



Province of the  
**EASTERN CAPE**  
DEPARTMENT OF EDUCATION

**GRADE 1**

**NUMERACY**

**PROVINCIAL LESSON PLANS**

**TERM 3**

**2009**

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## Introduction

This Resource Pack on Lesson Plans for **Grade 1 teachers** were developed by the Provincial Curriculum Advisors and Foundation Phase teachers.

The **Provincial Numeracy Learner Attainment Targets** documents were developed in 2008 by a Provincial Task Team for Grades R – 3. The attainment targets have been developed using the NCS Learning Outcomes and Assessment Standards from the Mathematics Learning Area. These targets indicate the expected level of achievement of learners at the end of each term. The attainment targets have a similar meaning to the ‘milestones’ in the Foundations for Learning Assessment Framework. The milestones have been infused into the Numeracy Learner Attainment Targets.

**Teachers should use the weekly lesson plans in conjunction with the Provincial Numeracy Learner Attainment Targets.** The Formal Assessment Tasks referred to as **FAT 1, 2 and 3** are clearly described in Section 3 of the Grade 1 Provincial Numeracy Learner Attainment Targets with the Methods, Forms and Tools for assessment.

The weekly lesson plans have been developed using:

- The Numeracy Learner Attainment Targets as a starting point.
- The NCS Learning Outcomes and Assessment Standards.
- Government Gazette 30880 of 14 March 2008, which outlines the Foundations for Learning Campaign, details the minimum expectations for the teaching of Literacy and Numeracy as well as providing timetabling and resourcing suggestions.
- Foundations for Learning: Foundation Phase Numeracy Lesson Plans.

The weekly lesson plans are intended to assist teachers to pace their teaching, give them guidance when planning their assessment tasks and provide suggestions to enrich teaching practice. If you follow these lessons systematically you will cover the curriculum and reach the milestones for Grade 1

**They are not intended to be prescriptive and teachers are not expected to abandon good practice in order to blindly follow the plans.**

**The weekly lesson plans provide:**

- An Annual Learning Programme Overview
- The Learning Outcomes and Assessment Standards targeted for every week.
- Weekly lesson plans with recommended number ranges for the third term.
- The NCS Learning Outcomes and Assessment Standards from the Mathematics Learning Area.
- A series of activities for the different components of Numeracy.
- Exemplars of the Formal Assessment Tasks for the third term. These Tasks are indicated as **FAT 1, 2 and 3**.
- Resources that will be useful to the teacher.
- Space for Reflection and recording of Barriers to Learning on a weekly basis.

The Provincial Weekly Lesson Plans in conjunction with the Provincial Learner Attainment Targets can therefore be used as clearly defined Lesson Plans although the format is different to the one most teachers are used to. It is recommended that the teacher breaks down the weekly plans into daily plans. However the plans are not prescriptive and allow you to use your own way of presenting the lessons.

## ADAPTING THE WEEKLY LESSON PLANS

Learners progress at different rates and learn in different ways, and you, as the class teacher, are best able to pace teaching and learning to the needs of the learners. Teachers are free to introduce their own sequence and adapt the number ranges where necessary.

**ANNUAL LEARNING PROGRAMME OVERVIEW: NUMERACY GRADE 1**

	TERM 1	TERM 2	TERM 3	TERM 4
<b>LEARNING OUTCOMES &amp; ASSESSMENT STANDARDS</b>	LO 1: AS 1; 2.1 LO 2: AS 2; LO 1: AS 3; 4; 9.1 LO 2: AS 2 LO 4: AS 5 LO 1: AS 2.1; 3; 4; 6; 7.1; 8; 9.1; 9.2 LO 2: AS 2; 3; 4 LO 3: AS 1; LO 5: AS 1; 2; 4; 5; 6	LO 1: AS 2.1; 2.2 LO 2: AS 2 LO 1: AS 3; 4; 7.2; 8; 9.1 LO 2: AS 1; 2; 4 LO 4: AS 5 LO 1: AS 2.1; 2.2; 3; 4; 5; 6; 7.1; 8; 9.1; 9.2 LO 2: AS 2; 3 LO 3: AS 1 LO 5: AS 1; 2; 4; 5; 6	LO 1: AS 2.1; 2.2 LO 2: AS 2 LO 3: AS 1; 4 LO 4: AS 5 LO 1: AS 3; 4; 7.2; 8; 9.1 LO 2: AS 2 LO 1: AS 2.1; 2.2; 3; 4; 5; 6; 7.1; 8; 9.1; 9.2 LO 2: AS 2; 3; 4 LO 5: AS 1; 2; 4; 5; 6	LO 1: AS 2.1; 2.2 LO 2: AS 2 LO 3: AS 1 LO 1: AS 3; 4; 7.2; 8; 9.1 LO 2: AS 2 LO 4: AS 5 LO 1: AS 2.1; 2.2; 3; 4; 5; 6; 7.1; 8; 9.1; 9.2 LO 2: AS 2; 3; 4 LO 5: AS 1; 2; 4; 5; 6
<b>TARGETS</b>	Count physical objects from 1 – 10 Count forwards and backwards in ones from 1- 20 Count forwards and backwards starting at any number (0-20) Recognise number symbols 1 – 20 Number Names from 1-5 Order whole numbers: ascending and descending order (0-10) Describe position of numbers: before, after, between (0-10) Compare numbers: more, less, biggest, smallest (0-10) Money problems (0-5) Solve and explain practical problems involving equal sharing & grouping with or without concrete left over Addition and subtraction in range 0-5 using concrete apparatus, drawings, etc. Estimate answers to addition and subtraction problems Mental calculations (+ and -) in the range 0-5 Build up numbers 1-5 Break down numbers 1-5 Double numbers 1 and 2 Halve numbers 2 and 4 Learners explain and check each	Count physical objects from 0-20 Count forwards and backwards in 1's in the range 0-40 Count forwards and backwards in 10's in the range 0-40 Read number symbols 0-40 Write number names 1-10 Order, describe compare numbers 0-20 Describe the position of numbers: before/after/between (0-20) Compare numbers: more/less Solve money problems: + & - Solve word problems in money Equal sharing and grouping with and without remainders in the range 0-10 Addition and subtraction (0-10) Repeated addition (0-10) Estimate answers to addition and subtraction problems (0-10) Mental calculations (+ and -) in the range 0-5 Break down numbers 1-10 Build up numbers 1-10 Double numbers 1-5 Halve even numbers 1-10 Learners explain and check each others' solutions to problems (Integrate with all number work) Copy and extend patterns with drawings	Count physical objects 0-34 Count forwards and backwards in 1's in the range 0-60 Count forwards and backwards in 10's in the range 0-60 Recognise number symbols 0-60 Write number names 1-20 Ascending and descending order 0-34 Describe position of numbers: before/after/ between (0-34) Compare numbers: more/less etc. 0-34 Solve money problems: 0-20 Addition and subtraction with money Solve word problems involving money Solve and explain practical problems involving equal sharing and grouping 0-20 with and without concrete remainders Building up the whole ten when adding and subtracting 0-20 Addition and subtraction 0-20 Repeated addition 0-20 Estimate answers to addition and subtraction 0-20 Mental calculations (+ and -) in the range 0-7 Break down numbers 1-20 Build up numbers 1-20	Count physical objects 0-34 Count forwards and backwards in 1's in the range 0-100 Count forwards and backwards in 10's in the range 0-100 Recognise number symbols 0-100 Write number names 1-34 Ascending and descending order 0-34 Describe position of numbers: before/after/ between (0-34) Compare numbers: more/less etc. 0-34 Solve money problems: 0-34 Addition and subtraction with money Solve word problems involving money Solve and explain practical problems involving equal sharing and grouping 0-34 with and without concrete remainders Building up the whole ten when adding and subtracting 0-34 Addition and subtraction 0-34 Repeated addition 0-34 Estimate answers to addition and subtraction 0-34 Mental calculations (+ and -) in the range 0-10 Break down numbers 1-34

