



Province of the
EASTERN CAPE
DEPARTMENT OF EDUCATION

**GRADE 1
NUMERACY
PROVINCIAL LESSON PLANS
TERM 4
2009**

Table of Contents

Note to School Management Teams and teachers in the Foundation Phase	3
Acknowledgements	3
Introduction	4
Lesson Plan – Week 1	5
Lesson Plan – Week 2	14
Lesson Plan – Week 3	23
Lesson Plan – Week 4	34
Lesson Plan – Week 5	42
Lesson Plan – Week 6	48
Lesson Plan – Week 7	59
Lesson Plan – Week 8	68
Lesson Plann – Week 9	76
Tangram Template	83
Rubrics and Recording Sheet	84

NOTE TO SCHOOL MANAGEMENT TEAMS AND TEACHERS IN THE FOUNDATION PHASE

The exemplar Numeracy Lesson Plans for **Grade 1 teachers** were developed by the Provincial Foundation Phase Curriculum Advisors and Foundation Phase teachers. This is intended to support teachers in the Planning, Teaching and Assessment process for Term 4.

The contents have been divided according to the 3 Learning Programmes (Literacy, Life Skills and Numeracy) and each Learning Programme indicates the content and context which should guide the teacher in the planning process.

We trust that these support materials will provide the necessary clarity and guidance for teachers to manage the NCS implementation process successfully and confidently.

It is the responsibility of the School Management Team to monitor and support teachers in the use of these resources. The teachers are responsible for using these resources to manage the Planning, Teaching and Assessment process successfully in the classroom. These are **exemplars** that are aligned to National Policies and prescripts and teachers are encouraged to use and adapt these lessons to suit the needs and context of the learners and their school.

If schools need more clarity and guidance on the use of these Resource Materials, the District and Provincial Offices can be contacted.

We trust that every school will now be better equipped to improve learner performance in the Foundation Phase.

Yours in Quality Education



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ACKNOWLEDGEMENTS

Teachers

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Ms C Wessels	St Mary's Primary	Grade 1	Grahamstown
Ms G Suttie	Graeme College Primary	Grade 2	Grahamstown
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Introduction

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:

- The Learning Outcomes and Assessment Standards targeted for every week.
- Weekly lesson plans with recommended number ranges for the fourth 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 fourth 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.

NOTE: FORMAL ASSESSMENT TASKS

The three Formal Assessment Tasks should be completed by the end of the sixth week because the Progression Promotion Schedules need to be ready for District offices as from week 7. **The Annual National Assessment Tests must be included as the Written Component of the third Formal Assessment Task for Term 4.**

WEEK 1

WEEK 1	Date completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
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.	2.1 2.2
AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.	
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	7.1 7.2 7.3
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.	
AS 9: Uses the following techniques: 9.3 Using concrete apparatus (e.g. counters) 9.4 Using number-lines	9.3 9.4
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100	
LO 3: SPACE AND SHAPE	
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.	
LO 4: MEASUREMENT	
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'.	
LO 5: DATA HANDLING	
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 4: Draws a picture as a record of collected objects.	

WEEK 1

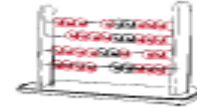
LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Learners count physical objects using one-to-one correspondence reliably in the number range 0-34

Activity: Use any resource available such as counters; abacus, shapes, books, children, crayons etc. Learners count the physical objects



AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

Activity: Count from 45 to 65; Count from 65 back to 45. A number line or hundred block can be used.

Write the numbers before and after the ones in the large (center) starfish.



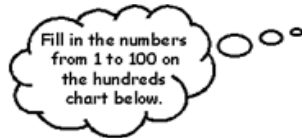
2.2 tens from any multiple of 10 between 0 and 100.

Activity: Learners count 30, 40, 50... (forward) and 80, 70, 60...(backward). A hundred block or abacus can be used.

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

The learners read the symbols on number cards, a number grid or a number line 0-100

Activity: Each learner has a hundred block, the teacher asks them to point to certain numbers or fill in or colour- in certain numbers.



1	2	—	—	—	6	—	—	—	—
—	—	—	—	—	16	—	18	—	20
—	—	23	24	—	—	—	28	—	—
—	32	33	—	—	36	—	—	—	—
—	42	—	44	—	—	—	—	—	50
—	—	53	—	55	—	—	—	59	—
61	62	63	—	—	—	—	—	—	—
—	—	—	—	—	76	77	—	—	80
—	—	—	—	—	—	—	88	89	90
—	—	93	—	—	—	97	—	—	100

Learners write any number name in the number range one to thirty four.

Activity: Teacher asks the learners to write down given numbers as well as their corresponding number name or learners can match the number name to the correct number symbol.

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

Activity: learners fill in the correct sign to complete the sum.

Write a plus(+) or a minus(-) sign in the circle

$$5 \bigcirc 2 = 7$$

$$1 \bigcirc 1 = 2$$

$$10 \bigcirc 7 = 3$$

$$2 \bigcirc 5 = 7$$

7.2 repeated addition with whole numbers and with solutions to at least 34

Activity: How many arms do 12 children have? Draw them and then count the arms.

7.3 estimation

Activity: Teacher shows the learners a domino, she then asks the learners how many they will need to measure the length of a piece of paper. Learners must write down their estimate of how many they think they will need.

The teacher then gives a pile of dominoes to the learners so that they can place the dominoes onto the paper. The learners record their findings. The teacher then asks if the estimate was accurate or not and if not, what was the difference between the actual amount needed and their estimate.



AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

Activities: Learners are told to draw their combinations of 9

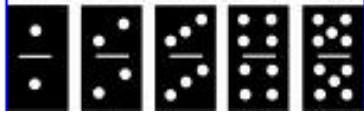
in the form of dominoes. i.e. $9+0$; $8+1$; $7+2$; $3+6$; $4+5$ etc.



Then they can write down or name all the sets of numbers that can **make 9**

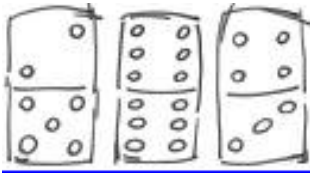
Learners can use dominoes to make sums

e.g. $1+1=$; $2+2=$; $3+3=$; $4+4=$; $5+5=$



Learners can draw their own dominoes and then write down their own sums

e.g. $5+2=7$; $6+6=12$; $4+3=7$ etc.



AS 9: Uses the following techniques:

9.3 Using concrete apparatus (e.g. counters)

Activity: Learners share 12 beans between 3 children, this practical activity can then be drawn into a book

9.4 Using number-lines

Activity: Teacher says: Draw a frog sitting on the 8 of the number line, how many "jumps" must he make to get to the 2? Show the jumps.

Now can you write the sum? E.g. $8 - 6 = 2$



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100

Activity: Ask learners to describe and extend the patterns.



Write the missing numbers.

61	—	63	—	65	—	—	—	—	—
----	---	----	---	----	---	---	---	---	---

Counting forward in ones

40		36				28	26	24	
----	--	----	--	--	--	----	----	----	--

20		16		12	10		6		
----	--	----	--	----	----	--	---	--	--

Counting backward in two's

100			85			70			
-----	--	--	----	--	--	----	--	--	--

50			35						
----	--	--	----	--	--	--	--	--	--

Counting backward in fives

3			12			21	24			33	36
---	--	--	----	--	--	----	----	--	--	----	----

Counting forward in threes

60		56	54	52		48	46		42
----	--	----	----	----	--	----	----	--	----

Counting backward in fours

LO 3: SPACE AND SHAPE

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

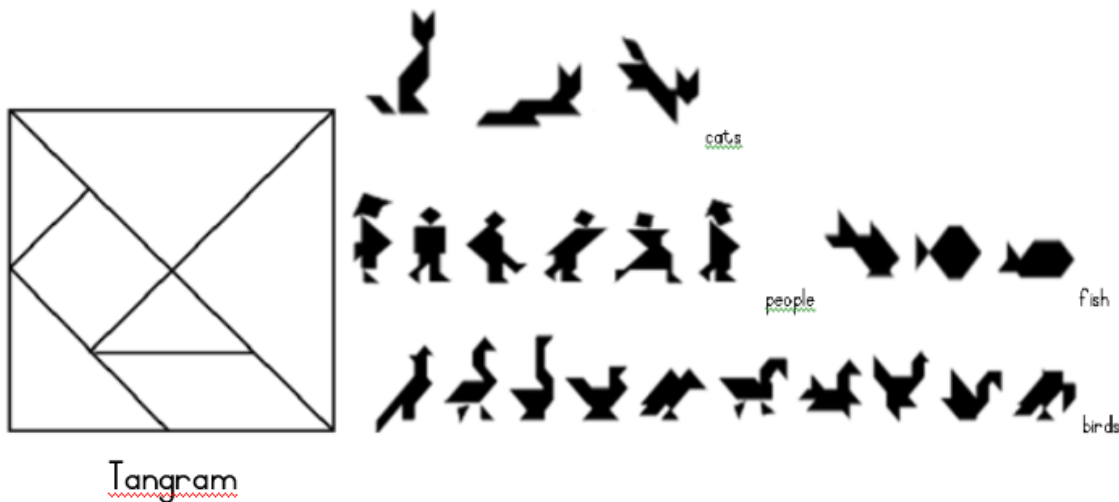
Activity:



Tangrams

Prepare sets of tangrams for your s ahead of time, using paper or cardboard. You should make **2 sets** for each learner. Show your learners some of the many pictures that can be made.

Challenge your learners to create their own designs with their tangrams. Can they make a fish? A cat? A bird? A person? A strange looking creature or plant? When learners have had opportunity to explore and create, have them create their favorite design and then glue the arrangement onto paper or cardboard. Later, use these designs as a classroom set of puzzle templates. Hand out the designs and new sets of tangrams and have learners try to recreate their classmates' designs. The designs may be recreated by matching the pieces directly on top of the puzzles. After the activity, use the puzzles to decorate your classroom.



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.

Activity: Learners are given tangrams. Teacher asks: How many different shapes are there? Can you name all the shapes? How many triangles are there? Which shapes are the same size? How many sides do the shapes have? Sort the shapes into 2 groups. Why did you group them like that? Can you make a rectangle using some of the shapes?

Can you make a shape with 6 sides, using some of the tangram shapes?

LO 4: MEASUREMENT

AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).

Activity: Ask the learners "which is longer: A day or a week?"; "which is shorter: an hour or a minute?" etc. Use a calendar and a clock to show time.



AS 3: Sequences events using language such as 'yesterday', 'today' and 'tomorrow'.

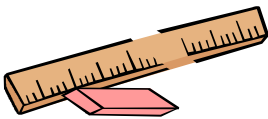
Activity: Ask: What day is it today? What day was it yesterday?
 What day will it be tomorrow? What did you do yesterday?
 Where are you going tomorrow?

OCTOBER 2009						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				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

LO 5: DATA HANDLING

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.

Activity: "Find rectangular shaped objects in the classroom or on a poster/ picture."
 Or " How many yellow objects can you find in the class or on a poster/ picture ?"



AS 4: Draws a picture as a record of collected objects.

Activity: Teacher asks: See how many red and how many yellow objects you can find in the classroom. Draw a graph depicting your collected objects, Show how many were red and how many were yellow.

Which group had the most objects? How many more did it have?

10		
9		
8		
7	✓	
6	✓	
5	✓	✓
4	✓	✓
3	✓	✓
2	✓	✓
1	✓	✓
	red	yellow

Word sums

✎ Paul has 10 Smarties he eats 4, how many does he have left?

✎ Bill and Sarah have 9 books altogether, if Sarah has 4, how many does Bill have?

✎ Susan has 8 sweets if she shares them between herself and 3 friends, how many will each get?

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

Reflections:

Barriers:

WEEK 2

WEEK 2	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
AS 1: Counts to at least 34 everyday objects reliably.	
AS 2: Counts forwards and backwards in:	2.1
2.1 ones from any number between 0 and 100; (FAT 1)	
2.2 tens from any multiple of 10 between 0 and 100. (FAT 1)	2.2
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 7: Can perform calculations, using appropriate symbols, to solve problems involving:	7.1
7.1 addition and subtraction with whole numbers and solutions to at least 34	7.2
7.2 repeated addition with whole numbers and with solutions to at least 34	
7.3 estimation	7.3
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.	
AS 9: Uses the following techniques:	9.1
9.1 building up and breaking down numbers	9.2
9.2 doubling and halving	
9.3 Using concrete apparatus (e.g. counters)	9.3
9.4 Using number-lines	9.4
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100 (FAT 1)	
AS 3: Creates own patterns.	
LO 3: SPACE AND SHAPE	
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 (FAT 1)	
AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').	
LO 4: MEASUREMENT	
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'.	
LO 5: DATA HANDLING	
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.	

WEEK 2

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Activity: Teacher says : " Count the cards that I have given you." How many do you have?



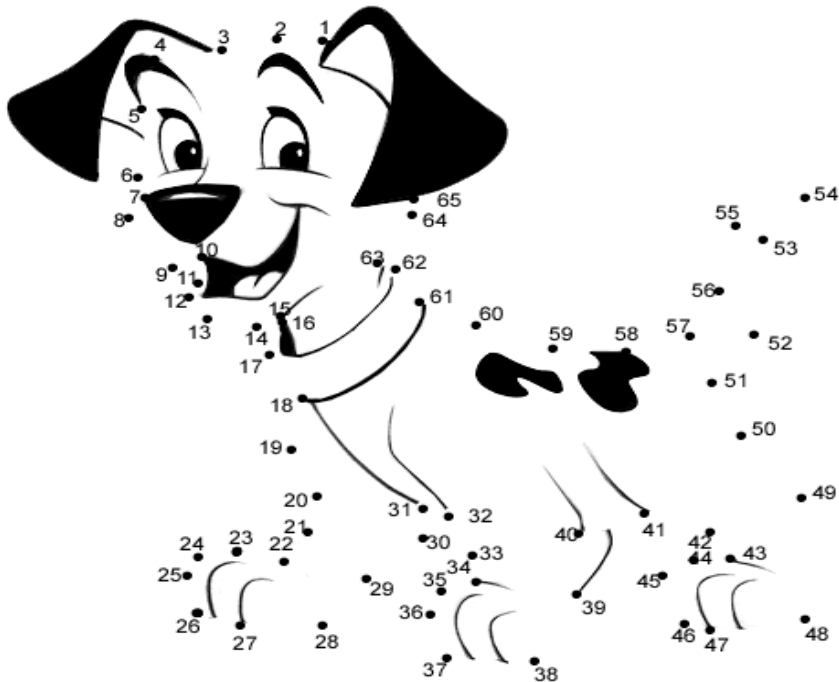
AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

FAT 1: Practical in small groups

Learners count forwards and backwards in ones from a given number in the number range 0 to 100.

