3.4.3 Grade 3 overview per term

GRADE 3 OVERVIEW 1. NUMBERS, OPERATIONS AND RELATIONSHIPS				
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
NUMBER CONCEPT DEVELOPMENT: Count with whole numbers				
1.1 **Count objects**	Group to at least 200 objects to estimate and count reliably. Give a reasonable estimate of a number of objects that can be checked by counting. The strategy of grouping is encouraged.	Group to at least 500 objects to estimate and count reliably. Give a reasonable estimate of a number of objects that can be checked by counting. The strategy of grouping is encouraged	Group to at least 700 objects to estimate and count reliably. Give a reasonable estimate of a number of objects that can be checked by counting. The strategy of grouping is encouraged.	Group to at least 1 000 objects to estimate and count reliably. Give a reasonable estimate of a number of objects that can be checked by counting. The strategy of grouping is encouraged.
1.2 **Count forwards and backwards**	Count forwards and backwards in: • 1s, from any number between 0 and 200 • 10s from any multiple of 10 between 0 and 200 • 5s from any multiple of 5 between 0 and 200 • 2s from any multiple of 2 between 0 and 200 • 3s from any multiple of 3 between 0 and 200 • 4s from any multiple of 4 between 0 and 200 • 100s to at least 500	Count forwards and backwards in: • 1s, from any number between 0 and 500 • 10s from any multiple of 10 between 0 and 500 • 5s from any multiple of 5 between 0 and 500 • 2s from any multiple of 2 between 0 and 500 • 3s from any multiple of 3 between 0 and 500 • 4s from any multiple of 4 between 0 and 500 • 50s,100s to at least 1 000	**Count forwards** and **backwards** in: • 1s, from any number between 0 and 700 • 10s from any multiple of 10 between 0 and 700 • 5s from any multiple of 5 between 0 and 700 • 2s from any multiple of 2 between 0 and 700 • 3s from any multiple of 3 between 0 and 700 • 4s from any multiple of 4 between 0 and 700 • 20s, 25s, 50s,100s to at least 1 000	**Count forwards** and **backwards** in: • 1s, from any number between 0 and 1 000 • 10s from any multiple of 10 between 0 and 1 000 • 5s from any multiple of 5 between 0 and 1 000 • 2s from any multiple of 2 between 0 and 1 000 • 3s from any multiple of 3 between 0 and 1 000 • 4s from any multiple of 4 between 0 and 1 000 • 20s,25s, 50s,100s to at least 1 000

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
NUMBER CONCEPT DEVELOPMENT: Represent whole numbers				
1.3 **Number symbols and number names**	**Identify, recognise and read numbers** • Identify, recognise and read number symbols 0 to 500 • Write number symbols 0 to 500 • Identify, recognise and read number names 0 to 250 • Write number names 0 to100	**Identify, recognise and read numbers** • Identify, recognise and read number symbols 0 to 1 000 • Write number symbols 0 to1000 • Identify, recognise and read number names 0 to 250 • Write number names 0 to 250	**Identify, recognise and read numbers** • Identify, recognise and read number symbols 0 to 1 000 • Write number symbols 0 to1000 • Identify, recognise and read number names 0 to 500 • Write number names 0 to 500	**Identify, recognise and read numbers** • Identify, recognise and read number symbols 0 to 1 000 • Write number symbols 0 to1000 • Identify, recognise and read number names 0 to1 000 • Write number names 0 to1000
NUMBER CONCEPT DEVELOPMENT: Describe, compare and order whole numbers				
1.4 **Describe, compare and order numbers**	Describe, compare and order numbers to 99. • Compare whole numbers up to 99 using smaller than, greater than, more than, less than and is equal to • Order whole numbers up to 99 from smallest to greatest, and greatest to smallest	Describe, compare and order numbers to 500. • Compare whole numbers up to 500 using smaller than, greater than, more than, less than and is equal to • Order whole numbers up to 500 from smallest to greatest, and greatest to smallest	Describe, compare and order numbers to 700. • Compare whole numbers up to 700 using smaller than, greater than, more than, less than and is equal to • Order whole numbers up to 700 from smallest to greatest, and greatest to smallest **Use ordinal numbers to show order, place or position** • Use, read and write ordinal numbers, including abbreviated form up to 31st	Describe, compare and order numbers to 999. • Compare whole numbers up to 999 using smaller than, greater than, more than, less than and is equal to • Order whole numbers up to 999 from smallest to greatest, and greatest to smallest
NUMBER CONCEPT DEVELOPMENT: place value				
1.5 **Place value**	**Recognise the place value of numbers to 99** • Know what each digit represents • Decompose two-digit numbers up to 99 into multiples of tens and ones/ units • Identify and state the value of each digit	**Recognise the place value of numbers to 500** • Know what each digit represents • Decompose three-digit numbers up to 500 into multiples of hundreds, tens and ones/units • Identify and state the value of each digit	**Recognise the place value of numbers to 700** • Know what each digit represents • Decompose three-digit numbers up to 700 into multiple of hundreds, tens and ones/units • Identify and state the value of each digit	**Recognise the place value of numbers to 999** • Know what each digit represents • Decompose three-digit numbers up to 999 into multiple of hundreds, tens and ones/units • Identify and state the value of each digit

