **Fruit on plates:** Learners use the eight fruit counters from their tubs to solve the problems.

Guiding questions:

- ★ Each fruit needs a plate. How many plates will you need?
- ★ Each plate needs two fruits. How many plates will you need?
- ★ If you have two plates, how many fruits can you put on each plate?

Learners compare and discuss how many fruits they would place on each plate.

4. **Banknotes:** Hide a note under a piece of paper.

Guiding questions:

- ★ The banknote under the paper is green and has a rhino on it. What is this banknote called?

Give learners each a turn to hide and describe a banknote.



Check that learners are able to:

- solve problems from 1–8
- recognise, match and describe banknotes

Workstation 1

What you need

- Crayons, colour pencils
- Banknotes
- A4 cardboard with 3 rectangles – 1 per learner
- A pair of scissors – 1 per learner

TIP

Learners can create their own banknotes that they would like to use, for example, 'on the moon'.

Learners cut out the rectangles. Referring to the banknotes, they create their own banknotes by drawing pictures on both sides and writing a number on one side of each rectangle.



Workstation 2

What you need

- Counters
- Dice – 1 per learner
- A4 page – 1 per learner
- Crayons
- Playdough
- Number 2 dot card (from the *Resource Kit*) – 1 per learner

Learners draw a shopping basket on the A4 page. They roll a dice and add two to the number of dots shown on the dice. (They can use a number 2 dot card for support.) They roll this number of balls from playdough and place the balls (fruit) in the basket. They repeat the activity.

Workstation 3

What you need

- A4 tortoise template (page 109) – 1 per learner
- Coloured counters (*Resource Kit*)
- Dot cards 1–8 (*Resource Kit*)
- Crayons

Place the dot cards face down on the table. Learners turn over a dot card. They find the piece of the tortoise's shell with the same number of dots and place the correct number of counters on these dots. They repeat the activity colouring in the dots as they count.



Workstation 4

What you need

- Number symbol and picture cards 1–8 (*Resource Kit*) for each learner
- Braai/salad tongs for each learner
- Wooden blocks

Place number cards face down on the mat. Learners turn a card over and use the tongs to stack the number of blocks shown on the card on top of each other.



Content Area Focus: Numbers, Operations and Relationships

Topics

- Describe, order and compare whole numbers
- Number relationships
- Number recognition
- Solving problems in context

New knowledge

- Grouping, half
- Up to three more (using dot cards)
- Order collections from smallest to biggest

Practise

- Oral counting: forwards 1–20 and beyond, backwards 10–1
- Counting objects 1–10
- Sequencing numbers 1–8
- Problem solving 1–8
- Reinforce number concept 1–8
- More, fewer, most, least, equal
- Two/three more/fewer

New maths vocabulary

half

Getting ready

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

- small smiley face stickers/cards – 1 per learner
- 36 small animal picture cards, each with a frieze animal (i.e. one card with an elephant, two cards each with one zebra, three cards each with one meerkat, and so on)
- 8 paper/cardboard circle cut-outs (40 cm in diameter)
- 2 small circle cut-outs: red and green
- envelope to fit dot cards
- 8 containers marked 1–8 for animal pictures
- envelopes each with a learner's name and 5 number symbol cards (between 1 and 8) – 1 per learner
- flower centres with numbers 1–8 on them and 30 petals per learner
- small cellophane/tin foil squares to wrap sweets – 30 per pair of learners
- playdough
- 8 small plastic zip-lock bags labelled 1–8 per pair of learners
- blank cards (5 × 5 cm) – 8 per pair of learners
- 4 sets of number symbol cards 1–8.

Whole class activities

Day 1

What you need

- Rhyme: *Spaceship* (page 100)
- 10 spaceships each with 10 windows (from Week 9)
- Small smiley face stickers/cards – 1 per learner
- 2 hula hoops
- 8 mouse picture cards
- 2 small circle cut-outs: red and green

1. **Rhyme:** Say the rhyme, *Spaceship* from Week 9.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Learners sit in a circle. Together count the spaceships as you place them in a circle on the mat. Hand out a smiley face sticker/card to each learner. Learners take turns to stick their sticker onto the windows of the first/second/third, and so on spaceship. Count 1–10 as they do this.



TIP

Explain that learners will continue to put 'people' into the spaceships on other days.



Guiding questions:

- ★ How will we know when the first spaceship has 10 'people' in it?
- ★ How will we know when we should start putting 'people' into the second spaceship?
- ★ Do you think we will have enough stickers for the second spaceship?
- ★ How many spaceships have/still need stickers?

Count the people in the spaceships together.

4. **Grouping; introducing half:** Give eight learners each a picture of a mouse. Place two hoops on the mat.

Guiding questions:

- ★ How can we make sure that each hoop has the same number of mice?
- Learners put four mice in one hoop and four mice in the other hoop. Explain that when we put the same number of mice in each hoop, we say that half of the mice are in the one hoop and half of the mice are in the other hoop.



TIP

The mouse pictures can be attached to a crown to add a fun element.



Play this rain game. Learners who are sitting in the circle pat the floor to make the sound of raindrops. The eight learners skip around and between the hoops through the rain. When you show a red circle, the rain stops. Half of the learners stand in one hoop and half in the other hoop. Show the green circle for the rain to start again.

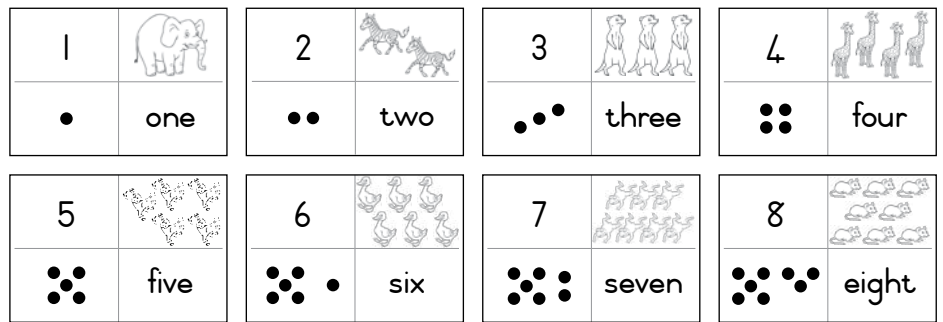
5. **Small group activities:** Describe the activities at each workstation.

Day 2

What you need

- 10 spaceships
- Smiley face stickers/cards – 1 per learner
- Song: *Eight elephants* (page 100)
- 36 animal picture cards
- Prestik
- 2 circle cut-outs

1. **Song:** Sing the song, *Eight elephants*. Refer to the number frieze as you sing. Dramatise verses 1 and 2.



2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Repeat the activity from Day 1. Learners take turns to stick their sticker/card onto the windows of the spaceships.
4. **Grouping; half:** Repeat the activity from Day 1 using the six duck picture cards. Then do the activity with five monkey picture cards.

Guiding questions:

- ★ Can half of this group of monkeys stand in one hoop and half in the other?
- ★ Why not?
- ★ Where will one monkey have to stand?

Repeat with other animal groups.

5. **Grouping; half – pictures:** Place two circle cut-outs on the wall. Give eight learners each a mouse card.

Guiding questions:

- ★ Can you put half the mice into one circle and half the mice into the other circle?

Repeat with the activity with the seven frog picture cards.

Guiding questions:

- ★ Why can't we put half of this group of frogs into each circle?

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

TIP

Place the different animal cards in containers and put a tub of Unifix blocks on the maths table. Learners can arrange the Unifix blocks in groups to match the number of animals in each container.

Day 3

What you need

- 10 spaceships
- Smiley face stickers/cards – 1 per learner
- Song: *Eight elephants* (page 100)
- Game: I wrote a letter to my friend (page 100)
- 30 number symbol, dot, picture and word cards 1–8 (*Resource Kit*)
- Envelope with two dot cards 1–4 (*Resource Kit*)

1. **Song:** Sing the song, *Eight elephants*. Dramatise verses 3 and 4.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Repeat the activity from Day 1. Learners take turns to stick their sticker/card onto the windows of the spaceships.

Guiding questions:

- ★ How many spaceships still need people in them?
- ★ How many already have ten people in them?
- ★ Do you think we will finish putting people into the ten spaceships tomorrow?
- ★ Why do you say that?

Count the people in each of the 'completed' spaceships 1–10.

4. **Practising 1–8, dot cards game:** Learners sit in a circle. Hand out a number symbol or word card from 1 to 8 to each learner. Play the game, I wrote a letter to my friend. Place two number dot cards between 1 and 4 into an envelope. One learner walks around the outside of the circle as the class says the rhyme. The learner drops the envelope behind another learner and runs around the circle. After chasing the learner who dropped the envelope, the learner who picked up the envelope opens it. She/he holds up one card, then the other card and then both cards. Ask all learners these questions:

- ★ Who has a number that matches the number of dots on the card that ____ is holding?
- ★ Who has a number that matches the number of dots on both the cards that ____ is holding put together?

Learners hold their number symbol or word cards above their heads and say the number.

Change the dot cards in the envelope. Learners play the game, I wrote a letter to my friend, again.

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

**TIP**

This game is best played outside so that learners have the space to run around the circle.

Day 4

What you need

- Song: *Eight elephants* (page 100)
- Game: I wrote a letter to my friend (page 100)
- Envelope with two dot cards 1–4 (*Resource Kit*)
- Blanket (size depends on available space)
- Number line
- 8 containers marked 1–8, with animal picture cards inside
- Number picture cards 1–8 (*Resource Kit*)
- 8 circle cut-outs

1. **Song:** Sing the song, *Eight elephants*. Dramatise verses 5 and 6.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Place the blanket on the mat. Learners sit around the edge.

Guiding questions:

- ★ Can you put 10, 3, 7 fingers; 2 feet; 5 toes on the blanket?

Ask ten learners to put one finger each onto the blanket; ten learners to put one foot onto the blanket; ten learners to put one hand onto the blanket, and so on.

- ★ How many fingers/hands/feet are on the blanket now?

4. **Practising 1–8:** Repeat the game, I wrote a letter to my friend, from Day 3. Learners show the number symbol on the number line to represent the total number of dots of the two cards in the envelope.

Guiding questions:

- ★ Is this number before or after 8/5, and so on?

5. **Ordering collections; smallest to biggest:** Place containers 1–8 with picture cards randomly on the mat. Learners each take an animal card from the eight containers. Place eight circle cut-outs randomly on the mat. Hold up a number picture card and place it next to one of the circles. Learners with matching animal cards place their cards on that circle.

