WEEK 9

GRADE 1 LESSON PLAN – TERM 3 WEEK 9

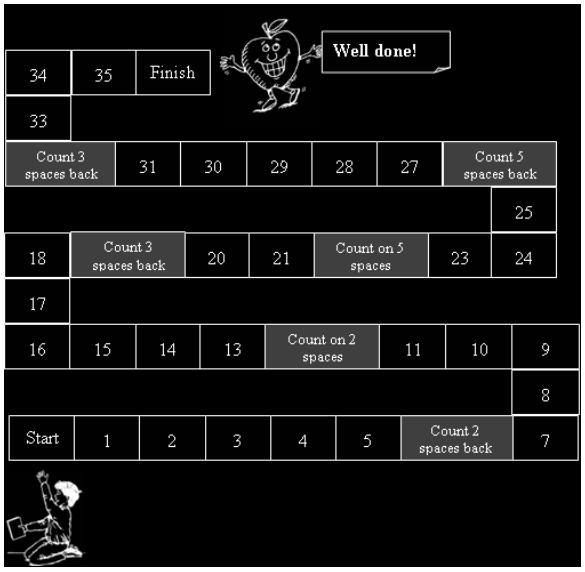
LO1 NUMBERS, OPERATIONS AND RELATIONSHIPS

- Learners count physical objects using one-to-one correspondence reliably in the number range 0 – 34
  E.g. Learners count the number of days in September on the calendar.

September 2009

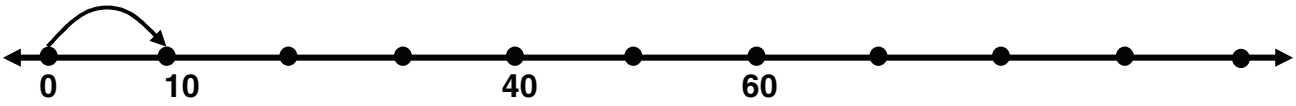
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

- Learners count forwards and backwards in ones from any given number in the number range 0 – 60. Learners may use the abacus or counters or the number line and the number grid.
  e.g. 41; 42; 43; … 45; 44; 43; …
- Learners count in ones from any given number:
  e.g. Count from 22 – 45 Count from 45 back to 10.
- Learners play a game in pairs. They throw a die. The one who throws a six starts. Player 1 throws the die and moves the number of blocks shown on the die. Player 2 starts when a six is thrown. The one who reaches the Finish block first is the winner.



- Learners count forwards and backwards in tens from any given number in the number range 0 – 60.

- Learners count in tens and fill in the missing numbers. They then complete the number by making jumps of ten.

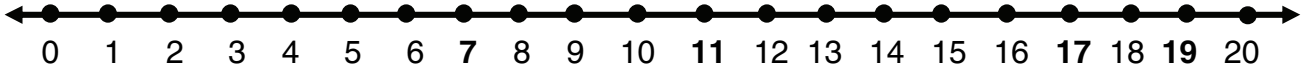


- The learners read the symbols on number cards, a number grid or a number line.
  Example: Individual learners read the number symbols on the number cards and shade the numbers on the number grid.

49	53	41

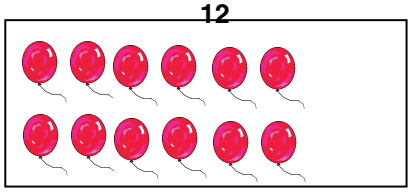
- Learners order whole numbers 0 – 50 in **ascending and descending** order. Learners may use a number grid or a number line.
  Example: Learners use picture cards to order the numbers from smallest to biggest.
  23; 25; 20; 21; 24;19; 22 → 19; 20; 21; 22; 23; 24; 25
  smallest to biggest

- Learners describe the position of numbers 0 – 34 using before, after, between on the number line.
  Example: What comes before 20?; What comes after 16?; What comes between 10 and 12?



- Learners compare numbers 0 – 34 using more than, less than, biggest and smallest. Learners may use a number grid or a number line. What is one more than 13?
  Example: Learners work individually to complete the exercise on a worksheet.
  Count the objects. Write the number symbol and number name.

  Show two more.

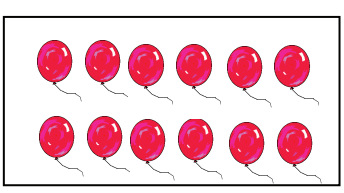


Show two less.