Activity: Learners complete a dot-to-dot .



2.2 tens from any multiple of 10 between 0 and 100.

FAT 1: Practical in small groups

Learners count forwards and backwards in multiples of ten in the number range 0 to 100.

Activity: Complete the pattern

70	60						
----	----	--	--	--	--	--	--

Backward in 10's

10	20								
----	----	--	--	--	--	--	--	--	--

Forward in 10's

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

Activity: 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	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



AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.

Activity: Teacher asks:

Which number is bigger: 13 or 21?

Which number is smaller: 17 or 24?

Place these numbers in order from biggest to smallest: 4; 34; 21; 6; 30; 8; 25; 19; 2; 15

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

Activity: 1 cat has 4 legs. How many legs do 6 cats have?



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

AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.

Activities: Learners complete mental maths worksheets

Add 1	
2	
1	
10	
6	

$$4 - 4 =$$

$$4 - 2 =$$

$$1 - 1 =$$

$$10 - 6 =$$

$$9 - 6 =$$

$$1 - 0 =$$

Activities:

Learners are each given a pair of dice. They throw the dice and then add the dots.

Learners can record the combinations on paper e.g. 1+1=2; 4+1=5; 5+1=6; 4+5=9 etc.



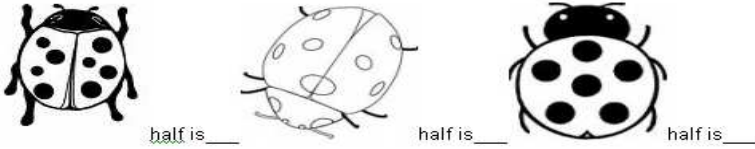
AS 9: Uses the following techniques:

9.1 building up and breaking down numbers

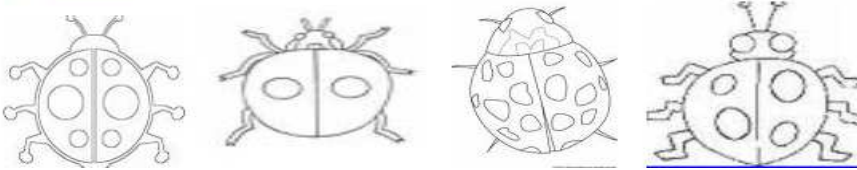
9.2 doubling and halving

Activity: Use ladybirds to illustrate doubling and halving.

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

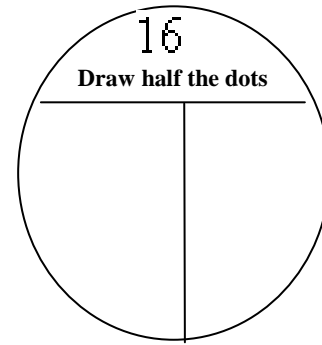
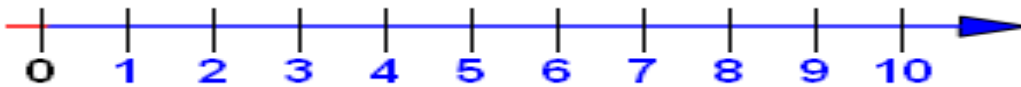


e.g. Colour in half of the dots on the lady bird.



9.3 Using concrete apparatus (e.g. counters)

9.4 Using number-lines



LO 2: PATTERNS, FUNCTIONS & ALGEBRA

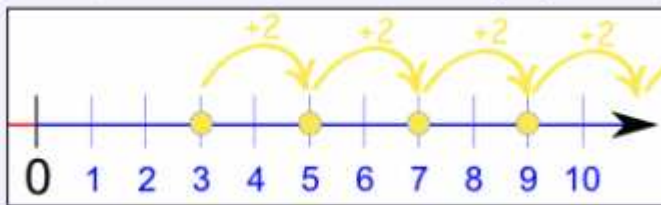
AS 2: Copies and extends simple number sequences to at least 100

FAT 1: Practical in small groups

The teacher gives learners number strips with different number patterns in the number range 0 to 100. Learners copy and extend the number pattern.

Activity: Give learners a number line and tell them to complete the pattern by drawing in the "jumps". They can then write down the pattern and extend it further.

Example: the sequence {3, 5, 7, 9, ...} starts at 3 and jumps 2 every time:



AS 3: Creates own patterns.

Activity: Give learners various shapes or objects and tell them to arrange them in a pattern or learners can draw their own pattern. Alternatively they can make their own number pattern.



or 1, 3, 5, 7, 9, ... or 1; 8; 8; 1; 8; 8;—

LO 3: SPACE AND SHAPE

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

FAT 1: Written

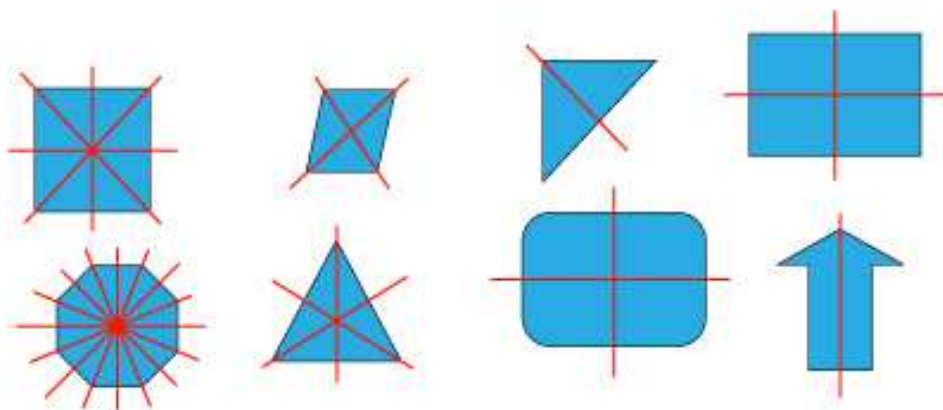
Learners draw boxes and balls of different sizes and colours and write the names underneath. ✍

Activity: Teacher gives the children a number of different balls. Teacher asks : What 3-D shape is a ball? If it were drawn in 2-D, what shape would it be? Learners must identify the sport or activity that matches the ball, they must state whether all the balls are the same shape or if they think a certain ball does not belong to the group. They must give reasons for their findings. Learners can then arrange the balls according to size. Teacher then asks the learners if the balls can be grouped in different ways e.g. heavy and light; big and small, rough and smooth, filled with air and solid etc.



AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').

Activity: Colour in the section of the shape that is symmetrical to the other half.



LO 4: MEASUREMENT

AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).

Activity: Ask; "which is longer, a week or a day?"; " Which is shorter a month or a week?" or "Which longer, a season or a month?"; " Which is shorter, a season or a year?"

1 Day



1 Week = 7 Days



1 Month (about 30 Days)



December	Summer
January	
February	
March	Autumn
April	
May	
June	Winter
July	
August	
September	Spring
October	
November	



AS 3: Sequences events using language such as 'yesterday', 'today' and 'tomorrow'.

Activity: Ask; What day is it today? What day was it yesterday? What did you have for supper yesterday? What day will it be tomorrow? What is the date today? What was the weather like yesterday?

Days Have Names

There are seven different days:

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

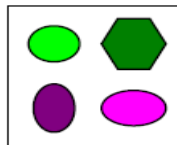
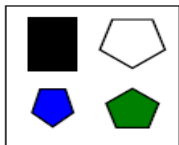
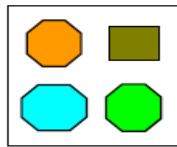
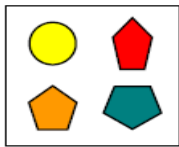
Wednesday, 14 October 2009						
◀ October 2009 ▶						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

7 days together make a Week.

LO 5: DATA HANDLING

AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).

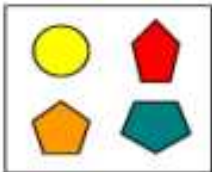
Activity: Give learners 3 similar shapes and 1 dissimilar shape and ask them to identify the shape that does not belong.



AS 3: Gives reasons for collections being grouped in particular ways.

Activity: Use the above activity and ask why that shape does not belong to the group.

Example:



The circle does not belong, because the other shapes all have corners

Word sums

- ✍ Pam has 10 Suckers she eats 6, how many does she have left?
- ✍ Bob and Sam have 9 balls altogether, if Sam has 6, how many does Bob have?
- ✍ Sally has 10 flowers if she shares them between herself and a friend, how many will each get?

Resources: Counters, abacus, number grid (100 block), flard cards, flash cards with number symbols and number names, Tangrams, various shapes, decks of cards, number lines, dot-to-dot worksheets, dominoes, number rods, calendar, dice and symmetry worksheets.

Reflections:

Barriers:

WEEK 3

WEEK 3	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
AS 1: Counts to at least 34 everyday objects reliably.	
AS 2: Counts forwards and backwards in:	2.1
2.1 ones from any number between 0 and 100;	
2.2 tens from any multiple of 10 between 0 and 100.	2.2
AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.	
AS 7: Can perform calculations, using appropriate symbols, to solve problems involving:	7.1
7.1 addition and subtraction with whole numbers and solutions to at least 34	7.2
7.2 repeated addition with whole numbers and with solutions to at least 34	
7.3 estimation	7.3
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.	
AS 9: Uses the following techniques:	9.1
9.1 building up and breaking down numbers	9.2
9.2 doubling and halving	
9.3 Using concrete apparatus (e.g. counters)	9.3
9.4 Using number-lines	9.4
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100	
AS 4: Describes observed patterns	
LO 3: SPACE AND SHAPE	
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 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).	
LO 4: MEASUREMENT	
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)	
LO 5: DATA HANDLING	
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.	

WEEK 3

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Activity: Learners are given a pile of number rods or dominoes. They are asked to count the objects.



AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

Activity: Learners count the dots on the dominoes, then they count backward from the last number.



2.2 tens from any multiple of 10 between 0 and 100.

Activity: Learners are given a worksheet with missing multiples of 10. They must fill in the missing numbers.

10					60					100
----	--	--	--	--	----	--	--	--	--	-----

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

Activity: Learners are given a number of cards with number names on some and number symbols on others. They must then match the number name to the correct number symbol.

1	one	2	two	3	three	4	four
5	five	6	six	7	seven	8	eight
9	nine	10	ten	11	eleven	12	twelve
13	thirteen	14	fourteen	15	fifteen	16	sixteen
17	seventeen	18	eighteen	19	nineteen	20	twenty
21	twenty-one	22	twenty-two	23	twenty-three	24	twenty-four
25	twenty-five	26	twenty-six	27	twenty-seven	28	twenty-eight
29	twenty-nine	30	thirty	31	thirty-one	32	thirty-two
33	thirty-three	34	thirty-four	35	thirty-five	36	thirty-six

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

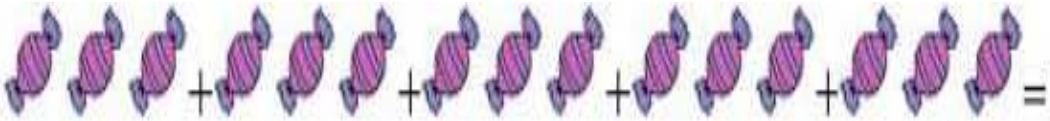
7.2 repeated addition with whole numbers and with solutions to at least 34

Activity: If there are 7 desks and each have 2 pencil holders, how many pencil holders will there be altogether?



$$2+2+2+2+2+2+2=$$

Activity: If 5 children each have 3 sweets, how many sweets will they have altogether?

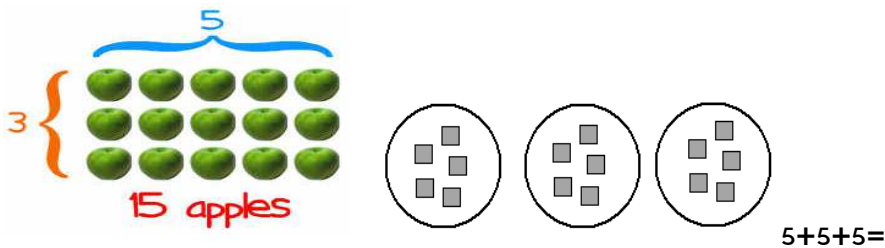


$$3+3+3+3+3=$$

Activity: There are 4 vases and each has 3 flowers, how many flowers will there be altogether?



Activity: If 3 children, each have 5 apples how many will they have altogether?



7.3 estimation

Activity: Teacher shows the learners a domino, she then asks the learners how many they think they will need to measure the length of the desk. Learners must write down their estimate of how many they think they will need.

The teacher then gives a pile of dominoes to the learners so that they can place the dominoes onto the desk to measure the desk. The learners record their findings.

The teacher then asks whether the estimate was accurate or not and if not, what was the difference between the actual amount needed and the estimate.



Activity: Free play: Learners can then use the dominoes to measure different objects in the classroom, estimating first. They can record their estimations and findings. Later they can tell the class which object was the biggest to be measured and which was the smallest

AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10

Activity: Teacher asks the learners to give the answers to the following sums verbally.

