

Grade 3 Mathematics Term 1 Lesson 1

Teachers

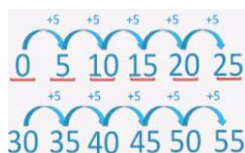
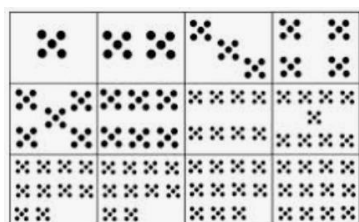
The first 3 days in Grade 3 are earmarked for learners to do the Baseline Assessment (BA). Once the BA has been marked and recorded/observed, you will be able to identify the teaching and learning gaps. The onus is on you to be vigilant and to plan for the remediation of all learning gaps. Acknowledge what the learner could not do e.g. $12 + 87$; the skills required here are number concept, the break down method, filling the 10, addition (+), etc. Stay focused, positive and reteach, revise and allow time for sufficient revision activities to help the learners overcome all deficits. Check on the understanding of the revised activities. Acknowledge all efforts and encourage the learners to do their best. Be mindful that you are responsible to teach for understanding so that the learners can progress to the next level. A positive mindset builds confidence which is necessary for their potential to develop fluency in Maths.

Whole Class Activity: Counting integrated with Mental Maths (5min + 10 min)

MENTAL CALCULATIONS: Remediate where applicable the baseline assessment knowledge and skills gap before starting Grade 3 work. Concentrate on the errors when marking. Be sure to cultivate the practice of doing corrections. This is of utmost importance. Ask at least 10 short mental questions every day (see examples below) to strengthen mental calculation skills. Design more questions to explore the numerosity of numbers. You may also simply be creative by changing the numbers.

- The last month of the year has ___ days.
- How many **school days** are there in 2 weeks... and in 4 **school weeks**?
- How many days are there in 2 weeks... and in 4 weeks?
- How many fingers do 4 boys have ...; and 8 boys ?
- $20+5$; $20+4$; $20+10+3$.
- 5 less than 10 is; $20-5$; $20-6$; $20-7$;
- Double 13; 15; 17; 19, etc.
- Half of 20 and 4 more is?
- Count back in 10s: 150, __, __, __, 110
- Today is Sunday in 7 days' time it will be?
- What month comes after the fourth month of the year?
- $9+9+9+9 =$; $39+2 =$; $19+2$; $29+2 =$; $49+2$;
- $6+6+6 =$; $19+1 =$; $29-1 =$; $40-1 =$...
- Share 6 oranges amongst 4 girls, each will get?
- Share 5 oranges amongst 4 boys, each will get?
- Continue the pattern 120, 125, 130, _ _ _ _
- $20-9$; $40-9$; $30-9$;
- If I share 20 chocolates between 2 boys., each will get... and if I share the 16 amongst 4 boys, each would get?
- The difference between 10 and 4?
- How many groups of 2 are there in 40? The half of 40 is ___.
- How many eggs in 3 dozen; $1\frac{1}{2}$ dozen?
- If 4 eggs of my 2 dozen eggs are cracked, how many eggs are not cracked?
- Ten children have ___ ears. Two more ears / another pair of ears added will equal ___.
- Five friends have 20 sweets altogether. If they all have the same number of sweets. How many sweets does each have?
- Which numbers are between 20 and 25?
- Twelve is how many less than 20?
- Twenty balloons, 3 pop. How many are left? What is the sum of 3 and 17?
- $20-6$; $20-8$; $20-9$; $20-7$
- The tenth and the eleventh month of the year have _ days.
- The last month of the year is... How many months are there in one year?
- How many buns are there in two dozen? How many buns in 4 dozen?
- If I share 20 sweets between 2 girls, each will get...
- Four apples cost R6. How much will 2 cost?

Below are ideas to enhance the counting and the mental calculation skills.



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
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

100 chart showing counting in 5s and 10s

Continue with **whole class** activities for approximately 20 min daily as detailed below.
It is however recommended that the **differentiated group work must focus** on further revision work and the remediation as informed by the **error analysis of the Baseline Assessment** administered. Teachers must know what the learners have /have not mastered before they progress with new work.

Foci for Day 1-5

Resources: Counters (straws, bottle tops,) abacus, number chart, number line, classwork book, Maths Rainbow workbook, flard cards, base ten blocks/ Dienes blocks, etc.