_____

twelve

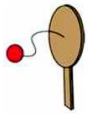
_____



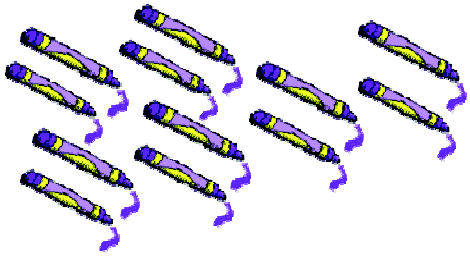
_____

_____

- Learners solve money problems in the range 0 – 10 using R1, R2, R5, 10c and 5c coins.
- Learners calculate change.
  Example: Practical group work. Learners cut out 'play money'. They count money to buy items at the toy shop. They paste the coins in the respective block.

	R10	
	R5	

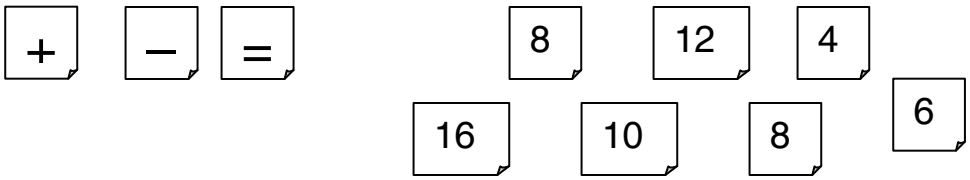
- Learners solve and explain practical problems involving equal sharing and grouping with and without remainders.
  Example: The teacher shares 12 crayons between 2 learners. How many crayons does each learner get?



☐ + ☐ = 12

- Mother gives her 3 sons R16 to share equally amongst themselves. How many rands will each son get? How much money is left?

- Learners perform addition and subtraction with whole numbers in the range 0 – 20 using +, - and = .
  Example: Learners work in pairs. They use number and symbol cards to build as many different addition and subtraction calculations as possible. They write down the calculations in their workbooks.

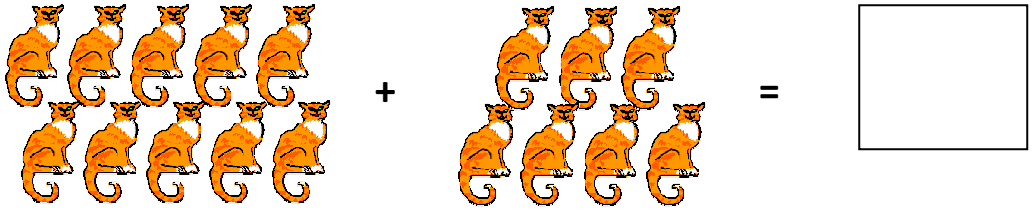


- Learners use repeated addition to calculate solutions in the number range 0 – 20. Learners may use concrete apparatus or drawings.
  Example: Learners complete an exercise on a worksheet.

1 bee has 4 stripes. 4 bees has _____ stripes.

☐ + ☐ + ☐ + ☐ = ☐

- Learners estimate the answers to addition and subtraction problems in the range 0 – 20. Learners compare the calculated answer with the estimated answer.
  Example: The teacher flashes a picture sum and asks learners to estimate the answer.



- Learners do the calculation to compare their estimated answer to the calculated answer.

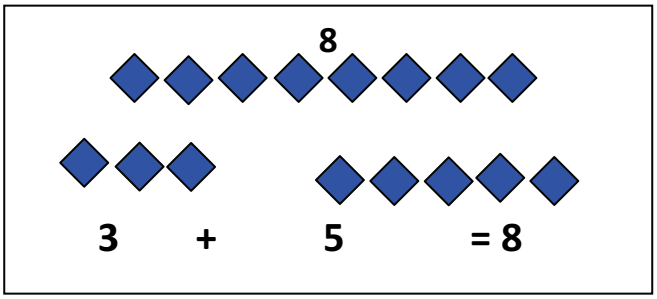
- The teacher plays guessing games. Is 14 – 7 closer to 10 or to 5. Why? **Learners check their answers by calculating the answers.**

- 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.
  Example: Group work. The learners in each group form a circle. The teacher goes to one group while the other groups are doing a worksheet. She plays the game “Odd man out”. The teacher flashes the cards and those with wrong answers have to sit until the winner is left.