$6+1=$

$8+0=$

$3+2=$

$5+5=$

$1+6=$

$2+4=$

$8+1=$

$1+2=$

$2+4=$

$3+1=$

$6-4=$

$3-3=$

$1-1=$

$2-0=$

$4-0=$

$7-2=$

$6-3=$

$5-3=$

$8-5=$

$5-3=$

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

Activity: Teacher shows the learners a different way of finding the sum of two numbers, by using the following Addition Table:

Example: Find $3 + 5$

- find the row starting with "3"
- move along to be under the column "5"
- and there is the number "8", so $3 + 5 = 8$

+	1	2	3	4	5	6	7
1	2	3	4	5	6	7	8
2	3	4	5	6	7	8	9
3	4	5	6	7	8	9	10
4	5	6	7	8	9	10	11

Activity: Teacher gives the learners number rods. The learners must then build a given number, using the rods. Example: a number 6 rod can be made using 2 number 3 rods or 3 number 2 rods or 6 number 1 rods



LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100

Activity: Teacher gives the learners strips of paper with the following patterns written on them. The learners must copy and complete the patterns.

1, 4, 7, 10, 13, 16, 19, 22, 25, ...

3, 8, 13, 18, 23, 28, 33, 38, ...

AS 4: Describes observed patterns

Activity: Teacher uses the activity in AS. 2. Learners must describe the patterns.

1, 4, 7, 10, 13, 16, 19, 22, 25, ...

This sequence has a difference of 3 between each number.

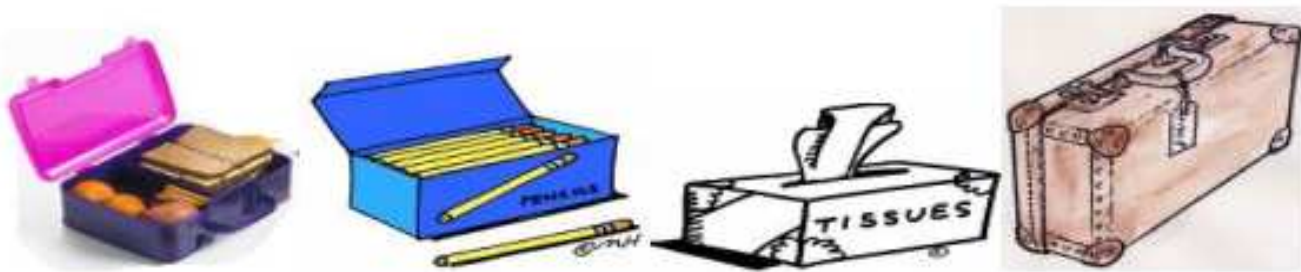
3, 8, 13, 18, 23, 28, 33, 38, ...

This sequence has a difference of 5 between each number.

LO 3: SPACE AND SHAPE

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

Activity: Find all the box shapes in the classroom or in a picture.

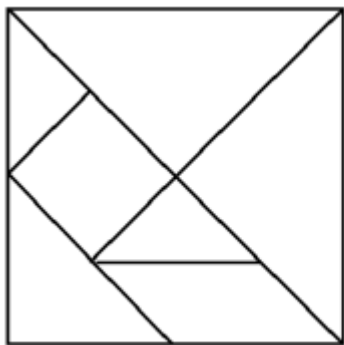


Activity: Learners must name the objects. Ask learners to compare the boxes, Which is the biggest? Which is the smallest? Order the boxes from biggest to smallest. Etc.

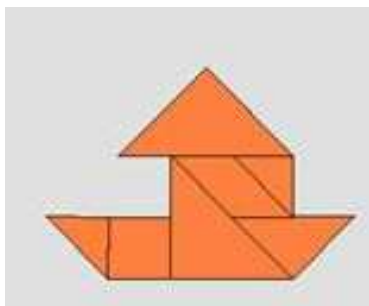
Activity: What is the 3-D name for the box shape? If the object were drawn in 2-D, what shape would it be?

AS 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).

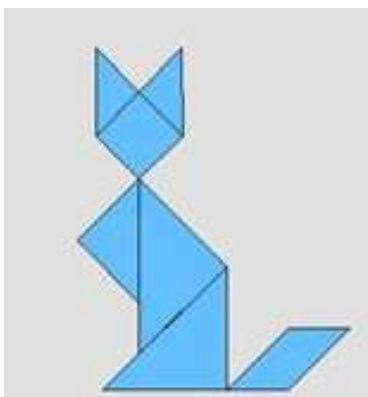
Activity: Teacher gives learners tangrams and asks them to make animals, people or any picture that they would like to make. Learners must experiment freely and creatively.



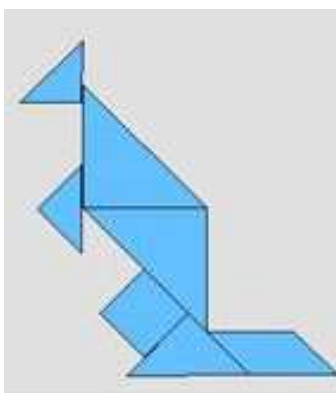
tangram



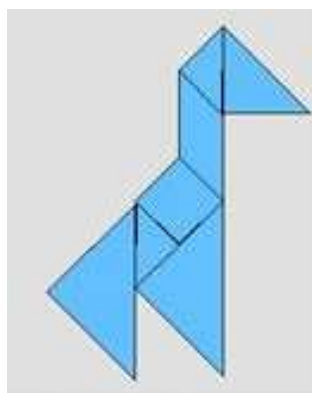
boat



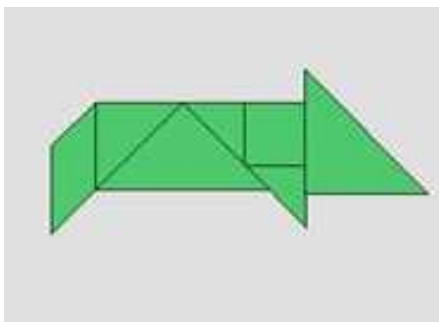
cat



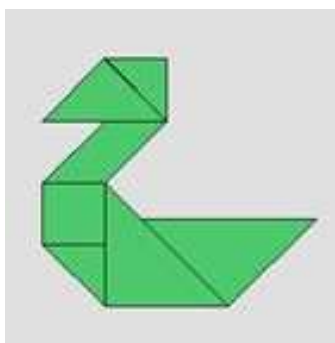
kangaroo



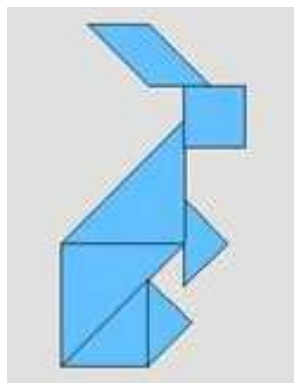
giraffe



pig



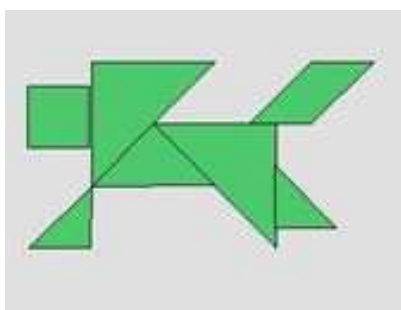
swan



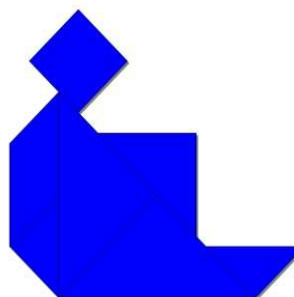
rabbit



camel



lion



man (sitting)

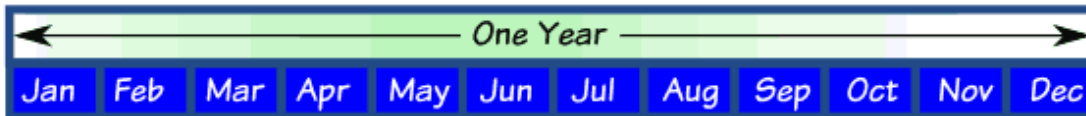
LO 4: MEASUREMENT

AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).

Activity: Teacher teaches the learners a rhyme to help them remember how many days there are in each month. Then she asks, which month is the shortest? How many days do most months have? Which months are the longest? How many months have 30 days? How many months are there altogether? Which month are we in now? How many months are left of the year? What is today's date? How many days are left of this month?

Months

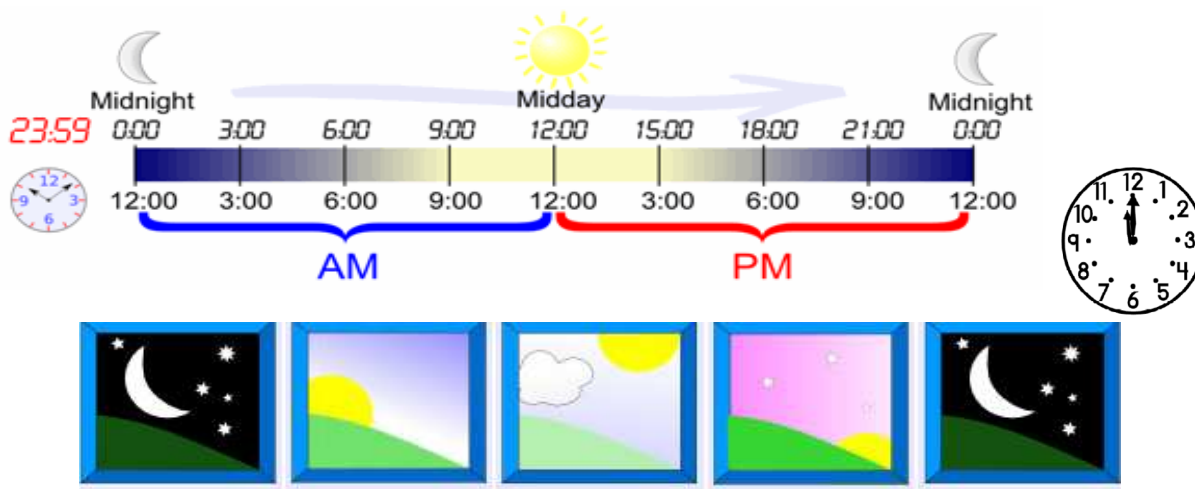
There are twelve months in a year:



You can remember how many days in each month using this rhyme:

*30 days has September,
April, June and November.
All the rest have 31
Except February alone,
Which has 28 days clear
And 29 in each leap year.*

Activity: Teacher teaches the learners that there are 24 hours in a day. That is why 12 o'clock is called "Midday". The day actually starts at 12 o'clock in the night "Midnight". Teacher asks children what time they go to bed and what time they wake up. Then they calculate how many hours are spent sleeping and how many are spent awake. Teacher asks which is more, the time spent sleeping or the time that learners are awake? How many hours do the learners spend at school? Which is less, the time spent sleeping or the time spent at school?



AS 3: Sequences events using language such as 'yesterday', 'today' and 'tomorrow'.

Activity: Teacher shows the learners a calendar. She asks, what month is it? What is the date today? What was yesterday's date? What will tomorrow's date be? What day of the week is it today? What will tomorrow be? What day was it yesterday? If Johnny's birthday is on the 24th of October, what day of the week will that be? How many days is it till Johnny's birthday? Will he be at school on his birthday?

Wednesday, 21 October 2009						
October 2009						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
			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	

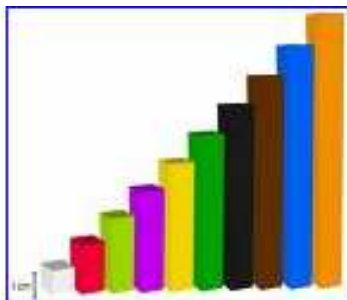
Activity: Teacher asks, how many days are there in a week? Of those days, how many are spent at school? How many are part of the weekend? How many weeks are there in a month?

Weekdays and Weekend



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)

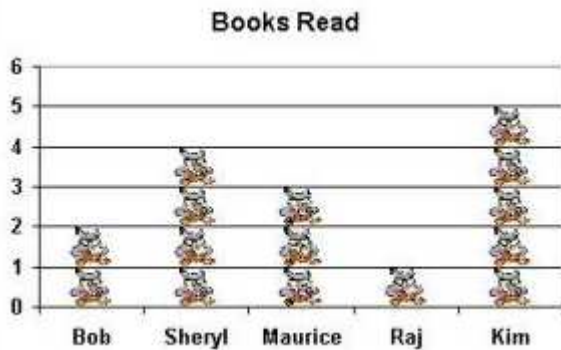
Activity: Teacher gives each learner a set of number rods. Learners must order the rods from biggest to smallest. Then learners must take the orange rod (longest one) and they must then find all the two rod combinations that will equal the orange rod (which has the value of 10). They must record their findings, e.g. $3+7=10$; $2+8=10$; $4+6=10$; $1+9=10$ etc.



LO 5: DATA HANDLING

AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.


Activity: Teacher asks learners to interview 5 classmates and ask how many supplementary readers each have read so far this week. The learners record their findings and then plot them on a graph using pictures, stickers or stamps.



AS 6: Describes own collection of objects, explains how it was sorted, and answers questions about it.


Activity: Teacher uses the activity in AS 5. Teacher asks learners what they have learned from their survey, i.e. Who read the most books? Who read the least? What was the difference between the most and the least? Etc.


Word sums

 Diane loves to walk around the neighborhood enjoy the Christmas trees that neighbors have decorated. On one side of the street there were 5 beautiful Christmas trees. The other side of the street had 7 decorated trees. Hint: If it helps, draw the Christmas Trees.



her
trees.
Christmas

 The school is having a bean bag toss contest. The person who tosses the most bean bags through the hoop wins. Nancy won the contest but made her mom guess how many bean bags she got through the hoop. Here are the clues Nancy gave. There are more than 8. There are fewer than 12. It is an even number. What is the number?