Revision: Skills and Knowledge

Numbers 1 to 10 (If the learner knows 10 well then progress to the 2-digit numbers)

- Daily practise will help to consolidate number sense.
- Count objects to 100 and progress to 150 pace the work.
- Count forwards in 10s, 5s, 2s to 200; Count backwards in 1s, 10s, 5s, 2s from 200.
- Compare numbers: more, less. 1 more, 2 more; 5 more 1 less, 2 less, 5 less to 100.
- Arrange from greatest to smallest and smallest to greatest up to 100.
- Number patterns.
- Addition and Subtraction up to 100.
- Bonds to 20. Compare and order numbers to 20.
- Problem solving to 100.
- Addition (+) and subtraction (-) to 100.
- Concentrate on allowing the learner to show +, - on the number line.

**DBE Workbook
for revision.**



0 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

Day 1

Numbers, Operations and Relationships: Develop Number Sense

Count in 2s, 5s, 10s to 150 and do at least ten similar mental calculations as noted on page 1.

Problem Solving in context.

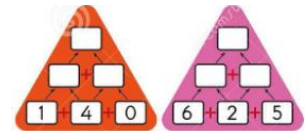
Measurement: Time: Days of the week months of the year, birthdays on calendar, weather chart.

Vocabulary: (today is, tomorrow will be, yesterday was...)



Problem Solving

- There are 18 hotdogs and 32 burger rolls. How many rolls are there in total?
- Ben sold 19 red apples. How many are left if he had 30 from the start?
- There are 17 apples left in the box. Thirteen apples were eaten.
How many apples were in the box from the start?



Make sure that the learner knows the 10 strategy/ filling the ten/ bridging the ten. The learner may develop own strategies for this.

9 + 1 19 + 1 29 + 1 39 + 1

8 + 2 18 + 2 28 + 2 38 + 2

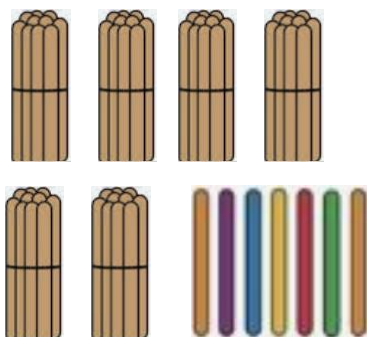
or use the 10 frame or bundles of 10

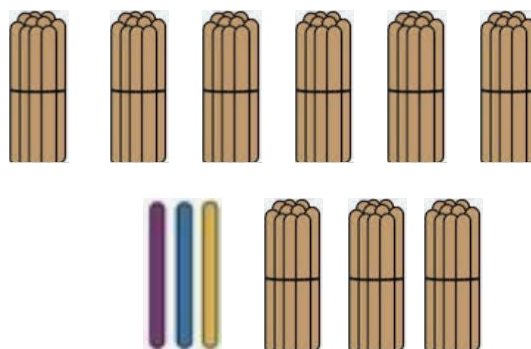
100

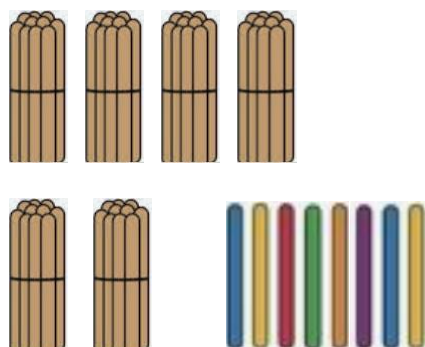
Check

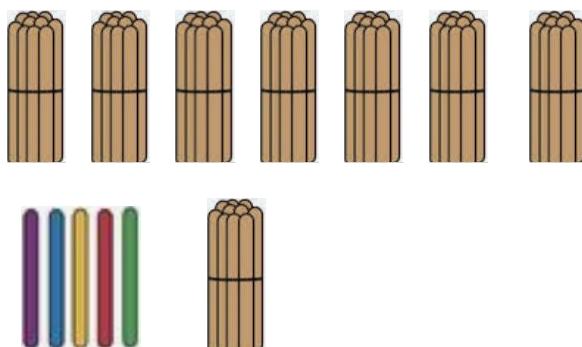
Written Activities.

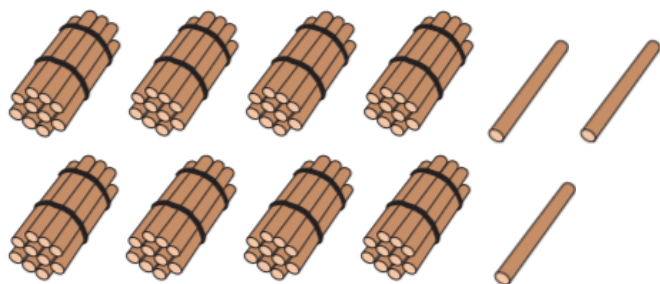
1. Place Value: How many?