**Guiding questions:**

- ★ Which group of animals has the least/most cards?
- ★ Which groups have fewer/more cards in them than the monkey card group?
- ★ Which group has a few/many cards?
- ★ How can we arrange these groups of cards from the group with the fewest cards/the smallest group, to the group with the most cards/the biggest group?

Learners give suggestions as you order the groups.

Muddle the order that the containers are placed in.

Guiding questions:

- ★ What must I do to put the containers into the same order as the groups in the circles?
 - ★ Should they be in the same order? Why?
6. **Small group activities:** Describe the activities at each workstation.

Day 5

What you need

- Song: *Eight elephants* (page 100)
- Game: I wrote a letter to my friend (page 100)
- Envelope with two dot cards 1–4 (*Resource Kit*)
- A set of dot cards 1, 2, 3 and 4 (*Resource Kit*)
- Masking tape/chalk

1. **Song:** Sing the song, *Eight elephants*. Dramatise verses 7 and 8.
2. **Oral counting:** 1–20 and beyond, 10–1.
3. **Counting objects 1–10:** Repeat the activity from Day 4.
4. **Jumping track:** Use masking tape/chalk to create a number 1–8 ladder. Learners jump as the class counts 1–8.

Guiding questions:

- ★ Can you stand on number 7 and jump back to number 1, and so on?
5. **Practising 1–8; addition; most/least:** Repeat the game, I wrote a letter to my friend, from Day 3 using number symbol, picture and dot cards 1–8 and two dot cards in an envelope.

When the learner shows two dot cards from the envelope, use three other dot cards to represent the same total, for example, two dots and five dots can also be shown as one dot, four dots and two dots, and so on.

Guiding questions:

- ★ Which of these three cards has the most/least dots?
- ★ Which has fewer than this one?
- ★ How many fewer does it have?

Hold up one dot card.

- ★ If we add the dots on this card to the dots on the cards that _____ is showing us, how many dots are there altogether?
 - ★ Who has a number card that matches this number?
6. **Small group activities:** Describe the activities at each workstation.



TIP

The three cards must only add up to a total of eight.

Integration

Home Language: Emergent Writing.

Life Skills: Creative Arts (visual and performing arts).

Small group activities

Teacher-guided activity

What you need

- Poster 5
- Container with coloured counters
- Number dot, picture, symbol cards 1–8 (*Resource Kit*)
- A tub per learner with:
 - Between 1 and 10 counters
 - Symbol, word cards 1–8 (*Resource Kit*)
- 2 plastic lids per learner

1. **Problem solving:** Discuss Poster 5. Talk about the stones in the river.

Guiding questions:

- ★ How could you cross the river if you didn't want to wet your shoes?
- ★ How many stones do you see in the river?
- ★ Mom walks across half of the stones. How many stones does she still need to cross?

2. **More/fewer, most/least, equal:** Sit on a blanket. Learners place their counters in a pile in front of them. Pretend you are having a picnic and that the counters are sweets.

Guiding questions:

- ★ Who has the most/least sweets?
- ★ Who has more than four/fewer than five sweets?
- ★ Can you show me six sweets, fewer/more than six sweets?
- ★ Do any of you have the same number of sweets?
- ★ Can you make two groups with half your sweets in each group?

Repeat with other numbers.

3. **Counting objects:** Can you see anything in Poster 5 that matches the number of sweets you have?
4. **Practising 8 – dot, picture and symbol cards:** Show the learners the dot cards one at a time. Each learner has a turn to call out the number each card represents and point to a number symbol or picture card that matches.

5. **Practising 8 – number symbols, number words and counters:** Learners arrange their number symbol and word cards in order from smallest to biggest (1–8) with counters (sweets) to match.

Guiding questions:

- ★ Which group has 7, 5, 8 sweets?
- ★ Which group of sweets has three fewer than/two more than the one with six sweets?
- ★ Which group has the most/least sweets?



 TIP

Allow learners to use more than two lids each. Let them shake and break and compare the number of sweets on the lids.

6. **Shake and break:** Learners use eight sweets to shake and break. Discuss each learner's combination of counters as they compare how they have broken up the collection of eight sweets.



Guiding questions:

- ★ How many sweets do you have on each lid?
- ★ How many more/fewer sweets do you have on this lid than on that lid?
- ★ How many sweets do you have on both lids together?



Check that learners are able to:

- identify half within a group
- recognise up to three more/three fewer; most/least; many/fewer
- order collections from smallest to biggest
- recognise, match, name and order number symbols, number words and dot cards 1–8
- problem solve 1–8

Workstation 1

 TIP

If they want to, learners can write or copy the number of their home, or their phone number on their envelope once they have completed this activity.

What you need

- Unifix blocks (*Resource Kit*)
- Envelopes with the learners' names with 5 number symbol cards 1–8 in each
- Threading laces – 1 per learner
- Kokis

Learners thread Unifix blocks according to the number cards in their envelope.



Workstation 2



What you need

- Playdough
- Cellophane/tin foil pieces to wrap playdough sweets
- Per pair of learners:
 - 8 small plastic zip-lock bags labelled 1–8
 - 8 blank cards
 - Pencils

Pairs of learners roll playdough sweets and wrap them. They place the correct number of sweets in each bag and order the bags from 1–8. They write the numbers 1–8 and place these in the matching bag.

Workstation 3

What you need

- 4 sets of number symbol cards 1–8

Learners work in pairs. They place the cards face down on the table and take turns to turn over two cards. If these match, they keep them. If not, they turn the cards face down again and try to memorise what they have seen for their next turn.



Workstation 4

What you need

- Flower centres with numbers 1–8 on them
- 30 petals per learner
- A3 page
- Green crayons

Learners order and paste flower centres 1–8 on the page. They paste the correct number of petals for each flower and draw a stem with the matching number of leaves.



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>Follows directions: forwards and backwards; left and right</p> <p>Describes, sorts and compares 3-D objects according to similarities and differences</p> <p>Describes, sorts and compares 2-D objects according to similarities and differences</p> <p>Recognises and applies crossing the midline</p>	<p>Measures and compares objects according to length, mass and capacity/volume</p> <p>Distinguishes between big, bigger, biggest and small, smaller, smallest</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>Discusses and reports on sorted collection of objects</p>	<p>Final coding</p>
Learners' names	Date				

Resources

Songs, rhymes and stories

Week 1

Rhyme: *It's pattern time*

It's pattern time,
It's pattern time,
So move your body while I move mine.
Move your hands.
Move your feet.
Stand up, sit down, do something neat.
The pattern you'll hear now is new. What will
your body do?
Clap your hands,
Stamp your feet, do something neat.
The pattern you'll hear now is new. What will
your body do?
Jump in the air,
Hop on one foot, do something neat.

Week 2

Song: *Six little ducks*

Six little ducks went swimming one day
over the hill and far away.
Daddy duck said, 'Quack, quack, quack, quack,'
and only five little ducks came waddling back.
(Repeat for five, four, three, two)
One little duck went swimming one day
over the hill and far away.
Daddy duck said, 'Quack, quack, quack, quack,'
and no little ducks came waddling back.
Daddy duck went out one day
over the hill and far away.
Daddy duck said, 'It's time to come back,'
and the six little ducks came waddling back.

Story: *Number 6 story (with Number 6 frieze template)*

Next came the six Ducks. They were a family. There was a father, a grandmother, a grandfather, an aunt and two ducklings. This meant that there were four adult ducks and two ducklings in the family of six.

The number symbol 6 and number word six went on the front of the house where everyone could see them. And six doorbells went on the front door.

The Ducks didn't put a pond in their lounge nor a bath in their bathroom, even though they loved to swim. They preferred to waddle down to the stream near their house. They did this because there were a lot of insects that lived near the stream, so they could look for food in the water and on the banks of the stream. The father duck made sure that the ducklings each ate six beetles for breakfast, six dragonflies for lunch and six mosquitoes for supper. The adults ate more than this because they had bigger tummies to fill.

The Ducks had a party to celebrate their new home. All the animals came. One Elephant from house number 1, two Zebras from house number 2, three Meerkats from house number 3, four Giraffes from house number 4 and five Monkeys from house number 5. They all brought their own food because they didn't all like eating insects.

Week 3

Song: *Seven green speckled frogs*

Seven green speckled frogs
Sat on a speckled log
Eating the most delicious flies.
One jumped into the pool
Where it was nice and cool
Then there were six green speckled frogs.
Glug-glug.
(Repeat with six, five, four, three, two, one)
Then there were no green speckled frogs.
Glug-glug.

Story: Number 7 story (with Number 7 frieze template)

Next came seven Frogs. They were friends of the six Ducks, who had told them how much fun they were having in their new home. The Ducks invited the Frogs to be their neighbours. The Frogs needed space to jump without knocking their heads on the walls or ceilings, and they each wanted their own room. They jumped up and down and looked inside and decided that because they were smaller than all the other animals in houses 1 to 6, they would be comfortable and have enough space.

The number symbol 7 and number word seven went on the front of the house where everyone could see them. And the seven doorbells went on the door. The seven Frogs didn't always use the front door as they preferred to jump in and out of the windows. They enjoyed seeing who could jump the highest.

They wanted a big bath in each of their seven bedrooms so that they could swim whenever they wanted to. And they also built a pond in their lounge. It had seven lily pads so that each of them had a place to sit. When the other animals came to welcome them, they found all seven Frogs swimming together in the indoor pond in the lounge.

The seven lily pads each had a beautiful yellow flower growing next to it, which the other animals often came to look at.

Song: *One little, two little*

One little, two little, three little fingers
Four little, five little, six little fingers
Seven little, eight little, nine little fingers
We all have ten fingers.

Week 4

Song: *It's a rectangle*

(To the tune of *B-I-N-G-O*)
There is a shape that has four sides,
But it is not a square, NO!
It's a rectangle,
It's a rectangle,
It's a rectangle,
It is not like a square, NO!

Two sides are long,
Two sides are short.
They are not the same, NO!
It's a rectangle,
It's a rectangle,
It's a rectangle,
The sides are not the same, NO!

Song: *Looby loo*

Here we go looby loo,
Here we go looby light,
Here we go looby loo,
All on a Saturday night.
You put your right hand in,
You take your right hand out,
You give your right hand a shake, shake, shake,
And turn yourself about.