5 + 2 =	**6 – 1 =**	**2 + 3 =**	**4 – 0 =**

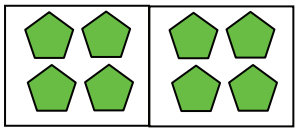
- Learners **break down** numbers in the range 1 – 20. Learners use counters (concrete) and drawings (semi-concrete).

- Learners **build up** numbers in the range 1 – 20. Learners use counters (concrete) and drawings (Semi-concrete)
  Example: Group work. Decomposition of numbers. Make up as many combinations as you can with the given numbers.



- Learners **double** numbers with answers in the number range 1 – 20. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).
  Example: Learners complete an exercise by drawing in their workbooks.

4 + 4 = 8



Double 4 is ☐

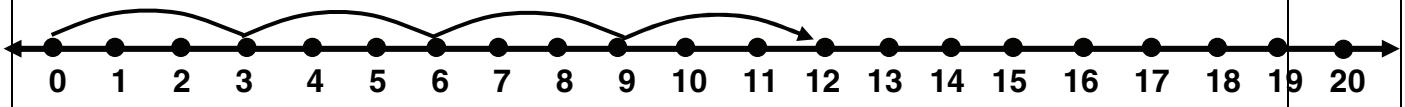
- Learners **halve** numbers without a remainder **(even numbers)** in the number range 1 – 20. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete)
- Learners halve numbers with a remainder **(odd numbers)** in the number range 1 – 20. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).
  Example: Learners work in pairs to share money equally between themselves. They explain how they solved the problem.

Give each one 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– 20.
- Learners check each other's solutions to problems in the number range 0– 20

LO 2 PATTERNS, FUNCTIONS AND ALGEBRA

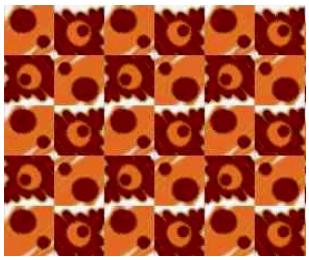
- Learners copy and extend simple number sequences in the range 0 - 60. Learners may use the abacus (concrete apparatus), or number lines and number grids (semi-concrete apparatus).
- Learners create and write own number patterns. Learners may use number lines or grids.
  Example: Teacher uses the number line to let learners count in different intervals. Learners write down the number patterns in their workbooks. They extend the number patterns.



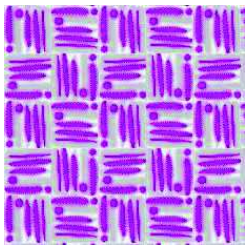
0 3 6 9 12 . . .

- Learners describe a given/own number pattern.
  Example: Learners work in groups to count in intervals on number grids. They shade their number patterns and explain the patterns they observe on the grid.

- Learners **copy and describe** familiar geometrical patterns observed in objects and pictures in and around the classroom.
  Example: Learners observe a pattern on a tablecloth. They copy and describe the pattern.



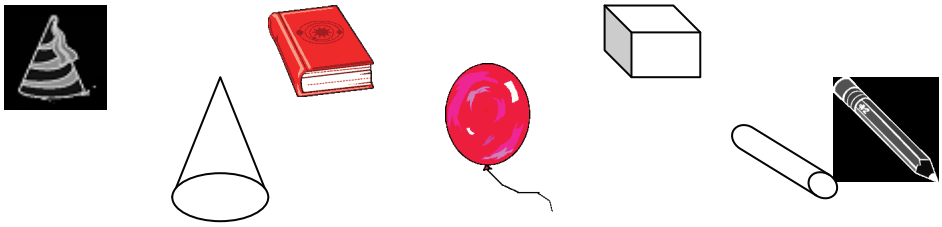
In the first row the first, third and fifth blocks are the same. They each have a small and a big circle.



There are lines and dots in the pattern. Some lines are standing up (vertical) and some are lying down (horizontal).

LO 3 SPACE AND SHAPE

- Learners recognise, identify and name **3-D objects** in the classroom.
  Example: Teacher asks questions to help learners recognize and identify 3-D objects in the classroom. E.g. Find an objects that looks like a cone, a box, a ball, a pipe, etc. The teacher uses pictures of objects and learners identify the previous shapes in the pictures.

