

PRIMARY ONE MATHS NOTES

TOPICAL BREAKDOWN FOR

1. Numeration system

- i) Counting objects and numbers 1-20
- ii) Counting and writing numbers 1-20
- iii) Matching pictures to numbers
- iv) Counting numbers from 21-50
- v) Filling in the missing numbers
- vi) Numbers which come after
- vii) Numbers which come between
- viii) Numbers which come before
- ix) Comparing pairs of numbers up to 50 using smaller (less),/ greater(bigger)
- x) Arranging the numbers from the smallest to the biggest
- xi) Arranging the numbers from big to small
- xii) Numbers words from 0 – 20, 21 – 35, 36-50

2. Sets

- i) Definition
- ii) Naming sets
- iii) Drawing sets
- iv) Empty sets
- v) Matching sets
- vi) Comparing sets
- vii) Forming small sets from big set
- viii) Forming a big set from small sets
- ix) Joining sets

3. Operation on numbers

- i) Addition of numbers less than 20 (horizontally and vertically)
- ii) Word problems involving addition of numbers
- iii) Adding using a number line
- iv) Subtraction of numbers less than 20 (horizontally and vertically)
- v) Word statements involving subtraction

4. Place values

- i) Tens and ones (drawing and counting)
- ii) Counting in tens
- iii) Counting tens and ones
- iv) Filling in the missing tens and ones
- v) Drawing sticks to show tens and ones
- vi) Presenting numbers on the abacus

- | | |
|--|--|
| | <ul style="list-style-type: none">vii) Expanding numbersviii) Adding tens and onesix) Word statements in addition of tens and onesx) Subtraction of tens and onesxi) Word statements in subtraction of tens and ones |
|--|--|

TERM I MATHEMATICS P.1

Theme: our school

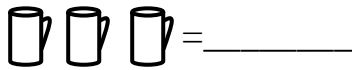
Topic: Numeration system

Counting objects and numbers from 1-20

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Activity

Count and write the number



= _____



= _____



= _____



= _____

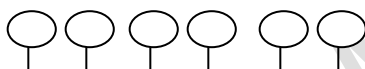
Counting and writing numbers 1-20

1, 2, 3, 4, ____, ____, 6, ____, 8, ____, 10, ____, ____, 13, ____, ____, 16, 17, ____, 19, ____

Matching pictures to numbers



3



4



5

6

Fill in the missing numbers

a) 2, 3, ____, ____, 6

b) 9, 8, ____, 6, ____, 4

Counting numbers from 21-50

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

Activity:

- Reciting rhymes about numbers
- Counting orally from 0 – 50
- Copying numbers from charts/ chalk board 0 - 50

Fill in the missing numbers

- a) 21, 22, __, __, 25, __, __, 28
b) 30, 31, __, 33, __, __ 36
c) 41, 42, __, __, 45, __, __

Which number comes right after?

- 2, __ 6, __ 9, __
12, __ 16, __ 19, __
22, __ 34, __ 49, __

__ Numbers comes right after 11?

__ Number comes after 16?

Which number comes just after 13? __

What number come just after 40? __

Which number comes between?

- a) 3, __, 5 b) 4, __, 6
b) 7, __, __, 10 c) 9, __, __, 13
c) 22, __, 24 f) 39, __, 41

g) Which number comes between 7 and 9?

h) What number is between 14 and 16?

What number comes right before?

- __, 3 __, 7 __, 9 __ 11
__, 14 __, 19 __, 22 __, 24 __, 32

- a) __ comes just before 10
b) __ comes just before 20
c) What number comes just before 12? ____
d) What number comes right before 29? ____

Circle the smaller (less) number

- a) 4 and 2 b) 7 and 5 c) 1 and 9 d) 10 and 20

	<p>Under line the smaller (less) number</p> <p>a) 12 and 22 b) 14 and 41 c) 6 and 9 d) 13 and 31</p> <p>a) 2, 7, 9 b) 7, 6, 5 c) 1, 2, 3 d) 10, 20, 30</p> <p>Circle the greater (bigger) number</p> <p>a) 4, 3, 1 b) 15, 5, 50 c) 7, 5, 9, 10</p> <p>d) 8, 2, 12, 16 d) 40, 30, 10, 20 e) 21, 11, 31</p> <p>Underline the greatest (biggest) number</p> <p>a) 1, 2, 3 b) 11, 6, 5 c) 7, 2, 6</p> <p>d) 10, 11, 9, 4 e) 22, 12, 32 d) 40, 30, 20, 10</p> <p>f) 50, 10, 20, 30</p>
	<p>Arrange the numbers from the smallest to the biggest</p> <p>a) 7, 1, 2 _____</p> <p>b) 12, 18, 15 _____</p> <p>c) 5, 9, 3, 1 _____</p> <p>d) 50, 10, 20, 40, 30 _____</p> <p>Arrange the numbers from the biggest to the smallest.</p> <p>a) 1, 2, 3, 4, _____</p> <p>b) 5, 3, 6, _____</p> <p>c) 10, 8, 9, _____</p> <p>d) 6, 7, 8, 9</p> <p>Number words from 0 – 20</p> <p>0 zero</p> <p>1 one</p> <p>2 two</p> <p>3 three</p> <p>4 four</p> <p>5 five</p>

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

Number words from 21 – 35

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

Write the missing number words

22 = _____

24 = _____

26 = _____

27 = _____

30 = _____

32 thirty two

33 = _____

21 = _____

Write in figures

36 thirty six

37 _____

38 _____

39 _____

40 forty

41 forty one

42 _____

49 _____

43 _____

44 _____

45 forty five

46 _____

47 _____

47 _____

48 forty eight

50 fifty

Sets

What is a set?

A set is a group of objects

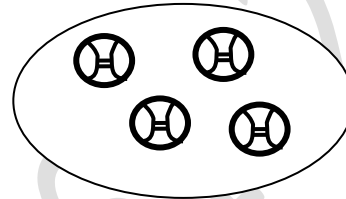
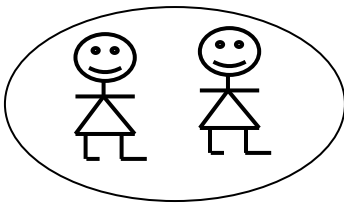
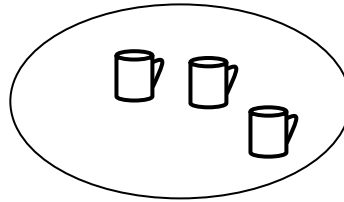
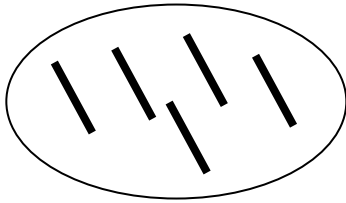
Or A set is a collection of objects

Objects found in a set are called

Members or elements

Note: The introduction of sets must be done practically. (Organize the materials to be used in time)

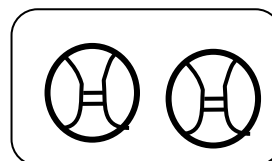
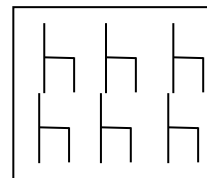
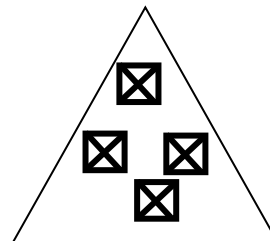
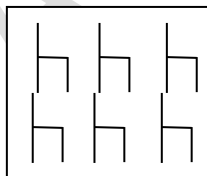
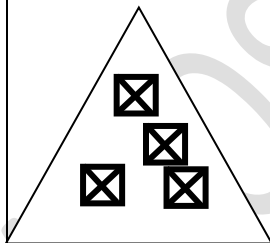
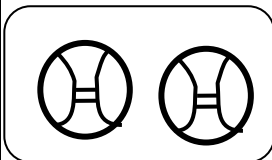
Name these sets



Draw these sets

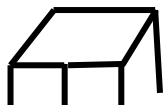
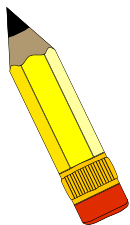
- a) A set of three flowers
 - b) A set of six boys
 - c) A set of ten oranges
 - d) A set of four chairs
- Empty sets: what is an empty set?