	TERM 1	TERM 2	TERM 3	TERM 4
TARGETS	<p>others' solutions to problems (Integrate with all number work)</p> <p>Extend given patterns using concrete objects</p> <p>Copy and extend simple number sequences (0-20)</p> <p>Identify familiar geometrical patterns in objects and pictures</p> <p>Recognize, identify and name 2-D shapes</p> <p>Describe, sort and compare 2-D shapes</p> <p>Observe and build freely with re-usable waste material</p> <p>Recognise symmetry and non-symmetry in self</p> <p>Describe the position of one 3-D object in relation to another</p> <p>Follow directions according to instructions</p> <p>Describe different times of the day</p> <p>Identify birthday months on the calendar</p> <p>Estimate, measure, compare and order the lengths of different objects using body parts</p> <p>Collect and sort objects according to colour</p> <p>Give reasons for grouping and draw a picture of collected objects</p> <p>Construct pictographs</p> <p>Describe, explain and answer questions about the grouping</p>	<p>Copy and complete number sequences in the range 0-40</p> <p>Draw own pattern</p> <p>Describe familiar geometrical patterns</p> <p>Recognize, name and identify 2D-shapes</p> <p>Compare 2-D shapes according to size</p> <p>Observe and build a model using re-usable waste material</p> <p>Identify symmetry in objects or drawings</p> <p>Describe the position of an object in relation to another in a picture</p> <p>Place self in different positions in relation to an object</p> <p>Describe different times of the day</p> <p>Compare events according to the length of time</p> <p>Use vocabulary: yesterday/today/tomorrow</p> <p>Estimate and measure the mass of different objects</p> <p>Compare and order objects from heaviest to lightest</p> <p>Collect and sort objects according to sizes</p> <p>Give reasons for grouping and draw a picture of collected objects</p> <p>Construct pictographs</p> <p>Answer questions about the grouping of the objects (most/least/etc)</p>	<p>Double numbers 1-10</p> <p>Halve even numbers 1-20</p> <p>Learners explain and check each others' solutions to problems (Integrate with all number work)</p> <p>Copy and complete number sequences in the range 0-60</p> <p>Create and write own number pattern</p> <p>Copy and describe familiar geometrical patterns</p> <p>Recognize, name and identify 3-D objects in classroom</p> <p>Describe, sort and compare 3-D objects according to size</p> <p>Observe and build a model using re-usable waste material</p> <p>Symmetry: Draw identical left/right images</p> <p>Describe the position of an object in relation to another in a picture</p> <p>Place an object in different positions in relation to self</p> <p>Describe different times of the day</p> <p>Use vocabulary: yesterday/today/tomorrow</p> <p>Estimate and measure the capacity of different containers</p> <p>Compare and order capacity of containers from most to least</p> <p>Collect and sort objects according to shapes</p> <p>Give reasons for grouping and draw a picture of collected objects</p> <p>Construct pictographs</p> <p>Describe, explain and answer questions about the grouping</p>	<p>Build up numbers 1-34</p> <p>Double numbers 1-17</p> <p>Halve even numbers 1-34</p> <p>Learners explain and check each others' solutions to problems (Integrate with all number work)</p> <p>Copy and complete number sequences in the range 0-100</p> <p>Create and write own number pattern</p> <p>Recognize, name and identify 3-D objects in pictures</p> <p>Describe, sort and compare 3-D objects according to objects that roll or objects that slide</p> <p>Observe and build a model using re-usable waste material</p> <p>Symmetry: Draw identical left/right images</p> <p>Describe different times of the day</p> <p>Use vocabulary: yesterday/today/tomorrow</p> <p>Measure and compare the length, mass and capacity of different objects</p> <p>Arrange objects from longest to shortest, heaviest to lightest, most to least</p> <p>Collect and sort objects according to objects that can roll and objects that can slide</p> <p>Give reasons for grouping and draw a picture of collected objects</p> <p>Construct pictographs</p> <p>Describe, explain and answer questions about the grouping</p>

