MATHEMATICS

TEACHERS' HANDBOOK

PRIMARY ONE LESSON NOTES

TERM 1 2024

Name:

School:

STANDARD CURRICULUM

Term I mathematics topical breakdown for P.1

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 numberline
   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
   vii) Expanding numbers
   viii) Adding tens and ones
   ix) Word statements in addition of tens and ones
   x) Subtraction of tens and ones
   xi) Word statements in subtraction of tens and ones

Lesson notes for primary one term one

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

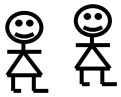
Activity

Count and write the number

 =_____

 =_____

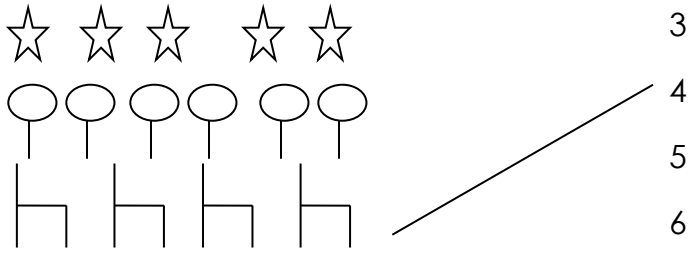
 = _____

 = _____

Counting and writing numbers 1-20

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

Matching pictures to numbers



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

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) 7, ___, ____, 10
c) 22, ____, 24
b) 4, ____, 6
c) 9, ____, ____, 13
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

4 and 2 7 and 5 1 and 9 10 and 20

Under line the smaller (less) number

12 and 22 14 and 41 6 and 9 13 and 31

Circle the greater (bigger) number

a) 4, 3, 1 b) 15, 5, 50 c) 7, 5, 9, 10

d) 8, 2, 12, 16 d) 40, 30, 10, 20 e) 21, 11, 31

Underline the greatest (biggest) number

a) 1, 2, 3 b) 11, 6, 5 c) 7, 2, 6

d) 10, 11, 9, 4 e) 22, 12, 32 d) 40, 30, 20, 10

f) 50, 10, 20, 30

Arrange the numbers from the smallest to the biggest

a) 7, 1, 2 _____ c) 5, 9, 3, 1 _____

b) 12, 18, 15 _____ d) 50, 10, 20, 40, 30 _____

Number words from 0 – 20

0	zero	7	seven	14	fourteen
1	one	8	eight	15	fifteen
2	two	9	nine	16	sixteen
3	three	10	ten	17	seventeen
4	four	11	eleven	18	eighteen
5	five	12	twelve	19	nineteen
6	six	13	thirteen	20	twenty

Number words from 21 – 35

21	twenty one	26	twenty six	31	thirty one
22	twenty two	27	twenty seven	32	thirty two
23	twenty three	28	twenty eight	33	thirty three
24	twenty four	29	twenty nine	34	thirty four
25	twenty five	30	thirty	35	thirty five

write the missing number words

22 = _____ 32 thirty two

30 = _____ 26 = _____ 27 = _____

24= _____ 33 = _____ 21 = _____

Write in figures

36	thirty six	39	_____	42	_____
43	_____	46	_____	48	forty eight
37	_____	40	forty	49	_____
44	_____	47	_____	50	fifty
38	_____	41	forty one		
45	forty five	47	_____		

Sets

What is a set?

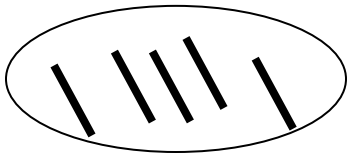
A set is a group of objects

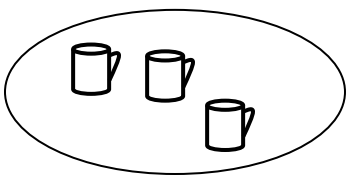
Or A set is a collection of objects

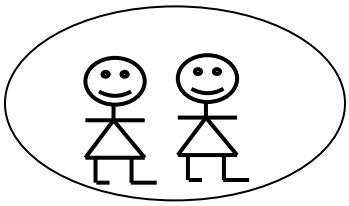
Objects found in a set are called

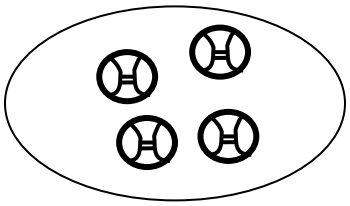
Members or elements

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
e) A set of seven triangles

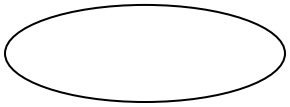
empty sets: what is an empty set?

An empty set is a set without members

Or

An empty set is a set with no members

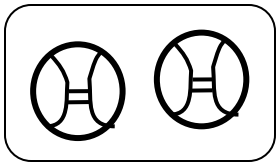
Name this set

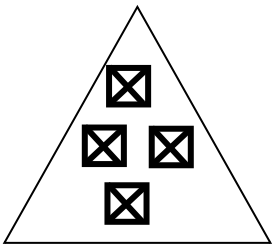


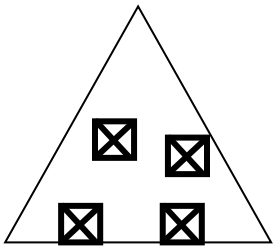
_____

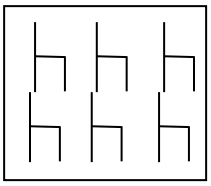
Draw an empty set

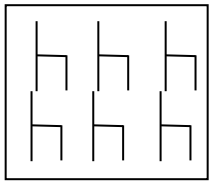
Matching sets with the same number of members