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
SOLVE PROBLEMS IN CONTEXT				
1.6 Problem-solving techniques	Use the following techniques when solving problems: • building up and breaking down numbers • doubling and halving • number lines	Use the following techniques when solving problems: • building up and breaking down numbers • doubling and halving • number lines • rounding off in tens	Use the following techniques when solving problems: • building up and breaking down numbers • doubling and halving • number lines • rounding off in tens	Use the following techniques when solving problems and explain solutions to problems: • building up and breaking down numbers • doubling and halving • number lines • rounding off in tens
1.7 Addition and subtraction	Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 99.	Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 400.	Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 800.	Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 999.
1.8 Repeated addition leading to multiplication	Solve number problems in context and explain own solution to problems involving multiplication with answers up to 50.	Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75.	Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75.	Solve number problems in context and explain own solution to problems involving multiplication with answers up to 100
1.9 Grouping and sharing leading to division	Solve number problems in context and explain own solutions to problems that involve equal sharing and grouping up to 50 with answers that may include remainders.	Solve number problems in context and explain own solutions to problems that involve equal sharing and grouping up to 75 with answers that may include remainders.	Solve number problems in context and explain own solutions to problems that involve equal sharing and grouping up to 75 with answers that may include remainders.	Solve number problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that may include remainders.
1.10 Sharing leading to fractions	Solve and explain solutions to practical problems that involve equal sharing leading to solutions that include unitary and non-unitary fractions e.g. $\frac{1}{2}, \frac{1}{4}, \frac{2}{3}$ etc.	Solve and explain solutions to practical problems that involve equal sharing leading to solutions that include unitary and non-unitary fractions e.g. $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{2}{5}$ etc.	Solve and explain solutions to practical problems that involve equal sharing leading to solutions that include unitary and non-unitary fractions e.g. $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{2}{5}$ etc.	Solve and explain solutions to practical problems that involve equal sharing leading to solutions that include unitary and non-unitary fractions e.g. $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{2}{5}$ etc.
1.11 Money	• Recognise and identify the South African coins and bank notes • Solve money problems involving totals and change in rands or cents	• Recognise and identify the South African coins and bank notes • Solve money problems involving totals and change in rands or cents	• Recognise and identify the South African coins and bank notes • Solve money problems involving totals and change in rands or cents • Convert between rands and cents	• Recognise and identify the South African coins and bank notes • Solve money problems involving totals and change in rands or cents • Convert between rands and cents