 One flower has 5 petals, how many petals will 4 flowers have?
You can draw the answer.



Resources: Counters, abacus, number grid(100 block), flard cards, flash cards with number symbols and number names, number rods, dominoes, calendar, clock, tangrams, addition table and balls.

Reflections:

Barriers:

WEEK 4

WEEK 4	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
AS 1: Counts to at least 34 everyday objects reliably.	
AS 2: Counts forwards and backwards in:	2.1
2.1 ones from any number between 0 and 100;	
2.2 tens from any multiple of 10 between 0 and 100.	2.2
AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34. (FAT 2)	
AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.	
AS 7: Can perform calculations, using appropriate symbols, to solve problems involving:	7.1
7.1 addition and subtraction with whole numbers and solutions to at least 34	7.2
7.2 repeated addition with whole numbers and with solutions to at least 34	
7.3 estimation	7.3
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10. (FAT 2)	
AS 9: Uses the following techniques:	9.1
9.1 building up and breaking down numbers	9.2
9.2 doubling and halving	
9.3 Using concrete apparatus (e.g. counters)	9.3
9.4 Using number-lines	9.4
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100. (FAT 2)	
AS 3: Creates own patterns.	
LO 3: SPACE AND SHAPE	
AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').	
LO 4: MEASUREMENT	
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). (FAT 2)	
LO 5: DATA HANDLING	
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 4: Draws a picture as a record of collected objects.	

WEEK 4

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Activity: The teacher collects stones for pupils to count. Each child is given a pile to

AS 2: Counts forwards and backwards in :

2.1 ones from any number between 0 and 100

Activity: Rhythmical counting from 61-80; Count from 55 back to 30. Learners click their fingers, clap etc. Learners count in ones from any given number.

2.2 tens from any multiple of 10 between 0 and 100.

e.g. 10,20,30.....;

Activity: Learners count on from different starting points. eg.30; 40; 50 $\frac{1}{2}$.

Activity: Learners colour in all the multiples of 10 on the hundred grid. What pattern can be seen?

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

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

Activity: The teacher flashes numbers in any order 0-100 and learners recognize and name numbers.

45	78	99
----	----	----

Activity: The teacher flashes number names in any order from zero to thirty-four and learners recognize and read the number name.

Learners write any number name in the number range 1-34

twenty-five

Fat 2: Oral/ Practical in small groups: rubrick

Knows and reads number symbols from 1 to at least 100



AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.

Activity: Use number rods. Teacher tells learners to place the different colours from biggest to smallest and smallest to biggest. The learners then use combinations together and place them from biggest to smallest and smallest to biggest. Pick up 1 orange and 1 grey, pick up 2 yellow. Now put the pairs together from the smallest number to the biggest number. Write down the numbers under the rods.

Learners describe the position of numbers 0-34

Activity: Learners use a number line to answer questions on the carpet.
What comes before 30?; What comes after 27?; What comes between 28 and 30?

27	28	29	30
----	----	----	----

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

Activity: What is one more than 28? What is two more than 31? Put a red counter on the number that is two less than 30. Draw a circle around the biggest number.

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

Activity: $29 + 4 = 29 + 1 + \underline{\quad}$, $34 - 8 = 34 - 4 - \underline{\quad}$

Peter has 34 sweets in his pocket. He gives his friend 9. How many will he have left?

Tumelo has 20 ice-cream cones for her birthday party. She needs 28. How many must she buy?

7.2 repeated addition with whole numbers and with solutions to at least 34

The teacher asks word problems. The learners calculate and write the sum.

Activity: $2+2+2+2+2+2+2+2=$

Activity: I have a bag of oranges there are 5 oranges in the bag. If I have 6 bags, how many will there be.

Fat 2: Practical in small groups:

Repeated addition with whole numbers and with solutions

7.3 estimation

Activity: There are 3 children on a bus, 6 get on at the first stop and 4 get on at the second stop.

How many children do you think are on the bus now?



AS 8 : Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

Activity: The teacher flashes flash cards with place holders in different positions.
Learners must answer as quickly as possible.

$$\square + 6 = 10$$

$$8 - 5 = \square$$

$$9 - \square = 5$$

$$7 + \square = 9$$

Fat 2: Oral/Practical response in small groups– rating scale

Performs mental calculations involving addition and subtraction for numbers to at least 10

AS 9: Uses the following techniques:

9.1 building up and breaking down numbers

Activity: The teacher gives each learner their own number between 0 and 34.
The learners break down and build up their number, they may use concrete apparatus. The learners record their work by drawing or writing sums.
e.g. Break down 34: $34 = 30 + 4$ or $34 = 20 + 10 + 2 + 2$ and Build up 34: $20 + \square + \square = 34$
or $30 + \square = 34$

Fat 2: Practical in small groups:
building up and breaking down numbers

9.2 doubling and halving

Activity: Doubling and halving: The teacher gives the learners counters.
The learners must either double or halve the number depending on the instruction given by the teacher i.e. double or halve.

9.3 Using concrete apparatus (e.g. counters)

9.4 Using number-lines

LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100

Activity: Learners are given number patterns, which they must extend.

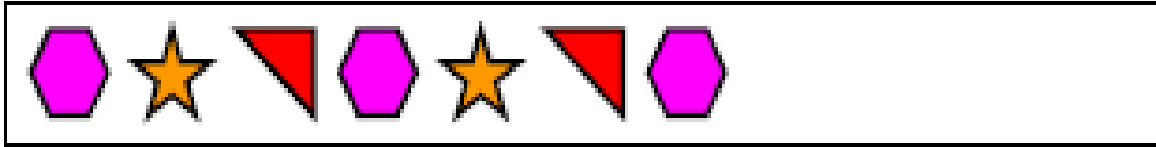
62	64	66							
----	----	----	--	--	--	--	--	--	--

	60		70	75			90		100
--	----	--	----	----	--	--	----	--	-----

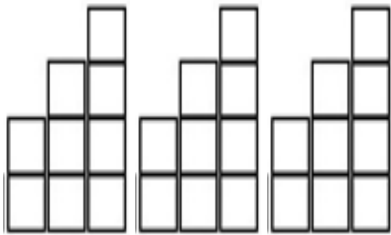
Fat 2: Practical in small groups:
Copies and extends simple number sequences to at least 100

AS 3: Creates own patterns.

Activity: The teacher tells the learners to use a few shapes and make their own patterns.



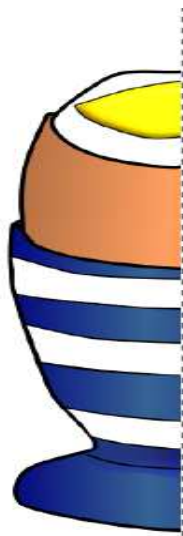
Activity: The teacher uses number rods to create a pattern. Learners must continue with the pattern.



LO 3: SPACE AND SHAPE

AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').

Activity: The teacher tells the learners to draw the right side of the picture.



LO 4: MEASUREMENT

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)

Activity: Learners arrange toys from the longest to the shortest. The teacher gives the learners 5 toys of different masses. Learners arrange the toys from the heaviest to the lightest.

The teacher gives the learners 5 containers of different sizes. The learners arrange the containers from the one that holds the most to the one that holds the least.

Fat 2: Practical in small groups:

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)

Activity: Learners are given a worksheet and told to Colour the object that holds the most water.

Learners are given a worksheet and told to Colour the heaviest object.

Learners are given a worksheet and told to Colour the shortest object.

Fat 2: Written: ✍

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)

LO 5: DATA HANDLING

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.

Activity: Learners are asked to bring any kind of construction toy to school, then they identify construction toys in the classroom e.g. building blocks, lego, puzzles etc.



AS 4: Draws a picture as a record of collected objects.

Activity: Learners create a pictograph according to the different types of construction toys brought to school.
E.g. 5 learners brought puzzles, 7 learners brought blocks and 2 learners brought lego.



Word Problems:

Father Christmas is making toys for Christmas. He has an order for 30 Barbie Dolls but he only has half of what he needs. How many must he still make before Christmas?



Father Christmas is making toy cars for Christmas. He has 20 wheels in on his worktable. How many cars can he make with those wheels?



Resources:

Abacus, counters, counting chart, number line, individual number cards, number name cards, sum flash cards, play money, cardboard robots, toys,

Reflections:

Barriers

WEEK 5

WEEK 5	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
AS 1: Counts to at least 34 everyday objects reliably.	
AS 2: Counts forwards and backwards in:	2.1
2.1 ones from any number between 0 and 100;	
2.2 tens from any multiple of 10 between 0 and 100.	2.2
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
7.1 addition and subtraction with whole numbers and solutions to at least 34	7.2
7.2 repeated addition with whole numbers and with solutions to at least 34	
7.3 estimation	7.3
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.	
AS 9: Uses the following techniques:	9.1
9.1 building up and breaking down numbers	9.2
9.2 doubling and halving	9.3
9.3 Using concrete apparatus (e.g. counters)	
9.4 Using number-lines	9.4
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100	
AS 3: Creates own patterns.	
AS 4: Describes observed patterns	
LO 3: SPACE AND SHAPE	
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.	
LO 4: MEASUREMENT	
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)	
LO 5: DATA HANDLING	
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 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.	

WEEK 5

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

Note to Teachers: The Annual National Assessment Test has to be written between the 2nd and the 6th of November 2009 (Week 5). This Test must be included as the Written Component of the third Formal Assessment Task (FAT 3). Therefore teachers only need to add the Oral/Practical component of FAT 3. The Oral/Practical component of FAT 3 will be done in Week 6.

AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

- Teacher gives learners a number and they count on from there to a specified number.
- Written activities: Fill in the numbers from various points.

1		3	4			7			10
	12			15					
					26		28	29	

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

- Learners are given cards with number symbols and number names and they must match up the number symbol with the number name.
- Learners can play the memory game. If they match the number symbol and number name correctly they keep the cards. The learner with the most cards at the end wins.

75

seventy-five

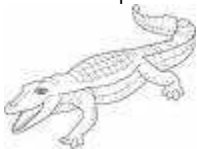
AS4: Orders, describes and compares whole numbers to at least 2-digit numbers.



Tell the story of the hungry crocodile. The crocodile always eats the larger number eg. If he's lying on the riverbank and he sees 12 fish on one side of him and 15 on the other.

Which will he choose? **12 < 15**

Explain that when there are the same numbers on both sides, he can't decide so his mouth is the same.



Give various different examples.

AS 5: Solves money problems involving totals and change in Rands and cents.

Mom gives me a R10 note and a R5 coin to buy some apples. The apples cost R11. How much change must I give Mom?

In my moneybox I've got 50cents, 20 cents and R1. How much money have I got?



Granny gives me 50cents for 5 days. How much money will I have?



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.

Granny is making apple pie. She needs 4 apples for each pie and she's making 3 pies. How many apples does she need?
A man at a garage has 24 tyres in the shed. How many cars can he put the tyres onto?

Group work on the carpet.

Learners are given a pile of counters. Pick up 16 counters. How many groups of 4 can you make?

Now pick up 30. How many groups of 3 can you make? Learners begin to record their groups eg

$$4+4+4+4=16,$$

$$3+3+3+3+3+3+3+3= 30$$



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

Worksheet with addition and subtraction to 34

Correlate stories with themes being taught.

Eg At the SPCA there are 3 dogs in a kennel. There are 5 kennels. How many dogs are there at the SPCA?



There are 4 mommy dogs. Each mommy has 5 puppies. How many puppies are there?



7.3 Estimation

The teacher plays estimation games with the learners using many different objects.

Learners guess how many objects in a jar, in a pile on the carpet. They count, the teacher then adds or removes counters and learners continue to estimate. Learners must count the objects after estimating.

AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

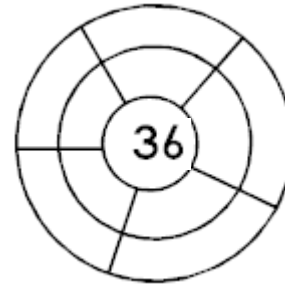
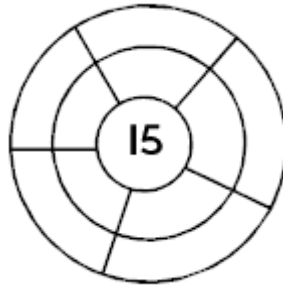
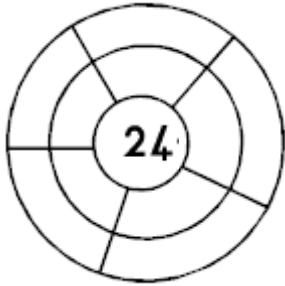
Learners play "Splash" Flashcards are placed on the floor as if they are stepping stones.

Learners have to cross the river saying the answers as quickly as possible. If the learner makes a mistake or is too slow, he/she falls into the river.



AS 9: Uses the following techniques:

9.1 building up and breaking down numbers



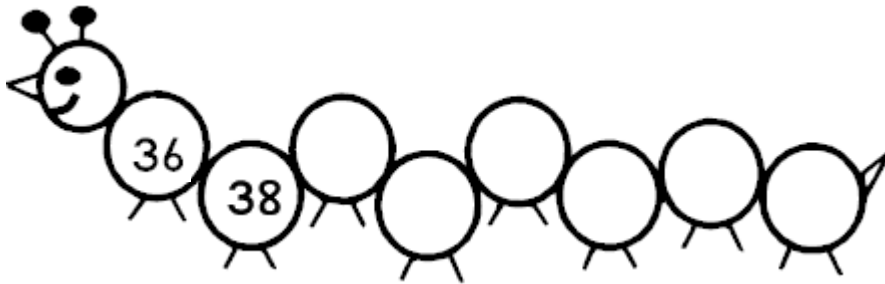
9.2 doubling and halving

9.3 Using concrete apparatus (e.g. counters)

9.4 Using number-lines

LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100



AS 3: Creates own patterns.