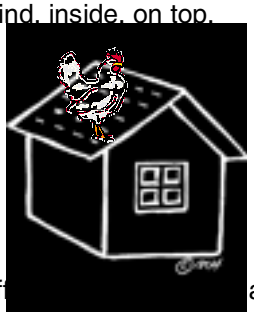


- Learners describe, sort and compare **3-D objects** according to size.
  Example: The teacher has 3-D objects available in class and asks learners to find all the small balls, large boxes, etc.

- Learners observe and build a model with any re-usable waste material. Learners may use toilet rolls, boxes and plastic containers of different sizes.
  Example: Learners construct a pair of binoculars using toilet rolls and rectangular strips of paper.

- Learners draw the identical left or right images of a simple picture.

- Learners describe the position of an object in relation to another in a sim t, right, und ront of, behind, inside, on top.



- Learners place an object e.g. a ball in diff ation to themselves.

LO4 MEASUREMENT

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

  Example: Learners draw a picture to tell what they have done. They report to the class what they have done on the above-mentioned times.

- **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?
- Example: Practical group work in pairs. Learners estimate how many cupfuls fill each container. They guess how many cups of water fill each container. Learners as a group complete the worksheet and draw the containers in order, from the one that holds the most to the one that holds the least.

container	my guess	how many cups
 1L		
 500 mL		

- 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.**
- Learners sort objects from the classroom or their environment.
- Learners give reasons for grouping collections in a particular way
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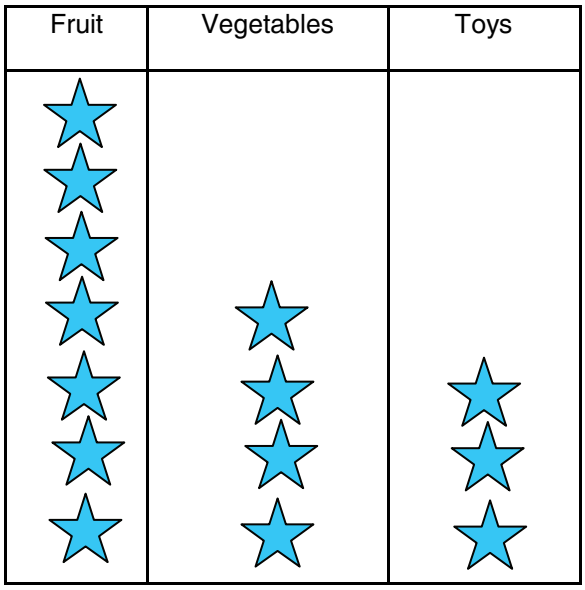
- Learners draw a picture of their collected objects.

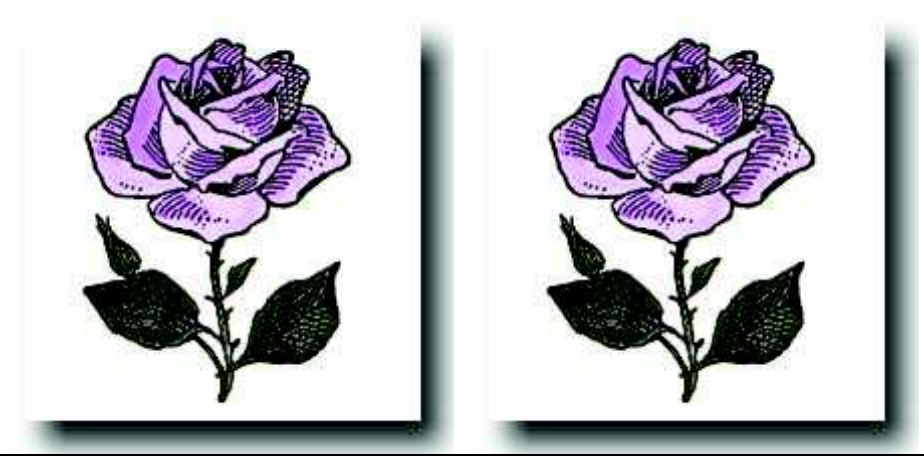
- Learners construct pictographs to show correspondence between collected data (boxes and balls) and representation. Learners may use stamps, stickers, or drawings to construct the pictograph.