An empty set is a set without members
Matching sets with the same members



Match correctly

Four

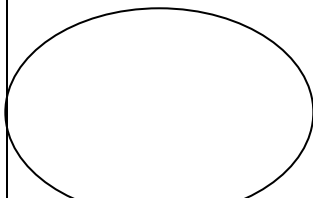


4

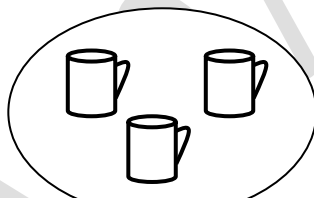


Comparing members in the given sets

A



B



a) set A has _____ members

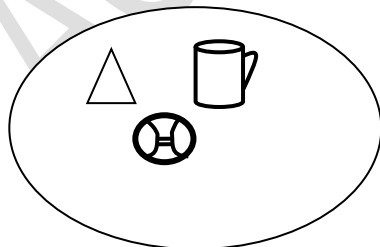
b) set B has _____ elements

c) How many members are in both sets?

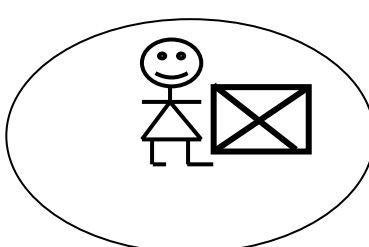
NB Teacher to give more similar numbers)

Comparing sets using more or less

Set X

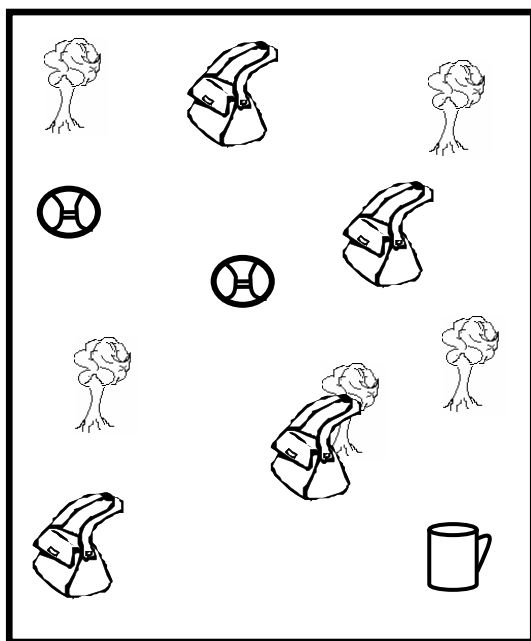


Set Y

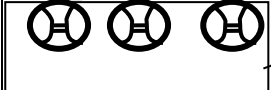
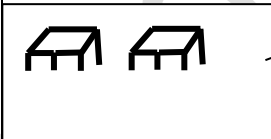
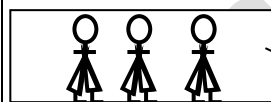


- set Y has _____members
- Set X ha _____memebrs
- Which set has more members?
- Which set has less members?
- How many members are in set Y?
- How many members are both sets?

Forming new sets



Forming big sets from small sets



Joining sets



and



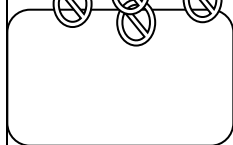
make



plus

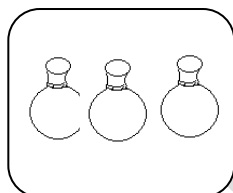
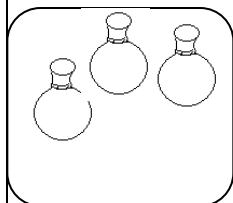


equals



+

=



TOPIC: OPERATION ON WHOLE NUMBERS

Addition of numbers less than 20 (horizontally)

$3+5 =$

$2+4+ 0= \underline{\hspace{2cm}}$

$9 + 2 =$

$3 + 7 + 5 = \underline{\hspace{2cm}}$

$5 + 0 =$

$8 + 4 + 6 =$

$3 + 6 =$

$7 + 3 + 5 =$

$11 + 4 =$

$13 \text{ cups} + 5 \text{ cups} =$

$10 \text{ books} + 10 \text{ books} =$

Addition of numbers less than 20 (vertically)

$$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ 2 \\ + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ 5 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ 5 \\ + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ 2 \\ + 0 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 0 \\ + \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 2 \\ + \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 6 \\ + \\ \hline \end{array}$$

Word statements in addition of numbers

a) Four plus three equals _____

b) Ten plus four equals _____

c) Sarah ate 3 apples

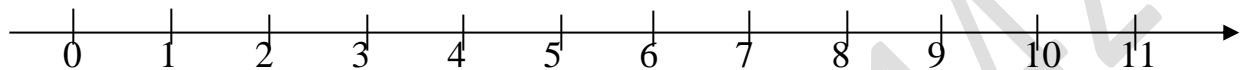
Mary ate 7 apples

How many apples did they eat altogether?

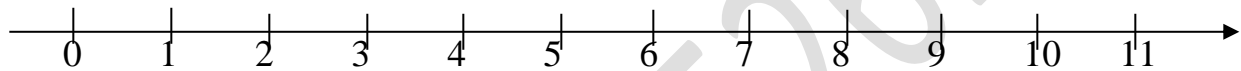
d) Juma has 10 books
 Ali has 5 books
 How many books do they have altogether?

Adding numbers using a numberline

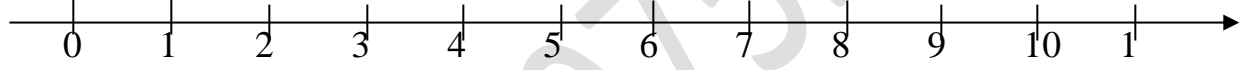
a) $4 + 2 =$



b) $5 + 0 =$



c) $4 + 3 =$



e) $6 + 2 =$



Subtraction of numbers less than 20 (horizontally)

a) $6 - 4 =$

b) $9 - 0 =$

c) $9 - 3 =$

d) $14 - 2 =$

e) $10 - 4 =$

f) $12 - 6 =$

g) $7 - 7 =$

h) $16 - 4 =$

Subtraction of numbers less than 20 (vertically)

$$\begin{array}{r} 9 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 2 \\ - \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 0 \\ - \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 5 \\ - \quad 5 \\ \hline \end{array}$$

Word statements involving subtraction

- a) Nine take away three equals _____
- b) Ten minus two equals _____
- c) Twelve minus three equals _____
- d) Daddy had 10 books
He gave away 6 books
How many books remained?
- e) Mary had 16 eggs. 9 eggs got broken
How many eggs remained?