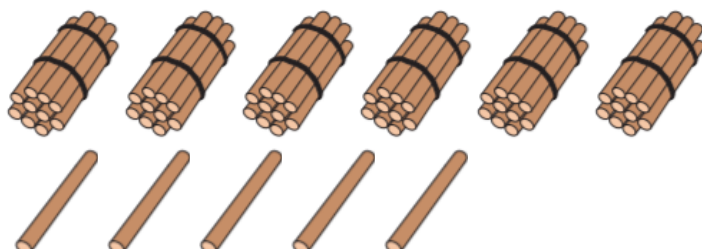


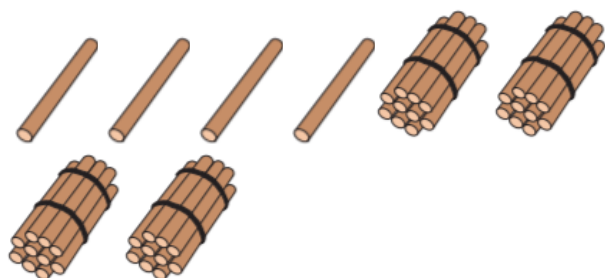


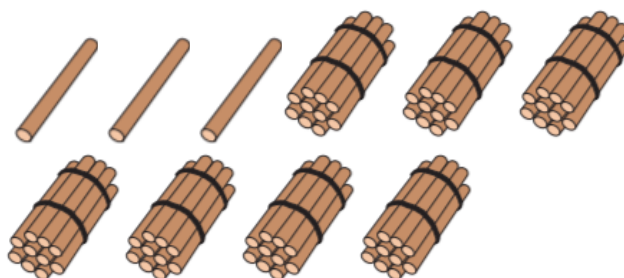




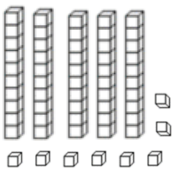
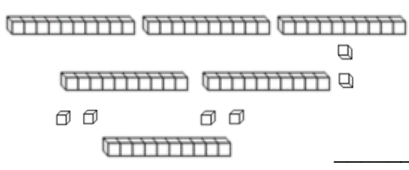
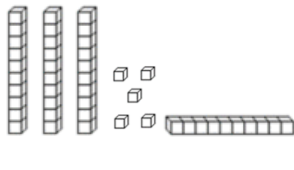
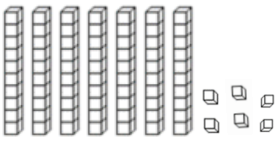
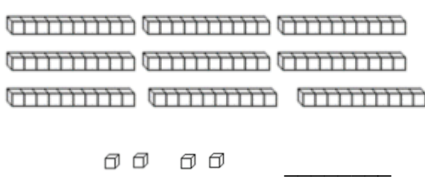
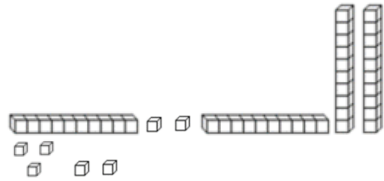
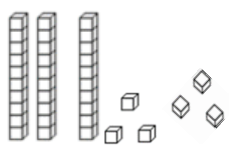
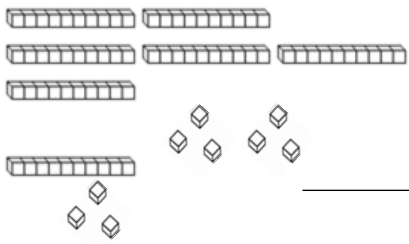
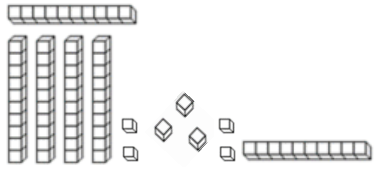




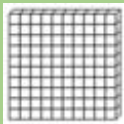
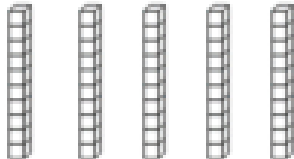
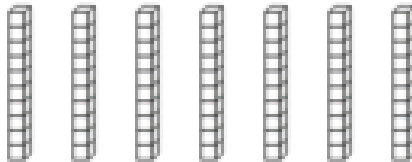
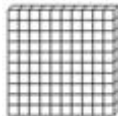
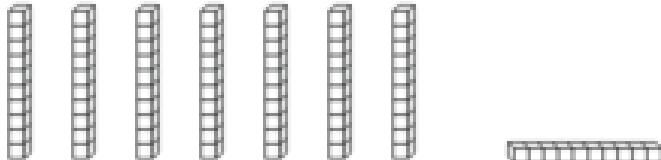
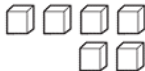




2. How many?

 _____	 _____	 _____
 _____	 _____	 _____
 _____	 _____	 _____

3. Count and write the number.

Hundreds		tens	ones/ units		
	= 100		=10		=1
					
					
					

Day 2

Numbers, Operations and Relationships: Developing Number Sense.