# WEEK 1

<b>LO 1: NUMBERS, OPERATIONS &amp; RELATIONSHIPS</b>
AS 1: Counts to at least 34 everyday objects reliably.
AS 2 : Counts forwards and backwards in: 2.1 ones from any number between 0 and 100; 2.2 tens from any multiple of 10 between 0 and 100.
AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.
AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.
AS 5: Solves money problems involving totals and change in rands and cents.
AS 6: Solves and explains solutions to practical problems that involve equal sharing and grouping with whole numbers to at least 34 and with solutions that include remainders.
AS 7: Can perform calculations, using appropriate symbols, to solve problems involving: 7.1 addition and subtraction with whole numbers and solutions to at least 34 7.2 repeated addition with whole numbers and with solutions to at least 34 7.3 estimation
AS 8: Performs <b>mental calculations</b> involving addition and subtraction for numbers to at least 10.
AS 9: Uses the following techniques: 9.1 building up and breaking down numbers 9.2 doubling and halving 9.3 Using concrete apparatus (e.g. counters) 9.4 Using number-lines
AS 10: Explains own solutions to problems.
AS 11: Checks the solution given to problems by peers.
<b>LO 2: PATTERNS, FUNCTIONS &amp; ALGEBRA</b>
AS 2: Copies and extends simple number sequences to at least 100
AS 3: Creates own patterns.
AS 4: Describes observed patterns
AS 5: Identifies, describes and copies geometric patterns in natural and cultural artifacts of different cultures and times.
<b>LO 3: SPACE AND SHAPE</b>
AS 1: Recognizes, identifies and names two-dimensional shapes and three-dimensional objects in the classroom and in pictures including: Boxes (prisms) and balls (spheres); Triangles and rectangles; Circles
AS 2: Describes, sorts and compares physical two-dimensional shapes and three-dimensional objects according to: size; objects that roll or slide; shapes that have straight or round edges.
AS 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).
AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').
AS 5: Describes one three-dimensional object in relation to another (e.g. 'in front of' or 'behind').
AS 6: Follows directions (alone and/or as a member of a group or team) to move or place self within the classroom or three-dimensional objects in relation to each other.
<b>LO 4: MEASUREMENT</b>
AS 1: Describes the time of day using vocabulary such as 'early', 'late morning', 'afternoon' and 'night'.
AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).
AS 3: Sequences events using language such as 'yesterday', 'today' and 'tomorrow'.
AS 5: Estimates, measures, compares and orders three-dimensional objects using non-standard measures: mass (e.g. bricks, sand bags); capacity (e.g. spoons, cups); length (e.g. hand spans, footsteps)
<b>LO 5: DATA HANDLING</b>
AS 1: Collects everyday objects (alone and/or as a member of a group or team) in the classroom and school environment according to given criteria or categories.
AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).
AS 3: Gives reasons for collections being grouped in particular ways.
AS 4: Draws a picture as a record of collected objects.
AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.
AS 6: Describes own collection of objects, explains how it was sorted, and answers questions about it.

## GRADE 1 LESSON PLAN – TERM 3 WEEK 1

### LO1 NUMBERS, OPERATIONS AND RELATIONSHIPS

- Learners count physical objects using one-to-one correspondence reliably in the number range 0 - 20  
e.g. Counters (bottle tops beans etc.) or body parts (fingers, toes etc.)



4 fingers and



3 fingers. How many altogether?

- Learners count forwards and backwards in ones from any given number in the number range 0 – 45. Learners may use the abacus or counters (concrete apparatus) or the number line and the number grid (semi-concrete)  
e.g. 41, 42, 43,... ;  
45, 44, 43,...
- Learners count in ones from any given number:  
e.g. Count from 22 to 45; Count from 45 back to 10.

- Learners count forwards and backwards in tens from any given number in the number range 0 - 50.
- Learners may use the abacus or counters (concrete apparatus) or the number line and the number grid (semi-concrete) Learners count in tens from a whole ten.  
e.g. 10, 20, 30,.;  
50, 40, 30...

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- The learners read the symbols on number cards, a number grid or a number line 0-50.  
e.g. Place a bottle top on the number **32** on the **number grid**.

31	●	33	34	35	36	37	38	39	40
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- Learners write any number name in the number range one to thirteen  
e.g. **12 twelve**



9	nine
10	
1	
7	
11	
13	

- Learners order whole numbers from 0-20 in an **ascending and descending** order Learners may use a number grid or a number line.

e.g.

(11, 20, 14, 19) → (11, 14, 19, 20) smallest to biggest

(14, 17, 1, 20) → (20, 17, 14, 1) biggest to smallest

- Learners describe the position of numbers 0 – 20 using before, after, between.

e.g.

What comes before 20? What comes after 18?; What comes between 17 and 19?

17	18	19	20
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- Learners compare numbers 0 – 20 using more than, less than, biggest, smallest. Learners may use a number grid or a number line.

e.g. What is one more than 13? What is two less than 15?

Which number is bigger: 16 or 18? Which number is smaller: 13 or 15?

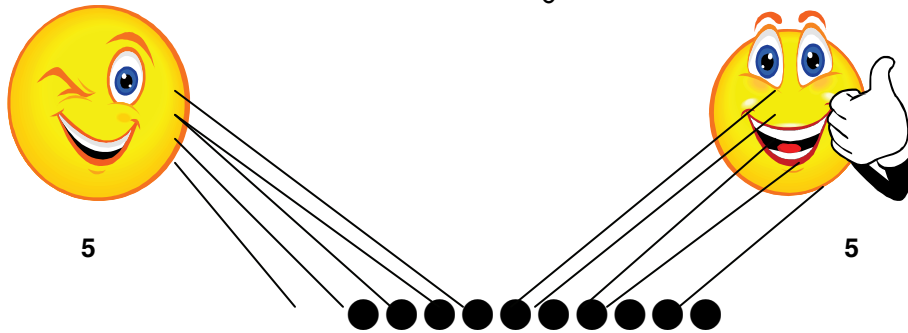
2 more than	
12	
18	
14	
17	

2 less than	
13	
17	
19	
10	

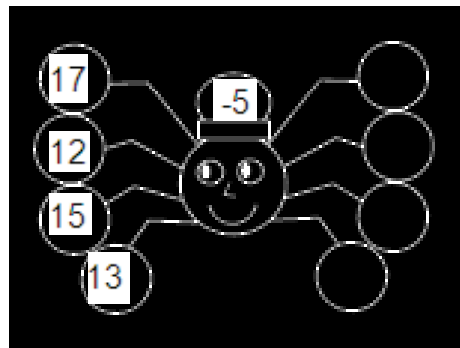
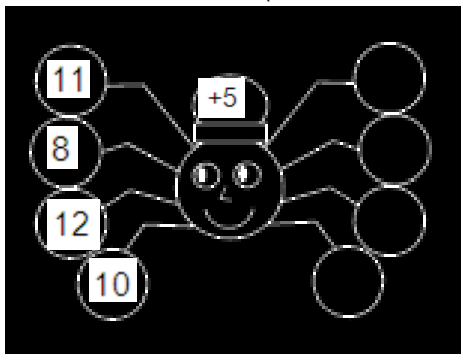
- Learners solve money problems in the range 0-10. Using R1, R2, R5 and 10c, 5c.
- Learners calculate change.
  - Practical group work on mat: Use "play money" to buy sweets and calculate change.
  - Learners choose to buy 2 sweets of differing amounts. They then pack out the "money" e.g. R4 and R2. Teacher asks "How much money did you spend?"
  - Teacher poses a problem: If you had a R10 note, how much change would you get?
  - e.g.  $R10 - R6 = R4$



- Learners solve and explain practical problems involving equal sharing and grouping with and without remainders.
  - e.g. You have 10 marbles if you share them equally with 1 friend, how many will you each have. Children draw to show their working.