PLAVE VALUES

Drawing and counting tens and ones

I = 1 ones

II = 2 ones

III = 3 ones

IIII = 4 ones

IIIII = 5 ones

IIIIII = 6 ones

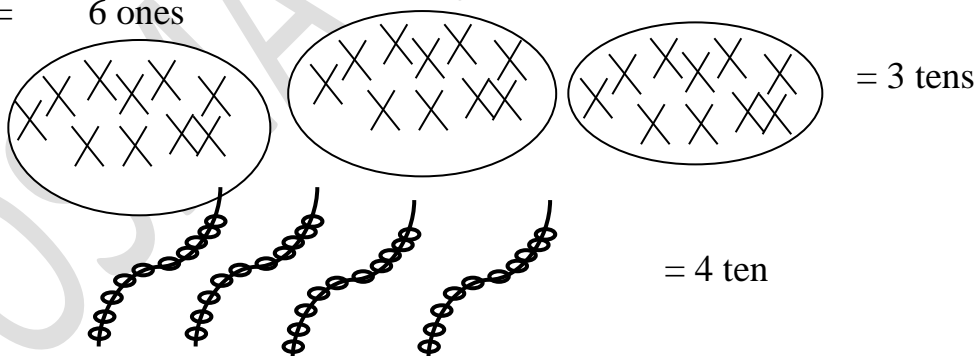
IIIIII = 7 ones

IIIIIII = 8 ones

IIIIIIII = 9 ones

IIIIIIII = 1 ten

IIIIIIIIII = 2 tens



Counting in tens

1-, 20, 30, 40, 50, 60, 70, 80, 90, 100

1 ten = 10 6 tens = _____

2 tens = 20 7 tens = _____

3 tens = 30 8 tens = _____

4 tens = 40

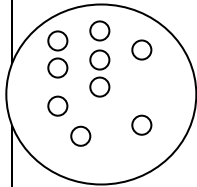
9 tens = _____

5 tens = _____

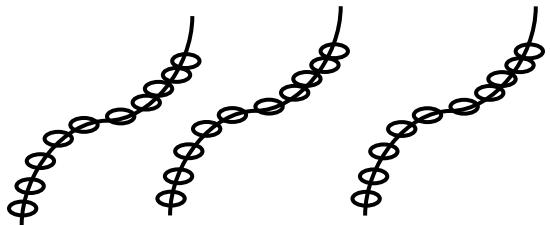
10 tens = _____

Counting tens and ones (how many tens and ones?)

IIIIIIII I II = _____ tens _____ ones



○ ○ ○ ○ ○ = _____ tens _____ ones



= _____ tens _____ ones

IIIIIIII IIIIIIII IIIIIIII I II = _____ tens _____ ones

Fill in the missing tens and ones

a) 42 = _____ tens _____ ones

b) 26 = _____ tens _____ ones

c) 80 = _____ tens _____ ones

d) 7 = _____ tens _____ ones

e) _____ tens _____ ones = 34

f) _____ tens _____ ones = 9

g) 3 tens 7 ones = _____

h) 2 tens 3 ones = _____

Draw to show tens and ones.

a) 4 = _____

b) 7 = _____

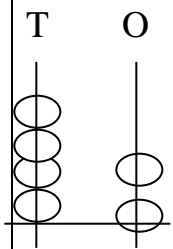
c) 12 = _____

d) 16 = _____

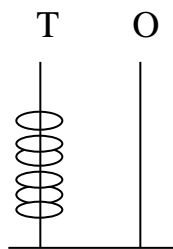
e) 24 = _____

f) 30 = _____

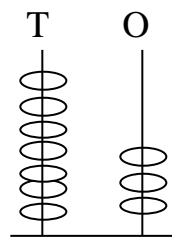
Which number are shown on the abacus?



____ =

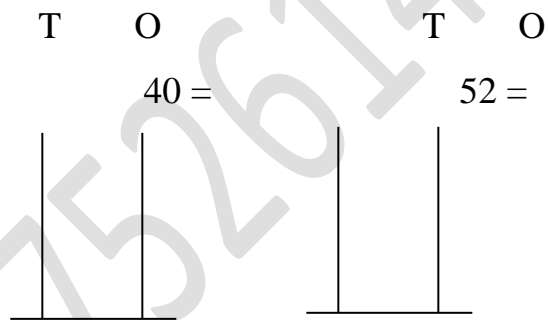
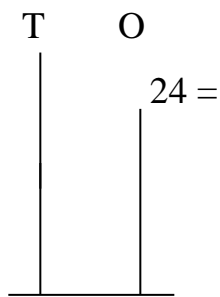


____ =



____ =

Show the number on the abacus



Expanding numbers

$13 = \underline{\quad} + \underline{\quad}$

$18 = \underline{\quad} + \underline{\quad}$

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

$23 = \underline{\quad} + \underline{\quad}$

$24 = \underline{\quad} + \underline{\quad}$

$39 = \underline{\quad} + \underline{\quad}$

$46 = \underline{\quad} + \underline{\quad}$

What number has been expanded?

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

$\underline{\quad} = 10 + 7$

$\underline{\quad} = 20 + 3$

$\underline{\quad} = 20 + 5$

$\underline{\quad} = 30 + 1$

$\underline{\quad} = 40 + 3$

$10 + 1 = \underline{\quad}$

$20 + 0 = \underline{\quad}$

$40 + 9 = \underline{\quad}$

$50 + 0 = \underline{\quad}$

$30 + 6 = \underline{\quad}$

Addition of tens and ones

T	O
1	2
+	3
<hr/>	
<hr/>	

T	O
2	2
+	2
<hr/>	
<hr/>	

T	O
4	3
+	5
<hr/>	
<hr/>	

T	O
3	4
+	20
<hr/>	
<hr/>	

T	O
4	7
+	30
<hr/>	
<hr/>	

T	O
5	4
+	24
<hr/>	
<hr/>	

Word statements in addition of tens and ones

1. Mary has 12 eggs. Sarah has 10 eggs. How many eggs do they have altogether?
2. Dan has 23 balls. Peter has 20 balls. They both have _____ balls.
3. There are 13 boys and 14 girls in a class. How many pupils are there altogether?

Subtraction of tens and ones

T	O
2	4
<hr/>	
-	4
<hr/>	
<hr/>	

T	O
1	6
<hr/>	
-	5
<hr/>	
<hr/>	

T	O
3	2
<hr/>	
-	2
<hr/>	
<hr/>	

T	O
5	4
<hr/>	
-	24
<hr/>	
<hr/>	

T	O
3	2
<hr/>	
-	12
<hr/>	
<hr/>	

T	O
4	3
<hr/>	
-	20
<hr/>	
<hr/>	

Word statements in subtraction of tens and ones

1. Nakato has 24 sweets. She ate 12 of them. How many sweets remained?
2. Subtract 10 from 22
3. Mummy has 34 eggs. 20 eggs were bad. How many eggs were good?
4. Sarah put 32 glasses on the tray. 11 glasses got broken. How many glasses were left?

ACOSMA ,0752614244

TERM TWO

Topical Break down Term II

1. Geometry

- i) Basic shapes
- j) Naming shapes
- k) Shapes of different objects
- l) Naming different things with a shape of a square eg circle

2. Length.

- i) What is length?
- ii) Parts of the body used to measure length
- iii) Other things used to measure length
- iv) Comparing length using long, tall or short
- v) Adding distance in metres (vertically and horizontally)
- vi) Word statements involving addition of metres
- vii) Subtraction of metres (horizontally and vertically)
- viii) Word statements in involving subtraction of metres
- ix) Picture interpretation about distance

3. Numeration system.

- i) Ordinal numbers
- ii) Numbers 50 – 100
- iii) Writing numbers and number names 50 (fifty – 100)
- iv) Matching numbers to their number names
- v) Missing addends
- vi) Grouping objects in twos
- vii) Multiplying numbers by two (horizontally and vertically)
- viii) Word statements involving multiplication of numbers by 2

- ix) Dividing by 2
- x) Word statement involving division of numbers by 2

4. Fractions.

- i) What is a fraction
- ii) Making and shading wholes
- iii) Making and shading halves
- iv) Making and shading quarters
- v) Making and shading other fractions
- vi) Addition of fractions
- vii) Subtraction of fractions
- viii)

5. Measures.

- i) Telling times on the clock face
- ii) Showing the given time on the clock face
- iii) Addition of time in full hours (horizontally and vertically)
- iv) Subtraction of time in full hours (horizontally and vertically)
- v) Days of the week
- vi) Months of the year

6. Graph.

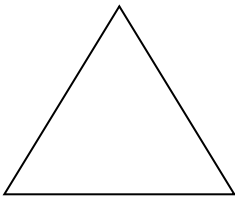
- i) Picture graph
 - ii) Block graph
7. Subtraction of numbers using a number line
8. Revision of the covered work

LESSON NOTES FOR PRIMARY ONE TERM II

Topic: Geometry.

