3.4.1 Grade 1 overview per term

GRADE 1 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**	**Count out concrete objects to 10** **Give a reasonable estimate of a number of objects that can be checked by counting.**	**Count out objects reliably to 20** **Give a reasonable estimate of a number of objects that can be checked by counting.** **Counting by grouping is encouraged**	**Count out objects reliably to 40** **Give a reasonable estimate of a number of objects that can be checked by counting.** **Counting by grouping is encouraged**	**Count out objects reliably to 50** **Give a reasonable estimate of a number of objects that can be checked by counting** **Counting by grouping is encouraged.**
1.2 **Count forwards and backwards**	**Count forwards and backwards in:** • Ones from any number between 1 and 20	**Count forwards and backwards in** • Ones from any number between 0 and 50 **Count forwards in** • 10s from any multiple of 10 between 0 and 50 • 5s from any multiple of 5 between 0 and 50 • 2s from any multiple of 2 between 0 and 20	**Count forwards and backwards in** • Ones from any number between 0 and 80 **Count forwards in** • 10s from any multiple of 10 between 0 and 80 • 5s from any multiple of 5 between 0 and 80 • 2s from any multiple of 2 between 0 and 80	**Count forwards and backwards in** • Ones1s from any number between 0 and 100 **Count forwards in** • 10s from any multiple of 10 between 0 and 100 • 5s from any multiple of 5 between 0 and 100 • 2s from any multiple of 2 between 0 and 100
NUMBER CONCEPT DEVELOPMENT: Represent whole numbers				
1.3 **Number symbols and number names**	**Recognise, identify and read numbers** • Recognise, identify and read number symbols 1 to 20 • Write number symbols 1 to 5 • Recognise, identify and read number names 1 to 5 • Write number names 1 to 5	**Recognise, identify and read numbers** • Recognise, identify and read number symbols 1 to 50 • Write number symbols 1 to10 • Recognise, identify and read number names 1 to 10 • Write number names 1 to 10	**Recognise, identify and read numbers** • Recognise, identify and read number symbols 1 to 80 • Write number symbols 1 to 20 • Recognise, identify and read number names 1 to 10 • Write number names 1 to 10	**Recognise, identify and read numbers** • Recognise, identify and read number symbols 1 to 100 • Write number symbols 1 to 20 • Recognise, identify and read number names 1 to 10 • Write number names 1 to 10

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
NUMBER CONCEPT DEVELOPMENT: Describe, compare and order whole numbers				

1.4
 	
Describe, compare and order numbers
	Describe, compare and order up to 5 objects
	
	• Compare collection of objects according to many, few; most, least; more than, less than; the same as, just as many as, different
	
	• Order collection of objects from most to least and least to most
	
	Describe, compare and order numbers to 5
	
	• Describe and compare whole numbers according to smaller than, greater than, more than, "less than, is equal to
	
	• Describe and order numbers:
	
	  - from smallest to greatest and greatest to smallest
	
	  - using the number line 1 - 5
		Describe, compare and order up to 10 objects
		
		• Compare collection of objects according to many, few; most, least; more than, less than; the same as, just as many as, different
		
		• Order collection of objects from most to least and least to most
		
		Describe, compare and order numbers to 10
		
		• Describe and compare whole numbers according to smaller than, greater than, more than, "less than, is equal to
		
		• Describe and order numbers:
		
		  - from smallest to greatest and greatest to smallest
		
		  - before, after, in the middle/ between
		
		  - using the number line 0 - 10
			Describe, compare and order up to 15 objects
			
			• Compare collection of objects according to many, few; most, least; more than, less than; the same as, just as many as, different
			
			• Order collection of objects from most to least and least to most
			
			Describe, compare and order numbers to 15
			
			• Describe and compare whole numbers according to smaller than, greater than, more than, "less than, is equal to
			
			• Describe and order numbers:
			
			  - from smallest to greatest and greatest to smallest
			
			  - before, after, in the middle/ between
			
			  - using the number line 0 - 15
				Describe, compare and order up to 20 objects
				
				• Compare collection of objects according to many, few; most, least; more than, less than; the same as, just as many as, different
				