- Learners describe, explain and answer questions about the grouping.

Word sums:

- There are 3 children in the playground. Each child has 4 sandwiches. How many sandwiches are there altogether.?
- Mom has 15 flowers to plant. She has already planted 13 flowers. How many flowers does she still have to plant?



➲ John eats 9 cookies. Sam eats 4 cookies. Yaka eats 2 cookies. How many cookies do they eat altogether?

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

Reflections:

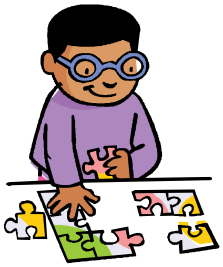
Barriers:

WEEK 10

GRADE 1 LESSON PLAN – TERM 3 WEEK 10

LO1 NUMBERS, OPERATIONS AND RELATIONSHIPS

- Learners count physical objects using one-to-one correspondence reliably in the number range 0-34 e.g. count pieces of a puzzle or cards in a deck



- Learners count forwards and backwards in ones from any given number in the number range 0 – 60. 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. One learner starts counting, then stops and another must carry on where he/she left off.

- Learners count forwards and backwards in tens from any given number in the number range 0 - 60.

  e.g. a dot-to-dot in multiples of 10

- 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…

- The learners read the symbols on number cards, a number grid or a number line. In the number range 0 – 60.

  ➔ Play "Bingo", learners have a hundred grid and small counters. The teacher calls out a few random numbers e.g. "32; 6; 17; 45; 50; 23…" etc, then the learners must find the number and cover it with a counter.

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

- Learners write any number name in the number range 1-20

  e.g. 20 twenty

- Learners order whole numbers 0-34 in an **ascending and descending** order Learners may use a number grid or a number line.

  e.g. A group of learners are each given a card with a random number written on it,

  they must then line up with their card, the smallest number must be first or last,

  depending on the instruction.

15	**3**	**32**	**27**	**8**	**24**	**10**

- Learners describe the position of numbers 0 – 34 using before, after, between.

  e.g.

  What comes before 29?; What comes after 28?; What comes between 29 and 31?

28	29	30	31

- Learners compare numbers 0 – 34 using more than, less than, biggest, smallest. Learners may use a number grid or a number line.

e.g.

What is 2 more than 28?; What is 2 less than 31? Which number is bigger 28 or 32?

- Learners solve money problems in the range 0-10. Using R1, R2, R5 and 10c , 5c.

- Learners calculate change.

e.g. Practical group work on mat, use "play money" learners must share R8 between 2 children. They can also draw their answer.

- 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 0-20 using +, - and =.

e.g

Colour in the blocks that equal 18			
11+7=	**4+11=**	**9+9=**	**18-0=**
2+14=	**20-3=**	**19-2=**	**8+8=**
19-1=	**16+2=**	**14+4=**	**5+13=**
1+17=	**9+8=**	**13+6=**	**16+3=**
12+5=	**3+15=**	**20-4=**	**8+10=**
20-2=	**6+12=**	**18+0=**	**7+7=**

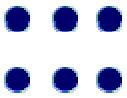
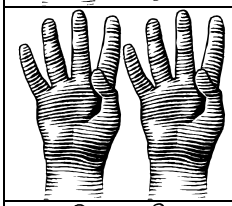
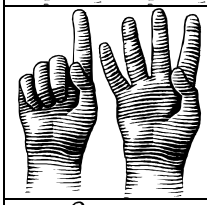
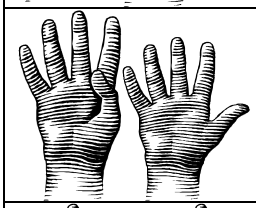
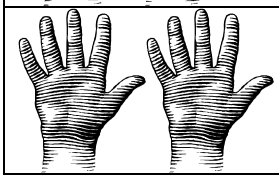
- Learners may use counters or the abacus (concrete apparatus), drawings and number lines (semi-concrete apparatus).

- Learners use repeated addition to calculate solutions in the number range 0-20. Learners may use concrete apparatus or drawings.

e.g. There are 4 bunches of balloons, with 5 in each bunch, how many all together?