Here we go looby loo,
Here we go looby light,
Here we go looby loo,
All on a Saturday night.
You put your left hand in,
You take your left hand out,
You give your left hand a shake, shake, shake,
And turn yourself about.

Here we go looby loo,
Here we go looby light,
Here we go looby loo,
All on a Saturday night.
You put your right foot in,
You take your right foot out,
You give your right foot a shake, shake, shake,
And turn yourself about.

Here we go looby loo,
Here we go looby light,
Here we go looby loo,
All on a Saturday night.
You put your left foot in,
You take your left foot out,
You give your left foot a shake, shake, shake,
And turn yourself about.

Here we go looby loo,
Here we go looby light,
Here we go looby loo,
All on a Saturday night.
You put your whole self in,
You take your whole self out,
You give your whole self a shake, shake, shake,
And turn yourself about.

Week 5

Song: One elephant went out to play

(To the tune of *Five little elephants*)

One elephant went out to play
Upon a spider's web one day.
He thought it such a tremendous stunt
That he called for another little elephant.
Two elephants went out to play
Upon a spider's web one day.
They thought it such a tremendous stunt
That they called for another little elephant.
Three elephants went out to play
Upon a spider's web one day.
The web went creak, the web went crack
And all of a sudden, they all ran back.

Week 6

Rhyme: Eight little mice

Eight little mice creeping through the house,
Eight little mice come out to play.
But if one big cat catches one little mouse
Then seven little mice will run away!
(Repeat for seven, six, five, four, three, two)
One little mouse creeping through the house,
One little mouse comes out to play.
But if one big cat tries to catch that mouse
That mouse is going to say, 'You great big bully,
go away!'

Story: Number 8 story (with Number 8 frieze template)

Next came eight Mice. The number symbol 8 and number word eight went on the front of the house where everyone could see them. And the eight doorbells went on the door. The Mice nibbled eight holes through the wooden floors in their rooms and made underground tunnels so that they could go in and out of the house from their eight bedrooms.

They didn't need big bedrooms as they were so small. They were used to living in the fields as they were field mice, but were excited about the idea of living in a new home next door to the Frogs.

They built a big lounge as they loved to dance and have parties. They each played an instrument. One played the keyboard, one a guitar, one a violin, one a flute, one a trumpet, one a marimba and two played drums. So there were eight instruments in the house. The other animals loved listening to the eight Mice playing their eight instruments. Sometimes they would all join in by stamping their feet and hooves to the beat.

Week 7

Rhyme: Five little hotdogs

Five little hotdogs frying in the pan. (Hold up five fingers)
The grease got hot and one went BAM! (Clap)
(Repeat for four (four fingers), three (three fingers), two (two fingers), one (one finger))
No little hotdogs frying in the pan. (Hold up fist)
The pan got hot and it went BAM! (Clap)

Story: Shopping for a hat

Summer is Babalwa's favourite time of the year. She loves the hot weather and going to the park to play. Today Babalwa's mother is taking her to buy a hat to keep her skin safe from the hot sun. Babalwa loves shopping for things to wear. Let's go along with her and her mother on her hat shopping trip and see all the different kinds of hats for sale.

In the shop there are hats everywhere – hats piled up high on every shelf, hats of different shapes, hats of different colours. Babalwa tries on lots of hats. She likes the floppy hat with big flowers, but she cannot decide on a colour. Let's help her choose which hat to buy. What colour hat should she choose? Which hat would you choose?

Week 8

Rhyme: *Going on a lion hunt*

(Pat thighs to keep rhythm)

We're going on a lion hunt,
We're gonna catch a big one!
What a beautiful day!
We're not scared!
Uh, oh! Grass!
Long, tall grass.
Can't go over it! *(Shake head)*
Can't go under it! *(Shake head)*
We'll have to go through it! *(Nod head)*
Swish, swash, swish, swash, swish, swash.
(Rub hands together)

We're going on a lion hunt,
We're gonna catch a big one!
What a beautiful day!
We're not scared!
Uh, oh! A river!
A wide, deep river.
Can't go over it! *(Shake head)*
Can't go under it! *(Shake head)*
We'll have to go through it! *(Nod head)*
Splish, splash, splish, splash, splish, splash.
(Stomp feet like walking through water)

We're going on a lion hunt,
We're gonna catch a big one!
What a beautiful day!
We're not scared!
Uh, oh! Mud!
Thick, gooey mud.
Can't go over it! *(Shake head)*
Can't go under it! *(Shake head)*
We'll have to go through it! *(Nod head)*
Squelch, squerch, squelch, squerch, squelch,
squerch. *(Lift feet slowly as if walking
through mud)*

We're going on a lion hunt,
We're gonna catch a big one!
What a beautiful day!
We're not scared!
Uh, oh! A forest!
A deep, dark forest.
Can't go over it! *(Shake head)*
Can't go under it! *(Shake head)*
We'll have to go through it! *(Nod head)*
Stumble, trip, stumble, trip, stumble, trip.
(Pretend to stumble)

We're going on a lion hunt,
We're gonna catch a big one!
What a beautiful day!
We're not scared!
Uh, oh! A cave!
A big, dark cave.
Can't go over it! *(Shake head)*
Can't go under it! *(Shake head)*
We'll have to go through it! *(Nod head)*
Tiptoe, tiptoe, tiptoe. *(Tiptoe on the spot)*
What's that? *(Reach hands out in front of you
and pretend to feel something)*
One shiny wet nose!
Two furry ears!
Two big eyes!
IT'S A LION! *(Throw hands up in the air)*
Quick! Back through the cave!
Tiptoe, tiptoe, tiptoe. *(Tiptoe quickly)*
Back through the forest!
Stumble, trip, stumble, trip, stumble, trip.
(Pretend to stumble quickly)
Back through the mud!
Squelch, squerch, squelch, squerch, squelch,
squerch. *(Walk through mud quickly)*
Back through the river!
Splish, splash, splish, splash, splish, splash.
(Splash through water quickly)
Back through the grass!
Swish, swash, swish, swash, swish, swash.
(Rub hands together quickly)
Get to the front door.
Open the door. *(Pretend to open door)*
Up the stairs. *(Pretend to run up stairs)*
Forgot to close the door!
Back down the stairs. *(Pretend to run down stairs)*
Close the door. *(Pretend to close door)*
Back up the stairs. *(Pretend to run up stairs)*
Into the bedroom.
Jump into bed. *(Sit down on the floor)*
Under the covers. *(Pretend to pull covers
over head)*
We're never going on a lion hunt again!

Week 9

Rhyme: *Spaceship*

Climb aboard the spaceship
Climb aboard the spaceship
We're going to the moon
Hurry and get ready
We're going to blast off soon
Put on your helmet and buckle up real tight
Here comes the countdown
Let's count with all our might!
10-9-8-7-6-5-4-3-2-1 BLAST OFF!

Week 10

Song: *Eight elephants*

One little elephant balancing,
Step by step on a piece of string.
Thought it such a funny joke, so he called up
some other little animal folk.

Two little zebras balancing,
Step by step on a piece of string.
Thought it such a funny joke, so they called up
some other little animal folk.

Three little meerkats balancing,
Step by step on a piece of string.
Thought it such a funny joke, so they called up
some other little animal folk.

Four giraffes balancing,
Step by step on a piece of string.
Thought it such a funny joke, so they called up
some other little animal folk.

Five little monkeys balancing,
Step by step on a piece of string.
Thought it such a funny joke, so they called up
some other little animal folk.

Six little ducks balancing,
Step by step on a piece of string.
Thought it such a funny joke, so they called up
some other little animal folk.

Seven little frogs balancing,
Step by step on a piece of string.
Thought it such a funny joke, so they called up
some other little animal folk.

Eight little mice balancing,
Step by step on a piece of string.
All of a sudden the piece of string broke and
down fell all the little animal folk!

Game: *I wrote a letter to my friend*

One player walks around the outside of the circle with an envelope.
The class says:
'I wrote a letter to my friend, and on the way I dropped it.'

One of you has picked it up and put it in your pocket.

It's not you, it's not you, it's not you ...'

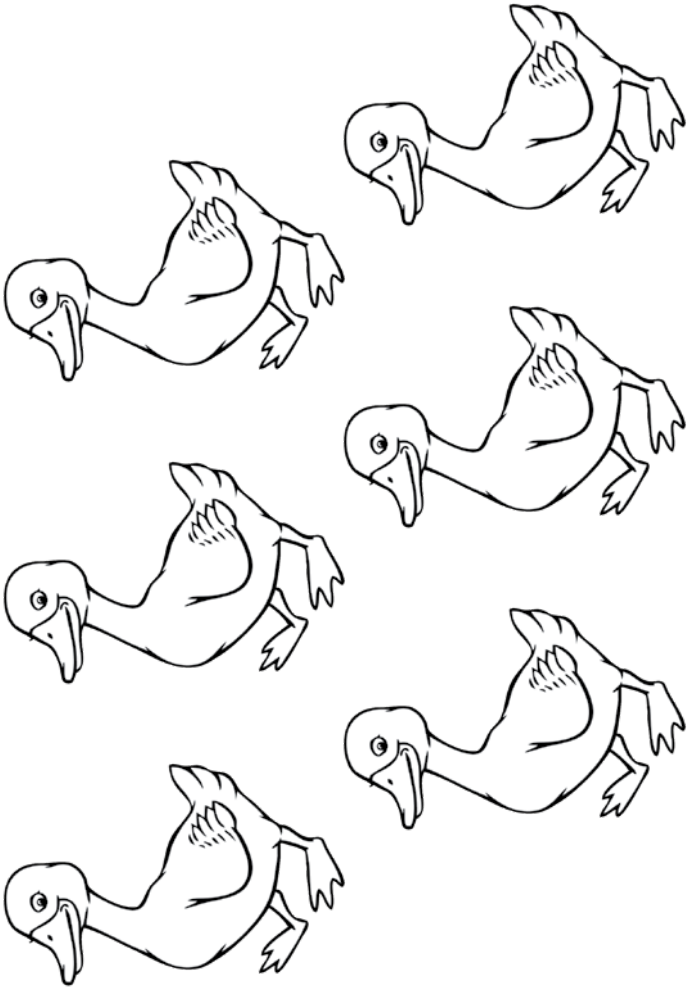
When deciding whom to drop the envelope behind, the person taps that person on the head and says, *'It's you!'*

They then run, with the person who now has the envelope chasing them, once around the circle of learners and try to get to sit in that person's empty place before they are caught.