Basic shapes

Triangle



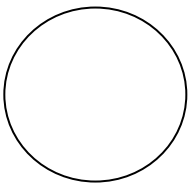
rectangle



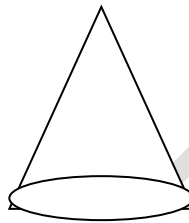
square



Circle



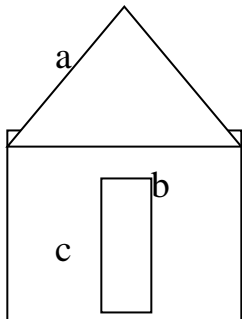
cone



oval



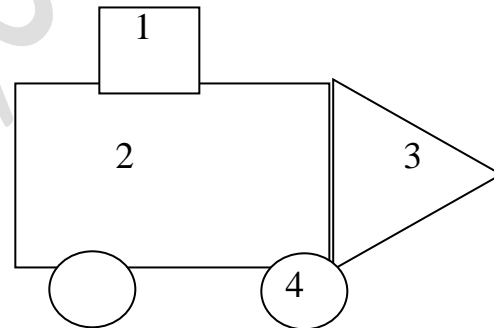
Name the shapes



a) _____

b) _____

c) _____



1. _____

2. _____

3. _____

4. _____

Shapes of different objects

Name different objects with a shape of a triangle

a) A Sacket of milk

b) A roof top of a hut

- c) A samosa

Name different objects with a shape of a rectangle

- a) A door
- b) A chalkboard

Name different things with a shape of a square

- a) Top of the chair
- b) Wire mesh

Name different things with a shape of a circle

- a) A ball
- b) A water melon
- c) A clock face
- d) An orange

ACOSMA , 0752614244

TOPIC: LENGTH

Definition

Length is the distance between two points

Parts of the body used to measure length

Hands

Fingers

Hand span

Feet

Arms

Other things we use to measure length

Ropes

Strings

Sticks

Banana fibers

Threads

Comparing length of different objects

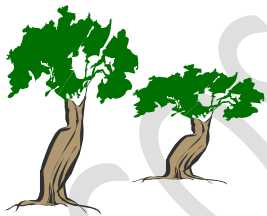
Use long, tall or short

A

B

Tree A is _____

Tree B is _____

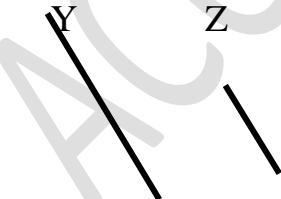


Y

Z

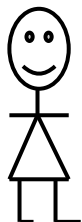
Stick y is _____

Stick Z is _____



Compare using longer, taller or shorter

Ann



Tendo



Ann is _____ than Tendo

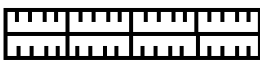
Tendo is _____ than Ann.

M



Ruler M is _____ than ruler N

N



Ruler N is _____ than ruler M

Adding metres (horizontally)

- a) 2 metres + 3 metres = _____ metres
- b) 7 metres + 4 metres = _____ metres
- c) 13 metres + 6 metres = _____ metres
- d) 9 metres + 1 meter = _____ metres

Adding metres vertically

6 metres	8 metres	4	5 m	1	0m
+ 3 metres	+ 4 metres	+ 2	3m	+ 2	4 m
_____	_____	_____	_____	_____	_____

Word statements involving addition of metres

- a) Joy moved 3 metres. Sarah moved 4 metres.
They both moved _____ metres
- b) Bursar had 12 metres of a black cloth and 4 metres of a yellow cloth. How many metres of cloth had the bursar?
- c) Tom walked 10 metres and ran 5 metres. How many metres did he move altogether?

Subtraction of metres

- a) 7 metres – 4 metres = _____ metres

b) $9 \text{ metres} - 2 \text{ metres} = \underline{\hspace{2cm}} \text{ metres}$

c) $20 \text{ m} - 10 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

d) $13 \text{ m} - 7 \text{ m} = \underline{\hspace{2cm}} \text{ m}$

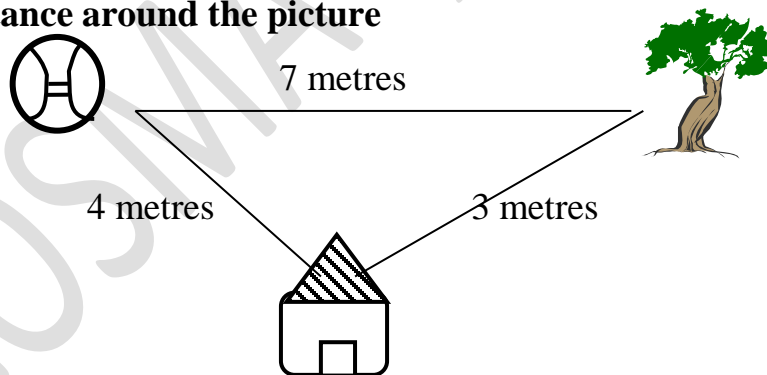
<p>e) $\begin{array}{r} 6 \text{ metres} \\ - 4 \text{ metres} \\ \hline \end{array}$</p>	<p>$\begin{array}{r} 1 \quad 9 \text{ metres} \\ - 1 \quad 6 \text{ metres} \\ \hline \end{array}$</p>
--	---

<p>h) $\begin{array}{r} 3 \quad 2 \text{ m} \\ - 2 \text{ m} \\ \hline \end{array}$</p>	<p>$\begin{array}{r} 4 \quad 0 \text{ m} \\ - 2 \quad 0 \text{ m} \\ \hline \end{array}$</p>
--	---

Word statements for subtraction of metres

- Tom had 6 metres of a red cloth. He sold 2 metres to his mother. How many metres did he remain with?
- ten metres minus six metres equals metres
- Joan had a sugarcane of 12 metres . She ate a piece of 5 metres. How many metres of a sugarcane did she remain with?