Let learners create their own number patterns and ask their peers if they can "see" the pattern.

e.g. 1 4 7 10 13 16

AS 4: Describes observed patterns

Say a sequence of numbers and learners must clap when they hear a number which is not in the right place, e.g. 10 12 14 16 18 20 or 10 12 14 15 18 20. You can also pause in the series and let the learners tell you what the next number is.

LO 3: SPACE AND SHAPE

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.

LO 4: MEASUREMENT

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)

LO 5: DATA HANDLING

AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).

Give the learners an assortment of buttons to sort.



AS 3: Gives reasons for collections being grouped in particular ways.

Ask the learners why they sorted the buttons according to colour/size etc.

AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.

Let the learners construct pictographs on the buttons they have sorted and grouped.

AS 6: Describes own collection of objects, explains how it was sorted, and answers questions about it.

Ask learners questions about their pictographs.

Word sums

✍ Paul has 10 Smarties he eats 6, how many does he have left?

✍ Bill and Sarah have 9 books altogether, if Sarah has 3, how many does Bill have?

✍ Susan has 10 sweets if she shares them between herself and 4 friends, how many will each get?

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

Reflections:

Barriers:

WEEK 6

WEEK 6	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
AS 1: Counts to at least 34 everyday objects reliably.	
AS 2: Counts forwards and backwards in:	2.1
2.1 ones from any number between 0 and 100;	
2.2 tens from any multiple of 10 between 0 and 100.	2.2
AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34. (FAT 3 🖐)	
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. (FAT 3 🖐)	
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. (FAT 3 🖐)	
AS 7: Can perform calculations, using appropriate symbols, to solve problems involving:	7.1
7.1 addition and subtraction with whole numbers and solutions to at least 34 (FAT 3 🖐)	7.2
7.2 repeated addition with whole numbers and with solutions to at least 34	
7.3 estimation	7.3
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.	
AS 9: Uses the following techniques:	9.1
9.1 building up and breaking down numbers	9.2
9.2 doubling and halving (FAT 3 🖐)	9.3
9.3 Using concrete apparatus (e.g. counters)	
9.4 Using number-lines	9.4
AS 10: Explains own solutions to problems.	
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100	
AS 3: Creates own patterns.	
AS 4: Describes observed patterns (FAT 3 🖐)	
LO 3: SPACE AND SHAPE	
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'). (FAT 3 🖐)	
LO 4: MEASUREMENT	
AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).	
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)	
LO 5: DATA HANDLING	
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. (FAT 3 🖐)	
AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours). (FAT 3 🖐)	
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. (FAT 3 🖐)	

WEEK 6

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Activity: Learners count how many jumps it takes to get to the bathroom. The teacher puts a pile of counters on the carpet and learners count and touch each one while they count.



AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

Activity: Learners fill in missing numbers on a counting chart.

51	52			55					60
61		63			66		68		
			74			77		79	80
	82			85			88		
91			94					99	100

2.2 tens from any multiple of 10 between 0 and 100.

Activity: Learners fill in missing numbers on a counting chart.

10					60				100
----	--	--	--	--	----	--	--	--	-----

12	14					24			
----	----	--	--	--	--	----	--	--	--

50	45	40							
----	----	----	--	--	--	--	--	--	--

35			38				42		
----	--	--	----	--	--	--	----	--	--

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

Activity: Small group on the carpet. Teacher quickly flashes numerals 1-100 and Learners read them. The teacher then flashes numbers again (0-34) and learners write the number names on a slate/whiteboard/paper

Activity: Read the numerals and match them to the number name

15 thirty-three
26 nineteen
33 fifteen
19 twenty-six

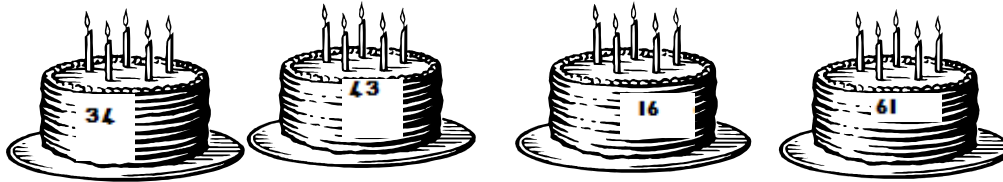


Fat 3: Practical in small groups

Knows and reads number symbols from 1 to at least 100.

AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.

Activity: Read the numbers in the cakes and draw all four cakes underneath with the biggest number on it first to the one with the smallest number last.



Activity: Colour the cake with the smallest number on it brown.
Colour the cake with the biggest number on it pink.
Colour the one that is 10 more than 6 yellow.
Colour the one that is 10 less than 44 pink.

AS 5: Solves money problems involving totals and change in rands and cents.

Activity: Lebo has R20. He buys Mom a Christmas present for R12.
How much change will he have?

Activity: Mary empties her money box to go shopping for Christmas.
She has 50c, 20c, R5 and R2. How much money does she have?



Fat 3: Practical in small groups

Solves money problems involving totals and change in rands and cents.

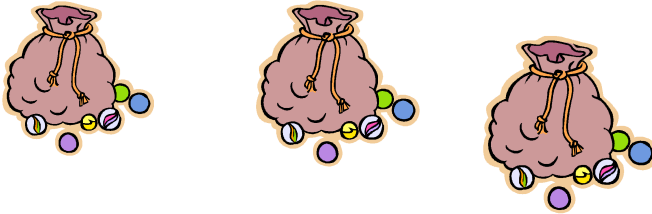
AS 6: Solves and explains solutions to practical problems that involve equal sharing and grouping with whole numbers to at least 34 and with solutions that include remainders.

Activity: The teacher poses problems to learners. They calculate and record their answers. The learners must explain to the teacher and others in the group how they calculated the answer.

Eg: Father Christmas is packing 6 little trucks in a box. He has packed 5 boxes. How many trucks has he packed?



Father Christmas has 27 marbles which he is putting into 3 bags. How many marbles will there be in each bag, if each bag must contain the same number of marbles?



Fat 3: Practical in small groups:

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

Activity: Learners play "fishing". They turn a sum over. If they know the answer, they keep the card. If they don't, they put it back.



Activity: Learners do work cards with addition and subtraction sums to 34.

Can you do these sums?:

$15 + 3 =$

$19 + 4 =$

$26 + 6 =$

$27 - 2 =$

$35 - 5 =$

$19 - 3 =$



Fat 3: Practical in small groups:

Can perform calculations, using appropriate symbols, to solve problems involving: 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

Activity: A shopkeeper has unpacked 16 pairs of shoes. How many shoes are there?



7.3 estimation

Activity: Learners estimate how many feet there are in the class room.

They write down their estimation. They then count all the feet in the classroom and compare the actual answer to their estimation.

AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

Activity: Learners do a worksheet with addition and subtraction to 10. The place holders should be in different positions.

E.g. Do these sums quickly and carefully

$$7 + 3 = \underline{\quad}$$

$$10 - \underline{\quad} = 4$$

$$4 + \underline{\quad} = 9$$

$$8 - 6 = \underline{\quad}$$

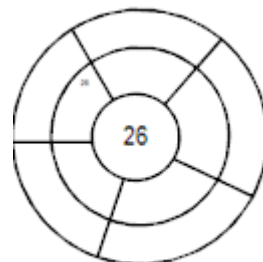
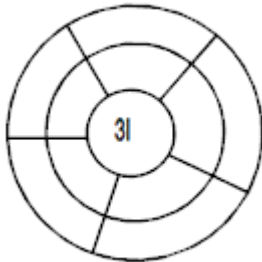
$$6 + \underline{\quad} = 10$$

$$9 - \underline{\quad} = 7$$

AS 9: Uses the following techniques:

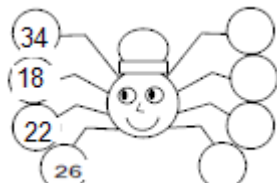
9.1 building up and breaking down numbers

Activity: Learners do their own combinations of numbers up to 34



9.2 doubling and halving

Activity: What is half of these numbers?



Fat 3: Practical in small groups:
doubling and halving

9.3 Using concrete apparatus (e.g. counters)

9.4 Using number-lines

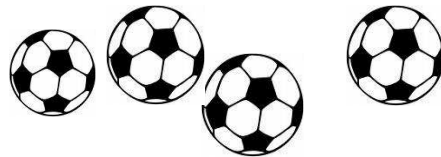
AS 10: Explains own solutions to problems.

Group activity: The teacher gives the learners problems. They do the calculations, write a sum and explain their own solutions.

E.g. There are 6 Christmas Pies in a pack. We need 18 pies for tea.
How many packs do we need?



E.g. Father Christmas has delivered 24 soccer balls,
but there are 32 children that should get one.
How many must he still deliver?



LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100

Activity: Learners complete the given number sequence

52	54	56					
----	----	----	--	--	--	--	--

AS 3: Creates own patterns.

Activity: The learners create their own patterns with shapes.



AS 4: Describes observed patterns

Activity: Learners describe their classmates patterns that were created.

Fat 3: Practical in small groups:
Describes observed patterns

LO 3: SPACE AND SHAPE

AS 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).

Activity: Learners bring cereal boxes, toilet rolls, scrap cardboard, plastic bottles and any other clean waste materials to school.

They construct a dinosaur or fantasy creature from the materials.



AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').

Activity: Learners discuss with a partner what in the classroom is symmetrical and what isn't. They discuss symmetry in their bodies as well.



LO 4: MEASUREMENT

AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower)

Activity: Learners compare lengths of time that it takes to do certain tasks:

E.g. Does it take longer or shorter to walk to school or go by car?

Activity: Learners estimate time. Teacher tells them to close their eyes for one minute. They must raise their hand when they think a minute has passed



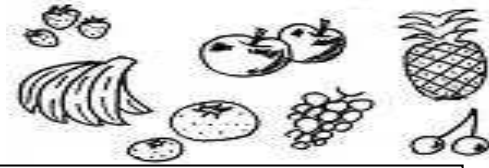
AS 5: Estimates, measures, compares and orders three-dimensional objects using non-standard measures: mass (e.g. bricks, sand bags); capacity (e.g. spoons, cups); length (e.g. hand spans, footsteps)

Activity: Learners collect various objects in the class room. They then say which is the heaviest, which is the lightest. Which is the biggest, which is the smallest etc.

LO 5: DATA HANDLING

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.

Activity: Each learner must bring fruit to school.



Fat 3: Practical:

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).

Activity: Learners sort the fruit according to types or colours etc.



Fat 3: Practical:

Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).

AS 4: Draws a picture as a record of collected objects.

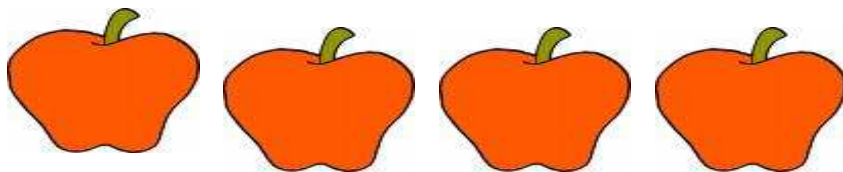
Activity: Learners count how many of each fruit there are and record their findings, by drawing.



Strawberries 2



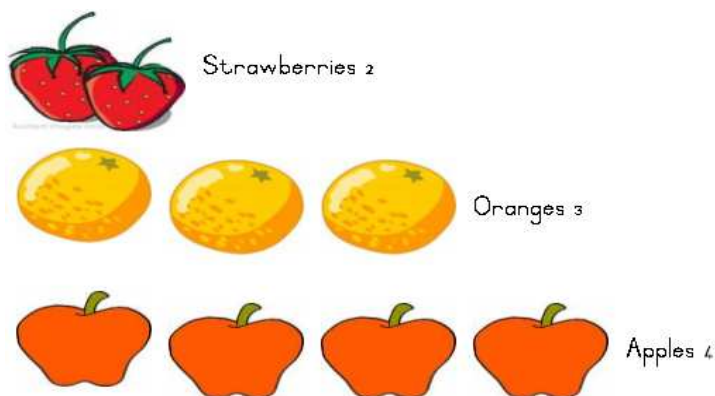
Oranges 3



Apples 4

AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.

Activity: Learners construct and discuss a pictograph of the fruit collected.

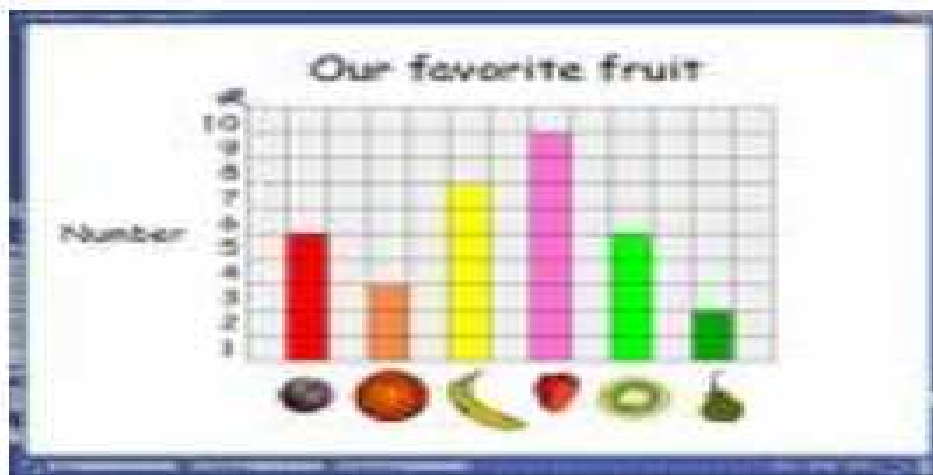


AS 6: Describes own collection of objects, explains how it was sorted, and answers questions about it.

Activity: Each group discusses what fruit they have brought.

They discuss the types of fruit and how many of each type.

They explain how they sorted the fruit.



