

THIRD TERM

TOPIC BREAKDOWN

THEME ELEVEN, BASIC TECHNOLOGY

LENGTH

- Definition
- Measuring the following things in class.
- Introduction of units
- Converting different units
- Adding length
- Subtracting length
- Mass
- Adding mass
- Word sums
- Subtracting mass
- Word sums
- Capacity
- Adding capacity
- Subtracting capacity

THEME TWELVE, ENERGY

ALGEBRA

- Use of letters
- Collecting like terms
- Perimeter
- Subtraction
- Word sums

GEOMETRY

- Perimeter and area
- Solid shapes
- Cubes

THEME ELEVEN: BASIC TECHNOLOGY

Week Two

Lesson One and Two

LENGTH

This is how long or short an object is. Measuring length is about measuring distance.

The basic unit for measuring length is a metre.

Activity

Measuring the following things in class.

- Exercise books
- Table tops
- Text books
- Their heights
- Their feet
- Their palms
- Geometry set
- Shoes
- Blackboards
- Door, e.t.c

Primary School Mathematics Book 3 Page 41 and page 64

MK Bk 3 MTC page 146.

Mk Book 4 Mathematics page 164

Lesson Three and Four

Introducing the units

Metric system

Km Hm Dm m dm cm mm

1m = 100cm

1m = 100cm

1dm = 10cm

2m = 100 x 2

4dm = 10 x 4

200cm

40cm

Activity

Primary school Mathematics Book 3 page 41 and 64

Mk primary Mathematics Book 4 page 166 to 167

Converting different units

Changing the following to cm

a) 2m b) 7m c) 4dm

d) 6m e) 5m f) 3m

Metre	1	2	3	4			
Centimetre	100				500		700

Lesson Five and Six

Adding Length

M	cm	m	dm
2	45	10	4
+ 6	36	+ 14	7
8	81	25	1

Workout

The length of our blackboard is 1m 35cm. The length of the P.3 class blackboard is 2m 10cm. find the length of the two blackboards.

$$\begin{array}{r}
 \text{M} \quad \text{cm} \\
 1 \quad 35 \\
 + \quad 2 \quad 10 \\
 \hline
 3 \quad 45
 \end{array}$$

Activity

Primary School Mathematics Book 3 page 43 and 65 to 66

Mk Mathematics Book 3 page 147 and 148

Lesson Seven and Eight

Subtracting length

$$\begin{array}{r}
 \text{M} \quad \text{cm} \\
 6 \quad 40 \\
 - \quad 1 \quad 10 \\
 \hline
 5 \quad 30
 \end{array}$$

Mulenga's sugarcane was 2m 85cm long. He cut off 1m 10cm and gave it to his young brother. What length of the sugarcane was left?

$$\begin{array}{r}
 \text{M} \quad \text{cm} \\
 2 \quad 85 \\
 - \quad 1 \quad 10 \\
 \hline
 1 \quad 75
 \end{array}$$

Activity

Primary School Mathematics Book 3 page 44 and 67

Mk Mathematics Book 3 page 149 and 150

Week Three

Lesson One and Two

Mass

The quantity of matter contained in an object. This is how light or heavy an object is.

The gram is the basic unit for mass.

Activity

Learners weighing themselves

Converting from kg to g

Kg Hg g dg cg mg

$$1\text{kg} = 1000\text{g}$$

Kilograms	1	2	3	4	5	6
Grams	1000		3000		5000	

4kg to gms

$$1\text{kg} = 1000\text{g}$$

$$4\text{kg} = (4 \times 1000)$$

$$\underline{4000\text{g}}$$

Activity

Primary School Mathematics Book 3 page 46

Lesson Three

Changing the following to grams

2kg 300g

$$1\text{kg} = 1000\text{g}$$

$$2\text{kg } 300\text{g} = (2 \times 1000) + 300$$

$$= 2000 + 300$$

$$= 2300\text{g}$$

Activity

Lesson Four

Converting from g to kg

$$5000\text{g} = ? \text{ kg}$$

$$1\text{kg} = 1000\text{g}$$

$$? = 5000 \div 1000$$

$$\underline{5\text{kg} = 5000\text{g}}$$

Activity

Primary School Mathematics Book 3 page 46

Mk Mathematics Book 4 page 179

Lesson Five and Six

Converting masses to Kg and g

4500g to kg and gm

$$1\text{kg} = 1000\text{g}$$

$$? = 4500 \div 1000$$

$$= \underline{4\text{kg } 500\text{g}}$$

$$\begin{array}{r} 4 \\ 1000 \overline{)4500} \\ \underline{-4000} \\ 500 \end{array}$$

Activity

Primary School Mathematics Book 3 page 46

Lesson Seven and Eight

Adding mass

Kg	g	kg	g
32	630	68	550
+ 15	180	+ 34	600
<u>47</u>	<u>810</u>	<u>93</u>	<u>150</u>

$$\begin{array}{r} 1 \\ 1000 \overline{)1150} \\ -1000 \\ \hline 150 \end{array}$$

Word sums

Nabulime's bag weighs 5k 150g. Her brother's bag weighs 3 kg 250g.