- Learners perform addition and subtraction with whole numbers in the range 0-17 using +, - and =. Learners may use counters or the abacus (concrete apparatus), drawings and number lines (semi-concrete apparatus).



- Learners build up the whole ten when adding and subtracting in the range 0-20
  - e.g.  $9+8=9+1+\square$  and  $17-9=17-2-\square$
  - Learners may use an abacus or coloured beads on a string e.g. 10 red & 10 blue beads

- Learners use repeated addition to calculate solutions in the number range 0-16. Learners may use concrete apparatus or drawings.

e.g. How many arms do 7 children have? Draw them and then count.



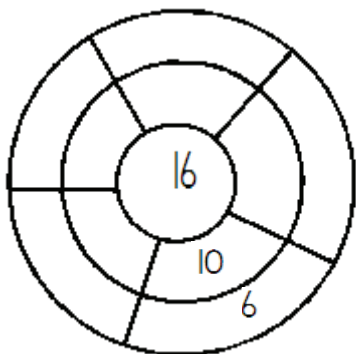
- Learners estimate the answers to addition and subtraction problems in the range 0-16. Learners compare the calculated answer with the estimated answer.

e.g. The teacher poses a problem. There are 10 people on a train. If 4 get off and 2 get on how many people do you think are on the train now? Learners must give a quick estimate. Then calculate the answer. Learners compare the calculated answer with the estimated answer.

- Learners perform **mental calculations** with addition and subtraction with answers to at least 7. The teacher uses flash cards with number symbols to represent the number combinations.

$2+8= \square$	$\square+4= 9$	$9-6= \square$
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- Learners **break down** numbers in the range 1-17. Learners use counters (concrete) and drawings (Semi-concrete).

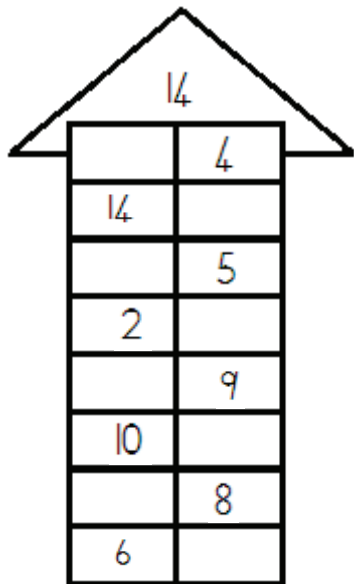


- Learners **build up** numbers in the range 1-17. Learners use counters (concrete) and drawings (Semi-concrete).

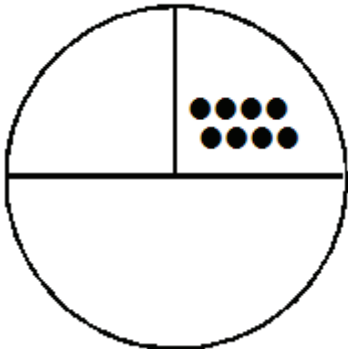
Flard cards can be used to build numbers e.g.

10	+	7	=	1	7	and	10	+	6	=	1	6
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Learners can also find the number combinations that build a given number e.g. 14



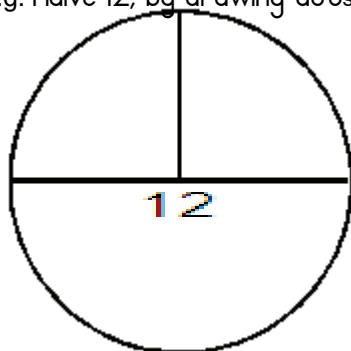
- Learners **double** numbers with answers in the number range 1 -16. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).



Double the number of dots and write the answer in the bottom half of the circle.

- Learners **halve** numbers without a remainder (**even numbers**) in the number range 1 – 16. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).

e.g. Halve 12, by drawing dots in the 2 segments

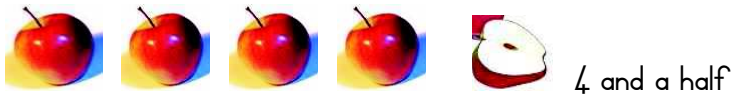


- Learners halve numbers with a remainder (**odd numbers**) in the number range 1 – 16. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).

e.g. There are 9 apples on a tree, if you share them equally between two children, how many will each child get? Are there any left over? What can you do if there is 1 left?



Learners can draw their answer.



- Learners use concrete apparatus when counting, building up, breaking down, doubling and halving numbers.

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## **LO 2 PATTERNS, FUNCTIONS AND ALGEBRA**

- Learners copy and extend simple number sequences in the range 0-50. Learners may use the abacus (concrete apparatus), or number lines and number grids (semi-concrete apparatus).  
e.g. 21, 23, 25, 27, 29..... ;
- Learners create and write own number patterns. Learners may use number lines or grids.  
e.g. 22, 32, 42.....



An abacus can be used to show and discover patterns in number.

- Learners describe a given/own number pattern.  
e.g. 11; 21; 31; 41;.....  
Ask learners what pattern they can see? Which number will follow 41?  
Can they make their own number pattern and explain what they did?
- Learners **copy and describe** familiar geometrical patterns observed in objects and pictures in and around the classroom.  
e.g. Complete the pattern.

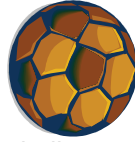


### LO 3 SPACE AND SHAPE

- Learners recognise, identify and name **3-D objects** in the classroom.



box



ball

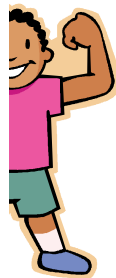
- Learners describe, sort and compare **3-D objects** according to size.  
e.g. Arrange the cylinders from biggest to smallest.



- Learners observe and build a model with any re-usable waste material. Learners may use toilet rolls, boxes and plastic containers of different sizes.  
e.g. Build a **robot** using boxes etc.



- Learners draw the identical left or right images of a simple picture.  
e.g. Draw the left side of the boy.