Fat 3: Practical in small groups;

Describes own collection of objects, explains how it was sorted, and answers questions about it.

Word Sums:

- There are 16 stars on the Christmas tree; Mom wants to hang 4 more. How many stars will then be on the tree?



- If a star has 5 points, how many points will 2/3/5/8 stars have?
- Santa has 12 reindeer, 7 are sick, how many are left to pull the sleigh?



- If 5 children each make 3 Christmas cards, how many cards will they have altogether?



Resources: Abacus, counters, counting chart, number line, individual number cards, number name cards, sum flash cards, play money, fruit.

Reflections:

Barriers:

WEEK 7

WEEK 7	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
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.	2.1
	2.2
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	7.1
	7.2
	7.3
AS 8: Performs mental calculations 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	9.1
	9.2
	9.3
	9.4
AS 11: Checks the solution given to problems by peers.	
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100	
AS 3: Creates own patterns.	
AS 4: Describes observed patterns	
LO 3: SPACE AND SHAPE	
AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').	
LO 4: MEASUREMENT	
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)	
LO 5: DATA HANDLING	
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.	

WEEK 7

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably eg using any resource available such as counters, abacus, pencil crayons, workbooks, learner's chairs, tables etc

AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

Group work: Learners use a blank number grid. The learners fill in missing numbers using cut out cards.

29	25	32	49	51
33	26	44	41	27
1	5	22	32	34
31	28	60	55	30
43	56	50	40	52

2.2 tens from any multiple of 10 between 0 and 100.

Group work: The teacher divides learners into groups. Each learner in the group strings 10 beads. Learners count in tens.

AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

Use number grid. The teacher calls out the number. Learner places a button/counter on the number. Teacher calls out a variety of numbers. Learners now write the number names of these numbers down.

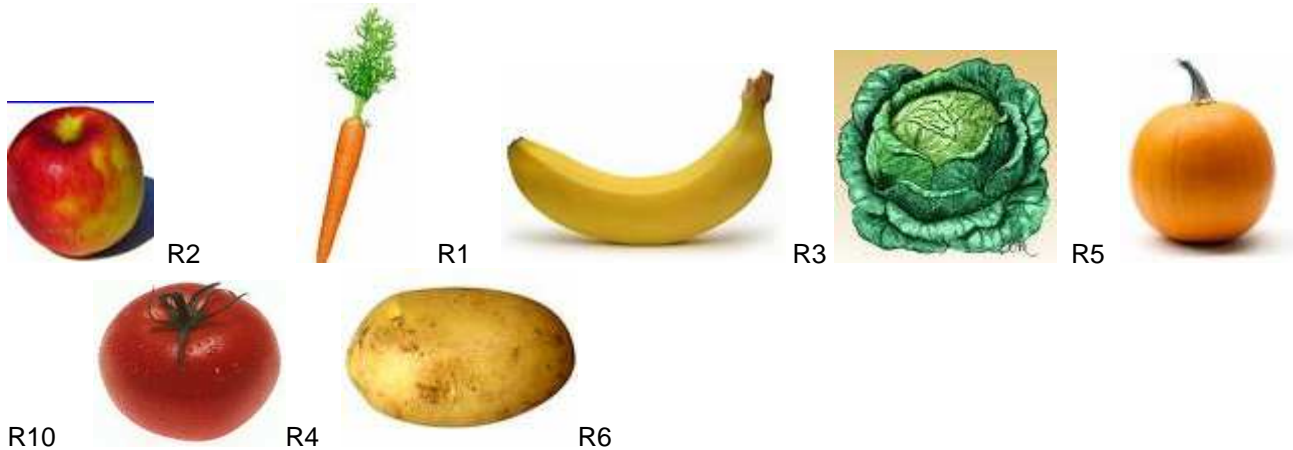
AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.

Learners work in pairs. They have about 5 number cards on their table. They arrange the numbers from biggest to smallest and from smallest to biggest. Pairs check the others' answers in the group.

Five star-shaped number cards are shown above a row of five rectangular boxes. The numbers on the cards are 51, 67, 76, 31, and 13. The numbers in the boxes are 17, 11, 32, 24, and 28. A vertical line is drawn to the right of the boxes.

AS 5: Solves money problems involving totals and change in rands and cents.

The learners work in pairs. Each pair has R30 to spend at the Greengrocer. They buy different fruit and vegetables. Calculate prices and change.



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.

Practical problem: Teacher divides learners into groups. She packs 30 coloured pencils in each group. Learners share the 50 pencils amongst themselves. They discuss how many each learner gets and if there are 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
Learners add and subtract by reading the instructions on the worksheets.

Add 9	
1	
7	
3	
0	

Add 5	
2	
3	
8	
4	

Subtract 5	
7	
8	
9	
6	

Subtract 6	
8	
7	
9	
10	

Learners fill in the correct symbol (+ or -) to solve the problem.

$$3 \bigcirc 4 = 7$$

$$0 \bigcirc 7 = 7$$

$$6 \bigcirc 0 = 6$$

$$1 \bigcirc 6 = 7$$

$$2 \bigcirc 6 = 8$$

$$5 \bigcirc 3 = 8$$

7.2 repeated addition with whole numbers and with solutions to at least 34

Eg Group work: Each group has an amount of shapes or counters on their table. Each group groups their objects differently eg 2s,3s,5s,10s
Learners record their findings. Groups rotate.
e.g. $9 = 3 + 3 + 3$



7.3 estimation (0-34)

Learners have objects on their table. They look briefly, estimate. Write their estimation on their piece of paper.

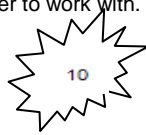
Teacher counts objects with learners. Compare estimation to the actual amount. Eg How many more or less are there than what was estimated? Who estimated the correct number?

AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

Worksheet

Learners play "Magic Number" game.

Each learner gets a different number to work with.



Write down your number	
Write the number name of your number.	
Double your number	
Halve your number	
Halve your number	
Add 2	
Subtract 2	
1 more	
1 less	
Count in 2s starting from your number.	

AS 9: Uses the following techniques:

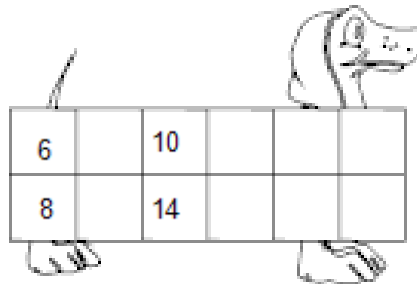
9.1 building up and breaking down numbers

Learners break down and build numbers using a worksheet and counters if necessary.

Break down 34	

Build up 32	
17	
19	
20	
22	

9.2 Doubling and halving



9.3 Using concrete apparatus (e.g. counters)

9.4 Using number-lines

AS 11: Checks the solution given to problems by peers.

Learners work in pairs. Each learner is given a problem to solve e.g. One tricycle has 3 wheels, how many wheels do 6 have?



Learners solve the problem and then explain to a partner how they solved the problem. The partner checks the solution.

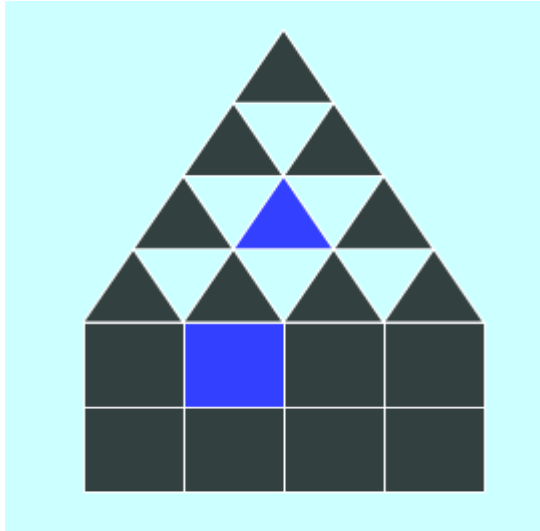
LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100

10	15			30			45	
		65			80			

AS 3: Creates own patterns.

Learners are given squares and triangles of different colours and told to create patterns using the shapes.



AS 4: Describes observed patterns

Learners describe the patterns that they see in the classroom or on worksheets etc.



LO 3: SPACE AND SHAPE

AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').

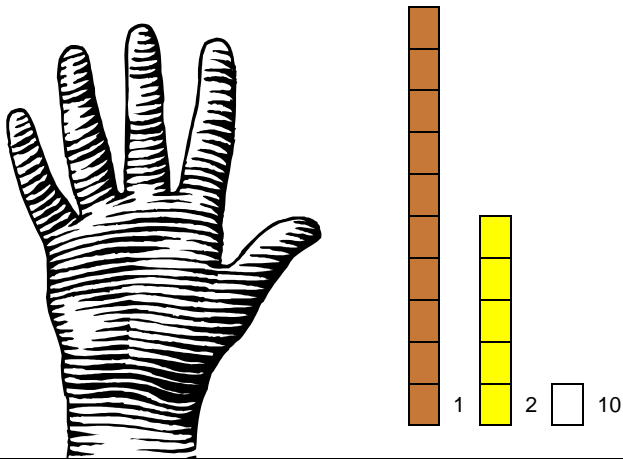
Learners are given pictures from magazines. They are asked to cut the picture in half. Then the learner must decide if the object in the picture is symmetrical or not. Learners can make posters to record their findings.



LO 4: MEASUREMENT

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)

Learners use number rods from smallest to biggest to measure their hand. E.g. First learners can trace their own hand onto a worksheet. Then start with the smallest rod and measure how many fit into the length of their hand. Learners can record their findings on a worksheet.



LO 5: DATA HANDLING

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.

Let learners collect leaves on the playground.

AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).

Let learners sort the leaves according to shape.



AS 3: Gives reasons for collections being grouped in particular ways.

Ask learners why they sorted the leaves the way they did.

AS 4: Draws a picture as a record of collected objects.

Let learners draw their collections of leaves in their mat books.

AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.

Let learners draw a pictograph of their collections of leaves. They can use stickers to represent the different kinds of leaves.

AS 6: Describes own collection of objects, explains how it was sorted, and answers questions about it.

Ask learners questions about their graphs.

Word sums

→ There are 6 boys on a rugby field, 4 join them, how many boys are there?

→ There are 10 girls on a netball court 6 go home, how many are left?

→ I have 10 balls, I want to share them between 2 children, how many will each child get?

→ If 3 children each have 5 sweets, how many do they have altogether

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

Reflections:

Barriers:

WEEK 8

WEEK 8	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
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.	2.1
	2.2
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	7.1
AS 8: Performs mental calculations 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	9.1
	9.2
	9.3
	9.4
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 2: Copies and extends simple number sequences to at least 100	
AS 3: Creates own patterns.	
AS 4: Describes observed patterns	
LO 3: SPACE AND SHAPE	
AS 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).	
LO 4: MEASUREMENT	
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)	
LO 5: DATA HANDLING	
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.	

WEEK 8

LEARNING OUTCOMES and ASSESSMENT STANDARDS

LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Learners count physical objects using one-to-one correspondence reliably in the number range 0-34

Eg Using any resource available such as counters, body parts, abacus, pencil crayons, workbooks, chairs etc



AS 2: Counts forwards and backwards in:

2.1 ones from any number between 0 and 100;

Activity: Learners count forwards and backwards from any given number. Teacher tells learners to put their finger on a specific number. They then count forwards and backwards from the given number.

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
61	62	63	64	65	66	67	68	69	70

Activity: Board game. Learners play games with dice in small groups.



1AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

Eg Group work: The teacher places some number cards on each group's table. Learners each choose a number and write down the matching number name. Learners check each others work.

The learners now pick up cards with the number name and they write the numeral.

13	thirteen
25	twenty-five
32	thirty-two

AS 4: Orders, describes and compares whole numbers to at least 2-digit numbers.

Group work: The teacher gives each learner a circle with a number on it. Learners arrange themselves from smallest to biggest according to the numbers on their circle in their groups. They then arrange themselves from the biggest to the smallest number.

Consolidation: The class now arrange themselves from the biggest to the smallest number.



AS 5: Solves money problems involving totals and change in rands and cents.

Problem solving in groups. Peter invites 8 friends to his birthday party. A party pack costs R3 each. How much will Mom spend to buy each boy a party pack?

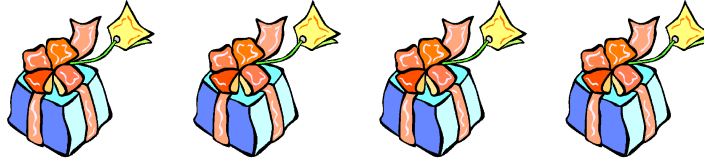
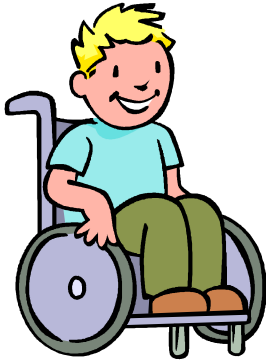


Mom bought 16 balloons. They cost R2 each. When she got home 6 of them blew away. How much money did Mom lose?



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.

e.g. Father Christmas delivers 24 gifts to 6 children in hospital. If they each get the same amount of gifts, how many will each child get?



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.

Teacher poses various problems orally. Learners write the number sentences and explain which operations were used to solve the problems. E.g. Sam has 12 crayons, he breaks 4, how many will he have left? Peter has 12 marbles. If he wins 12 more, how many will he have?

AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

Learners are given worksheets. They add or subtract as quickly as possible.

Add 4	
3	
4	
6	
8	

Subtract 2	
2	
6	
7	
9	

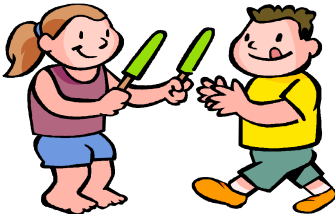
AS 9: Uses the following techniques:

9.1 building up and breaking down numbers

9.2 doubling and halving

e.g. Draw 11 ice-creams each one has 2 scoops, how many scoops altogether?