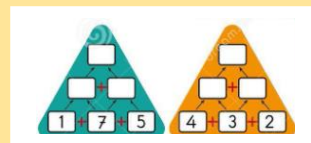
Count in 2s, 5s, 10s to 150 and do at least ten similar mental calculations as noted on page 1.

Problem Solving in context.

Measurement: Time: Acknowledge the date. Days of the week, months of the year, birthdays on calendar, weather chart.

Vocabulary: (today is, tomorrow will be, yesterday was...)

Do thorough consolidation.



Problem Solving

- There are 18 cups in the cupboard and 22 saucers. How many cups are missing?
- Ben sold 33 oranges. Seventeen are left. How many were there from the start.
- Gugu saves for a pair of shoes that costs R200. So far she has half the amount. How much more does she need?

Revise Monday's lesson and the notation board

Hundreds	Tens	Units/ ones		163	
				Place value of 1 =	100
				Place value of 6 =	60
1	3	6		Place value of 3 =	3

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



Use the base ten blocks or flard cards/ place value cards and pack out: 97; 148; 135; 165; 193; etc.

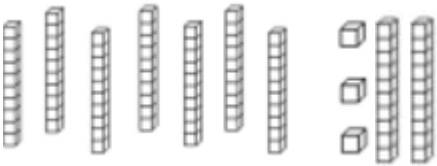
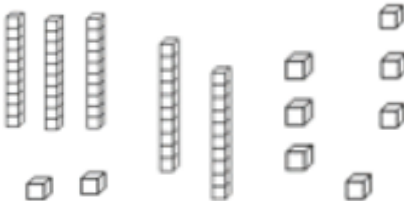
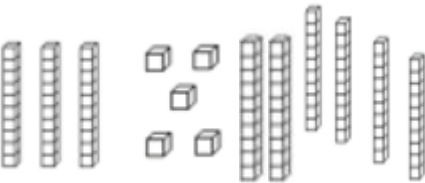
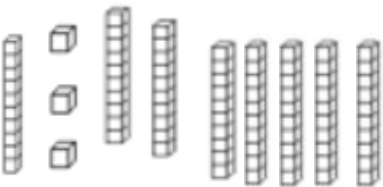
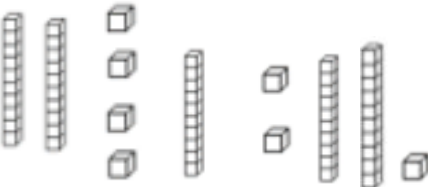
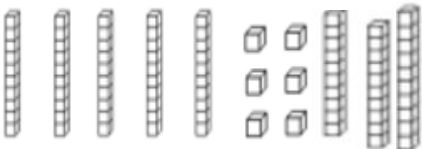
Emphasise counting in groups of 10, 20, 50, etc. counting must promote the grouping of objects. The learner counts forwards and backwards and forwards in groups of 100s. Again make sure that the learner knows that 10 ones is equal to one

and that 10 of is equal to (100 block).

Written work:

1. Write the number.

	H	t	u/o	
	1	4	4	144

2. Place Value (T U/O)	Write the number.	Add 10 to the number.	Subtract 20 from the new number.	$100 - \underline{\quad} = \underline{\quad}$
	93	$93 + 10 = 103$	$103 - 20 = 83$	$100 - 83 = 17$
				
				
				
				
				
				

Day 3

Numbers, Operations and Relationships: Developing Number Sense.

Count in 2s, 5s, 10s to 150 and do at least ten similar mental calculations as noted on page 1.

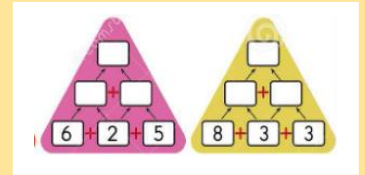
Problem Solving in context.

Measurement: Time: Days of the week months of the year, birthdays on calendar, weather chart.

Vocabulary: (today is, tomorrow will be, yesterday was...)

Patterns, Functions and Algebra: Geometric Patterns: Copy Patterns.

Consult the DBE Workbook and work at developing the following skills: extend, copy, describe.



Problem Solving

- Of the 48 eggs only 16 broke. How many are not broken?
- If there are 15 broken eggs, how many good eggs are there if there were 58 at the start?
- Nosi has 39 oranges and Silo gave her some oranges. Now she has 51 oranges. How many oranges did Silo give her?

Counting of everyday objects – use the place value cards/ bundles of straws, etc.