- Learners describe the position of an object in relation to another in a simple picture using left, right, underneath, above, in front of, behind, inside, on top.



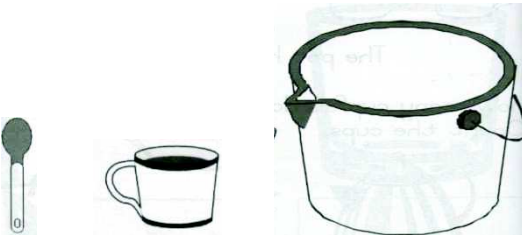
Where are the trees?  
Where is the chimney?  
Where is the door?

- Learners place an object e.g. a ball in different positions in relation to themselves.  
→ Teacher tells learners to place a ball next to them; in front of them; behind them etc.

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### LO4 MEASUREMENT

- Learners talk about own experiences using vocabulary yesterday, today and tomorrow.
- **Capacity**-Learners **estimate and measure the capacity of different containers**. Learners use cups, spoons & mugs  
e.g. How many spoons / cups do I use to fill a 2 liter bucket or bottle. First estimate and then do the activity practically.
- Learners compare the capacity of containers and order them from most to least or from least to most.  
e.g. smallest to biggest



### LO5 DATA HANDLING

- Learners collect **objects** from the classroom or their environment according to **different shapes**.  
→ **Collect rectangular shaped objects in the class.**  
**e.g. ruler, book, rubber & pencil box.**
- Learners sort objects from the classroom or their environment.
- Learners give reasons for grouping collections in a particular way.  
e.g. According to colour, shape or size
- Learners draw a picture of their collected objects.

book	ruler	rubber	Pencil box

- Learners construct pictographs to show correspondence between collected data and representation. Learners may use stamps, stickers, or drawings to construct the pictograph.  
Ask: Which is the most? Which is the least?
- Learners describe, explain and answer questions about the grouping.  
e.g. Why did you group the objects in that way?

### **Word sums**

- Learners explain solutions to problems in the number range 0– 16.
- Learners check each other's solutions to problems in the number range 0– 16
  - There are 10 puppies, 8 go to eat their food.  
How many are left?
  - There are some kittens sleeping in a basket 8 go and play; now there are 4.  
How many were there to begin with?
  - John's dog has 12 puppies and Jenny's cat has 8 kittens.  
How many more babies does John's dog have?

**Resources:** Counters, abacus, number grid (100 block), flard cards, flash cards with number symbols and number names, capacity apparatus e.g. cups, jugs, spoons, buckets etc. Examples of 3D objects like boxes and balls. Relevant worksheets, posters etc.

**Reflections:**

**Barriers:**



# WEEK 2

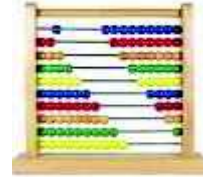
## GRADE 1 LESSON PLAN – TERM 3 WEEK 2

### LO1 NUMBERS, OPERATIONS AND RELATIONSHIPS

- Learners count physical objects using one-to-one correspondence reliably in the number range 0-25 e.g. Cars in car park or learners in the class



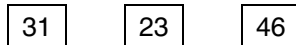
- Learners count forwards and backwards in ones from any given number in the number range 0 – 50. Learners may use the abacus or counters (concrete apparatus ) or the number line and the number grid (semi-concrete)  
e.g. 41, 42, 43,... ;  
50 ,49,48,...
- Learners count in ones from any given number:  
e.g. Count from 22- 45; Count from 45 back to 10.



- Learners count forwards and backwards in tens from any given number in the number range 0 - 50.
- Learners may use the abacus or counters (concrete apparatus) or the number line and the number grid (semi-concrete) Learners count in tens from a whole ten.  
e.g. 1,11,21,31.....;  
41, 31, 21...

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- The learners read the symbols on number cards, a number grid or a number line.  
e.g. flash cards



- Learners write any number name in the number range 1-16  
e.g. **15 fifteen**

- Learners order whole numbers 0-25 in an **ascending and descending** order Learners may use a number grid or a number line.  
e.g.  
(10, 22, 15,18) → (10,15,18,22) smallest to biggest  
(16, 19, 14, 25) → (25,19,16,14) biggest to smallest

- Learners describe the position of numbers 0 – 25 using before, after, between.  
e.g.

What comes before 24? What comes after 22?; What comes between 22 and 24?

21	22	23	24
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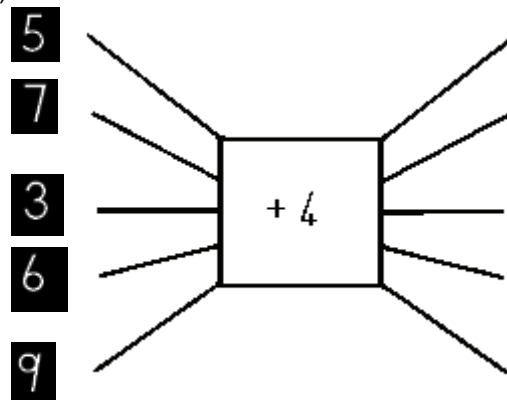
- Learners compare numbers 0 – 25 using more than, less than, biggest, smallest. Learners may use a number grid or a number line.

e.g. What is one more than 24? What is 1 less than 20?

3 less than		3 more than	
12		12	
18		18	
14		14	
17		17	

- Learners solve money problems in the range 0-15. Using R1, R2, R5 and 10c, 5c.
- Learners calculate change.  
e.g. Practical group work on mat, use “play money” to buy sweets and calculate change.
  - ☞ If Paul buys a sucker for R1 and a chocolate for R5 how much will he spend?
  - ☞ If he buys a packet of chips for R3 and he pays with a R5 coin, how much change will he get.

- Learners solve and explain practical problems involving equal sharing and grouping with and without remainders.  
e.g. I have 6 sweets, I share them between 2 children, how many sweets will each child get?  
I have 7 biscuits, I share them between 3 children, how many will each child get? Are there any left over?
- Learners perform addition and subtraction with whole numbers in the range 0-17 using +, - and =.
- Learners may use counters or the abacus (concrete apparatus), drawings and number lines (semi-concrete apparatus).



- Learners build up the whole ten when adding and subtracting in the range 0-20  
e.g.  $8+5 = 8 + 2 + \square$  and  $12 - 4 = 12 - 2 - \square$   
Learners may use an abacus or coloured beads on a string e.g. 10 red & 10 blue beads

- Learners use repeated addition to calculate solutions in the number range 0-18. Learners may use concrete apparatus or drawings.