				• Order collection of objects from most to least and least to most
				
				Describe, compare and order numbers to 20
				
				• Describe and compare whole numbers according to smaller than, greater than, more than, "less than, is equal to
				
				• Describe and order numbers:
				
				  - from smallest to greatest and greatest to smallest
				
				  - before, after, in the middle/ between
				
				  - using the number line 0 - 20
				
				Use ordinal numbers to show order, place or position
				
				• Position objects in a line from first to tenth or first to last e.g. first, second, third … tenth, last
				
				• Ordinal numbers in the range first to tenth

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
NUMBER CONCEPT DEVELOPMENT: Place value				
1.5 **Place value**			Recognise the place value of numbers 11 to 15 • Decompose two-digit numbers into ten and ones e.g. 12 is 10 and 2	Recognise the place value of numbers 11 to 19. • Decompose two-digit numbers into ten and ones e.g. 18 is 10 and 8
SOLVE PROBLEMS IN CONTEXT				
1.6 **Problem-solving techniques**	Use the following techniques when solving problems and explain solutions to problems: • concrete apparatus e.g. counters • pictures to draw the story sum • number lines supported by concrete apparatus e.g. counting beads	Use the following techniques when solving problems and explain solutions to problems: • concrete apparatus e.g. counters • pictures to draw the story sum • building up and breaking down numbers • doubling and halving • number lines supported by concrete apparatus e.g. counting beads	Use the following techniques when solving problems and explain solutions to problems: • concrete apparatus e.g. counters • pictures to draw the story sum • building up and breaking down numbers • doubling and halving • number lines supported by concrete apparatus e.g. counting beads	Use the following techniques when solving problems and explain solutions to problems: • concrete apparatus e.g. counters • pictures to draw the story sum • building up and breaking down numbers • doubling and halving • number lines supported by concrete apparatus e.g. counting beads
1.7 **Addition and subtraction**	Practically solve word problems in context and explain own solution to problems involving addition, subtraction with answers up to 5.	Solve word problems in context and explain own solution to problems involving addition, subtraction with answers up to 10.	Solve word problems in context and explain own solution to problems involving addition, subtraction with answers up to 15.	Solve word problems in context and explain own solution to problems involving addition, subtraction with answers up to 20**.**
1.8 **Repeated addition leading to multiplication**		Solve word problems in context and explain own solution to problems involving repeated addition with answers up to 10.	Solve word problems in context and explain own solution to problems involving repeated addition with answers up to 15.	Solve word problems in context and explain own solution to problems involving repeated addition with answers up to 20.
1.9 **Grouping and sharing leading to division**	Practically solve word problems in context and explain own solutions to problems involving equal sharing and grouping with whole numbers up to 5 and with answers that may include remainders.	Solve word problems in context and explain own solutions to problems involving equal sharing and grouping with whole numbers up to 10 and with answers that may include remainders	Solve word problems in context and explain own solutions to problems involving equal sharing and grouping with whole numbers up to 15 and with answers that may include remainders	Solve word problems in context and explain own solutions to problems involving equal sharing and grouping with whole numbers up to 20 and with answers that may include remainders.