If the person is caught, he or she has to sit in the middle of the circle.

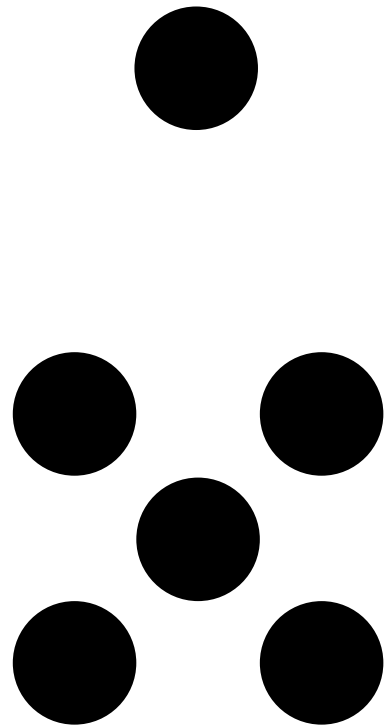
The new person holding the envelope starts walking around the circle, while the class says the words, *'I wrote a letter ...'*

And so the game goes on.

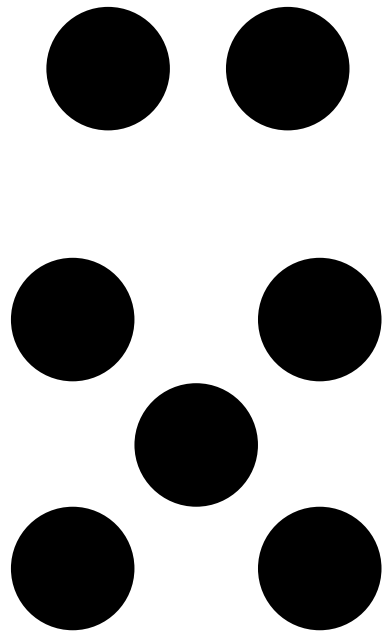
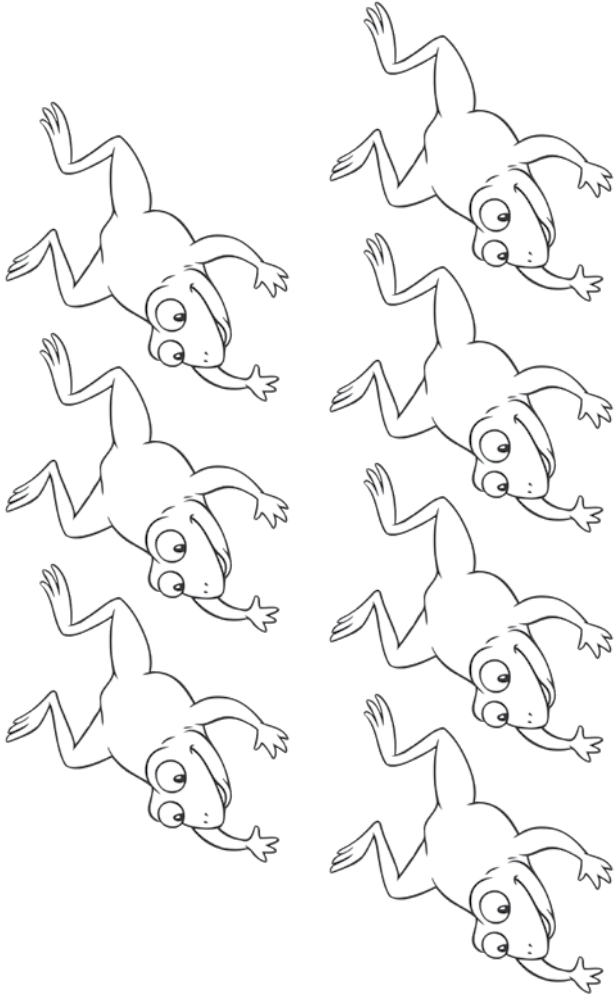


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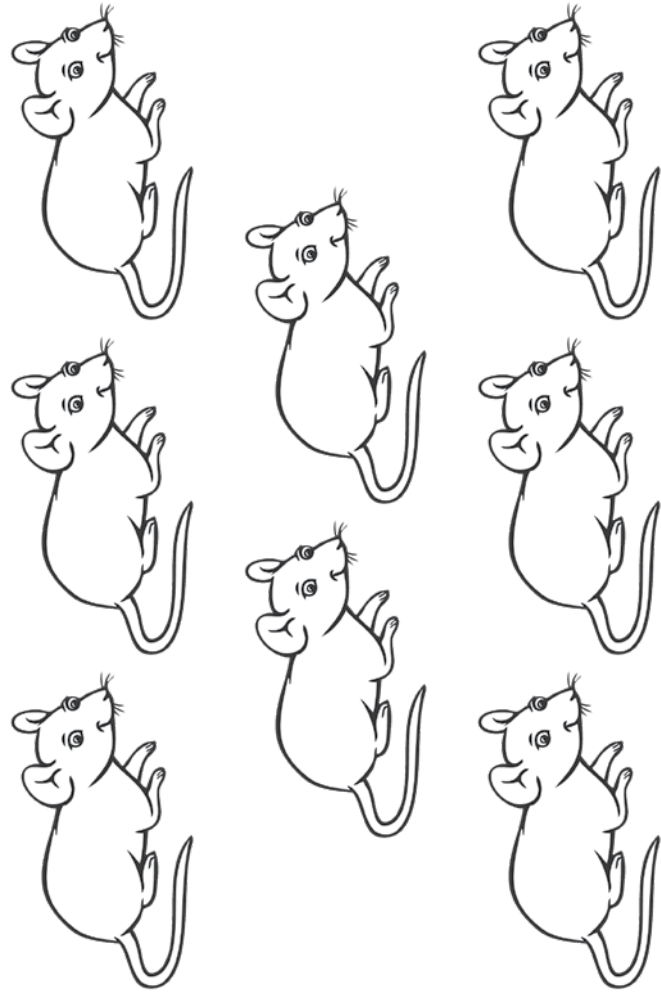
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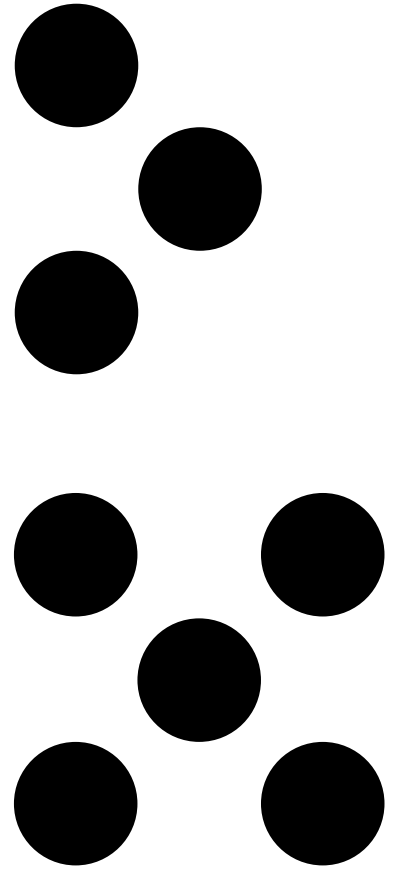
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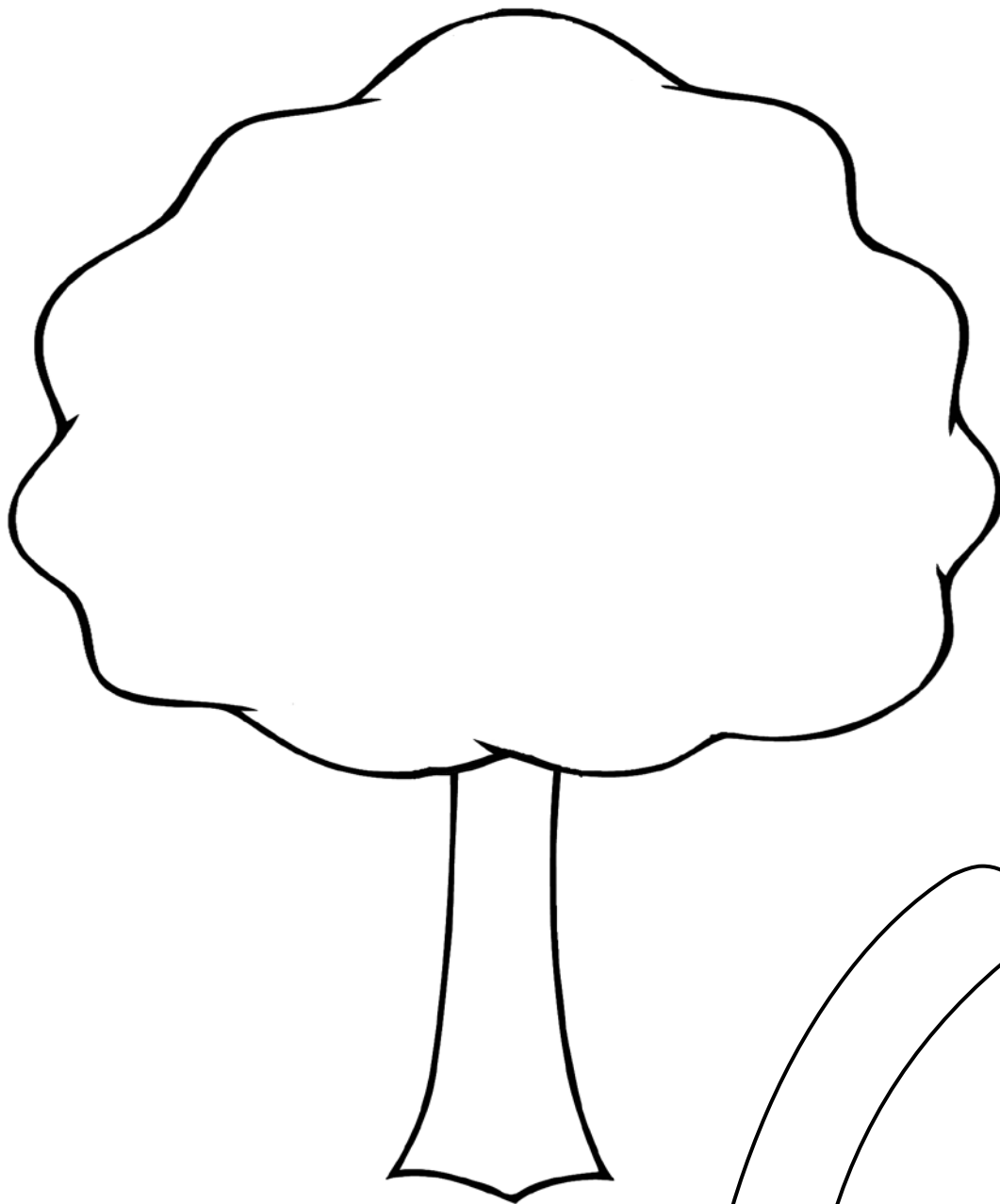
8