Find the distance around the picture



- What is the distance from the ball to the tree?
- How far is it from the hut to the ball?
- What is the shortest distance?
- What is the longest distance?
- What is the distance between the tree and the hut?
- Find the total distance around the pictures

TOPIC: ORDINAL NUMBERS

Ordinal numbers are numbers which tell us places of position and dates correctly

Number	Word
1 st	First
2 nd	Second
3 rd	Third
4 th	Forth
5 th	Fifth
6 th	Sixth
7 th	Seventh
8 th	Eighth
9 th	Ninth
10 th	Tenth
11 th	Eleventh
12 th	Twelfth
13 th	Thirteenth
14 th	Fourteenth
15 th	Fifteenth
16 th	Sixteenth
17 th	Seventeenth
18 th	Eighteenth
19 th	Nineteenth
20 th	Twentieth

	<p>Activity</p> <p>1. Fill in the missing numbers 1st, 2nd _____, 4th, 5th, _____, _____, 8th</p> <p>2. Write in numbers Ninth _____ Fifteenth _____ Second _____</p>
	<p>Numbers 50 – 100</p> <p>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</p> <p>Numbers 50 – 100 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</p> <p>Writing numbers and their number names</p> <p>50 fifty 51 fifty one 52 fifty two 53 _____ 54 _____ 55 _____ 56 fifty six 57 _____ 58 _____ 59 _____ 60 sixty 61 sixty one 62 _____ 63 sixty three 64 _____ 65 _____ 66 _____ 67 _____ 68 sixty eight</p>

	69 sixty nine 70 seventy 71 _____ 72 _____ 80 eighty 90 ninety 100 one hundred								
	<p>Activity</p> <p>Match numbers to their number names</p> <table> <tr> <td>76</td><td>ninety one</td></tr> <tr> <td>50</td><td>one hundred</td></tr> <tr> <td>91</td><td>seventy six</td></tr> <tr> <td>100</td><td>fifty</td></tr> </table> <p>Missing addends</p> <p>Find the missing numbers</p> <p>Example 1</p> <p> $2 + 3 = \square$ $5 + 3 = \square$ $4 + 5 = \square$ $10 + 7 = \square$ </p> <p>Teacher will give examples in groups and individually then give an activity</p> <p>Example 2</p> <p> $\square + 3 = 5$ $\square + 2 = 8$ </p> <p>Note: Draw balls for the bigger number and cross balls for the smaller number</p> <p>Teacher will help pupils with more examples then give an activity</p> <p>Example 3</p> <p> $4 + \square = 9$ $5 + \square = 7$ </p> <p> </p> <p>Note: Draw balls for the bigger number and cross for the small number, the remaining balls are the answer.</p> <p>Grouping in twos</p>	76	ninety one	50	one hundred	91	seventy six	100	fifty
76	ninety one								
50	one hundred								
91	seventy six								
100	fifty								

Grouping objects in twos



1 two =



2 twos =



3 twos =

Multiplying numbers by 2 (horizontally)

$1 \times 2 =$



$2 \times 2 =$



$3 \times 2 =$



$4 \times 2 =$



And more of this work up to 12

Multiplying numbers by 2 (vertically)

$$\begin{array}{r} 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 2 \\ \hline \end{array}$$

And more of this work to be given to pupils

Word problems with multiplication of numbers by 2

a) Juma has 2 eyes. How many eyes have 4 boys?

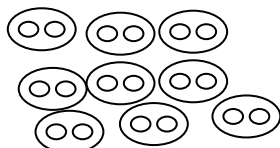
$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array} = 8$$

One girl has 2 ears. How many ears do 3 girls have?

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array} = 6$$

A hen has 2 legs. How many legs do 6 hens have?

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array} = 12$$



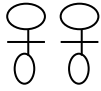
Put 2 eggs on each plate. How many eggs are on 5 plates?

$$5 \times 2 = 10$$

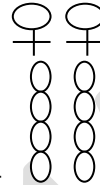


Dividing numbers by 2

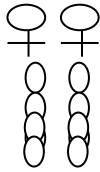
a) $2 \div 2 = 1$



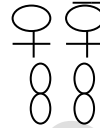
b) $8 \div 2 = 4$



c) $10 \div 2 = 5$



d) $4 \div 2 = \underline{\quad}$



e) $2 \overline{) 8}$

f) $2 \overline{) 14}$

g) $2 \overline{) 6}$

ACOSMA 0752614244

ACCIDENTS AND SAFETY

Teacher will give more numbers

Word problem involving division of numbers by 2

Share 6 mangoes between 2 girls. How many does each get?

$$6 \div 2 = 3 \text{ mangoes}$$

b) Ten divided by 2 equals

$$10 \div 2 = 5$$

c) Share 16 sweets equally between 2 boys

d) Daddy had 8 bananas. He shared them between 2 children. How many bananas did each child get?

$$8 \div 2 = 4$$

T

FRACTIONS

What is a fraction?

A fraction is part of a whole

New words

Whole

Half

Shade

Fraction

Quarter

A whole apple



A whole orange



A whole banana



One of the two equal parts cut is called a half.

Teacher will help pupils cut different fractions from different whole and name them.

(Practically)

Note: The parts cut must be of the same size.

Name the shaded fraction (work will be prepared and pasted in pupils' books)

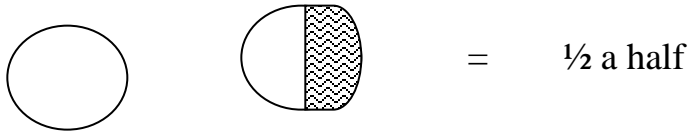
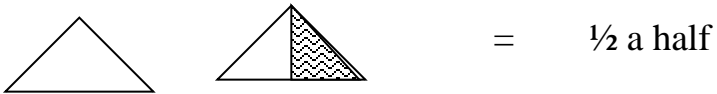
Making and shading wholes

A whole triangle

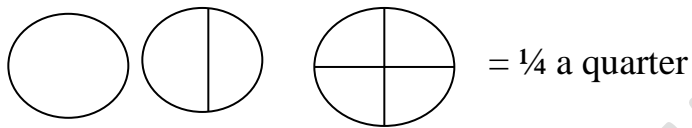
A whole circle

A whole pawpaw

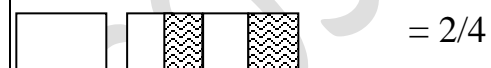
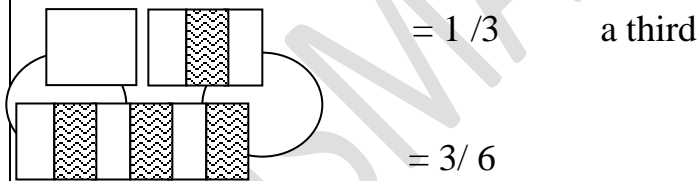
Making and shading halves



Making and shading quarters



Making and shading other fractions



Addition of fractions

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5} \quad \text{Note: Add numbers on top only and choose 5 one number from those down.}$$

$$\frac{4}{8} + \frac{2}{8} = \frac{4+2}{8} = \frac{6}{8}$$

More work will be given to pupils following the above example

Subtraction of fractions

$$\frac{3}{4} - \frac{2}{4} = \frac{3-2}{4} = \frac{1}{4} \quad \text{note: Subtract numbers up, then}$$

choose one number from down

$$\frac{7}{8} - \frac{5}{8} = \underline{\hspace{2cm}}$$

$$\frac{4}{10} - \frac{2}{10} =$$

$$\frac{8}{10} - \frac{8}{10} =$$

$$\frac{10}{10} - \frac{10}{10} =$$

$$\frac{2}{3} - \frac{1}{3} =$$

$$\frac{5}{7} - \frac{1}{7} =$$

$$\frac{3}{3} - \frac{3}{3} =$$

$$\frac{7}{7} - \frac{7}{7} =$$

Teacher will give more work following the above examples

each teacher will give more examples, then an activity

TOPIC: MEASURES

TIME

Telling time on a clock face

A clock face has 2 or more hands on it

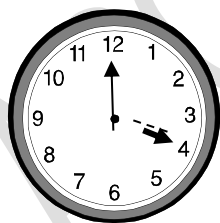
A short hand is the hour hand

A long hand is the minute hand

They both move around the clock but one moves faster than the other

When the long hand moves and points straight in 12, the time will be that number the short one is pointing to.

Example

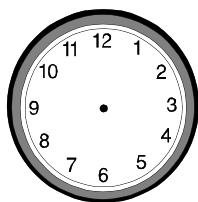


It is 4 o'clock

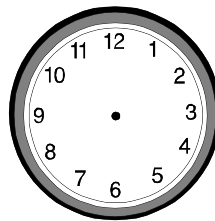
More work on telling time

Work will be done and pasted in their books

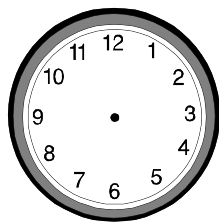
Showing time on a clock face.