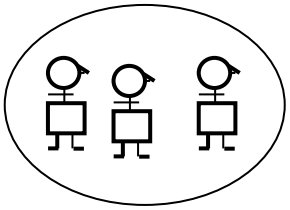


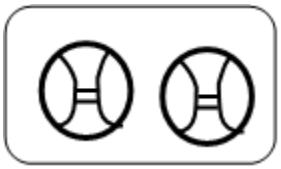


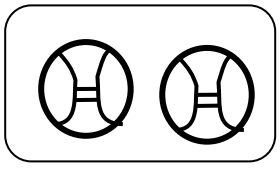




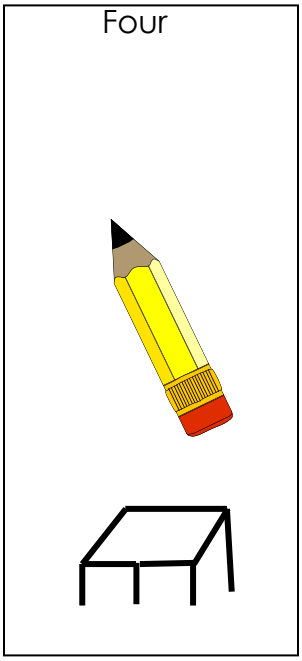


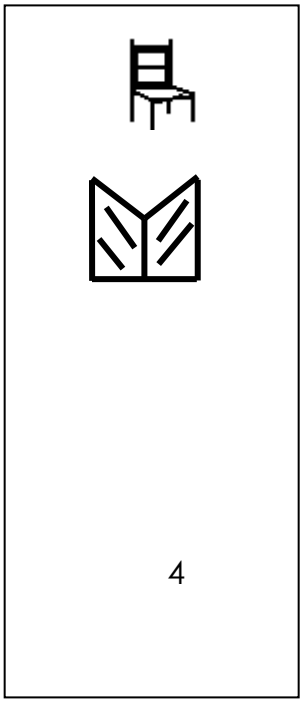






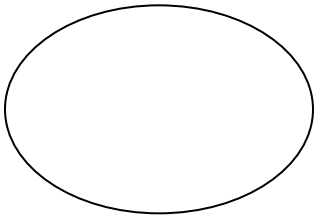
Match correctly



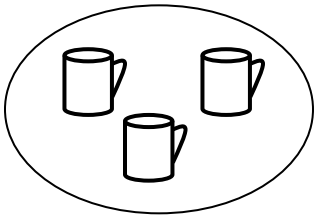


Comparing

A



B

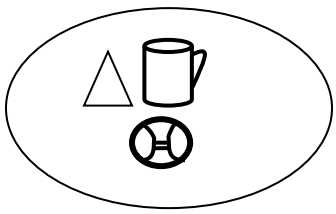


a) set A has _____members
b) set B has _____elements
c) how many members are in both sets?

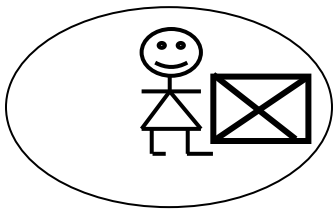
NB Teacher to give more similar numbers)

Comparing sets using more or less

Set X

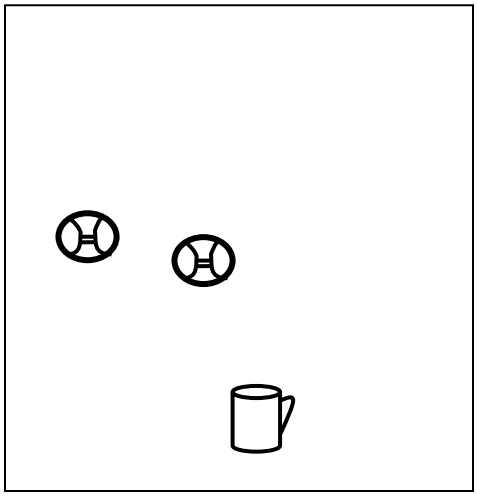


Set Y

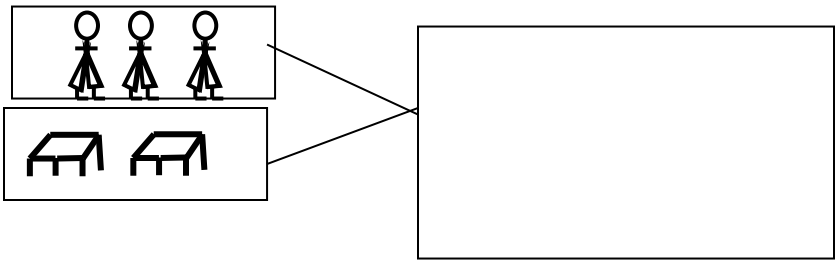


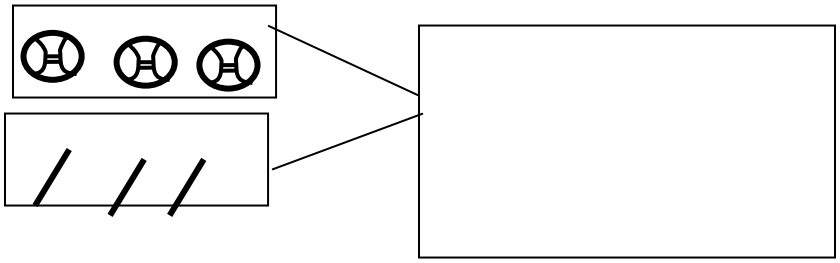
a) set Y has _____members
b) Set X ha _____memebrs
c) Which set has more members?
d) Which set has less members?
e) How many members are in set Y?
f) How many members are both sets?