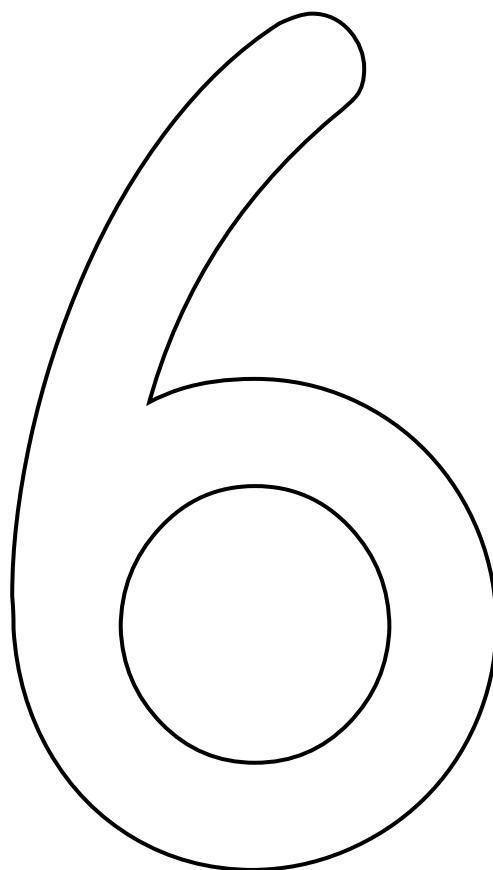
eight



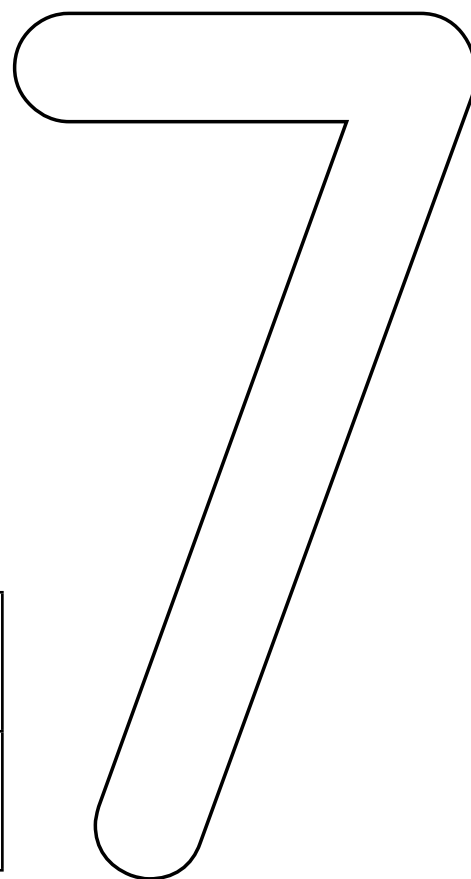
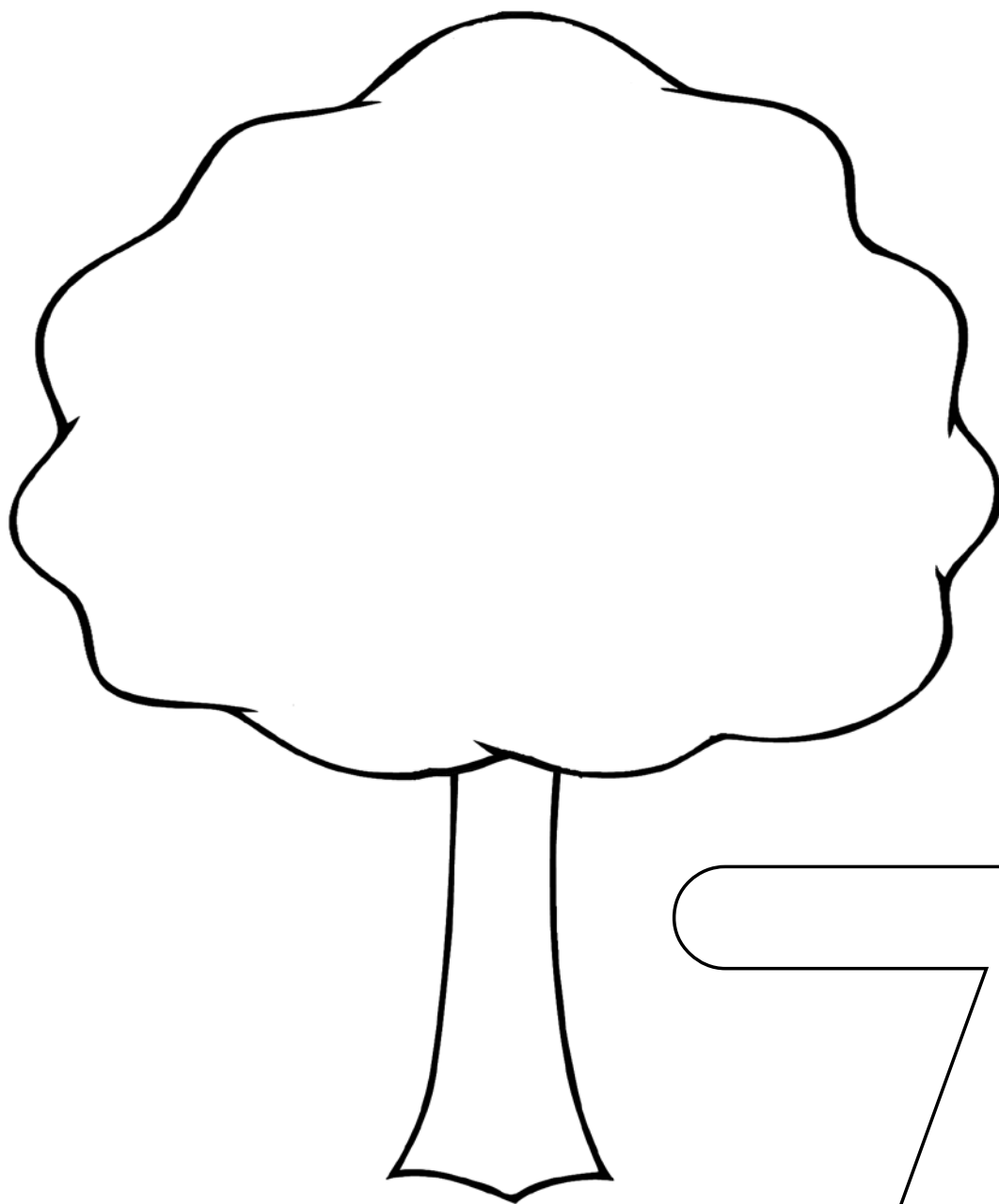
Playdough template: Number 6



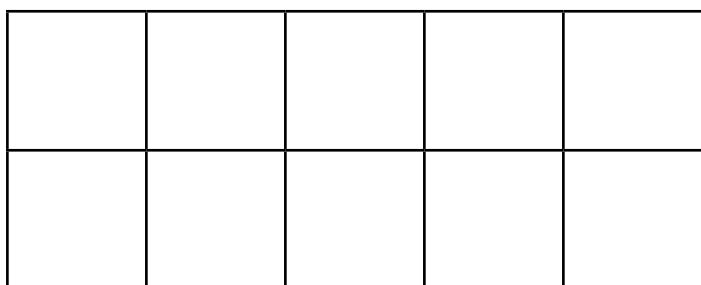
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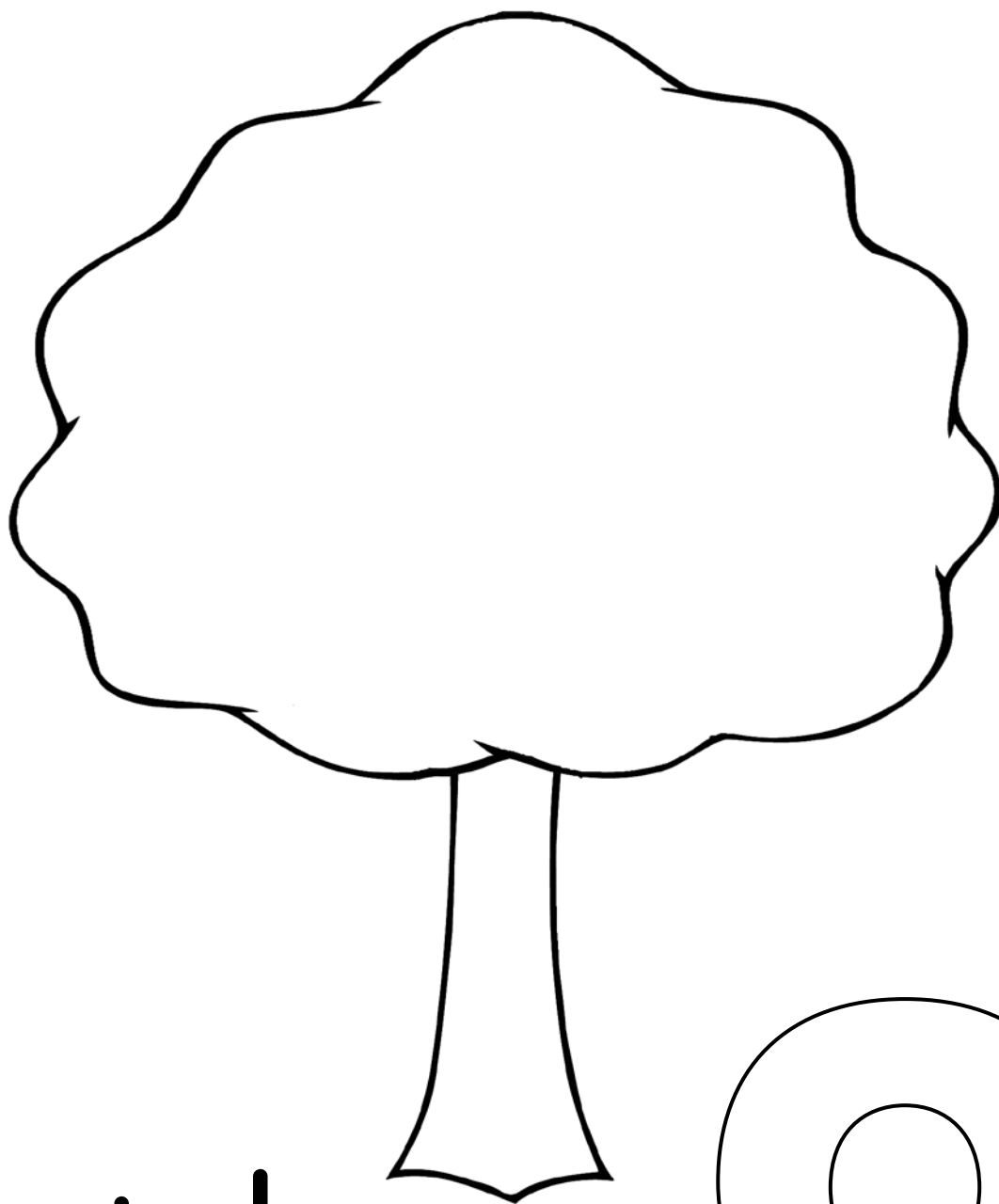
Playdough template: Number 7