It is 9 o'clock



It is 2 o'clock



More work to be done on papers and pasted in their books

Adding time in full hours

$$5 \text{ hours} + 3 \text{ hours} = \underline{\hspace{2cm}} \text{ hours}$$

$$8 \text{ hours} + 2 \text{ hours} = \underline{\hspace{2cm}} \text{ hours}$$

$$2 \text{ hours} + 4 \text{ hours} = \underline{\hspace{2cm}} \text{ hours}$$

$$\begin{array}{r} 3 \text{ hours} \\ + 4 \text{ hours} \\ \hline \end{array}$$

$$\begin{array}{r} 6 \text{ hours} \\ + 7 \text{ hours} \\ \hline \end{array}$$

$$\begin{array}{r} 7 \text{ hours} \\ + 5 \text{ hours} \\ \hline \end{array}$$

Subtraction of time in full hours

$$9 \text{ hours} - 4 \text{ hours} = \underline{\hspace{2cm}} \text{ hours}$$

$$8 \text{ hours} - 3 \text{ hours} = \underline{\hspace{2cm}} \text{ hours}$$

$$12 \text{ hours} - 8 \text{ hours} = \underline{\hspace{2cm}} \text{ hours}$$

$$\begin{array}{r} 9 \text{ hours} \\ - 6 \text{ hours} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10 \text{ hours} \\ - 8 \text{ hours} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12 \text{ hours} \\ - 4 \text{ hours} \\ \hline \\ \hline \end{array}$$

Days of the week

We have seven days in a week.

All days of the week have names beginning with capital letter

Sunday is the first day of the week.

Monday is the second day of the week

Tuesday is the third day of the week

Wednesday is the fourth day of the week

Thursday is the fifth day of the week

Friday is the sixth day of the week

Saturday is the seventh day of the week

Fill in the missing days of the week

- a) Sunday, Monday, _____, _____, _____, Friday
- b) Thursday, Wednesday, _____, _____, _____
- c) When do Christians go for prayers?
- d) Moslems pray on _____
- e) The seventh day Adventists pray on _____
- f) On _____ Christians go for prayers.

Note: 60 minutes = 1 hour

24 hours = one day

7 days = 1 week

2 weeks = fortnight

4 weeks = 1 month

12 months = one year

Months of the year

There are twelve months of the year

January 1st

February 2nd

March	3 rd
April	4 th
May	5 th
June	6 th
July	7 th
August	8 th
September	9 th
October	10 th
November	11 th
December	12 th

Activity

a) How many months make a year?

b) Fill in the missing letters

Jan_____ary Feb____u____ry J_____ne A_____ust

c) Fill in the missing months of the year

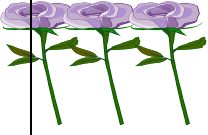

January, February, _____, _____May

August, September, _____, _____, December

GRAPHS

Graph 1


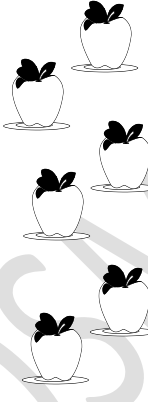

Teacher will help pupils get the ideas of graph from real objects

			
Sarah	Peter	Alum	Sofia

1. Who has more flowers
2. Who has fewer flowers?
3. How many flowers has Alum?
4. Who has three flowers?
5. How many flowers do they have altogether?

Graph 2

A graph of apples

		
Kasifa	Loy	Maria




Questions

1. How many apples does Loy have?
2. Who has three apples?
3. How many apples do they have altogether?
4. Who has most apples?

5. Who has the least number of apples?

Graph 3

A farmer planted trees on different days

Monday	
Tuesday	
Wednesday	

Questions

1. How many trees were planted on Tuesday?
2. On which day did he plant the least number of trees?
3. How many trees did he plant on Monday?
4. How many trees did he plant altogether?

Study the graph and answer the questions that follow

Five children have boxes

Tom	Tonny	Tina	Tasha	Trinity

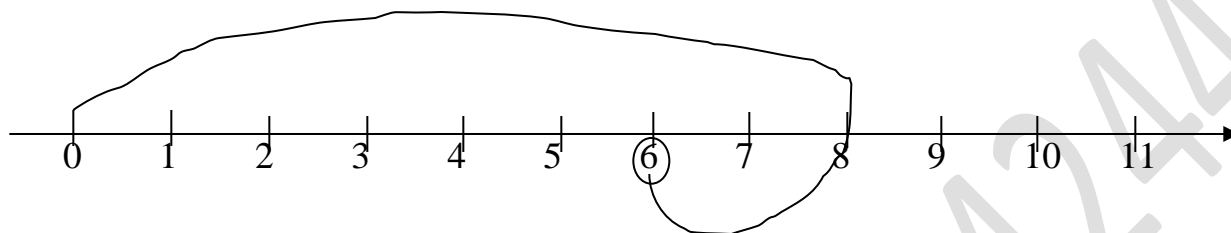
Questions

- a) How many boxes does Tonny have?
- b) Who have the same number of boxes?
- c) How many boxes has Trinity?

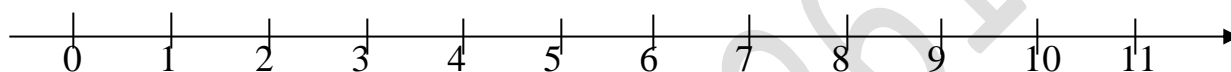
How many boxes do they have altogether?

Use a number line to get the answer

a) $8 - 2 = \underline{\hspace{2cm}}$



b) $9 - 7 = \underline{\hspace{2cm}}$



More work will be given.

Revision of the covered work.

TERM THREE NOTES

Topical breakdown for term III.

MEASUREMENTS

1. Weight(mass)

- i) What is weight?
- ii) Things we use to weigh
- iii) Comparing weight
- iv) Addition of weight – vertically and horizontally
- v) Word statements involving addition
- vi) Subtraction of weights – vertically and horizontally
- vii) Word statements involving subtraction

2. Capacity

- i) What is capacity
- ii) Examples of liquids
- iii) Objects/containers we use to measure liquids
- iv) Comparing capacity
- v) Measuring using nonstandard units
- vi) The standard unit for capacity
- vii) Addition in litres
- viii) Word statements (addition)
- ix) Subtraction in litres
- x) Word statements (subtraction)
- xi) Mixed exercises of addition and subtraction

3. Addition with re-grouping

- i) Add two-digit numbers with re-grouping
- ii) Word statements (addition)

4. Money

- i) What is money?
- ii) History of money
- iii) Uganda currency
- iv) Features on money
- v) Comparing money
- vi) Addition of money
- vii) Word statements
- viii) Subtraction of money
- ix) Word statements

5. Shopping

6. Mathematical statements on addition

- i) Subtraction
- ii) Multiplication
- iii) Division
- iv) Number families
- v) Multiplication by 3
- vi) Division by 3
- vii) Multiplication by 3
- viii) Division by 3

Topic: Measures

Weight (mass)

1. What is weight?

a) Weight is how heavy or light something is

b) We can tell how heavy or light something is after weighing it

2. We can weigh some objects using nonstandard tools eg. Tins, baskets, pots etc

3. We measure mass (weight) in kilograms (kg) and grams (g)

4. Examples of things we weigh

- Sugar
- Peas
- Salt
- Meat
- Millet
- Maize flour
- Bread
- Beans
- Rice
- Cassava flour