- Learners estimate the answers to addition and subtraction problems in the range 0-18. Learners compare the calculated answer with the estimated answer.
- Learners perform **mental calculations** with addition and subtraction with answers to at least 7. The teacher uses flash cards with number symbols to represent the number combinations

$8 - 4 =$	$8 - 1 =$	$8 - 3 =$	$8 - 5 =$	$8 - 2 =$
$4 + 4 =$	$7 + 1 =$	$5 + 3 =$	$6 + 2 =$	$8 + 0 =$

- Learners **break down** numbers in the range 1-18. Learners use counters (concrete) and drawings (Semi-concrete).

17	6										
	11										

Flard cards can be used to build numbers e.g.

$$\boxed{10} + \boxed{5} = \boxed{15} \text{ and } \boxed{10} + \boxed{8} = \boxed{18}$$

- Learners **build up** numbers in the range 1-18. Learners use counters (concrete) and drawings (Semi-concrete).

18	14	3		1		11		9		13
	4		6		10		0		2	

- Learners **double** numbers with answers in the number range 1 -16. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).  
e.g. pack out 6 counters, put a pencil on the right side of the counters and double the number by packing counters on the other side of the pencil, say: 6 plus 6 is equal to 12. Then write the number sentence:  $6 + 6 = 12$



- Learners **halve** numbers without a remainder (**even numbers**) in the number range 1 – 16. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).  
e.g. Pack out 14 counters and divide it into 2 equal groups (use the pencil again) and say half of 14 is equal to 7. Then write the number sentence:  $7 + 7 = 14$



- Learners halve numbers with a remainder (**odd numbers**) in the number range 1 – 16. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).
- Learners use concrete apparatus when counting, building up, breaking down, doubling and halving numbers.
- Learners explain solutions to problems in the number range 0– 18.
- Learners check each other's solutions to problems in the number range 0– 18

## LO 2 PATTERNS, FUNCTIONS AND ALGEBRA

- Learners copy and extend simple number sequences in the range 0-60. Learners may use the abacus (concrete apparatus), or number lines and number grids (semi-concrete apparatus).

30	33	36							
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- Learners create and write own number patterns. Learners may use number lines or grids.
- Learners describe a given/own number pattern.  
e.g. These are odd numbers.

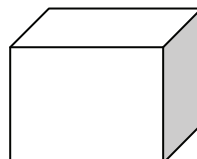
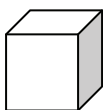
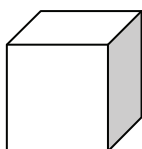
1	3	5							
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- Learners **copy and describe** familiar geometrical patterns observed in objects and pictures in and around the classroom.

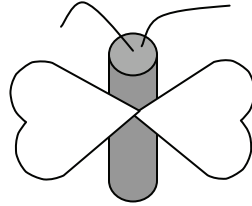
e.g. ○ ■ ■ ■ ○ ■ ■ ■ ○

## LO 3 SPACE AND SHAPE

- Learners recognise, identify and name **3-D objects** in the classroom.  
e.g. a box
- Learners describe, sort and compare **3-D objects** according to size.



- 
- Learners observe and build a model with any re-usable waste material. Learners may use toilet rolls, boxes and plastic containers of different sizes.  
e.g. Construct a butterfly using a toilet roll & card board or paper.



- Learners draw the identical left or right images of a simple picture.  
e.g. Draw the left side of the lamp.



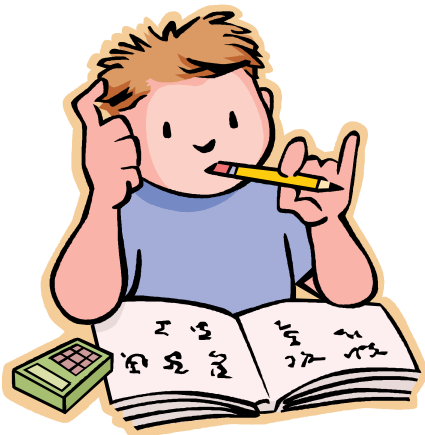
- Learners describe the position of an object in relation to another in a simple picture using left, right, underneath, above, in front of, behind, inside, on top.

e.g.

Where is the book?

Is the pencil in the boy's left or right hand?

What is next to the book?



- Learners place an object e.g. a ball in different positions in relation to themselves.  
➔ Place the ball behind you. Place the ball in front of you. Place the ball on your left.



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## LO4 MEASUREMENT

- Learners talk about own experiences using vocabulary yesterday, today and tomorrow.  
e.g. What date is it today? What date was it yesterday? (Calendar)
- **Capacity**-Learners **estimate and measure the capacity of different containers.** Learners use cups, spoons & bottles/jugs.  
e.g. How many spoons / cups do I use to fill a 2 liter bucket or bottle.
- Learners compare the capacity of containers and order them from most to least or from least to most.



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## LO5 DATA HANDLING

- Learners collect **objects** from the classroom or their environment according to **different shapes.**
- Learners sort objects from the classroom or their environment.  
e.g. According to shape, colour ,size etc.
- Learners give reasons for grouping collections in a particular way
- Learners draw a picture of their collected objects.
- Learners construct pictographs to show correspondence between collected data (boxes and balls) and representation. Learners may use stamps, stickers, or drawings to construct the pictograph.
- Learners describe, explain and answer questions about the grouping.

●	■
●	■
●	■
●	■
●	■
ball	box

e.g. Identify ball shaped and box shaped objects in the class and draw them on a graph.

Are there more boxes or balls?



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## Word sums

- If I have 4 sweets and my mom gives me 3 more. How many will I have?
- There are 8 biscuits in my lunch box, I give 5 away.  
How many will I have left?



- 
- Peter has 5 marbles and Paul has 4 more than him. How many marbles does Paul have?

**Resources:** Counters, abacus, number grid(100 block), flard cards, flash cards with number symbols and number names.

**Reflections:**

**Barriers:**



# WEEK 3

## GRADE 1 LESSON PLAN – TERM 3 WEEK 3

### LO1 NUMBERS, OPERATIONS AND RELATIONSHIPS

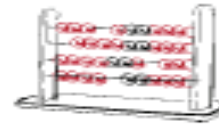
- Learners count physical objects using one-to-one correspondence reliably in the number range 0-25



e.g. chairs in class or desks in class

#### **FAT 1: Oral/Practical in small groups - use a rubric**

- Learners count forwards and backwards in ones from any given number in the number range 0 – 50. Learners may use the abacus or counters (concrete apparatus ) or the number line and the number grid (semi-concrete)  
e.g. 41, 42, 43,...  
50,49,48,...
- Learners count in ones from any given number:  
e.g. Count from 29- 50; Count from 50 back to 10.