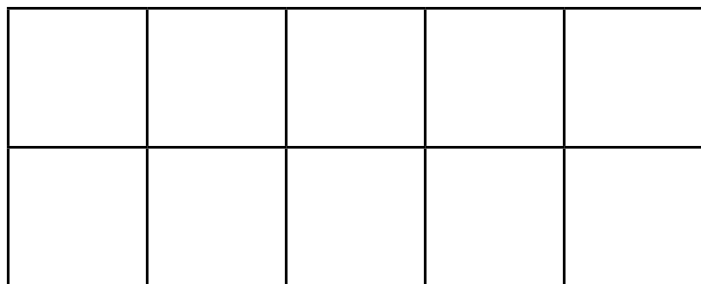
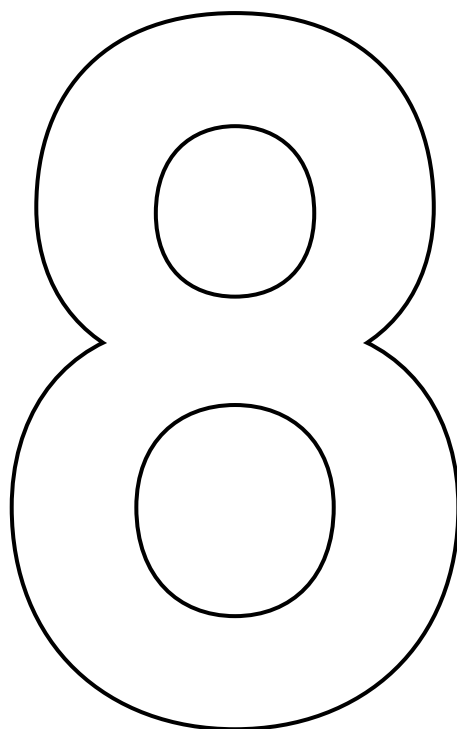
seven



Playdough template: Number 8

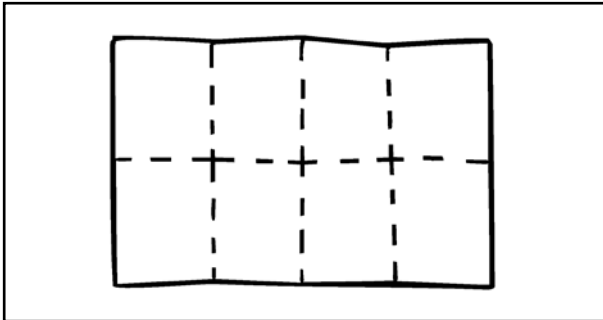


eight

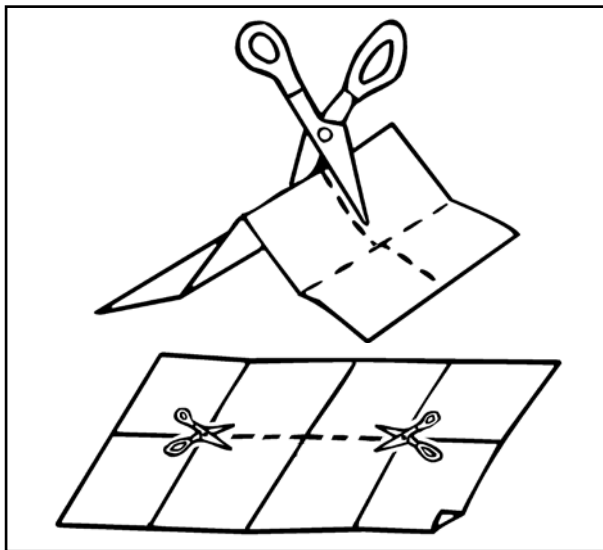


Shape book (Week 4)

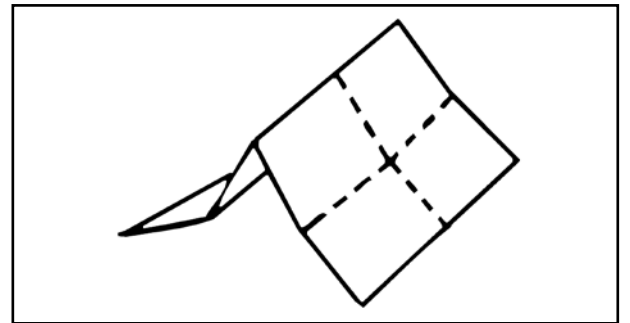
1. Fold an A4 page into eight pieces, by folding it in half three times. Unfold.



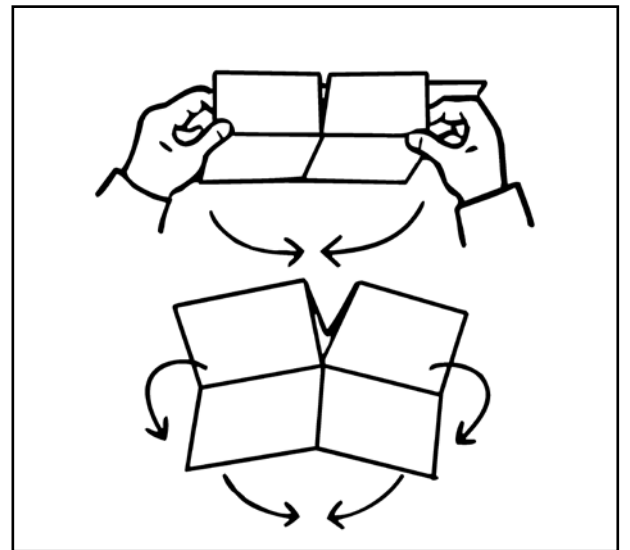
3. Cut on the middle fold as shown in the diagram.



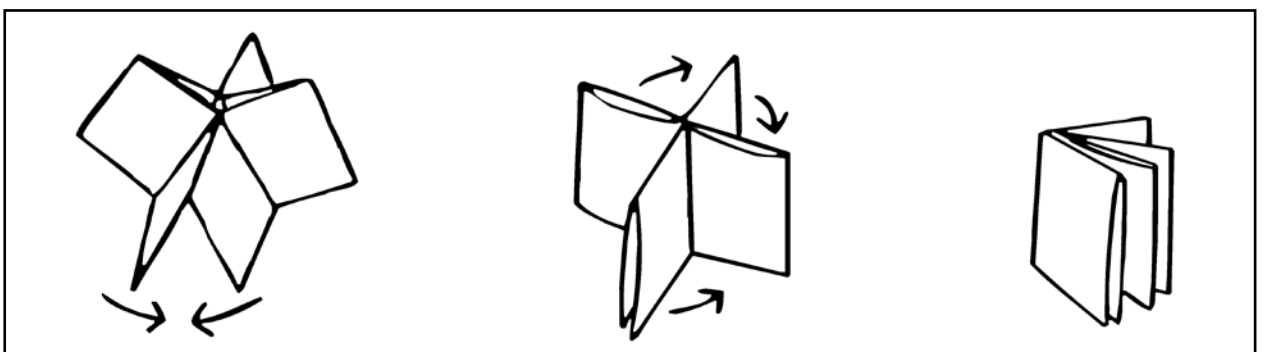
2. Fold the page in half again.