Comparing weight using heavy or light

a) A stone is _____

b) A paper is _____

c) A table is _____

d) A feather is _____

e) A brick is _____

f) A pen is _____

Page 43

	<p>Joan had 7kg of salt. Dan had 9kg of salt. How many kilograms did they have altogether?</p> <p>Add 12kg plus 10kg.</p> <p>Subtraction of mass in kilograms</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>10kg - 4kg = ____ kg</p> <p>7kg - 2kg = ____ kg</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 8kg - 4kg ----- _____ </div> <div style="text-align: center;"> 9kg - 3kg ----- _____ </div> </div> </div> <div style="width: 45%;"> <p>b) 12kg - 9kg = ____ kg</p> <p>d) 14kg - 7 kg = ____ kg</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 14kg - 4kg ----- _____ </div> <div style="text-align: center;"> 11kg - 10kg ----- _____ </div> </div> </div> </div> <p>Word statements</p> <p>a) Subtract 9kg - 5kg</p> <p>b) Daddy bought 14kg of meat. We ate 6kg. How many kilograms remained?</p> <p>c) There were 34kg of rice in the basket. Mummy cooked 20kg. How many kilograms remained?</p>
	<p>Capacity</p> <p>What is capacity?</p> <p>Capacity is the amount of liquid a container can hold.</p> <p>Examples of liquids</p> <ul style="list-style-type: none"> a) Water b) Milk c) Juice d) Paraffin e) Tea f) Petrol g) Diesel h) Glue i) Cooking oil

Container used to measure liquids

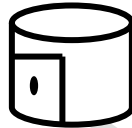
- a) Bottles
- b) Jugs
- c) Jerry cans
- d) Basins
- e) Cups
- f) Glasses
- g) Tins
- h) Gourd
- i) Bucket

Comparing capacity using less or more

Bottle

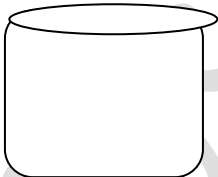


tin

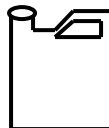


- a) Which object carries more water?
- b) Which object carries less water?

Drum



jerry can



- a) Which container holds more water?
- b) Which container holds less water?

Reference MK 1 page 102

Measuring using standard units

We measure liquids in litres (l) other measure are milliliters (ml) i.e. medicine, water, soda, juice

Practical measuring of water in different quantities

- a) A plastic mug holds $\frac{1}{2}$ of water
- b) A small plastic bottle holds $\frac{1}{2}$ litre of water
- c) A bottle of beer contains $\frac{1}{2}$ litres of beer

Activity

- a) How many mugs of water can fill five litre bottles?
- b) How many mugs of water can fill a one litre bottle?

Reference MK nk 2 page 150

Adding in litres (vertically and horizontally)

- a) 1 litre + 2 litres = 3 litres
- b) 4 litres + 3 litres _____ litres
- c) 5 litres + 2 litres = _____ litres

2	5 litres	3	3 litres
+	2	3 litres	
<hr/>		<hr/>	

Ref: MK bk 2 page 151

Word problems involving addition of litres

a) Juma had 2 litres of milk. He added 4 litres of water in milk. How many litres did he get altogether?

b) Tom had 8 litres of water. He bought more 2 litres of water. How many litres did he buy altogether?

c) Grace has 7 litres of soda. Akello has 5 litres of soda. How many litres do they

have altogether?

Subtracting litres horizontally and vertically

- a) 10 litres - 1 litre = _____ litres
- b) 15 litres - 7 litres = _____ litres
- c) 12 litres - 3 litres = _____ litres

- d) 8 litres e) 5 litres
- 3 litres - 2 litres

- f) 4 8 litres g) 3 7 litres
- 2 6 litres - 2 0 litres

Word problems involving subtraction of litres

- a) Mummy had 8 litres of milk. She sold 2 litres. How many litres did she remain with? _____
- b) Sarah had 16 litres of oil. She used 7 litres to fry pancakes. How many litres remained? _____

Mixed exercises on addition and subtraction of litres

- a) 6 litres + 4 litres = _____ litres
- b) 5 litres + 2 litres = _____ litres
- c) 10 litres - 5 litres = _____ litres
- d) 1 0 litres e) 1 4 litres f) 2 4 litres
- 2 litres - 1 0 litres + 1 1 litres

Addition with regrouping (carrying)

$$\begin{array}{r} \text{T} \quad \text{O} \\ 1 \quad 8 \\ + \quad 3 \\ \hline \underline{2} \quad \underline{1} \\ 11 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 1 \quad 9 \\ + \quad 4 \\ \hline \underline{2} \quad \underline{3} \\ 13 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 6 \quad 9 \\ + \quad 6 \\ \hline \underline{7} \quad \underline{5} \\ 15 \end{array}$$

Exercise

$$\begin{array}{r} \text{T} \quad \text{O} \\ 3 \quad 7 \\ + \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 5 \quad 4 \\ + \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 8 \quad 9 \\ + \quad 9 \\ \hline \end{array}$$

Adding two digit numbers to two digit numbers with regrouping**Exercise**

$$\begin{array}{r} \text{T} \quad \text{O} \\ 4 \quad 5 \\ + \quad 4 \quad 5 \\ \hline \underline{6} \quad \underline{0} \\ 10 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 6 \quad 9 \\ + \quad 6 \\ \hline \\ 14 \end{array}$$

Exercise

$$\begin{array}{r} \text{T} \quad \text{O} \\ 4 \quad 6 \\ + \quad 2 \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 5 \quad 7 \\ + \quad 1 \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 2 \quad 9 \\ + \quad 3 \quad 7 \\ \hline \end{array}$$

TOPIC: **MONEY**

Money : This is what we use to buy what we want.

Discuss the use of money

History of money

Long ago, people used to exchange goods for goods and services for services (barter trade). Later, they introduced cowrie shells.

When the Indians came, they introduced rupees. The rupees also got expired and now we have the present currency called shillings.

Currency used by different countries

Uganda	–	shillings
Kenya	–	shillings
England	–	pounds
America	-	Dollars
Rwanda	-	Farang
Nigeria	-	Naira

There are two forms of money used in Uganda

These are

1. Coins
2. Notes (paper money)

Coins

50shillings coin

100 shillings coin

200 shillings coin

500 shillings coin

1000 shillings coin

Notes:

1000 shillings note

2000 shillings note

5000 shillings note

10,000 shillings note

20,000 shillings note

50,000 shillings note

Features on money

a) A coin of 50 shillings has a head of a cob and the coat of arms

a coin of 100 shillings – a cow and a coat of arms

a coin of 200 shillings – a fish

a coin of 500 shillings – a head of a crested crane

a coin of 1000 shillings – a crested crane

Changing money/ comparing different money denominations

$$\text{Shs. 100} = \text{shs 50} + \text{shs. 50}$$

$$\text{Shs. 200} = \text{shs. } \underline{\hspace{1cm}} + \text{shs } \underline{\hspace{1cm}} + \text{shs. } \underline{\hspace{1cm}} + \text{shs. } \underline{\hspace{1cm}}$$

$$\text{a) Shs. 300} = \text{shs. } \underline{\hspace{1cm}} + \text{shs. } \underline{\hspace{1cm}} + \text{shs. } \underline{\hspace{1cm}}$$

b) How many coins of 100 make shs. 200?

c) How many coins of 100 make shs. 500?

Addition of money vertically and horizontally

$$\text{a) i) Shs. 100} + \text{Shs. 100} = \text{Shs 200}$$

$$\text{ii) Shs. 100} + \text{Shs. 100} = \underline{\hspace{2cm}}$$

$$\text{iii) Shs. 500} + \text{Shs. 200} = \underline{\hspace{2cm}}$$

$$\text{b) i) shs. 50} \quad \text{ii) shs. 150}$$

$$\begin{array}{r} \text{+ shs 50} \\ \hline \end{array} \quad \begin{array}{r} \text{+ shs. 50} \\ \hline \end{array}$$

a) Jane had shs. 200. Peter had shs. 300. How much money do they have altogether?