Forming new sets

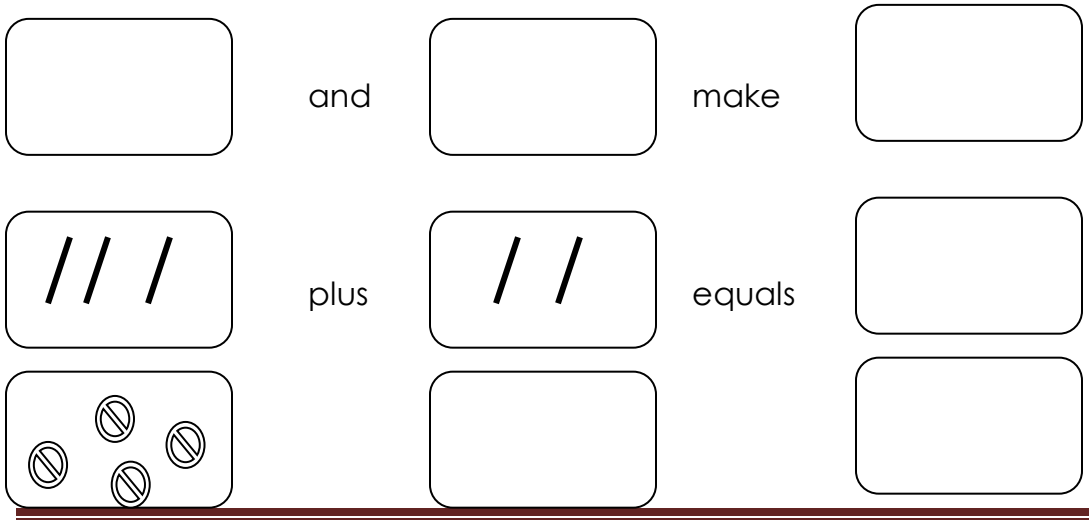


Forming big sets from small sets

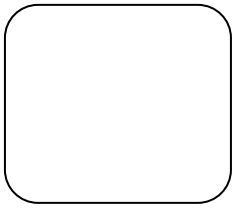


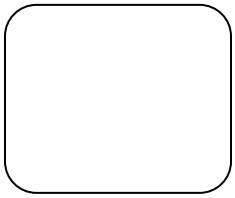


Joining sets



4 + 0 = _____





_____ + _____ = _____

TOPIC : OPERATION ON WHOLE NUMBERS

Addition of numbers less than 20 (horizontally)

3+5 =

9 + 2 =

5 + 0 =

3 + 6 =

2+4+ 0= _____

3 + 7 + 5 = _____

8 + 4 + 6 =

7 + 3 + 5 =

Addition of numbers less than 20 (vertically)

5	6	7	6
+ 9	+ 4	+ 7	+ 5
_____	_____	_____	_____
_____	_____	_____	_____

3	4	5	6
2	5	5	2
+ 1	+ 7	+ 5	+ 0
_____	_____	_____	_____
_____	_____	_____	_____

1 0	1 2	1 6
+ 2	+ 4	+ 4
_____	_____	_____
_____	_____	_____

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?

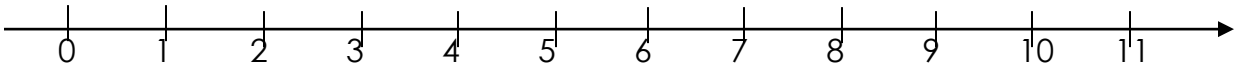
d) Juma has 10 books

Ali has 5 books

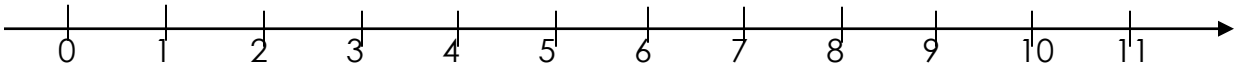
How many books do they have altogether ?

Adding numbers using a numberline

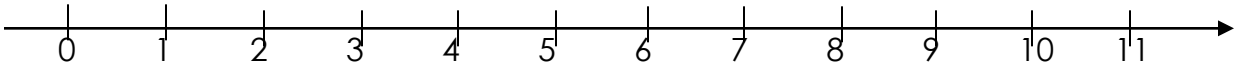
a)4 + 2 =



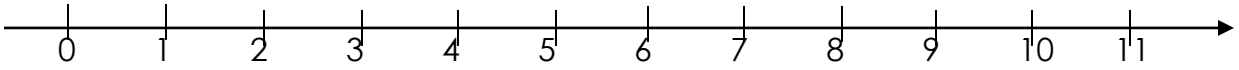
b) 5 + 0 =



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)

9	7	1 2
- 6	- 2	- 7

	8			1	0		1	5
-	5		-	3		-	5	

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?

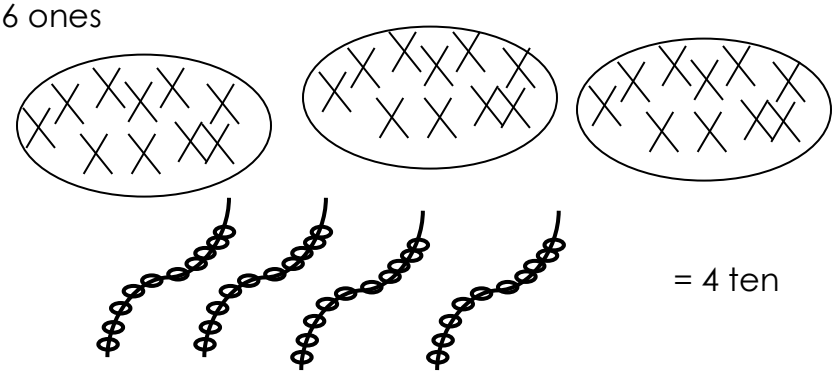
e) Mary had 16 eggs. 9 eggs got broken

How many eggs remained?

PLAVE VALUES

Drawing and counting tens and ones

I	=	1 ones	IIIIIII	= 7 ones
II	=	2 ones	IIIIIIII	= 8 ones
III	=	3 ones	IIIIIIIII	= 9 ones
IIII	-	4 ones	~~IIIIIIII~~	= 1 ten
IIIIII	=	5 ones	~~IIIIIIII~~ ~~IIIIII~~	= 2 tens
IIIIIII	=	6 ones		