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
1.11 **Money**		• Recognise and identify the South African currency coins 5c, 10c, 20, 50c, R1, R2; R5 • Solve money problems involving totals and change to R10 and in cents up to 20c	• Recognise and identify the South African currency coins 5c, 10c, 20, 50c, R1, R2; R5 • Solve money problems involving totals and change to R20 and in cents up to 20c.	• Recognise and identify the South African currency - coins 5c, 10c, 20, 50c, R1, R2; R5 notes R10 and R20 • Solve money problems involving totals and change to R20 and in cents up to 20c
CONTEXT-FREE CALCULATIONS				
1.12 **Techniques** **(methods or strategies)**	Use the following techniques when performing calculations: • concrete apparatus e.g. counters • draw pictures • number lines supported by concrete apparatus e.g. counting beads	Use the following techniques when performing calculations: • concrete apparatus e.g. counters • draw pictures • building up and breaking down numbers • doubling and halving • number lines supported by concrete apparatus e.g. counting beads	Use the following techniques when performing calculations: • concrete apparatus e.g. counters • draw pictures • building up and breaking down numbers • doubling and halving • number lines supported by concrete apparatus e.g. counting beads	Use the following techniques when performing calculations: • concrete apparatus e.g. counters • draw pictures • building up and breaking down numbers • doubling and halving • number lines supported by concrete apparatus e.g. counting beads
1.13 **Addition and subtraction**	**Number range: 1 - 5** • Addition up to 5 • Subtract from 5 • Practise number bonds to 5	**Number range: 1 - 10** • Add up to 10 • Subtract from 10 • Use appropriate symbols (+, −, =, □) • Practise number bonds to 7	**Number range: 1 - 15** • Add to 15 • Subtract from 15 • Use appropriate symbols (+, −, =, □) • Practise number bonds to 9	**Number range: 1 - 20** • Add to 20 • Subtract from 20 • Use appropriate symbols (+, −, =, □) • ·Practise number bonds to 10
1.14 **Repeated addition leading to multiplication**		• Repeated addition(i.e. the same number) to 10 • Use appropriate symbols (+, =, □)	• Repeated addition(i.e. the same number) to 15 • Use appropriate symbols (+, =, □)	• Repeated addition (i.e. the same number) to 20 • Use appropriate symbols (+, =, □)

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
1.16 **Mental mathematics**	**Number concept: Range 5** • Order a given set of selected numbers. • Compare numbers up to 5 and say which is and more or less	**Number concept: Range 10** • Order a given set of selected numbers. • Compare numbers up to 10 and say which is and more or less	**Number concept: Range 15** • Order a given set of selected numbers. • Compare numbers up to 15 and say which is and more or less **Rapidly recall:** • Number bonds to 5 • Recall addition and subtraction facts to 5 **Calculation strategies** Use calculation strategies to add and subtract efficiently: • Put the larger number first in order to count on or count back • Number line • Doubling and halving • Building up and breaking down	**Number concept: range 20** • Order a given set of selected numbers. • Compare numbers up to 20 and say which is and more or less **Rapidly recall:** • Number bonds to 10 • Recall addition and subtraction facts to 10 **Calculation mental strategies** Use calculation strategies to add and subtract efficiently: • Put the larger number first in order to count on or count back • Number line • Doubling and halving • Building up and breaking down

Problem Types for Grade 1

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

Stella sells apples in bags of three apples each. She has 14 apples. How many bags of three apples each can she make up?

Grouping, incorporating the remainder in the answer

Ben wants to take 15 eggs to his grandmother. How many egg boxes that can take six eggs each does he need to pack all the eggs?

Sharing

Sharing, discarding the remainder

Share 14 sweets among three friends so that they all get the same number of sweets.

Repeated addition

How many wheels do four bicycles have?

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 had five apples. Silo gave her eight apples. How many apples does she have now?

Noluthando had 13 apples. She gave five apples to Silo. How many apples does she have now?

Combine

Nosisi has five green and eight blue marbles. How many marbles does she have?

Nosisi has 13 marbles. Five are green and the rest are blue. How many blue marbles does Nosisi have?

Compare

Nosisi has 13 bananas. Themba has five bananas. How many more bananas does Nosisi have than Themba?

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.

Noluthando had some apples. Silo gave her eight more apples. Now she has 13 apples. How many apples did Noluthando have in the beginning?

Noluthando had five apples. Silo gave her some apples. She now has 13 apples. How many apples did Silo give her?

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	6	7
Cost in R	4	8					

Use the table to find the cost of seven hotdogs

These 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.

	GRADE 1 OVERVIEW			
	2. PATTERNS, FUNCTIONS AND ALGEBRA			
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**

2.1
 	
Geometric patterns
	Copy and extend
	
	Copy and extend simple patterns using
	
	• physical objects;
	
	• drawings (e.g. using colours and shapes)
	
	Suggested sequencing of work
	
	Start copying and extending patterns using physical objects and once learners are comfortable with using a crayon or pencil, start copying and extending patterns by drawing them
		Copy, extend and describe
		
		Copy, extend and describe in words
		
		• simple patterns made with physical objects
		
		• simple patterns made by drawings lines, shapes or objects
		
		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 by drawings lines, shapes or objects
			