#### **FAT 1: Oral/Practical in small groups - use a rubric**

- Learners count forwards and backwards in multiples of ten in the number range 0 - 50.  
0; 20; 30; ..... and 50; 40; 30;.....
- Learners may use the abacus or counters (concrete apparatus) or the number line and the number grid (semi-concrete)

- INSTRUCTION: Put your finger on 3 and colour the block. Now count on ten. Colour the block where your finger lands. Can you see a pattern? Continue in this way. Can you guess which number you will land on?

e.g. 3, 13, 23, 33.....; and 43, 33, 23...

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- The learners read the symbols on number cards, a number grid or a number line.

46	47	48
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- Learners write any number name in the number range 1-16  
e.g. **16 sixteen**

- Learners order whole numbers 0-25 in an **ascending and descending** order Learners may use a number grid or a number line.

e.g.

(11, 20, 14, 19) → (11, 14, 19, 20) smallest to biggest

(14, 17, 1, 20) → (20, 17, 14, 1) biggest to smallest

- Learners describe the position of numbers 0 – 25 using before, after, between.  
e.g. What comes before 25?; What comes after 22?; What comes between 23 and 25?

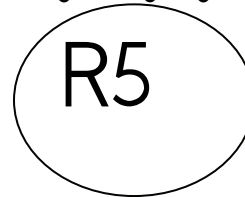
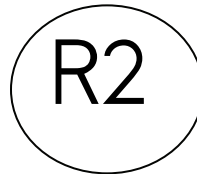
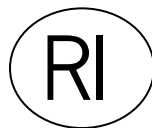
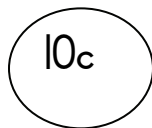
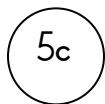
22	23	24	25
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- Learners compare numbers 0 – 25 using more than, less than, biggest, smallest. Learners may use a number grid or a number line.

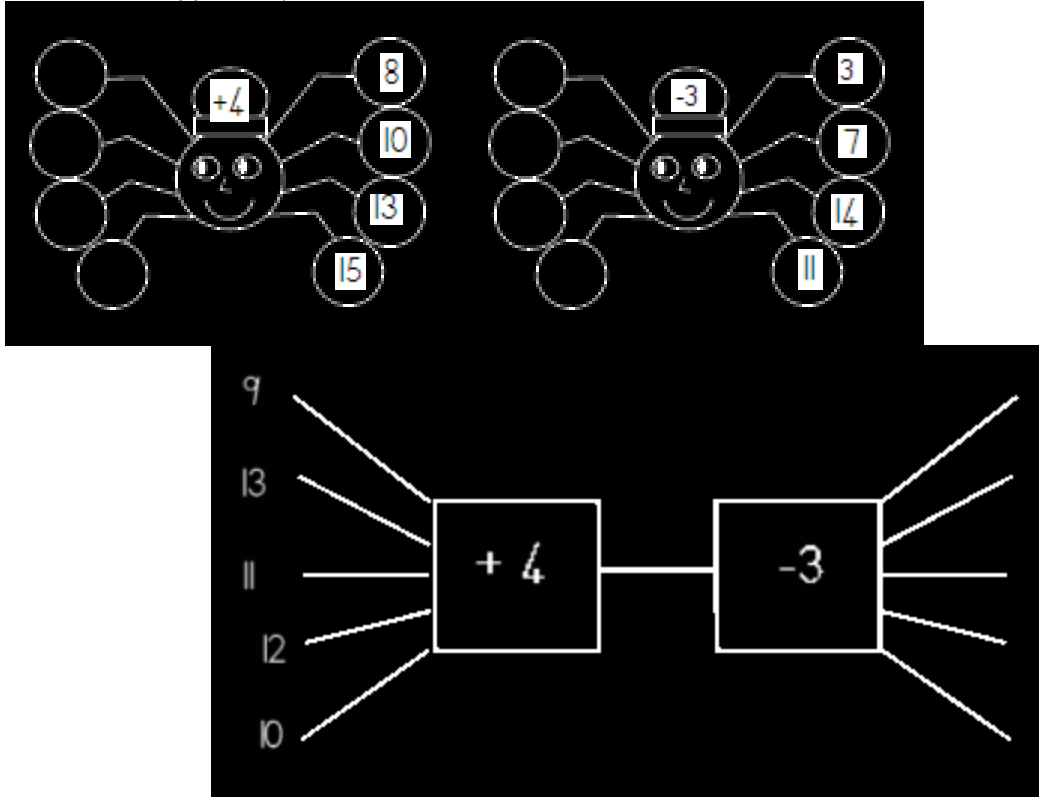
e.g. What is 3 more than 23?

2 more than		3 less than	
17		22	
19		20	
20		19	
22		15	

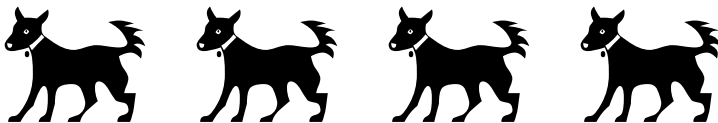
- Learners solve money problems in the range 0-15. Using R1, R2, R5, R10 and 10c, 5c.  
→ Worksheet: Buy 2 items and calculate the price. e.g. R2+ R5=R7 Or 10c+5c =15c
- Learners calculate change.  
→ If an item costs R7 and you have R10, how much change will you get?



- Learners solve and explain practical problems involving equal sharing and grouping with and without remainders.
- Learners perform addition and subtraction with whole numbers in the range 0-18 using +, - and =.
- Learners may use counters or the abacus (concrete apparatus), drawings and number lines (semi-concrete apparatus).



- Learners build up the whole ten when adding and subtracting in the range 0-20  
e.g.  $7+5 = 7 + 3 + \square$  and  $11 - 4 = 11 - 1 - \square$   
Learners may use an abacus or coloured beads on a string e.g. 10 red & 10 blue beads
- Learners use repeated addition to calculate solutions in the number range 0-18. Learners may use concrete apparatus or drawings.  
e.g. How many legs will 4 dogs have?



$$4 + 4 + 4 + 4 =$$

- Learners estimate the answers to addition and subtraction problems in the range 0-18. Learners compare the calculated answer with the estimated answer.