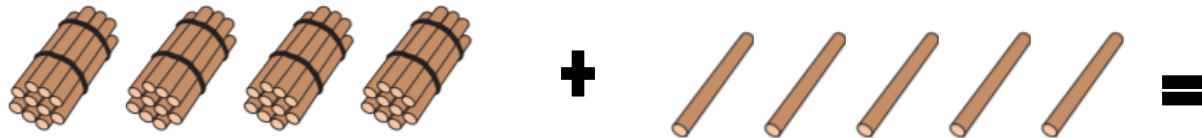
The learner must note the counting linked to grouping, hence encourage counting in 5s, 10s, 20s and the extension of this to 100s. Again, make sure that the learner knows that

ten 1s () equal and that 10 times ten units () = 100 block

Written Activities

1. Use the base ten blocks/ bundles of 10; flard cards / place value cards to demonstrate addition.

Bundles of 10 straws

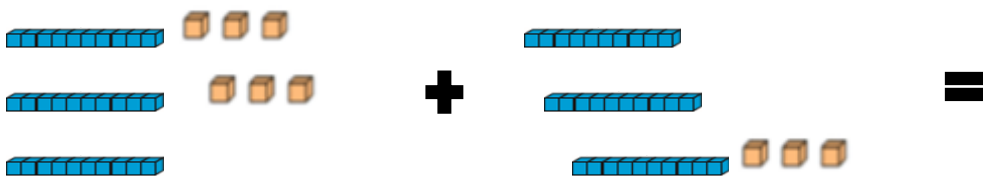


$$\begin{array}{|c|c|} \hline 4 & 0 \\ \hline \end{array} + \begin{array}{|c|} \hline 5 \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline 4 & 5 \\ \hline \end{array}$$

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

Pack out the flard cards/ place value cards.



Practise more examples, if time allows.

$$90 + 8$$

$$70 + 7$$

$$100 + 60 + 3$$

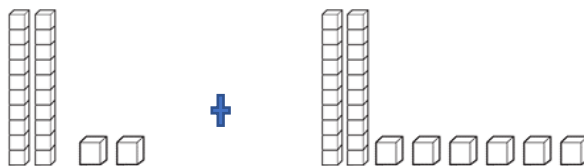
2. Addition – show your method.



$$23 + 16 =$$

20 and 3 10 and 6

$$30 + 9 = 39$$



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



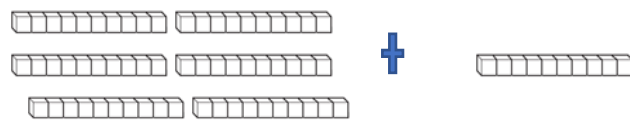
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$



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



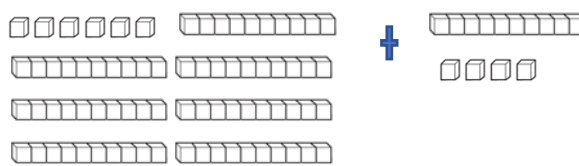
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$



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



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



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

Day 4

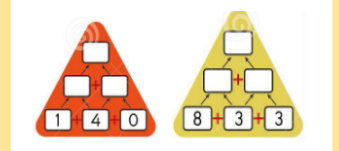
Numbers, Operations and Relationships: Developing Number Sense.

Count in 2s, 5s, 10s to 150 and do at least ten similar mental calculations as noted on page 1.

Problem Solving in context.

Measurement: Time: Days of the week months of the year, birthdays on calendar, weather chart.

Patterns, Functions and Algebra: Numeric Patterns: Copy, extend and describe simple number patterns.



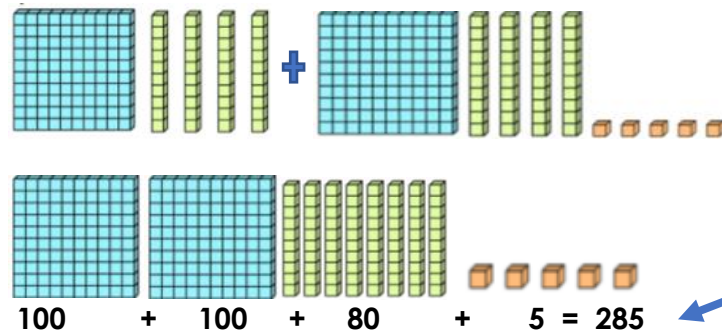
Problem Solving

- Garry and his 11 friends each have 5 oranges. How many oranges are there altogether? (Note the number pattern if learners cannot recognise this, draw a table as below.)
- Peter first picks 34 peaches and then 67 peaches. How many peaches altogether?
- Judy pays R10 for travel costs per day. Complete the table.

Days	1	2	3	4	5	6	7	8	9	10
R10	10	20								

Use the base ten blocks; flard cards to demonstrate addition.