			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
				
				Create and describe own patterns
				
				• Create own geometric patterns
				
				   - with physical objects
				
				   - by drawing lines, shapes or objects
				
				• Describe own patterns

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
2.2 **Number patterns**	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 20. Sequence should show counting forwards and backwards in: • ones from any number between 1 and 20	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 50. Sequences should show counting forwards and backwards in: • 1s from any number between 1 and 50 **Counting forwards in:** • 10s from any multiple of 10 between 0 and 50 • 5s from any multiple of 5 between 0 and 50 • 2s from any multiple of 2 between 0 and 50 **Create and describe own patterns** • Create and describe own number patterns	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 80. Sequences should show counting forwards and backwards in: • 1s from any number between 1 and 80 **Counting forwards in:** • 10s from any multiple of 10 between 0 and 80 • 5s from any multiple of 5 between 0 and 80 • 2s from any multiple of 2 between 0 and 80 **Create and describe own patterns** • Create and describe own number patterns	**Copy, extend and describe** Copy, extend and describe simple number sequences to at least 100. Sequences should show counting forwards and backwards in: • 1s from any number between 1 and 100 **Counting forwards in:** • 10s from any multiple of 10 between 0 and 100 • 5s from any multiple of 5 between 0 and 100 • 2s from any multiple of 2 between 0 and 100 **Create and describe own patterns** • Create and describe own number patterns

	GRADE 1 OVERVIEW			
	3. SPACE AND SHAPE (GEOMETRY)			
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
3.1 **Position, orientation and views**	**Language of position** Describe the position of one object in relation to another e.g. on top of, in front of, behind, left, right, up, down, next to. **Position and directions** • Follow directions to move around the classroom • Follow instructions to place one object in relation to another e.g. put the pencil inside the box **Suggested focus sequencing of work for Term 1** • Language of position should be introduced through practical activities that involve learners in physical movement • This can be consolidated through written recording such as drawing, colouring or matching drawings with words • Apply the language of position learnt when following directions • Directions should be practised through practical activities in which learners move themselves or objects according to instructions			**Language of position** Describe the position of one object in relation to another e.g. on top of, in front of, behind, left, right, up, down, next to. **Position and directions** • Follow directions to move around the classroom • Follow instructions to place one object in relation to another e.g. put the pencil inside the box **Suggested focus and sequencing of work for Term 4** • Work on position and direction can be consolidated through written recording such as drawing, colouring or matching drawings with words • Any new language of position should be introduced through practical activities that involve learners in physical movement • Directions should be practised through practical activities in which learners move themselves or objects according to instructions **Position and views** • Match different views of the same everyday object

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) **Features of objects** Describe, sort and compare 3-D objects in terms of: • size • colour **Focused activities** Observe and build given 3-D objects using concrete materials such as building blocks, recycling material, construction kits **Suggested focus and sequencing of activities for Term 1** • Free play with various 3-D objects. Building things of own choice using building blocks, construction kits or recycling material. This can be done in independent time • Copy a model of something the teacher provides. This can be done in independent time • Compare the size of similar objects e.g. say which ball is larger • Talk about the colours of objects and then sort objects according to colour • Identify and describe geometric and everyday objects by saying whether are shaped like a ball or they are shaped like a box • 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) **Features of objects** Describe, sort and compare 3-D objects in terms of: • size • colour • objects that roll • objects that slide **Suggested focus and sequencing of activities for Term 3** • Work with balls and objects shaped like balls, and various boxes and other objects shaped like rectangular prisms or cubes. Investigate which of the objects can roll, which slide, which can be stacked. • Identify and describe geometric and everyday objects by saying whether they are shaped like a ball or like a box • 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) **Features of objects** Describe, sort and compare 3-D objects in terms of: • size • colour • objects that roll • objects that slide **Suggested focus 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** Recognise and name 2-D shapes • circles • triangles • squares **Features of shapes** Describe, sort and compare 2-D shapes in terms of: • size • colour • straight sides • round sides **Suggested focus and sequencing of activities for Term 2** • Start with free play with various shapes including making pictures with cut-out geometric shapes. This can be done in independent time. This can also be done during Life Skills lessons • Copy a picture made up of geometric shapes. This can be done in independent time • Compare the size of similar objects e.g. order squares from smallest to greatest and use the language of size to describe shapes • Talk about the colours of shapes and then sort shapes according to colour • Work with circles and squares of different sizes, and triangles with different shapes. Sort them according to whether they have straight or round sides • Sort and group shapes according to whether they are triangles, squares or circles • Work is consolidated through written exercises		**Range of Shapes** Recognise and name 2-D shapes • circles • triangles • squares **Features of shapes** Describe, sort and compare 2-D shapes in terms of: • size • colour • straight sides • round sides **Suggested focus and sequencing of activities for Term 4** • Work with circles and squares of different sizes and different kinds of triangles. Sort the shapes according to whether they have straight or round sides • Sort and group shapes according to whether they are triangles, squares, rectangles or circles • Work is consolidated through written exercises