The ice-cream seller has 30 ice lollies, he sells half of them. How many will he have left?



9.3 Using concrete apparatus (e.g. counters)

9.4 Using number-lines

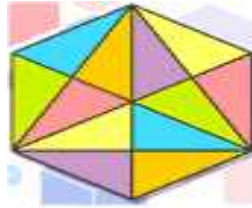
LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 2: Copies and extends simple number sequences to at least 100



AS 3: Creates own patterns.

Activity: Learners create their own pattern using one type of shape e.g. triangles



AS 4: Describes observed patterns

Activity: Learners describe a pattern that they are shown.

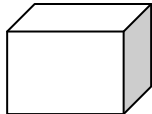


e.g.

LO 3: SPACE AND SHAPE

AS 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).

Activity: Learners are shown a 3-D object e.g. a box. Learners build a 3-D box using materials such as toothpicks, straws and matches.



LO 4: MEASUREMENT

AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).

Group work

Activity: The teacher has measured all the learners' heights in the first term. She records them. She then re-measures them in the last term. She records the last term's findings. Learners discuss who is the tallest, shortest, same height etc. They compare the last term's measurements to the first term's. Each learner records the heights of their groups in the first and last term and compare.

	Name	First term	Fourth term
1.			
2			
3			
4			

AS 3: Sequences events using language such as 'yesterday', 'today' and 'tomorrow'.

Worksheet:

Read the days of the week. Colour what day it is today red, tomorrow yellow and yesterday blue.



Write the day that it will be tomorrow.

Tomorrow is _____

Draw what you did yesterday.

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)

Learners estimate how many foot steps it will take to measure the length of the classroom, the passage, each other, etc. They then measure how many actual steps it will take. Learners compare their estimate with the actual measurement.

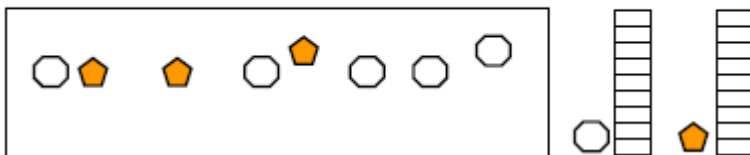


LO 5: DATA HANDLING

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.

Activity: Learners are given shapes to sort and place on a graph.

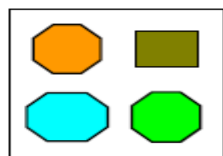
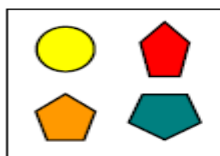
Count each shape. fill the graph for each shape to the right height. and circle the shape that appears most often.



AS 2: Sorts physical objects according to one attribute chosen for a reason

Activity

Circle the shape in each group that is different.










AS 3: Gives reasons for collections being grouped in particular ways.

Learners explain why they grouped certain shapes together .E.g. all the shapes have corners

AS 4: Draws a picture as a record of collected objects.




Learners draw a pictograph to record their findings.

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.

Word sums

-  Paul has 15 Smarties he eats 4, how many does he have left?
-  Bill and Sarah have 12 books altogether, if Sarah has 4, how many does Bill have?
-  Susan has 8 sweets if she shares them between herself and 1 friend, how many will each get?

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

Reflections:

Barriers:

Week 9

WEEK 9	Date Completed
LEARNING OUTCOMES and ASSESSMENT STANDARDS	
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS	
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.	2.1
	2.2
AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.	
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	
AS 8: Performs mental calculations involving addition and subtraction for numbers to at least 10.	
AS 9: Uses the following techniques: 9.1 building up and breaking down numbers	
AS 10: Explains own solutions to problems.	
AS 11: Checks the solution given to problems by peers.	
LO 2: PATTERNS, FUNCTIONS & ALGEBRA	
AS 3: Creates own patterns.	
LO 3: SPACE AND SHAPE	
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').	
LO 4: MEASUREMENT	
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'.	
LO 5: DATA HANDLING	
AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).	
AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.	

WEEK 9

LEARNING OUTCOMES and ASSESSMENT STANDARDS

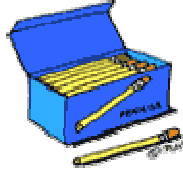
LO 1: NUMBERS, OPERATIONS & RELATIONSHIPS

AS 1: Counts to at least 34 everyday objects reliably.

Learners count physical objects using one-to-one correspondence reliably in the number range 0 - 34.

Using any resource available such as counters, abacus, body-parts, shapes, beads, books, learners, etc.

E.g. they count pencils or crayons: They first work **individually** and then **in groups**.



AS 2: Counts forwards and backwards in:

2.1 Ones from any number between 0 and 100;

Learners count forwards and backwards from any number in ones.

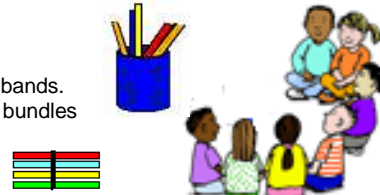
E.g. **Learners work in pairs**. They use their monthly calendar to count. Learners point to today's date and the teacher tells them to count on another 14 days. They can also count back 14 days.

OCTOBER 2009						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				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

2.2 Tens from any multiple of 10 between 0 and 100.

Learners count in tens from any multiple of ten.

E.g. Learners work **in groups**. Each group has a container with sticks and elastic bands. Individual learners count out 10 sticks and make a bundle. The group counts their bundles together in tens. Afterwards they join another group and count on in tens.



AS 3: Knows and reads number symbols from 1 to at least 100 and writes number names from 1 to at least 34.

3.1 **Group work**: E.g. Learners use their number grid to play a game. They take turns to throw a bean on their number grid. They write down the number and the matching number name on which the bean landed.

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



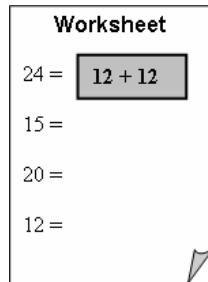
15	fifteen
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AS 7: Can perform calculations, using appropriate symbols, to solve problems involving:

7.1 Addition and subtraction with whole numbers and solutions to at least 34

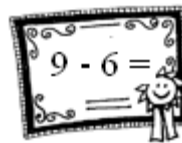
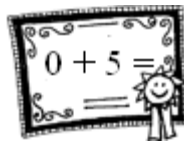
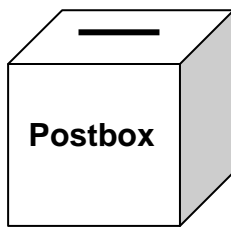
E.g. **Group work:** Learners work in pairs. The teacher gives each learner two number sentences. They find the answer to their number sentences. The group now places their number sentences on a worksheet under the correct sum.

Example:



AS 8: Performs **mental calculations** involving addition and subtraction for numbers to at least 10.

E.g. **Group work:** The teacher gives each group twelve envelopes with number sentences to post. Each learner in the group takes two envelopes. They quickly have to write down the answers on the envelopes. The teacher checks their answers. If correct, they can post their letters. The first groups to post all their letters are the winners and get a reward.

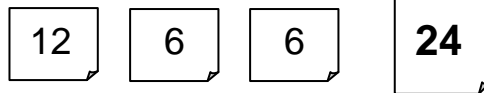


AS 9: Uses the following techniques:

9.1 Building up and breaking down numbers

E.g. **Group work:** The teacher puts a number card in the center of the group's table. E.g. **24**. She gives each learner a few number cards. The learners build up or break down the number on their table using their numbers. They say the number sentence out loud.

Build Up



$12 + 6 + 6 = 24$



Break down



$24 = 10 + 7 + 7$



AS 10: Explains own solutions to problems.

Learners are expected to continuously explain strategies and solutions. This assessment standard should be applied in all lessons.



$6 + 7 = 13$
 $5 + 5 + 1 + 2 = 13$

$6 + 7 = 13$
 $6 + 6 + 1 = 13$



AS 11: Checks the solution given to problems by peers.

Learners are expected to continuously assess each other's solutions. The assessment standard should be applied in all lessons.



$6 + 7 = 12$



No, $6 + 6 = 12$

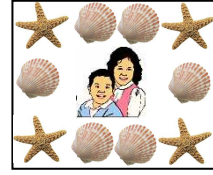
LO 2: PATTERNS, FUNCTIONS & ALGEBRA

AS 3: Creates own patterns.

E.g. Group work: Learners use different shapes, sticks, pictures, etc. to create their own patterns. They work in groups to plan and practice their patterns. The teacher gives each learner a sheet of stiff card.

Learners decorate the card to create a photo frame.

These activities can be integrated with Technology and Art and Culture.



LO 3: SPACE AND SHAPE

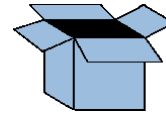
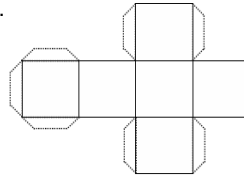
AS 1: Recognizes, identifies and names two-dimensional shapes and three-dimensional objects in the classroom and in pictures including: Boxes (prisms) and balls (spheres); Triangles and rectangles; Circles.

E.g. Individual: Learners observe and build given three-dimensional objects using 2-dimensional nets.

They decorate the nets before they cut out and fold cubes.

The cubes can be used as gift boxes.

Learners can also create dice.



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.

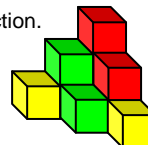
E.g. Group work: The teacher asks each group to bring different objects from home. E.g. group one: three dimensional objects e.g. a ball, an orange, (spheres) etc. Group two: pictures of two-dimensional shapes that look like squares and rectangles. Group three: pictures of 2-D shapes that look like triangles. Group four: pictures of 2-D shapes that look like circles. Group five: three-dimensional objects e.g. boxes (prisms), toothpaste, cereal boxes etc. Learners observe their objects and shapes and describe and compare them. The groups rotate.



AS 3: Observes and builds given three-dimensional objects using concrete materials (e.g. building blocks and construction sets).

E.g. Learners work in pairs. The teacher gives them a picture of a cube construction.

Learners observe and build the construction using cubes.



AS 4: Recognizes symmetry in self and own environment (with focus on 'left', 'right', 'front' and 'back').

Whole class discussion: 1. The teacher asks two learners to stand in front of the class. She asks questions such as: Who stands on the left-hand side? Who stands on the right-hand side?. Imagine you are looking at the learners from behind. Who is on the left-hand side now? 2. Learners use their hands: On which side is your thumb when your hand palm faces up? Flip your hand so that your palm faces downwards. On which side is your thumb now? 3. Group work: The teacher gives learners half potatoes with two different shapes cut out. Learners predict which shape will be on which side when they make prints.

LO 4: MEASUREMENT

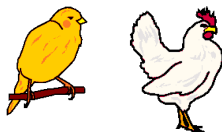
AS 2: Compares events in terms of the length of time they take (longer, shorter, faster, slower).

Whole class discussions: Teacher asks questions about the duration of everyday events. Learners have to justify their answers. E.g. What will take longer: walking or running to school? Why? Boiling water in a pot on a stove or in an electric kettle. Who runs faster: a horse or a sheep? The teacher tells the story about the tortoise and the hare and asks questions. Learners work individually to complete a worksheet. They shade pictures showing events that take longer or faster than others.

Which of the two runs faster?



Which one takes longer to get away?



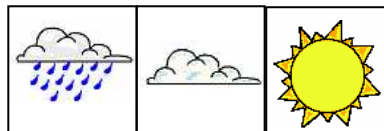
Which one grows slower?



AS 3: Sequences events using language such as 'yesterday', 'today' and 'tomorrow'.

Group work: Each group gets a series of pictures to talk about what happened yesterday, today and tomorrow.

Yesterday it was raining. Today it is cloudy. Tomorrow it will be sunny.



LO 5: DATA HANDLING

AS 2: Sorts physical objects according to one attribute chosen for a reason (e.g. Sort crayons into colours).

Group work: Learners sort different objects e.g. different colour counters, multi-link cubes, Cuisenaire rods, smarties, etc. according to colour. Teacher asks questions about the different number of objects: How many more red blocks are there than blue ones? Learners work in pairs to sort shapes according to the number of sides. They sort 3-D objects according to which can roll and which can slide.

AS 5: Constructs pictographs where stickers or stamps represent individual elements in a collection of objects.

E.g. Group work: The teacher gives each group a graph to record their findings. Learners draw circles to represent the different colour counters. The teacher poses questions about the number of counters in the graph, e.g. How many counters are there altogether? Which counters are the more than the blue ones? Which counters is the same amount? Etc.

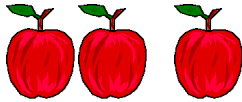
Counters						
6			●			
5			●			●
4	●		●		●	●
3	●		●		●	●
2	●	●	●		●	●
1	●	●	●	●	●	●
	Blue	Red	Yellow	Green	Brown	Orange

Word Sums

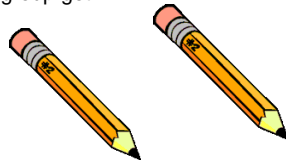
- Asana and her friends have 19 oranges. They ate some. Now they have 9 left. How many oranges did they eat?



- Pam picked 12 red apples from their orchid. Pumla picked 9 more than Pam. How many apples did Pumla pick altogether?



- Thando has 18 pencils. He shares them equally amongst the six learners in his group. How many pencils did each learner in the group get?