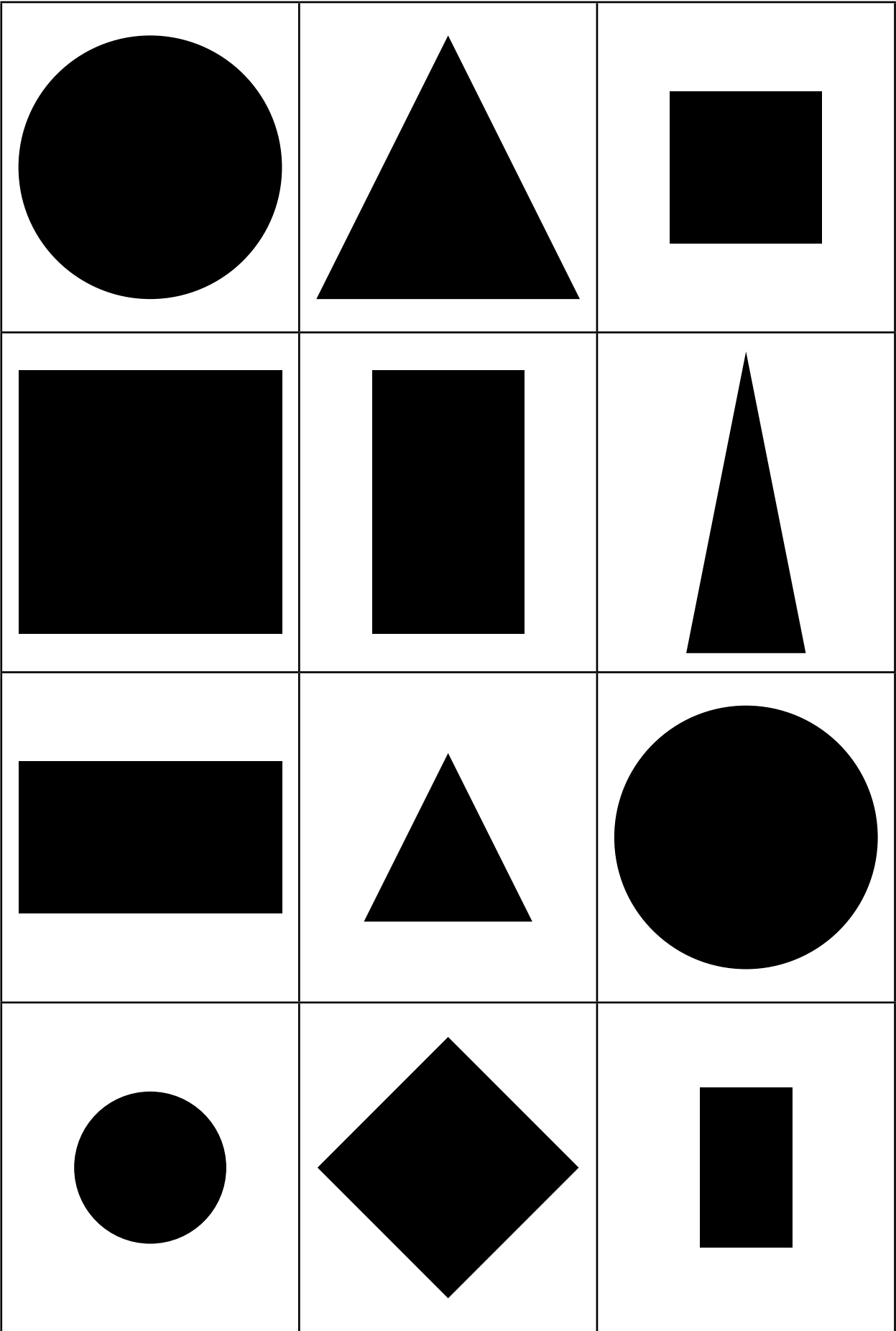
4. Hold the page between your finger and thumb on both sides, so the middle parts of the page are touching. Bring your hands together as shown by the arrows.



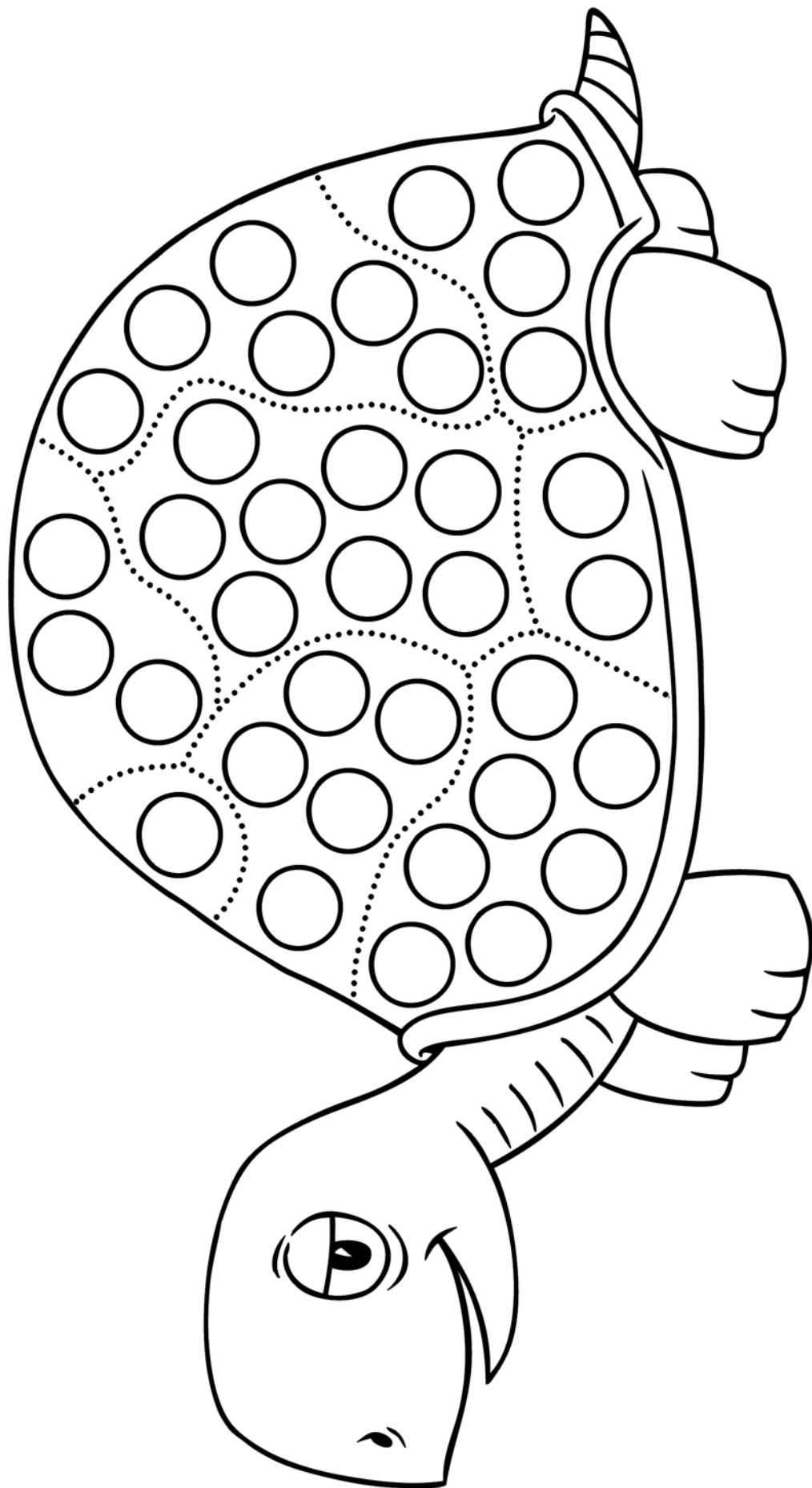
5. Complete the little book by folding the pages flat, as shown.



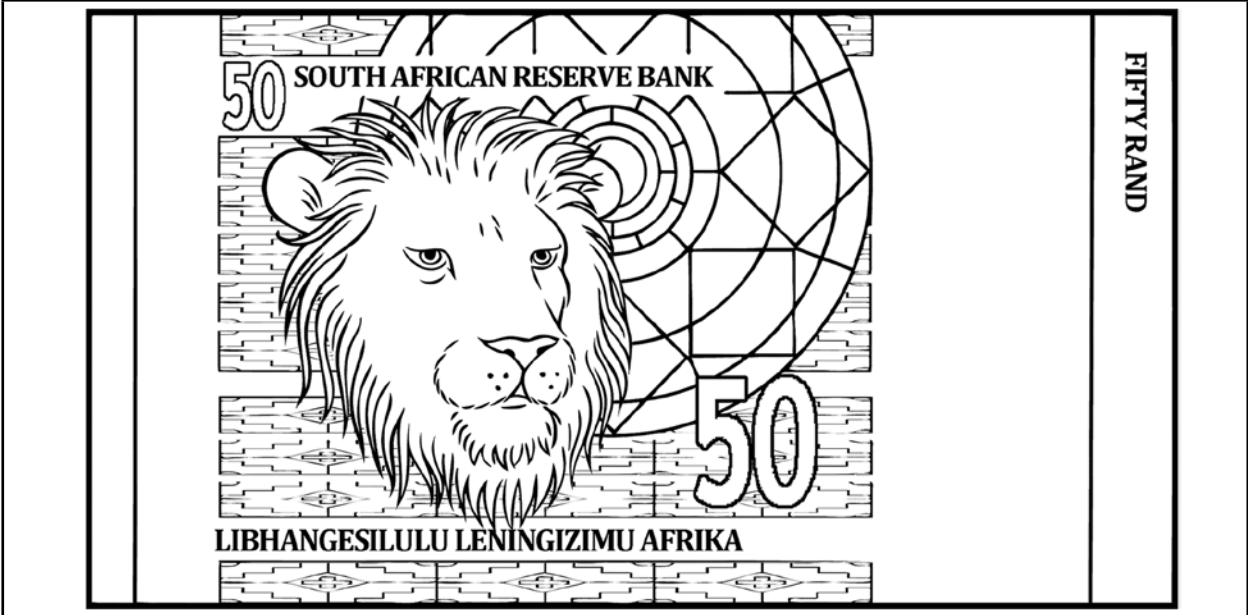
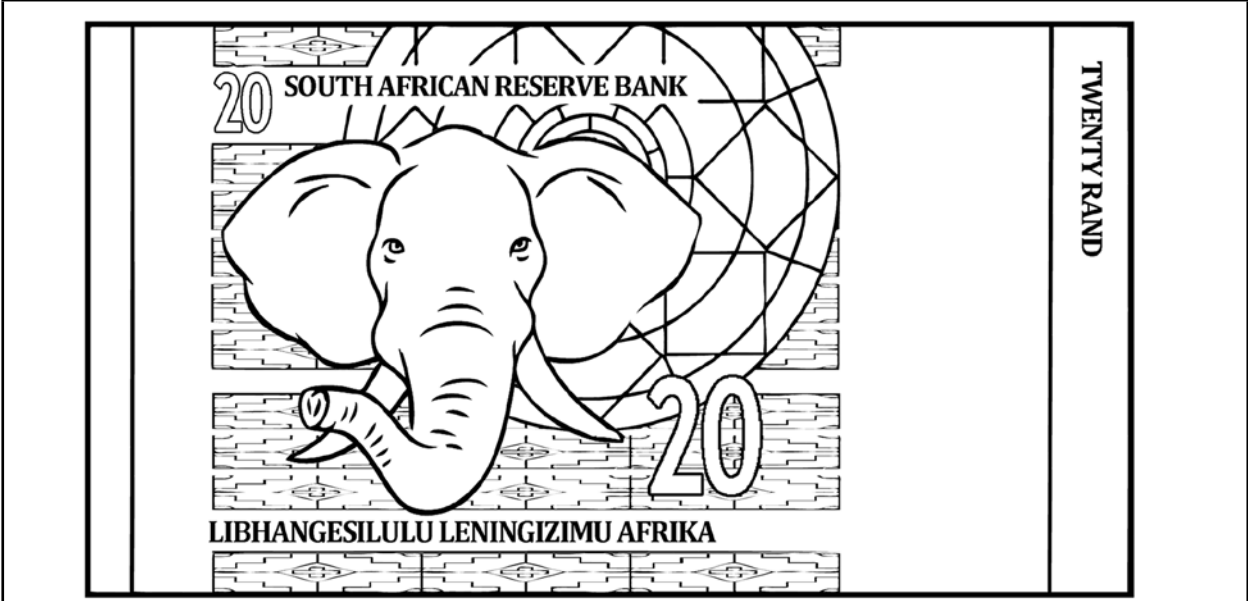
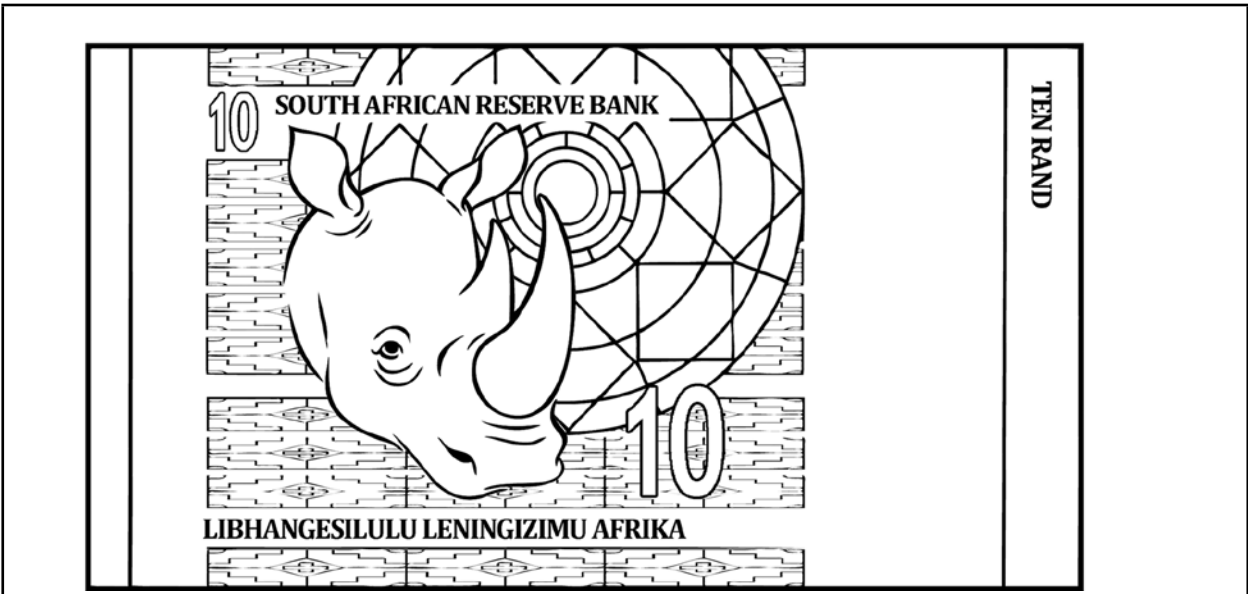
Shape Bingo board (Week 8)