= 3 tens

= 4 ten

Counting in tens

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

1 ten = 10

2 tens = 20

3 tens = 30

4 tens = 40

5 tens = ____

6 tens = _____

7 tens = _____

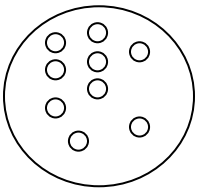
8 tens = _____

9 tens = _____

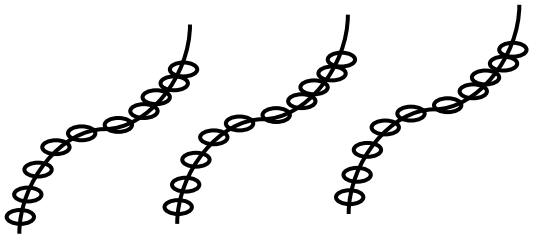
10 tens = _____

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

𝍸 III = _____tens _____ones



○ ○ ○ ○ ○ = _____tens _____ones



= ____tens _____ones

𝍸 𝍸 𝍸 III = _____tens _____ones

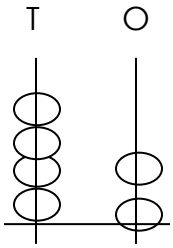
Fill in the missing tens and ones

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 = _____

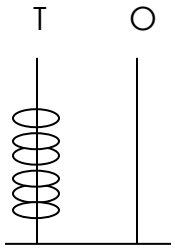
Draw sticks to show tens and ones

a) 4 = _____
b) 7 = _____
c) 12 = _____
d) 16 = _____
e) 24 = _____
f) 30 = _____

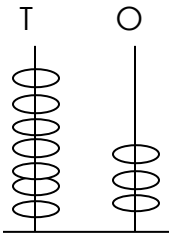
Which number are shown on the abacus?



___ ___ =



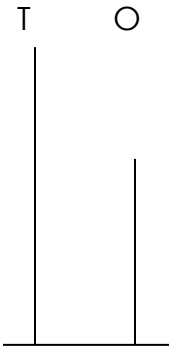
____ _____ =



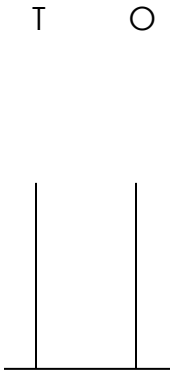
____ _____ =

Show the number on the abacus

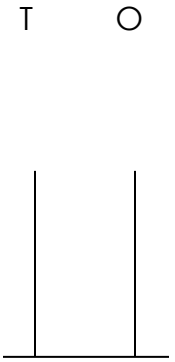
24 =



40 =



52 =



Expanding numbers

13 = _____ + _____

24 = _____ + _____

18 = _____+ _____

39 = _____+_____

10 = _____+_____

46 = _____+_____

23 = _____+_____

What number has been expanded?

_____ = 10 + 4

10 + 1 = _____

_____ = 10 + 7

20 + 0 = _____

____ = 20 + 3

40 + 9 = _____

____= 20 + 5

50 + 0 = _____

_____= 30 + 1

30 + 6 = _____

_____=40 + 3

Addition of tens and ones

T	O
1	2
+	3

T	O
2	2
+	2

T	O
4	3
+	5

T	O
3	4
+	2 0

T	O
4	7
+	3 0

T	O
5	4
+	2 4

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
-	4

T	O
1	6
-	5

T	O
3	2
-	2

T	O
5	4
-	2 4

T	O
3	2
-	1 2

T	O
4	3
-	2 0

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?

TERM II MTC - Lesson notes for primary one

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

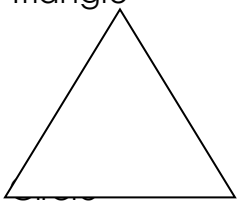
6. Graph
   i) Picture graph
   ii) Block graph
7. Subtraction of numbers using a numberline
8. Revision of the covered work

Lesson notes for primary one term II

Topic: geometry

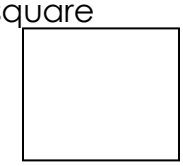
Basic shapes

Triangle

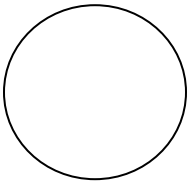


rectangle

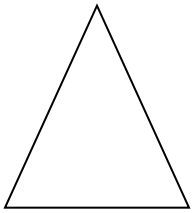
square



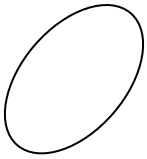
circle



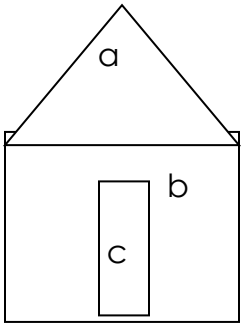
cone



oval



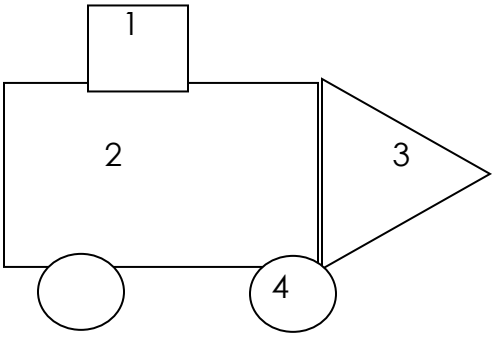
Name the shapes



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

TOPIC : LENGTH

Definition

Length is the distance between two points

Parts of the body used to measure length

Hands	Hand span	Arms
Fingers	Feet	

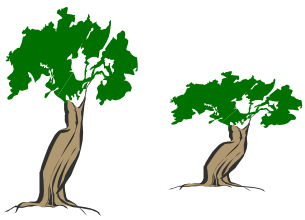
Other things we use to measure length

Ropes	Sticks	Threads
Strings	Banan fibres	

Comparing length of different objects

Use long , tall or short

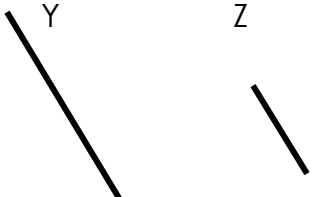
A B



Tree A is _____

Tree B is _____

Y Z

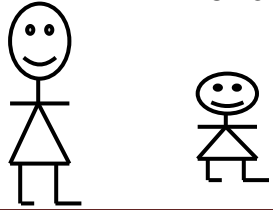


Stick y is _____

Stick Z is _____

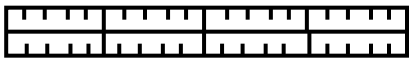
Compare using longer, taller or shorter

Ann Tendo



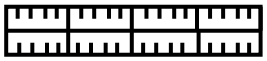
Ann is _____than Tendo

Tendo is _____than Ann.