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
CONTEXT-FREE CALCULATIONS				
1.12 Techniques (methods or strategies)	Use the following techniques when performing calculations: • building up and breaking down numbers • doubling and halving • number lines	Use the following techniques when performing calculations: • building up and breaking down numbers • doubling and halving • number lines • rounding off in tens	Use the following techniques when performing calculations: • building up and breaking down numbers • doubling and halving • number lines • rounding off in tens	Use the following techniques when performing calculations: • building up and breaking down numbers • doubling and halving • number lines • rounding off in tens
1.13 Addition and subtraction	• Add up to 99 • Subtract from 99 • Use appropriate symbols (+, –, =, □) • Practise number bonds to 20	• Add up to 400 • Subtract from 400 • Use appropriate symbols (+, –, =, □) • Practise number bonds to 30	• Add up to 800 • Subtract from 800 • Use appropriate symbols (+, –, =, □) • Practise number bonds to 30	• Add up to 999 • Subtract from 999 • Use appropriate symbols (+, –, =, □) • Practise number bonds to 30
1.14 Repeated addition leading to multiplication	• Multiply numbers 1 to 10 by 2, 5, 3, 4 • Use appropriate symbols (x, =, □)	• Multiply 2, 4, 5, 10, 3 to a total of 50 • Use appropriate symbols (x, =, □)	• Multiply 2, 3, 4, 5, 10 to a total of 100 • Use appropriate symbols (x, =, □)	• Multiply 2, 3, 4, 5, 10 to a total of 100 • Use appropriate symbols (x, =, □)
1.15 Division	• Divide numbers to 50 by 2, 5, 10 • Use appropriate symbols (÷, =, □)	• Divide numbers to 50 by 2, 4, 5, 10, 4 • Use appropriate symbols (÷, =, □)	• Divide numbers to 99 by 2, 4, 5, 10, 3, • Use appropriate symbols (÷, =, □)	• Divide numbers to 99 by 2, 3, 4, 5,10 • Use appropriate symbols (÷, =, □)

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
1.16 **Mental mathematics**	**Number concept: Range 200** • Order a given set of selected numbers. Range 200 • Compare numbers to 200 and say which is: - 1 more or 1 less - 2 more or 2 less - 3 more or 3 less - 4 more or 4 less - 5 more or 5 less - 10 more or 10 less **Rapid recall:** • Addition and subtraction facts to 20 • Add or subtract multiples of 10 from 0 to 100 **Mental strategies** Use calculation strategies: • Put the larger number first in order to count on or count back • Number line • Doubling and halving • Building up and breaking down • Use the relationship between addition and subtraction	**Number concept: Range 500** • Order a given set of selected numbers. Range 500 • Compare numbers to 500 and say which is: - 1 more or 1 less - 2 more or 2 less - 3 more or 3 less - 4 more or 4 less - 5 more or 5 less - 10 more or 10 less **Rapid recall:** • Addition and subtraction facts to 20 • Add or subtract multiples of 10 from 0 to 100 **Mental strategies** Use the following calculation strategies • Put the larger number first in order to count on or count back • Number line • Doubling and halving • Building up and breaking down • Use the relationship between addition and subtraction	**Number concept: Range 750** • Order a given set of selected numbers • Compare numbers to 200 and say which is: - 1 more or 1 less - 2 more or 2 less - 3 more or 3 less - 4 more or 4 less - 5 more or 5 less - 10 more or 10 less **Rapid recall:** • Addition and subtraction facts to 20 • Add or subtract multiples of 10 from 0 to 100 **Mental strategies** Use the following calculation strategies: • Put the larger number first in order to count on or count back • Number line • Doubling and halving • Building up and breaking down • Use the relationship between addition and subtraction • Use the relationship between multiplication and division	**Number concept: Range 999** • Order a given set of selected numbers • Compare numbers to 1000 and say which is: - 1 more or 1 less - 2 more or 2 less - 3 more or 3 less - 4 more or 4 less - 5 more or 5 less - 10 more or 10 less **Rapid recall:** • Addition and subtraction facts to 20 • Add or subtract multiples of 10 from 0 to 100 • Multiplication and division facts for the: - two times table up to 2 x 10 - ten times table up to 10 x 10 **Mental strategies** Use the following calculation strategies • Put the larger number first in order to count on or count back • Number line • Doubling and halving • Building up and breaking down • Use the relationship between addition and subtraction • Use the relationship between multiplication and division