TOPICS	TERM 1	TERM 2	TERM 3	TERM 4
3.4 **Symmetry**			**Symmetry** • Recognise symmetry in own body. • Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes. **Suggested focus of activities for Term 3** • Look for lines of symmetry in concrete objects and pictures. • Written exercises should not only be "draw in the other half" but also include examples where learners draw in the line of symmetry.	**Symmetry** • Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes **Suggested focus of activities for Term 4** • Written exercises should include examples where the line of symmetry is not only a vertical line

	GRADE 1 OVERVIEW			
	4. MEASUREMENT			
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
4.1 **Time**	**Passing of time** Talk about passing of time • Order regular events from their own lives • Compare lengths of time using language e.g. longer, shorter, faster, slower • Sequence events using language such as yesterday, today, tomorrow **Telling the time** • Describe when something happens using language e.g. morning, afternoon, night, early, late • Name and sequence days of week and months of year • Place birthdays on a calendar	Time is dealt with continuously during whole class teaching time.	Time is dealt with continuously during whole class teaching time.	Time is dealt with continuously during whole class teaching time.
4.2 **Length**	**Informal measuring** • Compare and order the length, height or width of two or more objects by placing them next to each other • Use language to talk about the comparison e.g. longer, shorter, taller, wider • Estimate, measure, compare, order and record length using non-standard measures e.g. hand spans, paces, pencil lengths, counters, etc.		**Informal measuring** • Estimate, measure, compare, order and record length using non-standard measures e.g. hand spans, paces, pencil lengths, counters, etc.	

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			**Informal measuring** • Estimate, measure, compare, order and record mass using non-standard measures and a balancing scale e.g. blocks, bricks, etc. • Use language to talk about the comparison e.g. light, heavy, lighter, heavier
4.4 **Capacity/ Volume**	**Informal measuring** • Compare and order the amount of liquid (volume) in two containers placed next to each other. Learners check by pouring into a third container if necessary	**Informal measuring** • Compare and order the amount of liquid that two containers can hold if filled (capacity) • Use language to talk about the comparison e.g. more than, less than, full, empty • Estimate, measure, compare, order and record the capacity of containers by using non-standard measures e.g. spoons and cups		**Informal measuring** • Estimate, measure, compare, order and record the capacity of containers by using non-standard measures e.g. spoons and cups

	GRADE 1 OVERVIEW			
	5. DATA HANDLING			
TOPICS	**TERM 1**	**TERM 2**	**TERM 3**	**TERM 4**
5.1 **Collect and sort objects** **5.2** **Represent sorted collection of objects** **5.3** **Discuss and report on sorted collection of objects**	Collect and sort everyday physical objects. Draw a picture of the sorted objects. • Give reasons for how the collection was sorted Answer questions about: - how the sorting was done (process) - what the sorted collection looks like (product) • Describe the sorted collection	Collect and sort everyday physical objects. Draw a picture of the sorted objects. • Give reasons for how the collection was sorted Answer questions about; - how the sorting was done (process) - what the sorted collection looks like (product) • Describe the sorted collection		
5.4 **Collect and organise data** **5.5** **Represent data** **5.6** **Analyse and Interpret data**			**Recommended:** Whole data cycle to make class pictograph • Collect and organise data - about the class or school - answers to questions posed by the teacher • Represent data in pictograph. • Answer questions about data in pictograph	Analyse data from representations provided. Recommended: At least two pictographs