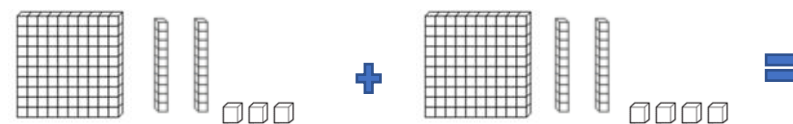
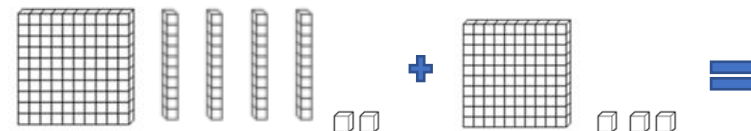
Note the linear formation of partitioning with the base ten blocks. The grouping is simple (HTU); Are the learners able to pack the flard cards this way. The learners entering Grade 3 should be able to understand the value of numbers and the break down the numbers in order to calculate. The teacher must provide opportunities for practise to embed the understanding of the break down of numbers as this will help with addition and subtraction.



$$\begin{array}{r} 100 \\ 40 \\ 200 \\ + \\ 100 \\ 40 \\ 80 \\ + \\ 5 \\ + \\ 5 \end{array}$$

More examples to pack out and talk about. Use the flard cards and base ten blocks. Allow learners to complete / practise this at their desks.

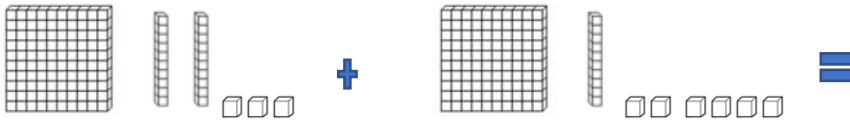
Pack out the flard cards and note the relationships



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

Written Activity: Addition (Allow for packing the flard cards and to record the workings as completed in the first one.)

1.



$$\begin{array}{r}
 123 \quad + \quad 116 \\
 \begin{array}{l} 100 + 20 + 3 \text{ and } 100 + 10 \text{ and } 6 \\ \hline 200 + 30 + 9 = 239 \end{array}
 \end{array}$$

2.



3.



4.



Day 5

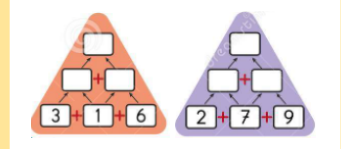
Numbers, Operations and Relationships: Developing Number Sense.

Count in 2s, 5s, 10s to 150 and do at least ten similar mental calculations as noted on page 1.

Problem Solving in context.

Measurement: Time: Days of the week months of the year, birthdays on calendar, weather chart.

Patterns, Functions and Algebra: Number patterns.



Problem Solving

Revise the work completed to make sure that the learners have a good understanding before you progress to teach other topics.

Repeat the word problems for Day 1-4. You may increase the numbers and change the words to suit the class context, e.g.

note the number patterns completed on day 4 which you may change to:

School weeks	1	2	3	4	5	6	7	8	9	10	11
days	5	10									

Practise this table formation strategy as it can support the counting strategies.

Written Activities in classwork books.

Preferably the teacher must have 3 or 4 groups for Maths.

Each group must complete at least 2 written activities per day in their classwork/ workbooks.

Work at remediating the gaps noted in the baseline assessment as recommended above.

Be sure that the learners have mastered the basics so that further teaching will develop good number sense and fluidity in Maths.

Suggested written activities for learner books must be related to the work the learner is familiar with and this must be completed independently by the learner.

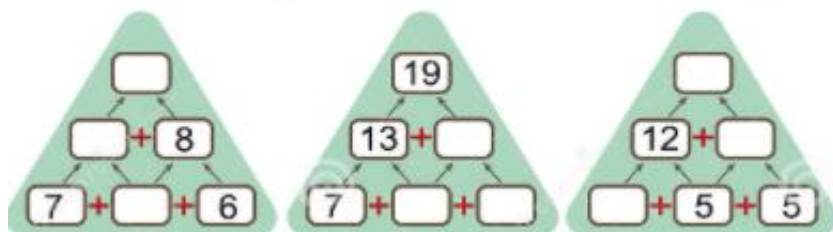
Activities to be done independently:

- See examples below to consolidate concepts revised and be sure to refer to the DBE workbook as well.

1. Number Patterns.

Complete where necessary and state the pattern rule.

Pattern rule



2. Complete the number patterns on the number lines.

1.



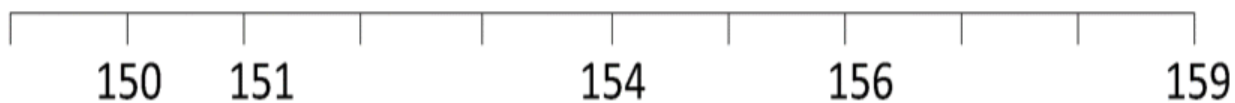
2.