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
1.17 Fractions	• Use and name unitary fractions including halves, quarters thirds, fifths • Recognise fractions in diagrammatic form • Write fractions as 1half, 1third	• Use and name unitary fractions including halves, quarters eighths, thirds, sixths, fifths • Recognise fractions in diagrammatic form • Write fractions as 1 half, 1third	• Use and name unitary and non-unitary fractions including halves, quarters, eighths, thirds, sixths, fifths • Recognise fractions in diagrammatic form • Begin to recognise that two halves or three thirds make one whole and that 1 half and 2 quarters are equivalent • Write fractions as 1 half, 2 third	• Use and name unitary and non-unitary fractions including halves, quarters, eighths, thirds, sixths, fifths • Recognise fractions in diagrammatic form • Begin to recognise that two halves or three thirds make one whole and that 1 half and 2 quarters are equivalent • Write fractions as 1 half, 2 third

Problem Types for Grade 3

These are examples of important problem types that the teacher needs to present repeatedly to her class. When the teacher works with a small group, she should pose the problem orally. When the learners can read, she can give them a written version of the problem as well, but she must still pose the problem orally.

Problems in context can be included in worksheets, but should then be short, straightforward and familiar, and the teacher must make sure that all the learners understand them.

Grouping

Grouping, discarding the remainder

A bakery sells bread rolls in bags of 12. They have 118 rolls. How many bags of 12 rolls each can they make up?

Grouping, incorporating the remainder in the answer

A farmer has 227 eggs. How many egg boxes that can take six eggs each does he need to pack all the eggs?

Sharing

Sharing, discarding the remainder

Five friends share a box of 84 sweets so that they all get the same number of sweets.

Sharing, leading to fractions

Share 15 chocolate bars among six friends so that they all get the same amount of chocolate bar and there is nothing left over.

Fraction of a collection

Grandmother gives Kiki R12. Kiki wants to save a third of the money. How much money must she save?

This problem type must only be posed after learners have solved four or five problems of the Sharing, leading to fractions type and know the names of fractional pieces.

Putting fractions together

The netball coach gives half an orange to each player. There are 14 players. How many oranges does she need?

This problem type must only be posed after learners have solved four or five problems of the Sharing, leading to fractions type and know the names of fractional pieces.

Proportional sharing

Peter is smaller than Rhulani. When Peter eats one slice of bread, Rhulani needs two slices of bread. When Peter eats two slices, Rhulani needs four slices. After a few days, they have eaten 12 slices of bread. How many slices did Peter eat and how many slices did Rhulani eat?

Sue and Greg do a piece of work together. Sue works for three hours and Greg works for one hour. They are paid R60. How must they share the money?

Repeated addition

How many wheels do 36 cars have?

Rate

Thami saves 35c every week. How much money does he save in 8 weeks?

Grids

Mr Khumalo plants 20 rows of orange trees. There are 12 trees in a row. How many trees are there altogether?

Addition and subtraction

There are at least three basic types of addition and subtraction problems and each type can be posed in different ways. The basic types are:

Change

Noluthando collected 234 stickers. Silo gave her 80 more stickers. How many stickers does she have now?

There were 500 passengers on a train and 176 passengers got off. How many passengers were left on the train?

Combine

Nosisi collects items for the school's recycling projects. She collected 124 plastic bottles and 268 tin cans. How many items did she collect? The shop has 368 packets of chips; 82 are chippos and the rest are Ziksnacks. How many packets or Zicksnacks are there?

Compare

Grade 2 collected R446. Grade 3 collected R729. How much more money did the Grade 3s collect?

Posing each problem in different ways

Problems have to be posed in different ways. For example, both of these are change problems, but the "unknowns" are in different places in the problem.

The shop had packets of mealie meal and ordered 55 more . Now there are 170 packets of mealie meal. How many packets were there in the beginning?

The shop had 500 packets of sugar. After selling some packets, they had 324 packets of sugar left. How many packets did they sell?

Problem situations with different functional relationships

Heila sells hotdogs at R4 each. Make a table to help her find the amount for large orders.

Number of hotdogs	1	2	3	4	5	10	20
Cost in R	4	8					

Use the table to find the cost of seven hotdogs and 23 hotdogs.

Sedick babysits. He charges R20 for travel costs, and then R5 per hour for babysitting. Complete this table for him.

Number of hours	1	2	3	4	5	10
Cost in R	25	30				

Note that Heila's problem and Sedick's problem work differently.