M 

Ruler M is _____than ruler N

Ruler N is _____than ruler M

N 

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 moves 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 = _____metrers

b) 9 metres – 2 meters = _____metres

c) 20 m – 10 m = _____m

d) 13 m – 7 m = _____m

e)

	6 metres			1	9 metres
-	4 metres		-	1	6metres
	_____				_____

h)

3	2m		4	0m	
-	2m	-	2	0m	
_____			_____		
_____			_____		

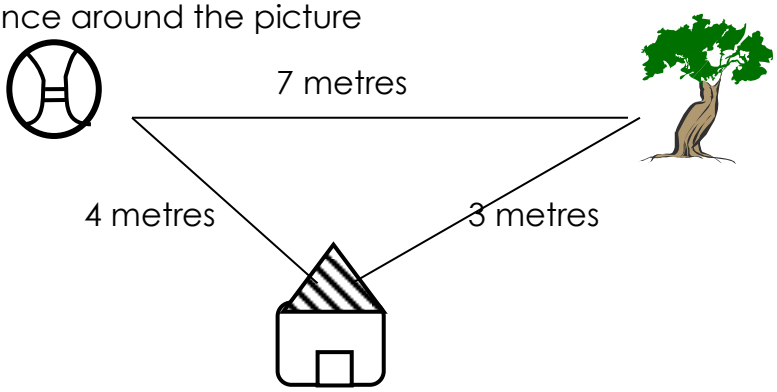
Word statements for subtraction of metres

a) Tom has 6 metres of a red cloth. He sold 2 metres to his mother. How many metres did he remain with?

b) ten metres minus six metres equals _____metres

c) 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



a) What is the distance from the ball to the tree?

b) How far is it from the hut to the ball?

c) What is the shortest distance?

d) What is the longest distance?

e) What is the distance between the tree and the hut?

f) 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
1st	First
2nd	Second
3rd	Third
4th	Forth
5th	Fifth
6th	Sixth
7th	Seventh
8th	Eighth
9th	Ninth
10th	Tenth
11th	Eleventh
12th	Twelfth
13th	Thirteenth
14th	Fourteenth

15th	Fifteenth
16th	Sixteenth
17th	Seventeenth
18th	Eighteenth
19th	Nineteenth
20th	Twentieth

Activity

1. Fill in the missing numbers

   1st , 2nd _____, 4th , 5th , _____, ____, 8th

2. Write in numbers

   Ninth _____

   Fifteenth _____

   Second _____

TOPIC: NUMERATION SYSTEM

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

Writing numbers and their number names

50	fifty	57	_____	64	_____	71	_____
51	fifty one	58	_____	65	_____	72	_____
52	fifty two	59	_____	66	_____	80	eighty
53	_____	60	sixty	67	_____	90	ninety
54	_____	61	sixty one	68	sixty eight	100	one hundred
55	_____	62	_____	69	sixty nine		
56	fifty six	63	sixty three	70	seventy		

Activity

Match numbers to their number names

76	ninety one
50	one hundred
91	seventy six
100	fifty

Missing addends

Find the missing numbers

Example 1

2+3 = ☐ 5+3 = ☐ 4+5 = ☐ 7 = ☐

Teacher will give examples in groups and individually then give an activity

Example 2

☐ + 3 = 5 ☐ + 2 = 8

Note: Draw balls for the bigger number and cross balls for the smaller number

Teacher will help pupils with more examples then give an activity

Example 3

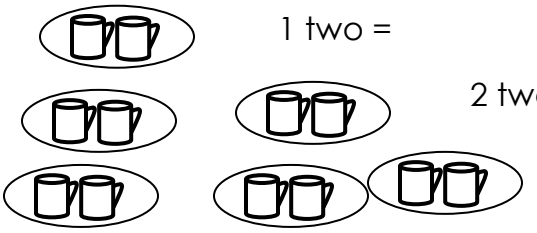
4 + ☐ = 9

5 + ☐ = 7

Note: Draw balls for the bigger number and cross for the small number, the remaining balls are the answer.

Grouping in twos

Grouping objects in twos



1 two =

2 twos =

3 twos =

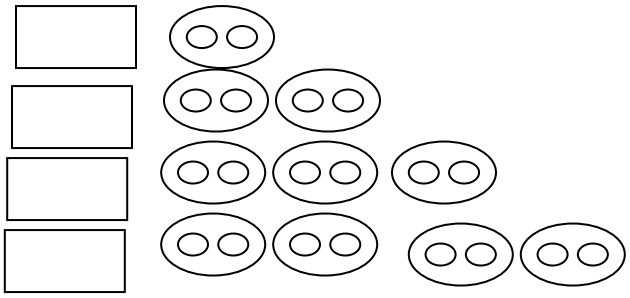
Multiplying numbers by 2 (horizontally)

1 x 2 =

2 x 2 =

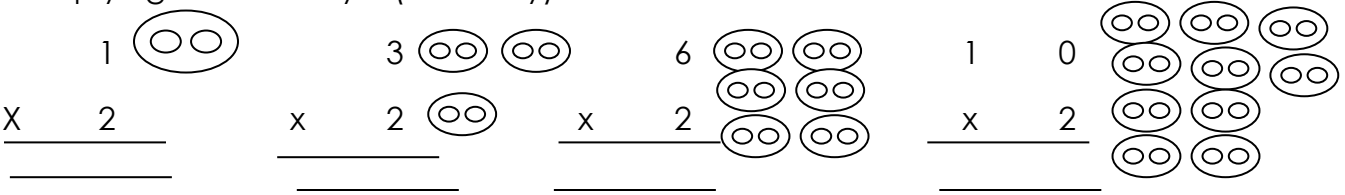
3 x 2 =

4 x 2 =



And more of this work up to 12

Multiplying numbers by 2 (vertically)



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?