- Learners perform **mental calculations** with addition and subtraction with answers to at least 7. The teacher uses flash cards with number symbols to represent the number combinations.

8+2=
------

10-3=
-------

4+5=
------

9-4=
------

1+8=
------

- Learners **break down** numbers in the range 1-18. Learners use counters (concrete) and drawings (Semi-concrete).

→Mat work: Learners break up numbers in different ways e.g. 10=■■■■■■■■+■■■■■

- Learners **build up** numbers in the range 1-18. Learners use counters (concrete) and drawings (Semi-concrete).

→Mat work: Give learners 7 counters, ask how many more they will need to make 12.

- Learners **double** numbers with answers in the number range 1 -18. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).

e.g.

Double		
6 *****	6 *****	12
8 *****		
4****		
9*****		
7*****		

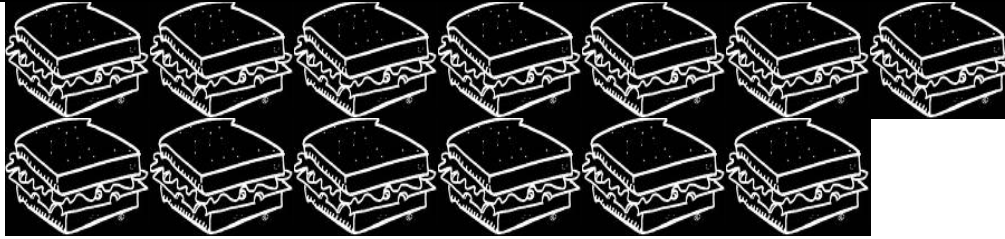
- Learners **halve** numbers without a remainder (**even numbers**) in the number range 1 – 18. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).

Halve		
12*****	6 *****	6 *****
18*****		
14*****		
10*****		
16*****		

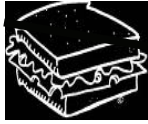
- Learners halve numbers with a remainder (**odd numbers**) in the number range 1 – 18. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).

e.g. I have 13 sandwichies, I share them between 2 children, how many will each get?

Draw your answer. Are there any left over?



If so, what can you do with the one left over?



e.g.  
cut it in half.

- Learners use concrete apparatus when counting, building up, breaking down, doubling and halving numbers.
- Learners explain solutions to problems in the number range 0– 18.
- Learners check each other's solutions to problems in the number range 0– 18

## LO 2 PATTERNS, FUNCTIONS AND ALGEBRA

### **FAT 1: Oral/Practical in small groups - use a rubric**

- The teacher gives learners number strips with different number patterns in the number range 0 - 60. Learners copy and extend the number pattern.
- Learners may use the abacus (concrete apparatus), or number lines and number grids (semi-concrete apparatus).

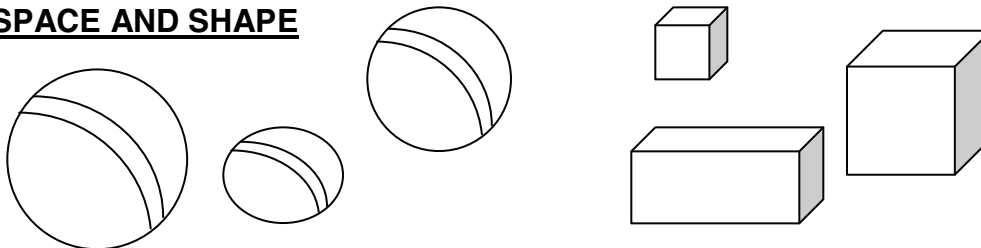
- Learners create and write own number patterns. Learners may use number lines or grids.
- Learners describe a given/own number pattern.

10	15	20						
----	----	----	--	--	--	--	--	--

e.g. counting in 5's

- Learners **copy and describe** familiar geometrical patterns observed in objects and pictures in and around the classroom.  
e.g. ●●●●●

## LO 3 SPACE AND SHAPE



**FAT 1: Oral/Practical in small groups - use a rating scale**

- The teacher shows different boxes and balls in the classroom. The learners recognize and name the objects.

**FAT 1: Written – use a rating scale or rubric**

- Learners sort boxes and balls and write the names underneath. ✍
  
- Learners describe, sort and compare **3-D objects** according to size.
- Learners observe and build a model with any re-usable waste material. Learners may use toilet rolls, boxes and plastic containers of different sizes.

**FAT 1: Oral/Practical in small groups – use a rubric**

- Learners identify symmetry in pictures.

**FAT 1: Written – use a rating scale or rubric**

- Learners draw the identical left or right images of a simple picture. (Symmetry) ✍



- Learners describe the position of an object in relation to another in a simple picture using left, right, underneath, above, in front of, behind, inside, on top.
- Learners place an object e.g. a ball in different positions in relation to themselves. e.g. place the ball to the left or the right of yourself.

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## LO4 MEASUREMENT

- Learners talk about own experiences using vocabulary yesterday, today and tomorrow.

### FAT 1: Oral/Practical and Written in small groups – use a rubric

The teacher will have examples of different containers in class and learners must **estimate** how many cups of water they will need to fill a certain container.

- Learners write down their estimations.
- The learners **measure** the capacity of the different containers to determine the number of cups of water that will fill the container. They write down the actual answer.
- The learners compare their estimated answer with the actual answer.


- Learners **estimate and measure the capacity of different containers**. Learners use cups, spoons & mugs e.g. How many spoons / cups do I use to fill a 2 liter bucket or bottle.
- Learners compare the capacity of containers and order them from most to least or from least to most.



## LO5 DATA HANDLING

- Learners collect **objects** from the classroom or their environment according to **different shapes**. e.g. collect boxes and balls.
- Learners sort objects according to edges. eg. with straight edges and with round edges.
- Learners give reasons for grouping the objects in a particular way

### FAT 1: Written – use a rubric

- Learners count and draw a picture of their collected objects (boxes and balls) 

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## Word sums

1. John has 7 crayons he loses 2, how many does he have left?
2. Peter and Mary have 10 crayons altogether, if Mary has 3, how many does Peter have?
3. Jill has 9 sweets if she shares them between herself and 2 friends, how many will each get?

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**Resources:** Counters, abacus, number grid(100 block), flash cards, flash cards with number symbols and number names.

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**Reflections:**

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**Barriers:**

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