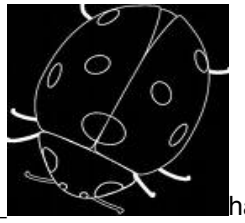
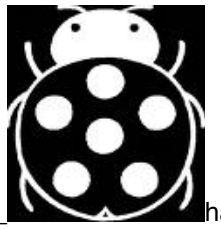
5+5+5+5=

- Learners estimate the answers to addition and subtraction problems in the range 0-20. 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
- Learners **break down** numbers in the range 1-20. Learners use counters (concrete) and drawings (Semi-concrete).
- Learners **build up** numbers in the range 1-20. Learners use counters (concrete) and drawings (Semi-concrete).
- Learners **double** numbers with answers in the number range 1 -20. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete)

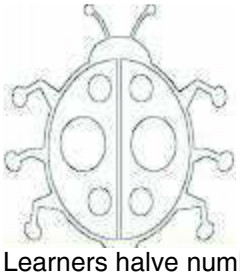
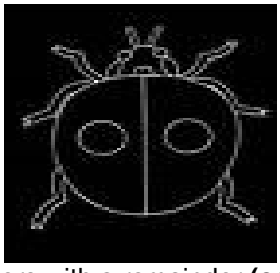
Double		
Given number	Draw equal amount	Answer
		12
		
		
		
		

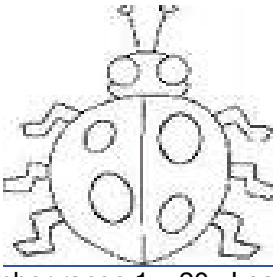
- Learners **halve** numbers without a remainder **(even numbers)** in the number range 1 – 20. Learners may use counters or the abacus (concrete apparatus), or drawings, number lines (semi-concrete).

e.g. Count all the dots on the lady birds, then halve the dots.


half is___

half is___

half is___

e.g. Colour in half of the dots on the lady bird.



- Learners halve numbers with a remainder **(odd numbers)** in the number range 1 – 20. 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– 20.
  Learners check each other's solutions to problems in the number range 0– 20

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).
  e.g. Learners must continue to colour in the numbers in the pattern.

  Learners must then describe the pattern that they can see i.e. every second number is coloured in or all the odd numbers are coloured in.

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
51	52	53	54	55	56	57	58	59	60

- Learners create and write own number patterns. Learners may use number lines or grids.
- Learners describe a given/own number pattern.
- Learners **copy and describe** familiar geometrical patterns observed in objects and pictures in and around the classroom.

LO 3 SPACE AND SHAPE

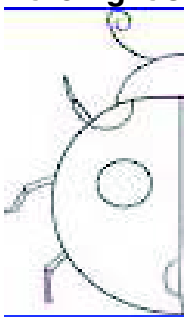
- Learners recognise, identify and name **3-D objects** in the classroom.
- Learners describe, sort and compare **3-D objects** according to size.
- Learners observe and build a model with any re-usable waste material. Learners may use toilet rolls, boxes and plastic containers of different sizes.

e.g. Learners construct a Lady Bird:

What you will need: Red and black poster board, wiggly eyes, pipe cleaners, paper fasteners, milky pens, glue, tape, black magic markers, scissors, and a hole punch.

- Learners draw the identical left or right images of a simple picture.

e.g. draw the right side of the Lady Bird



- 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.

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. Show learners all the different measuring utensils needed to bake a cake:

Cup; measuring spoons; jug; 2 liter mixing bowl etc.

- Learners compare the capacity of containers and order them from most to least or from least to most

e.g. Learner can say which measuring spoon is the biggest/smallest; which container will hold the most/least liquid etc

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.

➔Give learners a pack of cards and ask them to sort them. See how many different ways the pack can be sorted.

e.g. Into shapes (Suites); picture and non-picture cards; according to number (all the 10's together 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.

Resources: Counters, abacus, number grid(100 block), flard cards, flash cards with number symbols and number names, playing cards, puzzles, measuring equipment, play money.

Reflections:
Barriers:

FLARD CARDS

9	8	7	6	5	4	3	2	1
9	8	7	6	5	4	3	2	1
0	0	0	0	0	0	0	0	0

9	8	7	6	5	4	3	2	1
9	8	7	6	5	4	3	2	1
0	0	0	0	0	0	0	0	0