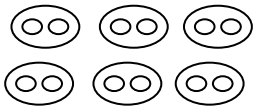
4 x 2 = 8

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

3 x 2 = 6

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

6 x 2 = 12

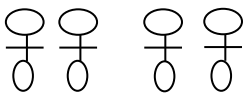


Put 2 eggs on each plate. How many eggs are on 5 plates?

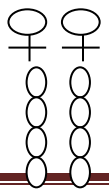
5 x 2 = 10

Dividing numbers by 2

a) 2 ÷ 2 = 1

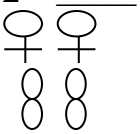


b) 8 ÷ 2 = 4



c) 10 ÷ 2 = 5

d) 4 ÷ 2 = ____



e) 2 ⟌ 8

f) 2 ⟌ 14

g) 2 ⟌ 6

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 ÷ 2 = 3 mangoes

b) ten divided by 2 equals

10 ÷ 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 ÷ 2 = 4

Teacher will give more examples, then an activity

ACCIDETNS AND SAFETY

FRACTIONS

What is a fraction?

A fraction is part of a whole

New words

Whole Half Shade Fraction Quarter

Same fractions

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)

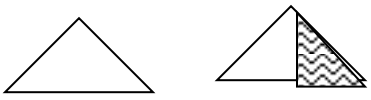
Making and shading wholes

A whole triangle

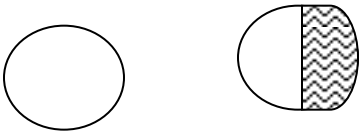
A whole circle

A whole pawpaw

Making and shading halves

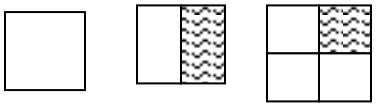


= ½ a half

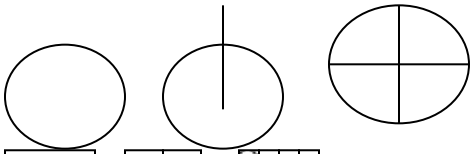


= ½ a half

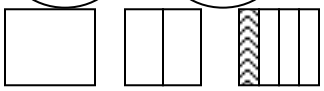
Making and shading quarters



= ¼ a quarter

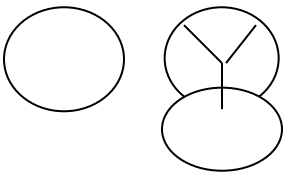


= ¼ a quarter

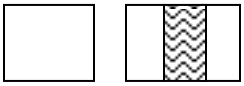


= ¼ a quarter

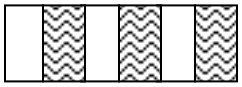
Making and shading other fractions



1/ 3 a third



= 1 /3 a third



= 3/ 6

= 2/4

Addition of fractions

$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$ Note: Add numbers on top only and choose 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 examples

Subtraction of fractions

$\frac{3}{4} - \frac{2}{4} = \frac{3-2}{4} = \frac{1}{4}$ note: Subtract numbers up, then choose one number from down

$\frac{7}{8} - \frac{5}{8} = \_\_\_\_$ $\frac{4}{10} - \frac{2}{10} =$

$\frac{2}{3} - \frac{0}{3} =$ $\frac{5}{7} - \frac{1}{7} =$

Teacher will give more work following the above examples

TOPIC: MEASURES

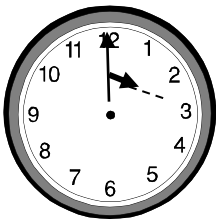
TIME

Telling time on a clock face

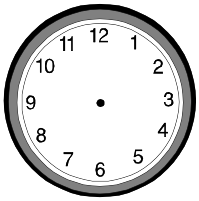
A clock face has 2 or more hands on it
A short hand is the hour hand
A long hand is the minute hand
They both move around the clock but one moves faster than the other
When the long hand move and point straight in 12, the time will be that number the short one is pointing to.

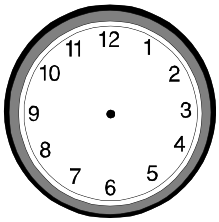
Example

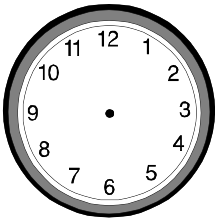
It is 4 o'clock



More work on telling time
Work will be done and pasted in their books
Showing time on a clock face.







It I 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 hours + 3 hours = _____hours
8 hours + 2 hours = _____hours
2 hours + 4 hours = _____hours

	3 hours		6 hours		7 hours
+	4 hours	+	7 hours	+	5 hours
	_____		_____		_____
	_____		_____		_____

Subtraction of time in full hours

9 hours – 4 hours = _____hours
8 hours – 3 hours = _____hours
12 hours – 8 hours = _____hours

	9hours		10 hours		12 hours
-	6 hours	-	8 hours	-	4 hours
	_____		_____		_____
	_____		_____		_____

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

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

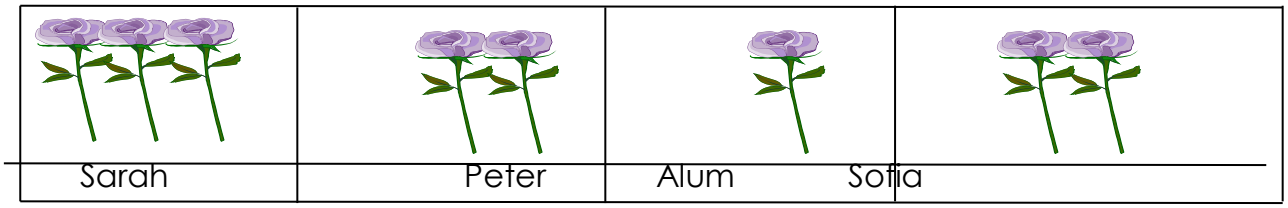
January , February, _____, _____May

August , September, _____, _____, December

GRAPHS

Graph 1

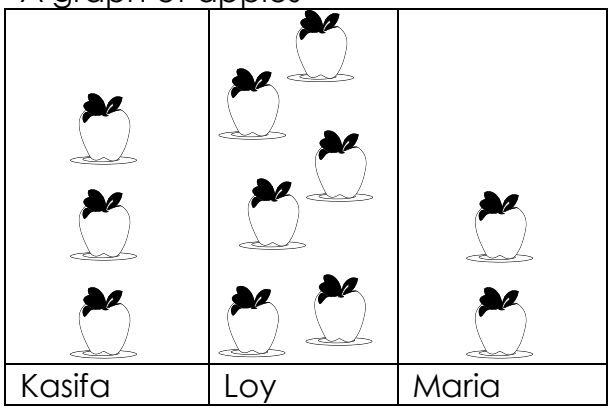
Teacher will help pupils get the ideas of graph from real objects