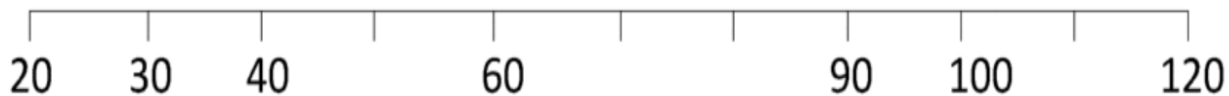
3.



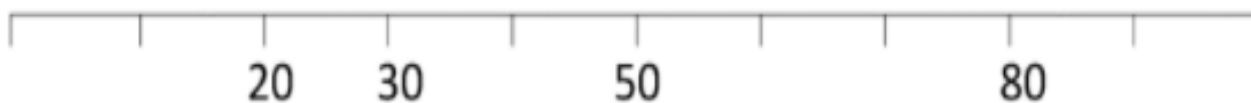
4.



5.



6.

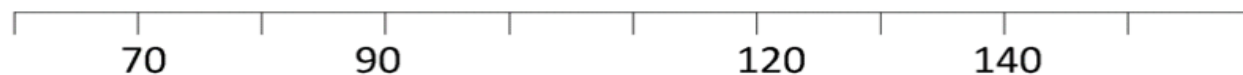


7.



3. Complete the number patterns on the number lines.

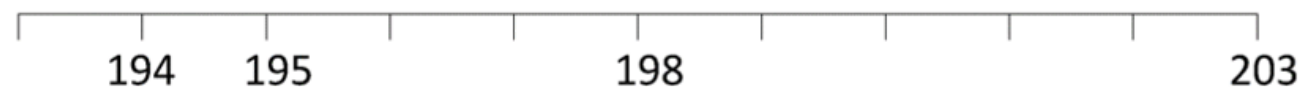
1.



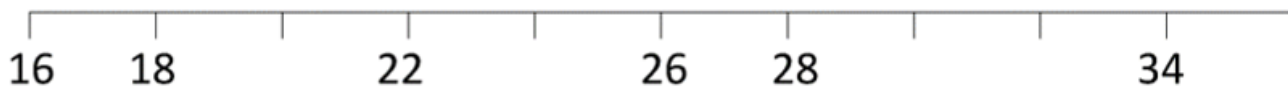
2.



3.



4.



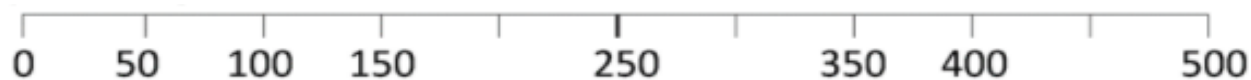
5.



6.

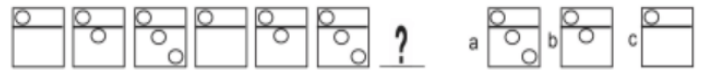


7.



4a. Recognising Patterns: Complete the number patterns.

b. Choose from a, b, c which one must be filled in where you see the ? tick ✓ below your choice.



c. Which number comes next?