- b) There are shs. 400 in the tin and shs. 200 in the box. How much money is there altogether?
- c) Tom picked shs. 500 on the way to school. John picked shs. 300. How much money do they have altogether?

Subtraction of money

shs. 600	ii)	shs. 700	iii)	shs. 300
- shs 400	-	shs. 200	+	shs 200

Ref: Mk Bk 2 page 127

Oxford Primary MTC Bk 2 page 58

Word problems involving subtraction of money

- a) You have shs. 500. You spent Shs. 200. How much is left?

$$\begin{array}{r} \text{shs. } 500 \\ - \text{shs } 200 \\ \hline \end{array}$$

- b) You have Shs. 200. You have spent shs. 100. How much is left?

$$\begin{array}{r} \text{shs. } 200 \\ - \text{shs } 100 \\ \hline \end{array}$$

- c) Eva had shs. 300. She lost shs. 100. How much money did she remain with?

$$\begin{array}{r} \text{shs. } 300 \\ - \text{shs } 100 \\ \hline \end{array}$$

- d) Susan had shs. 700. She bought a ruler at shs. 300. How much money did she remain with?

$$\begin{array}{r} \text{shs. } 700 \\ - \text{shs } 300 \\ \hline \end{array}$$

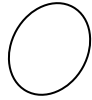
Lesson SHOPPING

An apple



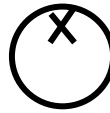
Shs. 500

an egg



shs. 200

an orange



shs. 150

a cup



shs. 300

- a) What is the cost of an egg?
- b) Which item costs shs. 300?
- c) A _____ costs shs. 500.
- d) What is the cost of an egg and a cup?
- e) Study the price list and answer the questions

Item

Price

Pencil

shs. 50 each

Sweet

shs. 50 each

Book

shs. 100 each

Matchbox

shs. 50 each

Ice cream

shs. 500 each

Questions

- a) How much is a pencil?
- b) What is the cost of a sweet?
- c) How much is a tin of ice cream?
- d) How much will one pay for two match boxes?
- e) What is the cheapest item?
- f) A _____ is the most expensive item.

TOPIC:NUMBER FAMILIES

Number families of 2, 3, 4, 5, 6, 7, 8, 9, 10

Which two numbers add up to 2

First list all the numbers from 0 up to 2

① 0, 1, 2, ②

Choose the first and the last numbers

$$0 + 2 = 2$$

$$1 + 1 = 2$$

$$2 + 0 = 2$$

Which pairs of numbers add up to 4?

③ 0, ④ 1, 2, ⑤ 3, ⑥ 4

$$0 + 4 = 4$$

$$1 + 3 = 4$$

$$2 + 2 = 4$$

$$4 + 0 = 4$$

$$3 + 1 = 4$$

Which pairs of numbers add up to 5?

⑦ 0, ⑧ 1, 2, ⑨ 3, ⑩ 4, ⑪ 5, ⑫ 6

$$0 + 5 = 5$$

$$1 + 4 = 5$$

$$2 + 3 = 5$$

$$3 + 2 = 5$$

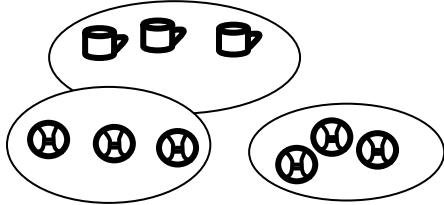
$$4 + 1 = 5$$

$$5 + 0 = 5$$

Up to 1

TOPIC: **MULTIPLICATION BY 3**

Grouping in threes.



1 group of three = 3 _____
2 groups of three = _____

Multiplying numbers by 3 [horizontally]

Example

$$1 \times 3 =$$

$$2 \times 3 =$$

$$3 \times 3 =$$

$$4 \times 3 =$$

And more of this work up to 12

More of this work to be given to pupils

Word problems with multiplication by 3

a) A stool has 3 legs. How many legs. How many legs do 2 stools have?

$$\begin{array}{c} 2 \\ \text{○○○} \end{array} \times \begin{array}{c} 3 \\ \text{○○○} \end{array} = 6 \text{ _____ legs.}$$

b) There are 3 eggs in a tray

How many eggs are there in 4 trays?

$$3 \times 4 = \underline{12} \text{ eggs}$$

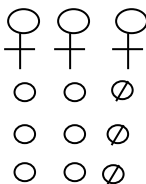
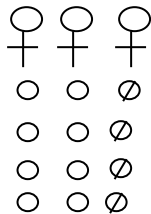
TOPIC: DIVISION OF NUMBERS BY 3

Dividing numbers by 3 [horizontally]

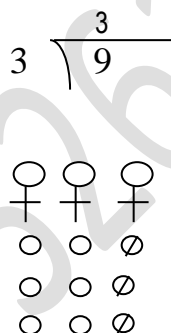
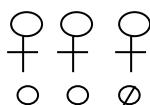
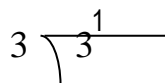
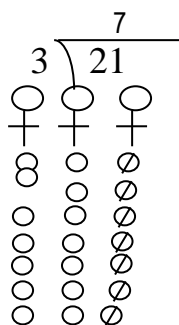
$$6 \div 3 = \underline{\quad}$$

$$9 \div 3 = \underline{\quad}$$

$$12 \div 3 = 4 \underline{\quad}$$



Dividing numbers by 3 [vertically]



Teacher will give more examples and then an activity

Word problems involving division of numbers by 3

- a) Mummy had 6 bananas. She shared them equally among 3 children. How many bananas did each get?

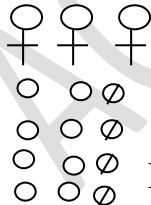
$$6 \div 3 = \underline{2}$$

Each child got 2 bananas

- b) Nine divide by three equals _____

- c) Share 12 pencils equally among 3 boys

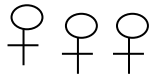
$$12 \div 3 = \underline{\quad}$$



Each child get 4 pencils

- d) What do we get when we share 3 apples equally among 3 girls?

$$3 \div 3 = \underline{\quad\quad} \text{ apple}$$



TOPIC: MATHEMATICAL STATEMENTS

Mathematical statements on addition

Words used in addition

- Add
- Altogether
- And
- Both
- Sum
- Total
- Plus
- Put together
- More

a) Two plus five equals _____

b) What is the sum of three, two and four?

c) Jane has four apples. John has three apples
How many apples do they have altogether?

d) Find the total of five and six oranges

e) What is six and four?

f) Tom had six books. Teo had five books.

Both had _____ books altogether.

g) Daddy had 2 sweets. Mummy gave him more 7 sweets. How many sweets did daddy have altogether?

Mathematical statements on subtraction

Words used in subtraction

- Subtraction
- Take away
- Less
- Minus

- Remain
- Remove

a) Subtract 4 mangoes from 11 mangoes

b) What is 8 take away zero

c) Twelve minus six equals _____

d) What is four less two? _____

e) A hen had 8 eggs. Five eggs were broken. How many eggs remained?

f) Remove 4 pens from 10 pens. How many pens remain?

Mathematical statements on the multiplication

Words used in multiplication

- Multiplication
- Groups of
- Times

Note: teacher will give examples using words above.

Mathematical statements on division

Words used in division

Share

Divide

Among

Equally

Between

Give

Note: Teacher will give examples using words above.

ACOSMA EDUCATIONAL SERVICES-0752614244