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



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

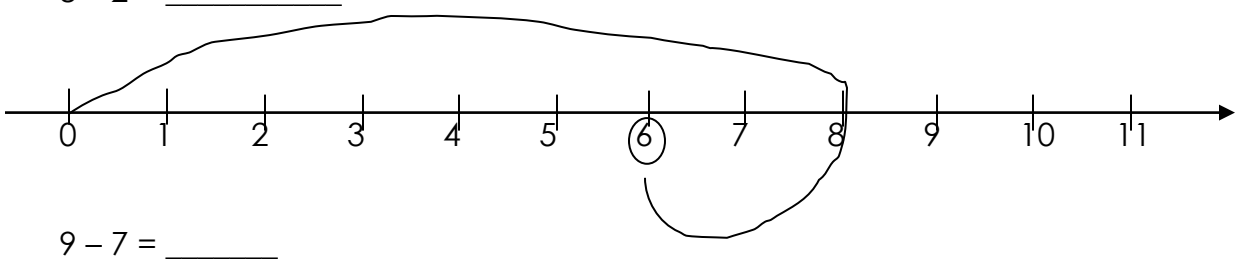
Tom	**Tonny**	**Tina**	**Tasha**	**Trinity**

Questions

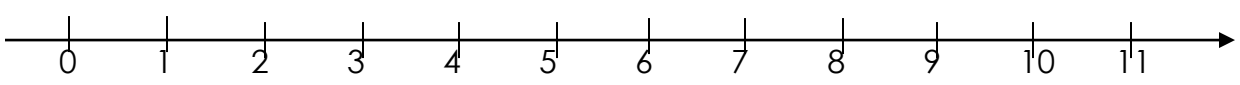
a) How many boxes does Tonny have?
b) Who have the same number of boxes?
c) How many boxes has Trinity?
d) How many boxes do they have altogether?

Use a number line to get the answer

a) 8 – 2 = _____



b) 9 – 7 = _____



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 non standard units
   vi) The standard unit for capacity
   vii) Addition in litres
   viii) Word statements (addition)
   ix) Subtraction in litres
   x) Work 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

LESSON NOTES FOR PRIMARY ONE TERM III

Topic: Measures

Weight (mass)

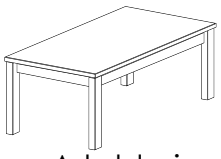
1. What is weight?
   a) Weight is how heavy or light something is
   b) We can tell how heavy or light something is after weighing it
2. We can weigh some objects using non standard tools eg. Tins, baskets, pots etc
3. We measure mass (weight) in kilograms (kg) and grams (g)
4. Examples of things we 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 _____

Comparing weight using **heavier than** or **lighter than**

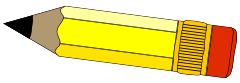
Table



cup

a) A table is _____a cup.

b) A cup is _____a table.



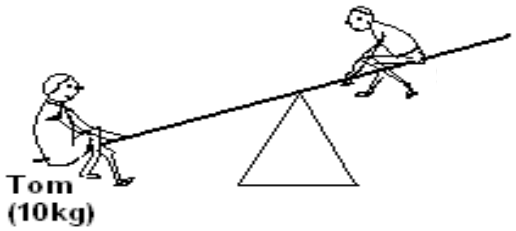
pencil

stone

a) A pencil is _____a stone

b) A stone is _____a pencil.

Juma



Tom

a) Juma is _____Tom

b) Tom is _____Juma

Addition of mass in kilograms

a) 1 kg + 3 kg =

b) 9kg + 2 kg =

c) 7kg + 2 kg + 4kg

d) 8kg + 0kg + 5kg =

e)
$$\begin{array}{r} 9\text{kg} \\ +\ 5\text{kg} \\ \hline \\ \hline \end{array}$$

f)
$$\begin{array}{r} 8\text{kg} \\ 4\text{kg} \\ +\ 2\text{kg} \\ \hline \\ \hline \end{array}$$

g)
$$\begin{array}{r} 1\ 0\ \text{kg} \\ +\ 1\ 3\text{kg} \\ \hline \\ \hline \end{array} \quad + \quad \begin{array}{r} 2\ 1\text{kg} \\ 1\ 5\text{kg} \\ \hline \\ \hline \end{array}$$

Word statements involving addition of mass

Aunt bought 3kg of sugar. Uncle bought 5kg of sugar

How many kilograms did they buy altogether?

Joan had 7kg of salt. Dan had 9kg of salt. How many kilograms did they have altogether?

Add 12kg plus 10kg.

Subtraction of mass in kilograms

10kg - 4kg = _____kg

b) 12kg – 9kg =____kg

7kg – 2kg = ____kg

d) 14kg – 7 kg = _____kg

$$\begin{array}{r} 8\text{kg} \\ -\ 4\text{kg} \\ \hline \\ \hline \end{array} \qquad \begin{array}{r} 9\text{kg} \\ -\ 3\text{kg} \\ \hline \\ \hline \end{array} \qquad \begin{array}{r} 14\text{kg} \\ -\ 4\text{kg} \\ \hline \\ \hline \end{array} \qquad \begin{array}{r} 11\text{kg} \\ -\ 10\text{kg} \\ \hline \\ \hline \end{array}$$

Word statements

a) Subtract 9kg – 5kg

b) Daddy bought 14kg of meat. We ate 6kg. How many kilograms remained?

c) There were 34kg of rice in the basket. Mummy cooked 20kg. How many kilograms remained?