The above problem types are given to guide the teacher. Learners should not be burdened with type names. Note that learners often use different ways of solving a problem that may not be what the teacher expects. For example, a division problem may be solved by repeated subtraction, addition or multiplication. Learners' methods will change in the course of the year as their understanding of and familiarity with the problem types grow, and as their number concept develops.

GRADE 3 OVERVIEW 2. PATTERNS, FUNCTIONS AND ALGEBRA				
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
2.1 **Geometric patterns**	**Copy, extend and describe** Copy, extend and describe in words • simple patterns made with physical objects • simple patterns made with drawings of lines, shapes or objects **Range of patterns**: • Simple patterns in which shapes or groups of shapes are repeated in exactly the same way. **Create and describe own patterns** • Create own geometric patterns - with physical objects - by drawing lines, shapes or objects. • Describe own patterns	**Copy, extend and describe** Copy, extend and describe in words • simple patterns made with physical objects • simple patterns made with drawings of lines, shapes or objects **Range of patterns**: • Simple patterns in which shapes, or groups of shapes are repeated in exactly the same way • Patterns in which the number or size of shapes in each stage changes in a predictable way i.e. regularly increasing patterns **Create and describe own patterns** • Create own geometric patterns - with physical objects - by drawing lines, shapes or objects. • Describe own patterns	**Copy, extend and describe** Copy, extend and describe in words • simple patterns made with physical objects • simple patterns made with drawings of lines, shapes or objects **Range of patterns**: • Patterns in which the number of shapes in each stage changes in a predictable way i.e. regularly increasing patterns **Create and describe own patterns** • Create own geometric patterns - with physical objects - by drawing lines, shapes or objects. • Describe own patterns	**Patterns around us** Identify, describe in words and copy geometric patterns • in nature • from modern everyday life • from our cultural heritage
2.2 **Number patterns**	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 200. Sequences should show counting forwards and backwards in: • the intervals specified in Grade 2 with increased number ranges • 100s to at least 500	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 500. Sequences should show counting forwards and backwards in: • the intervals specified in Grade 2 with increased number ranges • 50s,100s to at least 1 000	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 750. Sequences should show counting forwards and backwards in: • the intervals specified in Grade 2 with increased number ranges • 20s,25s, 50s,100s to at least 1 000 **Create and describe own number patterns**	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 1 000 . Sequences should show counting forwards and backwards in: • the intervals specified in Grade 2 with increased number ranges • 20s,25s, 50s,100s to at least 1 000 **Create and describe own number patterns**

GRADE 3 OVERVIEW 3. SPACE AND SHAPE (GEOMETRY)				
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
3.1 **Position, orientation and views**		**Position and views** • Match different views of the same everyday object • Name an everyday object when shown an unusual view of it **Position and directions** • Follow directions to move around the classroom and school • Give directions to move around the classroom and school	**Position and views** • Read, interpret and draw informal maps, or top views of a collection of objects. • Find objects on maps **Position and directions** • Follow directions from one place to another on an informal map	

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
3.2 **3-D objects**		**Range of objects** Recognise and name 3-D objects in the classroom and in pictures • ball shapes, (spheres) • box shapes (prisms) • cylinders **Features of objects** Describe, sort and compare 3-D objects in terms of: • 2-D shapes that make up the faces of 3-D objects • flat or curved surfaces **Focused activities** Observe and build given 3-D objects using concrete materials such as cut-out 2-D shapes, clay, toothpicks, straws, other 3-D geometric objects **Suggested focus and sequencing of activities for Term 2** Work with spheres, prisms and cylinders as they did in Grade 2; name them and group them. Focus on the kind of surfaces on each type of object. Distinguish surfaces according to whether they are curved or flat. Use cut-out cardboard squares to make a box. Talk about the flat surfaces on prisms and cylinders and describe them according to whether they are circular, square or rectangular. Work is consolidated through written exercises.	**Range of objects** Recognise and name 3-D objects in the classroom and in pictures • ball shapes (spheres) • box shapes (prisms) • cylinders • pyramids • cones **Features of objects** Describe, sort and compare 3-D objects in terms of: • 2-D shapes that make up the faces of 3-D objects • flat or curved surfaces **Focused activities** Observe and build given 3-D objects using concrete materials such as cut-out 2-D shapes, clay, toothpicks, straws, other 3-D geometric objects **Suggested focus and sequencing of activities for Term 3** Work with spheres, prisms, cylinders, pyramids and cones. Focus on the kind of surfaces on each type of object. Distinguish surfaces according to whether they are curved or flat. Talk about the flat surfaces on prisms and cylinders and describe them according to whether they are circular, square, rectangular or triangular Name and group the geometric objects above. Use toothpicks, straws, or rolled paper to make a pyramid. Work is consolidated through written exercises.	**Range of objects** Recognise and name 3-D objects in the classroom and in pictures • ball shapes (spheres) • box shapes (prisms) • cylinders • pyramids • cones **Features of objects** Describe, sort and compare 3-D objects in terms of: • 2-D shapes that make up the faces of 3-D objects • flat or curved surfaces **Suggested focus and sequencing of activities for Term 4** Work is consolidated through written exercises.