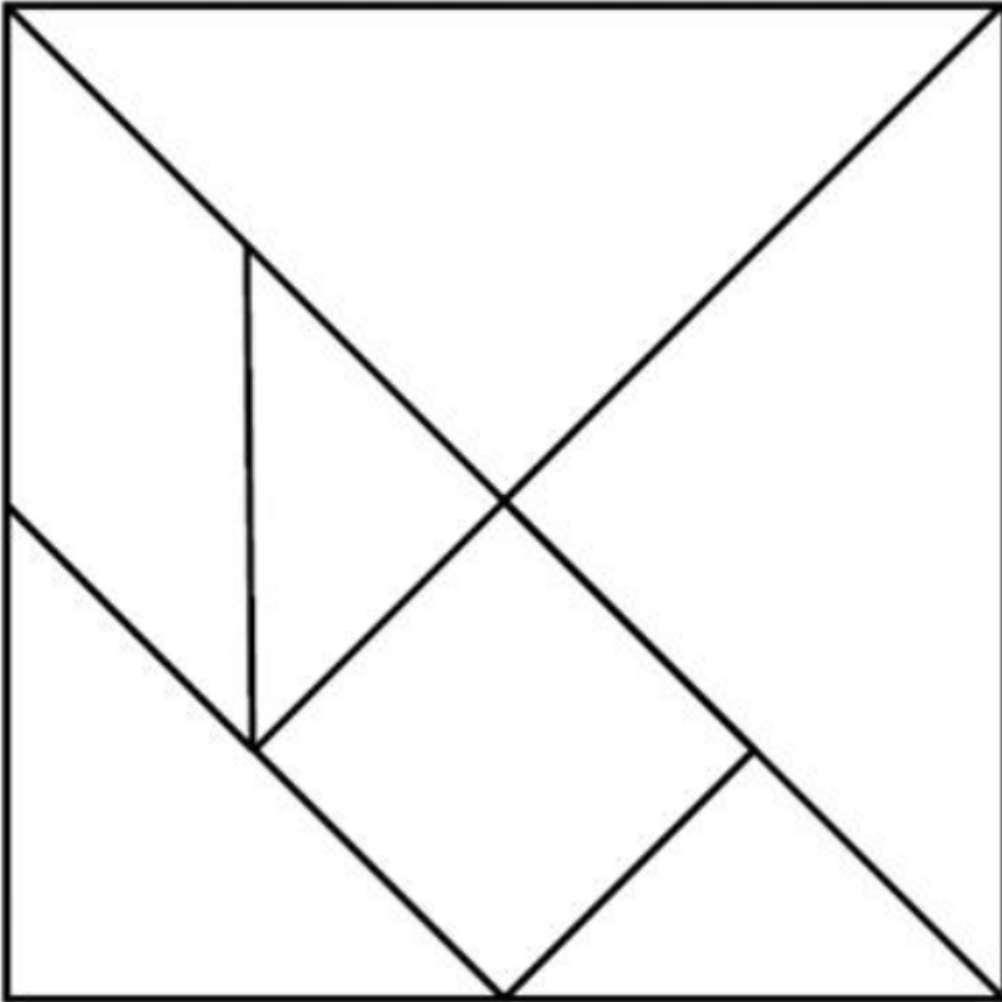


Resources: Counters, calendars, number grids, flard cards with number symbols, number names, number sentence, worksheets, objects, graphs, pictures and shapes.

Reflections:









Barriers:

Tangram Template












Rubrics and Recording Sheet

**Rubrics for Formal Assessment Tasks
Grade 1 Term 4**

Assessment Standard	1	2	3	4
LO 1 AS 2.1  Counts forwards and backwards in ones from any number between 0 and 100	Unable to count forwards and backwards in ones from a given number between 0 and 100. Needs prompting from the teacher to count on the number line or number grid.	Counts forwards and backwards in ones from a given number between 0 and 100 on the number line or number grid. Makes errors and relies on support from the teacher.	Counts forwards and backwards accurately in ones from a given number between 0 and 100 on the number line and number grid. Makes careless mistakes, but self-corrects	Counts forwards and backwards accurately and confidently in ones from a given number between 0 and 100.
LO 1 AS 2.2  Counts forwards and backwards in tens from any multiple of 10 between 0 and 100	Unable to count forwards and backwards in multiples of tens from a given number between 0 and 100. Needs prompting from the teacher to count on the number line or number grid.	Counts forwards and backwards in multiples of tens from a given number between 0 and 100 on the number line or number grid. Makes errors and relies on support from the teacher.	Counts forwards and backwards accurately in multiples of tens from a given number between 0 and 100 on the number line and number grid. Makes careless mistakes, but self-corrects.	Counts forwards and backwards accurately and confidently in multiples of tens from a given number between 0 and 100.
LO 1 AS 3  Knows and reads number symbols from 1 to at least 100 and writes number names to at least 34	Unable to recognize and read the number symbols 1 to 100. Needs prompting from the teacher.	Recognises and reads some of the number symbols 1 to 100. Relies on assistance from the teacher.	Recognises and reads most of the number symbols 1 to 100. Makes careless mistakes, but self-corrects	Recognises and reads the number symbols 1 to 100 accurately and confidently.
LO 1 AS 3  Knows and reads number symbols from 1 to at least 100 and writes number names to at least 34 (<i>worksheet</i>)	Unable to recognise and write the number names from 1 to 34 Relies on prompting from the teacher	Recognises and writes some of the number names from 1 to 34.	Recognises and writes most of the number names from 1 to 34. Makes careless mistakes, but self-corrects	Recognises and writes number names from 1 to 34 accurately, and with ease
LO 1 AS 4  Orders, describes and compares whole numbers to at least 2-digit numbers.	Unable to order numbers 0 to 34 from biggest to smallest and smallest to biggest. Unable to describe and compare numbers between 0 and 34 using one more than, one less than, two more than, two less than, before, between and after.	Orders some numbers 0 to 34 from biggest to smallest and smallest to biggest. Describe and compare some of the numbers between 0 and 34 using one more than, one less than, two more than, two less than, before, between and after.	Orders most numbers 0 to 34 from biggest to smallest and smallest to biggest. Describe and compare most of the numbers between 0 and 34 using one more than, one less than, two more than, two less than, before, between and after.	Orders numbers 0 to 34 from biggest to smallest and smallest to biggest accurately and with ease. Describe and compare numbers between 0 and 34 accurately and with ease using one more than, one less than, two more than, two less than, before, between and after.
LO 1 AS 4  Orders, describes and compares whole numbers to at least 2-digit numbers (<i>worksheet</i>)	Unable to fill in missing numbers on a worksheet.	Able to fill in some missing numbers on a worksheet.	Able to fill in most missing numbers on a worksheet.	Able to fill in missing numbers accurately and confidently on a worksheet.
LO 1 AS 5  Solves money problems involving totals and change in rands and cents.	Unable to pack out play or real money to buy a specific item on a shopping flyer. Unable to calculate totals and change.	Able to pack out play or real money to buy a specific item on a shopping flyer. Able to calculate totals, but unable to calculate change. Needs prompting from the teacher.	Able to pack out play or real money to buy a specific item on a shopping flyer. Able to calculate totals and change. Makes careless mistakes, but self-corrects	Able to pack out play or real money to buy a specific item on a shopping flyer. Able to calculate totals and change confidently and accurately.
LO 1 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	Struggles to solve word problems in the range 1 to 34.	Needs support from the teacher to solve some word problems in the range 1 to 34. Relies on concrete apparatus.	Solves most of the word problems in the range 1 to 34. Relies on concrete apparatus.	Solves word problems in the range 1 to 34. Use drawings to show solutions.

**Rubrics for Formal Assessment Tasks
Grade 1 Term 4**

Assessment Standard	1	2	3	4
that include remainders				
LO 1 AS 7.1  Addition and subtraction with whole numbers and solutions to at least 34	Unable to write the numbers sentences and calculate the answers to the word problems. Needs support from the teacher.	Writes some of the numbers sentences and calculates some of the answers to the word problems. Relies on concrete apparatus and assistance from the teacher.	Writes most of the numbers sentences and calculates most of the answers to the word problems. Relies on concrete apparatus.	Writes the numbers sentences and calculates the answers to the word problems accurately and with ease. Seldom relies on concrete apparatus.
LO 1 AS 7.1  Addition and subtraction with whole numbers and solutions to at least 34 (worksheets)	Unable to calculate the answers to the number sentences. Needs support from the teacher.	Can calculate some of the answers to the number sentences. Confuses addition and subtraction.	Can calculate most of the answers to the number sentences. Sometimes make careless errors. Relies on concrete and semi-concrete apparatus.	Can calculate all the answers to the number sentences accurately and with ease. Seldom relies on concrete and semi-concrete apparatus.
LO 1 AS 7.2  Repeated addition with whole numbers and with solutions to at least 34.	Unable to write the numbers sentences and calculate the answers to the word problems. Needs support from the teacher.	Writes some of the numbers sentences and calculates some of the answers to the word problems. Relies on concrete apparatus and assistance from the teacher.	Writes most of the numbers sentences and calculates most of the answers to the word problems. Relies on concrete apparatus.	Writes the numbers sentences and calculates the answers to the word problems accurately and with ease. Seldom relies on concrete apparatus.
LO 1 AS 8  Performs mental calculations involving addition and subtraction for numbers to at least 10.	Any 2 correct	Any 3 - 5 correct	Any 6 - 8 correct	All 10 correct
LO 1 AS 9.1  Uses the following techniques: building up and breaking down numbers	Unable to build up and break down numbers to 34. Needs assistance from the teacher. Unable to write a number sentence.	Can build up and break down numbers to 34 using limited combinations. Relies on concrete apparatus. Needs support from the teacher to write the number sentences.	Can build up and break down numbers to 34 using a variety of combinations. Seldom relies on concrete apparatus. Writes most of the number sentences.	Can build up and break down numbers to 34 using all the combinations accurately. Writes all the number sentences accurately.
LO 1 AS 9.2  Uses the following techniques Doubling and halving	Unable to double or halve numbers 1 to 34.	Uses concrete apparatus e.g. counters/abacus to double and halve numbers 1 to 34 with some accuracy. Relies on support from the teacher.	Uses concrete apparatus e.g. the number line to double and halve numbers 1 to 34 with reasonable accuracy.	Doubles and halves numbers 1 to 34 accurately. Draws and writes the answers.
LO 2 AS 2  Copies and extends simple number sequences to at least a 100	Unable to copy and extend number sequences by counting on in intervals of 2, 4, 10 etc from any given number up to 100.	Can copy and extend a simple number sequence by counting on in intervals of 2, 4, 10 etc. from any given number up to 100. Makes errors and relies on support from the teacher.	Can copy and extend a simple number sequence by counting on in intervals of 2, 4, 10 etc. from any given number up to 100. Makes some careless errors.	Can copy and extend a simple number sequence by counting on in intervals of 2, 4, 10 etc. from any given number up to 100 accurately and with ease.
LO2 AS 3  Creates own patterns	Unable to create own number pattern. Needs prompting from the teacher.	Needs support to create own number pattern.	Creates own number patterns independently.	Creates a variety of number patterns confidently and with ease.
LO 2 AS 4  Describes observed	Unable to describe own number pattern.	Needs support to describe own number	Describes own shape patterns, colour	Describes a variety of shape patterns,

Rubrics for Formal Assessment Tasks Grade 1 Term 4				
Assessment Standard	1	2	3	4
patterns	Needs prompting from the teacher.	pattern.	patterns and number patterns independently.	colour patterns and number patterns confidently and with ease.
LO 3 AS 1 ✍ Recognises, identifies and names 2-D shapes and 3-D objects in the classroom and in pictures including: <ul style="list-style-type: none"> • Boxes and balls • Triangles and rectangles • Circles 	Cannot match the names of 3-D objects with the corresponding object.	Can match some of the names of 3-D objects with the corresponding object.	Can match most of the names of 3-D objects with the corresponding object.	Can match the names of 3-D objects with the corresponding 3-D object accurately and with ease.
LO 5 AS 1 📁 Collects everyday objects(alone and/or as a member of a group or team) in the classroom or school environment according to given criteria or categories	Collects fruit but needs support from the teacher to sort it. Needs prompting from the teacher to answer questions about grouping.	Collects fruit and sorts it. Answers some of the questions about the grouping.	Collects fruit and sorts it. Answers most of the questions about the grouping.	Collects fruit and sorts it. Answers all the questions about the grouping.
LO 5 AS 2 📁 Sorts physical objects according to one attribute chosen for a reason (e.g. sort crayons into colours)				
LO 5 AS 6 📁 Describes own collection of objects, explains how it was sorted and answer questions about it				
LO 5 AS 4 ✍ Draws a picture as a record of collected objects. (worksheet)	Unable to draw a picture of the different kinds of fruit. Still concrete bound.	Able, but needs assistance to draw a picture of the different kinds of fruit.	Able to draw a picture of the different kinds of fruit with some errors.	Able to draw a picture of the different kinds of fruit accurately.
LO 5 AS 5 ✍ Constructs pictographs where stickers or stamps represent individual elements in a collection of objects. (worksheet)	Unable to construct a pictograph to show the number of different kinds of fruit. Still concrete bound.	Able, but needs assistance to construct a pictograph of the number of different kinds of fruit.	Able to construct a pictograph of the number of different kinds of fruit with some errors.	Able to construct a pictograph of the number of different kinds of fruit accurately.



**PROVINCE OF THE EASTERN CAPE
DEPARTMENT OF EDUCATION
NUMERACY RECORDING SHEET FOR FORMAL ASSESSMENT TASKS**

YEAR _____
 NAME OF SCHOOL _____
 CLASS TEACHER _____
 GRADE 1
 TERM 4

NAME	FAT'S	LO 1 Numbers, Operations & Relationships								LO 2 Patterns, Functions & Algebra			LO 3 Space & Shape			LO 4 Measurement		LO 5 Data Handling				ANNUAL NATIONAL TEST	FINAL CODE FOR FAT	FINAL CODE	COMMENTS
		AS 2.1	AS 2.2	AS 3	AS 5	AS 6	AS 7.1	AS 8	AS 9.2	CODE	AS 2	AS 4	CODE	AS 1	AS 4	CODE	AS 5	CODE	AS 1	AS 2	AS 6				
1	1																								
	2																								
	3																								
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TEACHER _____

DATE _____

GRADE HEAD _____

DATE _____