Capacity

What is capacity?

Capacity is the amount of liquid a container can hold.

Examples of liquids

a) Water
b) Milk
c) Juice
d) Paraffin
e) Tea
f) Petrol
g) Diesel
h) Glue
i) Cooking oil

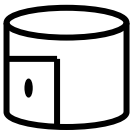
Container used to measure liquids

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

Comparing capacity using less or more

Bottle

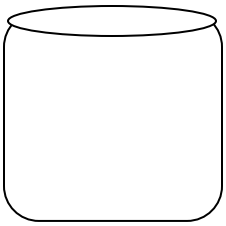
tin



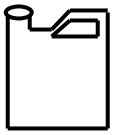
a) Which object carries more water?

b) Which object carries less water?

Drum



jerrcan



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 (1) other measure are milliliters (ml)i.e medicine , water, soda, juice

Practical measuring of water in different quantities

a) A plastic mug holds ½ of water
b) A small plastic bottle holds ½ litre of water
c) A bottle of beer contains ½ 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	3litres	+	5	0 litres	

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
- 3 litres

e) 5 litres
- 2 litres

f)
	4	8 litres
-	2	6 litres

g)
	3	7 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
- 2 litres

e) 1 4 litres
-1 0 litres

f) 2 4 litres
+ 1 1 litres

Addition with regrouping (carrying)

T	O
1	8
+	3
2	**1**

11

T	O
1	9
+	4
2	**3**

13

T	O
6	9
+	6
7	**5**

15

Exercise

T	O
3	7
+	4

T	O
5	4
+	8

T	O
8	9
+	9

Adding two digit numbers to two digit numbers with regrouping

Exercise

T	O
4	5
+ 4	5
6	0

T	O
6	9
+	6

14

Exercise

T	O
4	6
+ 2	8

T	O
5	7
+ 1	4

T	O
2	9
+ 3	7

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

Shs. 100 = shs 50 + shs. 50
Shs. 200 = shs. _____ + shs ____ + shs. ____ + shs. _____
a) Shs. 300 = shs. _____ + shs. _____ + shs. _____
b) How many coins of 100 make shs. 200?
c) How many coins of 100 make shs. 500?

Addition of money vertically and horizontally

a) i) Shs. 100 + Shs. 100 = Shs 200
ii) Shs. 100 + Shs. 100 = _____
iii) Shs. 500 + Shs. 200 = _____

b) i) shs. 50 + shs 50 _____

ii) shs. 150 + shs. 50 _____

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?

shs. 500
- shs 200

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

shs. 200
- shs 100

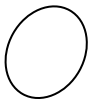
c) Eva had shs. 300. She lost shs. 100. How much money did she remain with?

shs. 300
- shs 100

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

shs. 700
- shs 300

Lesson **SHOPPING**

An apple	an egg	an orange	a cup
			
Shs. 500	shs. 200	shs. 150	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

0, 1, 2

Choose the first and the last numbers

O + 2 = 2
1 + 1 = 2
2 + 0 = 2

Which pairs of numbers add up to 4?

0, 1, 2, 3, 4

O + 4 = 4
1 + 3 = 4
2 + 2 = 4
4 + 0 = 4
3 + 1 = 4

Which pairs of numbers add up to 4?

(0) (1), 2, 3, (4) (5)

O	+	5	=	5
1	+	4	=	5
2	+	3	=	5
3	+	2	=	5
4	+	1	=	5
5	+	0	=	5

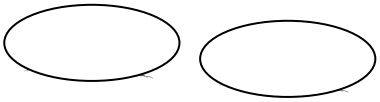
Up to 1

TOPIC: **MULTIPLICATION BY 3**

1. **Grouping in threes.**

1 group of three = 3

2 groups of three = _____

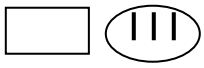


3 threes = _____

Up to 12

Multiplying numbers by 3 [horizontally]

Example

1 x 3 

2 x 3 

3 x 3 

4 x 3 

And more of this work up to 12

Multiplying numbers by 3 [vertically]

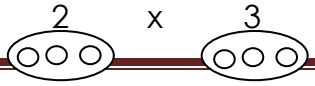
1	3	7	1 2
x 3	x3	x 3	x 3
____	___	____	___

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?

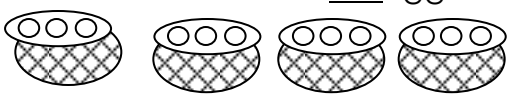
2 x 3 = 6 _____ legs.



b) There are 3 eggs in a tray

How many eggs are there in 4 trays?

3 x 4 = 12 eggs

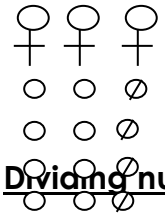


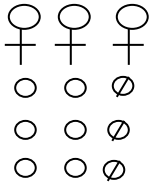
TOPIC: **DIVISION OF NUMBERS BY 3**

Dividing numbers by 3 [horrizontally]

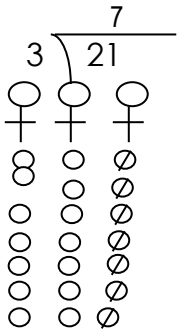
6 ÷ 3 = _____ 9 ÷ 3 = _____

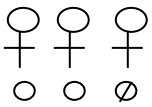
12 ÷ 3 = _____

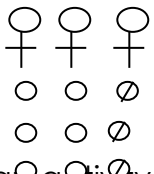




Dividing numbers by 3 [vertically]





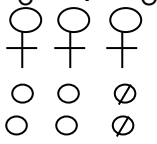


Teacher will give more examples and then an activity

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 ÷ 3 = _____

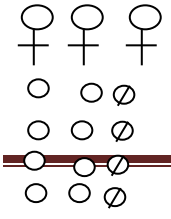


Each child got 2 bananas

b) Nine divide by three equals _____

c) Share 12 pencils equally among 3 boys

12 ÷ 3 = _____



Each child gets 4 pencils

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

3 ÷ 3 = _____ 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.