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
3.3 **2-D shapes**	**Range of shapes** • Circles • Triangles • Squares • Rectangles **Features of shapes** Describe, sort and compare 2-D shapes in terms of: • shape • straight sides • round sides **Suggested focus of activities for Term 1** Name and group shapes. Focus on the kind of sides that each shape has. Distinguish shapes by talking about whether their sides are round or straight. Draw circles, squares, rectangles and triangles. Work is consolidated through written exercises.		**Range of shapes** • Circles • Triangles • Squares • Rectangles **Features of shapes** Describe, sort and compare 2-D shapes in terms of: • shape • straight sides • round sides **Suggested focus of activities for Term 3** Name them and group shapes. Focus on the kind of sides that each shape has. Distinguish shapes by talking about whether their sides are round or straight. Draw circles, squares, rectangles and triangles. Work is consolidated through written exercises.	
3.4 **Symmetry**		**Symmetry** Determine line of symmetry through paper folding and reflection **Suggested focus of Term 2** Paper folding activities that develop an understanding of symmetry include: • activities in which wet paint is placed on the page before folding • activities in which paper is cut or torn from the fold line		**Symmetry** Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes **Suggested focus of Term 4** Written exercises should include examples where • the line of symmetry is not always a vertical line • there is more than one line of symmetry in the shape or object

GRADE 3 OVERVIEW 4. MEASUREMENT				
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
4.1 **Time**	**Telling the time** • Read dates on calendars • Place birthdays, religious festivals, public holidays, historical events, school events on a calendar • Tell 12-hour time in - hours - half hours - quarter hours - minutes on analogue clocks and digital clocks and other digital instruments that show time e.g. cell phones	**Telling the time** • Read dates on calendars • Place birthdays, religious festivals, public holidays, historical events, school events on a calendar • Tell 12-hour time in - hours - half hours - quarter hours - minutes on analogue clocks and digital clocks and other digital instruments that show time e.g. cell phones **Calculate length of time and passing of time** Use calendars to calculate and describe lengths of time in days or weeks or months • Use clocks to calculate length of time in hours or half hours	**Telling the time** • Read dates on calendars • Place birthdays, religious festivals, public holidays, historical events, school events on a calendar • Tell 12-hour time in - hours - half hours - quarter hours - minutes on analogue clocks and digital clocks and other digital instruments that show time e.g. cell phones **Calculate length of time and passing of time** Use calendars to calculate and describe lengths of time in days or weeks or months including • converting between days and weeks • converting between weeks and months Use clocks to calculate length of time in hours, half hours and quarter hours	**Telling the time** • · Read dates on calendars • · Place birthdays, religious festivals, public holidays, historical events, school events on a calendar • Tell 12-hour time in - hours - half hours - quarter hours - minutes on analogue clocks and digital clocks and other digital instruments that show time e.g. cell phones **Calculate length of time and passing of time** Use calendars to calculate and describe lengths of time in days or weeks or months including • converting between days and weeks • converting between weeks and months • Use clocks to calculate length of time in hours, half hours and quarter hours