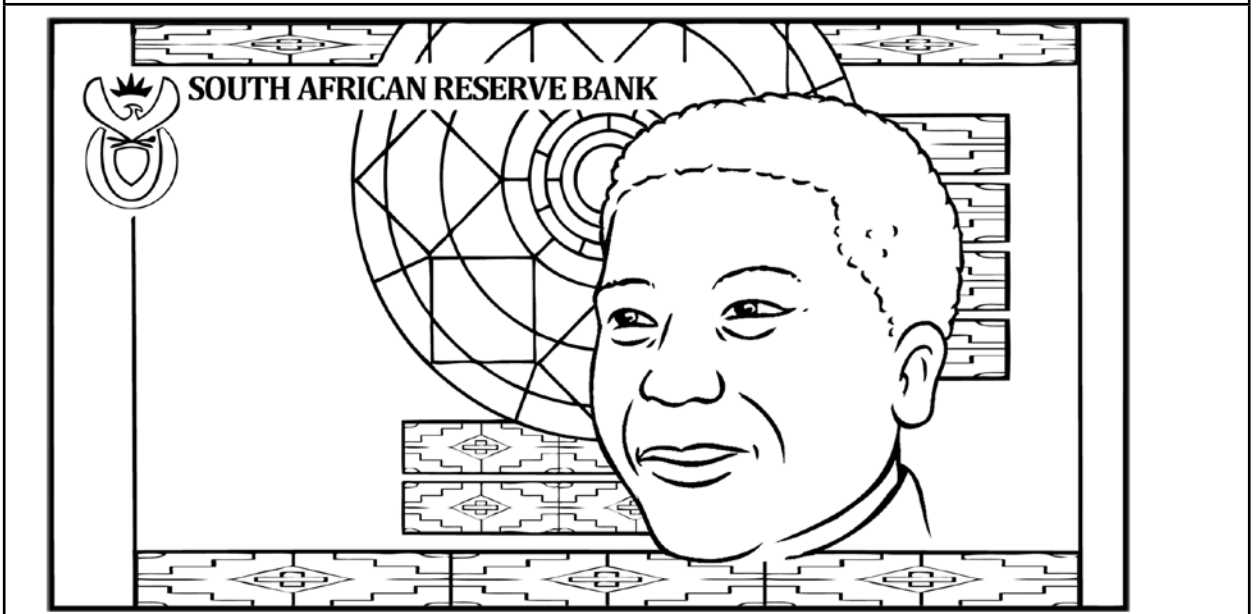
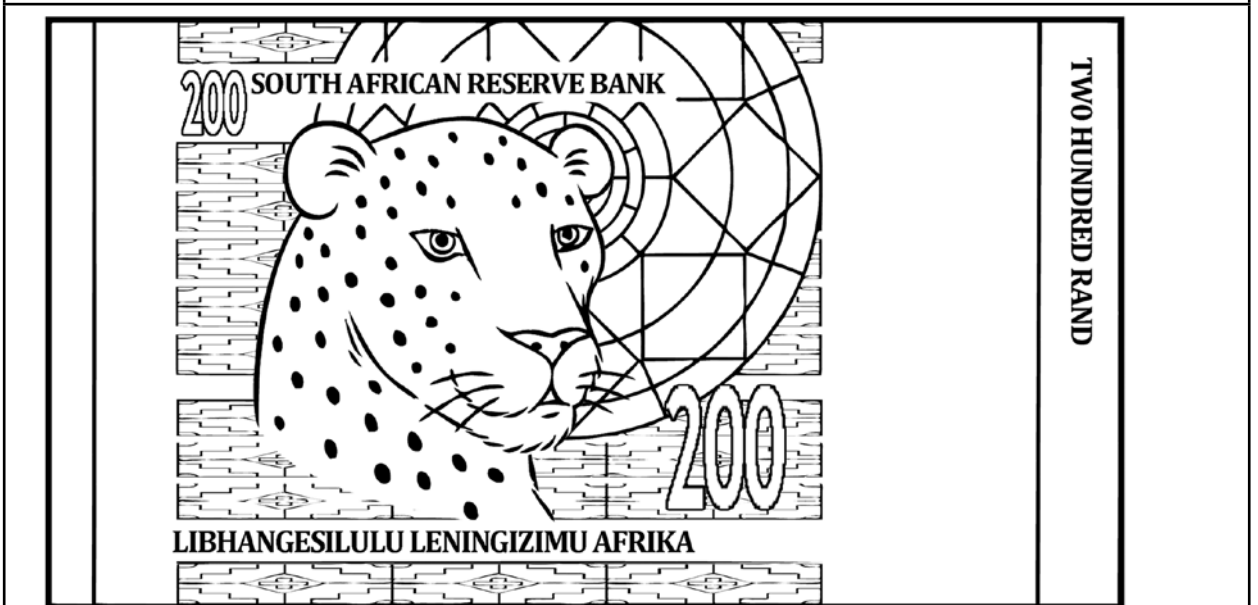
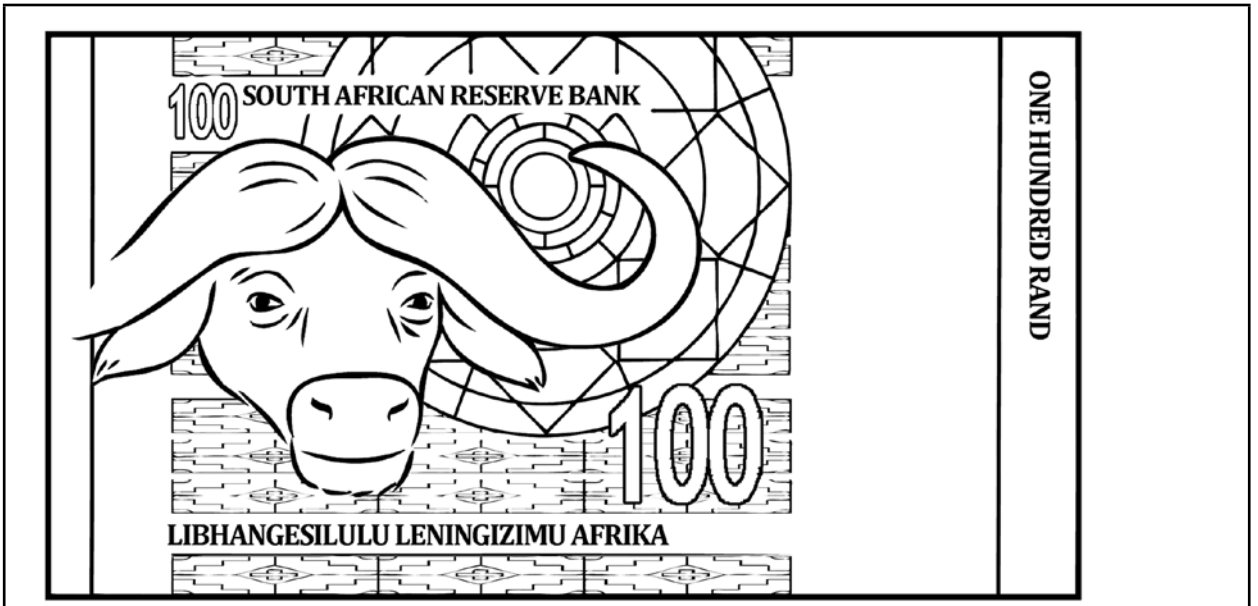


Tortoise (Week 9)



Banknotes (Week 9)





Eighteen-piece puzzle