100 200 300 400

100 99 98 97

11 22 33 44

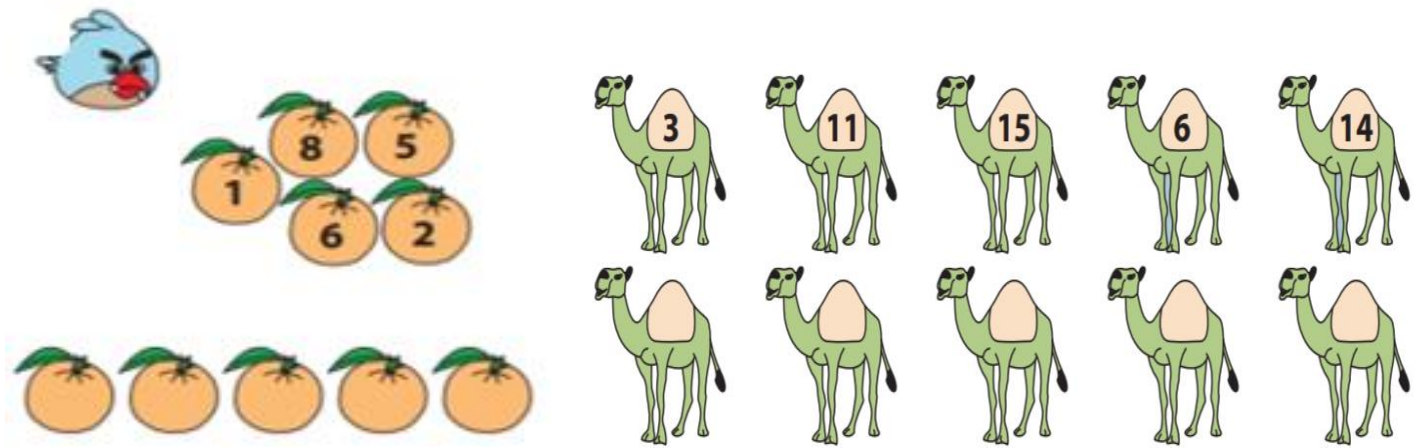
100 105 110 115

4 8 12 16

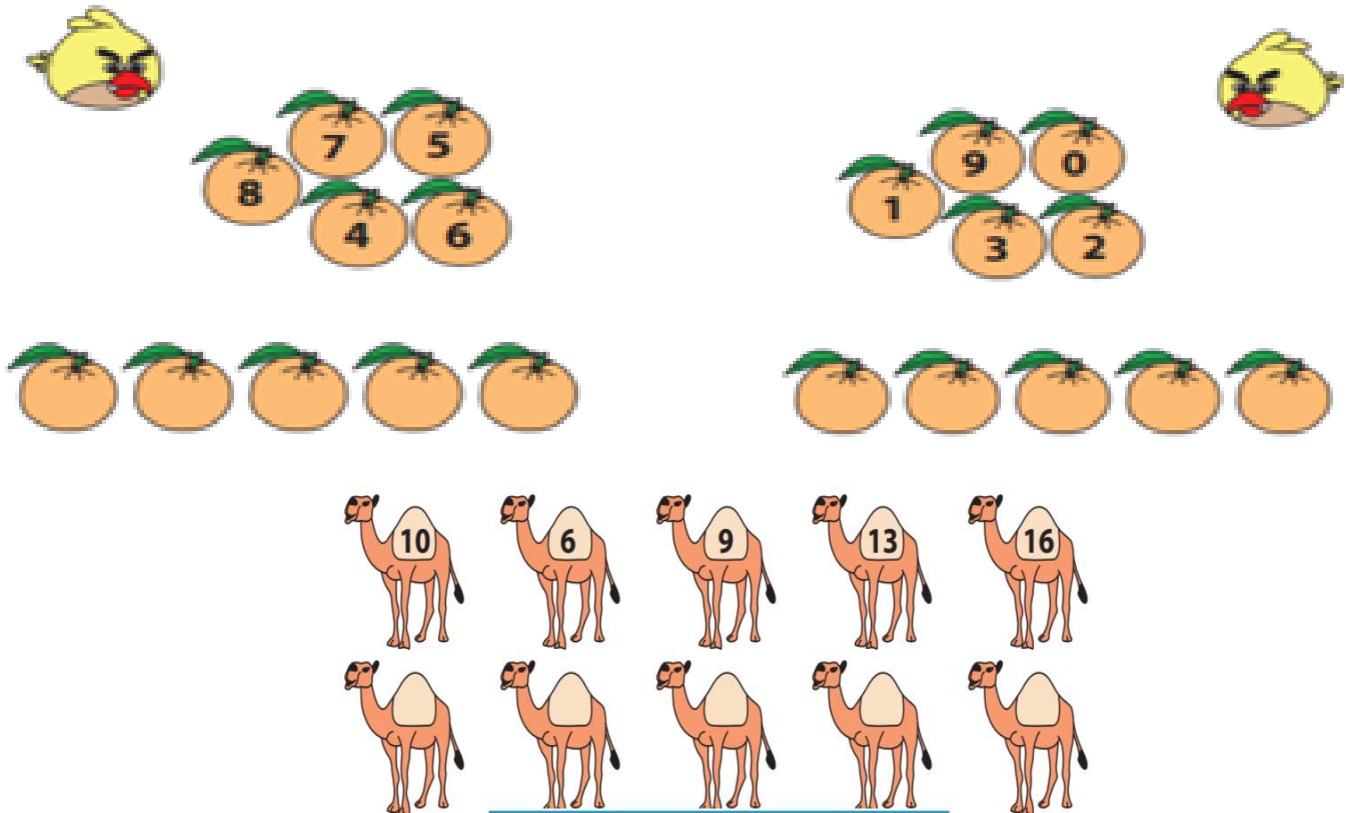
100 98 96 94

d. Write the number.

5a. Order the numbers from smallest to biggest.



b. Order the numbers from biggest to smallest.



Teachers

The aim is to teach Maths for understanding and to develop the learner numerically. The onus is on the teacher to provide the opportunity for much practise, teach well and remediate the learning gaps. Be sure to document your findings and keep track of the learners progress at all times. Keep the parents updated and involved as well. Good relationships will build confidence, support and stimulate the child's love for learning.

See the DBE Rainbow Workbook 1 for more practice activities on pages 2, 3 and 4.