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
4.2 **Length**		**Informal measuring** • Estimate, measure, compare, order and record length using non-standard measures e.g. hand spans, paces, pencil lengths, counters, etc. • Describe the length of objects by counting and stating the length in informal units • Use language to talk about the comparison e.g. longer, shorter, taller, wider **Introducing formal measuring** • Estimate, measure, order and record length using metres (either metre sticks or metre lengths of string) as the standard unit of length • Estimate and measure lengths in centimetres using a ruler (No conversions between metres and centimetres required)	**Introducing formal measuring** • Estimate, measure, compare, order and record length using metres (either metre sticks or metre lengths of string) as the standard unit of length • Estimate, measure and record lengths in centimetres using a ruler	

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
4.3 **Mass**		**Informal measuring** • Estimate, measure, compare, order and record mass using a balancing scale and non-standard measures e.g. blocks, bricks, etc. • Use language to talk about the comparison e.g. light, heavy, lighter, heavier **Introducing formal measuring** • Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms e.g. 2 kilograms of rice and 1 kilogram of flour or in grams, e.g. 500 grams of salt • Where bathroom scales are available, learners can measure their own mass in kilograms using a bathroom scale. The expectation is that learners only read to the nearest numbered gradation line. They describe their mass as almost/ nearly/close to/a bit more than/more or less/or exactly the number (of kilograms) they read off the scale • Where balancing scales with mass pieces calibrated in grams are available, learners can measure mass or different objects (No conversions between grams and kilograms required)		**Introducing formal measuring** Learners do written tasks to consolidate the following, including reading pictures of • products with mass written on them • bathroom scales where the needle points to numbered gradation lines

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
4.4 **Capacity/ Volume**	**Informal measuring** • Estimate, measure, compare and order the capacity of containers (i.e. the amount the container can hold if filled) by using non-standard measures e.g. spoons and cups • Describe the capacity of the container by counting and stating how many of the informal units it takes to fill the container e.g. the bottle has the capacity of four cups **Introducing formal measuring** • Estimate, measure, compare, order and record the capacity of objects by measuring in litres, half litres and quarter litres - using bottles with a capacity of 1 litre, or containers whose capacity is stated in millilitres e.g. cool drink cans - measuring jugs in which numbered calibration lines show litres, half litres and quarter litres - measuring jugs which have numbered calibration lines for millilitres - measuring cups and teaspoons which indicate their capacity • Compare, order and record the capacity of commercially packaged objects whose capacity is stated in litres e.g. 2 litres of milk, 1 litre of cool drink, 5 litres of paint, or in millilitres e.g. 500 ml of milk, 340 millilitres of cool drink, 750 millilitres of oil • Know that a standard cup is 250 millilitres • Know that a teaspoon is 5 millilitres (No conversions between millilitres and litres required)			**Introducing formal measuring** Written tasks to consolidate the following, including reading pictures of • products with their capacity written on them in order to sequence in order • jugs where the volume is near to a numbered 1 litre or 2 litre gradation line or half litre or quarter litre • jugs where the volume is near to a numbered millilitres gradation line. The expectation is that learners only read to the nearest numbered gradation line. They describe their volume as almost/nearly/ close to/ a bit more than/ more or less/ or exactly the number (of litres) they read off the jug (No conversions between millilitres and litres required)

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
4.5 **Perimeter**			**Perimeter** Investigate the distance around 2-D shapes and 3-D objects using direct comparison or informal units.	
4.6 **Area**				**Area** Investigate the area using tiling.

GRADE 3 OVERVIEW 5. DATA HANDLING				
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
5.4 **Collect and organise data** **5.5** **Represent data** **5.6** **Analyse and Interpret data**	**Recommended:** Whole data cycle to make bar graph. Collect data about the class or school to answer questions posed by the teacher. Use tallies to record data in categories provided. Represent data in • Tables • Bar graphs Talk about and **answer** questions about data in tables and bar graphs.	Analyse data from representations provided. **Recommended** • At least one pictograph with one-to-one correspondence • At least one bar graph	**Recommended:** Re-organise data provided in a list or tally or table in a bar graph. Represent data on bar graph. Answer questions about data on bar graph	Analyse data from representations provided. **Recommended** • At least one pictograph with one-to-one correspondence • At least one bar graph