Kg	g
5	150
+ 3	250
<u>8</u>	<u>400</u>

Activity

Primary School Mathematics Book 3 page 47 to 48

Mk Mathematics Book 3 page 171 and 172

Week Four

Lesson One and Two

Subtracting mass

Kg	g	kg	g	
7	800	72	350	350
- 3	300	- 59	750	+1000
<u>4</u>	<u>500</u>	<u>12</u>	<u>600</u>	13509

Word sums

Namono had 5kg 750g of salt. She gave 3kg 250g to her mother. How much salt did she remain with?

$$\begin{array}{r} \text{Kg} \quad \text{g} \\ 5 \quad 750 \\ - 3 \quad 250 \\ \hline 2 \quad 500 \end{array}$$

Activity

Primary School Mathematics Book 3 page 49

Mk Mathematics Book 3 page 173 to 175

Lesson Three and Four

Capacity

The ability to hold or contain

A container can hold among other things substances such as water, paraffin, oil, milk, sand and air. The basic unit of capacity is litres.

Comparing litres and half litres

- Using bottles of litres and half litres.
- How many $\frac{1}{2}$ litre cups of water will fill a 10 litres pail?
- How many $\frac{1}{2}$ litre bottles will fill a 10 litre container?
- How many 1 litre jugs will fill a 5 litre jerrycan?
1 litre in a jerrycan = 1 litre jug
5 litres in a jerrycan = 1 x 5 (litre jugs)
5 litre jugs
- How many $\frac{1}{2}$ litre jugs will fill a 6l container?

1 litre = 2 half litres

6 litre = 2 x 6 half litre jugs

12 half litre jugs

- How many 1 litre cups will fill a 14litre jerrycan?

Activity

Mk mathematics book 3 page 159 - 161

Mk mathematics book 4 page 183

Lesson Five and Six

Converting litres to centilitres

Convert 4 litres to cl

$$1\text{l} = 100\text{cc}$$

$$4\text{l} = (4 \times 100 \text{ cl})$$

$$\underline{400\text{cl}}$$

Converting centiliters to litres.

500cl to c?

$$1\text{l} = 100 \text{ cl}$$

$$? = 500\text{cl} \div 100$$

$$= \underline{5\text{l}}$$

Activity

Primary School Mathematics book 3 page 50

Mk mathematics Book 4 page 182

Lesson Seven and Eight

Adding capacity

1. How many litres are there in tanks of 850 litres and that of 350 litres?

850 litres

+ 350 litres

1200 litres

Activity

Primary School Mathematics book 3 page 51 and 52

Mk mathematics book 3 page 161 - 163

Week Five

Lesson One and Two

Subtracting capacity

1. Mrs Kiggundu had 566 litres of paraffin 498 litres were sold. How much paraffin was left?

$$\begin{array}{r} 566 \text{ litres} \\ - 498 \text{ litres} \\ \hline 68 \text{ litres} \end{array}$$

Activity

Primary School Mathematics book 3 page 53

Mk mathematics book 3 page 164 - 165

Lesson Three and Four

TOPICAL TEST

Mk Mathematics book 3 page 189 to 191

THEME TWELVE: ENERGY

Lesson Five and Six

Algebra

Using letters for numbers

We have seen that $y + y + y = 3y$

But $3y$ is the same as $3 \times y$

What is $4 \times h$

$$4 \times h = \underline{4h}$$

What is $11 \times h$

$$11 \times h = \underline{11h}$$

Collecting like terms

Kevin has 3 shirts and Amos has 4 shirts, altogether

$$(3\text{shirts} + 4\text{ shirts}) = 7\text{ shirts}$$

$$3\text{ shirts} = 3s \text{ and } 4\text{ shirts} = 4s$$

$$\text{So both boys have } 3s + 4s = \underline{7s}$$

Kalyango had 5 balls and Tanga had 4 balls. How many balls did they get (have) altogether?

5balls plus 4 balls equals 9 balls

Let b stand for a ball

$$5b + 4b = \underline{9b}$$

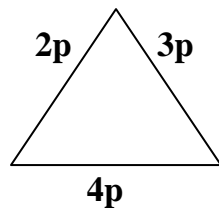
Activity

Mk mathematics Book 4 page 248 to 249

Lesson Seven and Eight

Finding perimeter using unknown

Find the perimeter

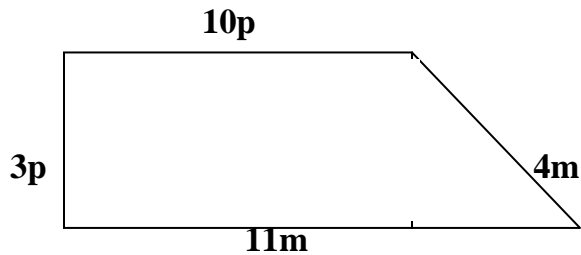


$$P = 2p + 3p + 4p$$

$$P = 5p + 4p$$

$$P = 9p$$

Find the perimeter



$$P = 11m + 10p + 4m + 3p$$

$$P = 11m + 4m + 10p + 3p$$

$$P = (11 + 4)m + 13p$$

$$P = \underline{\underline{15m + 13p}}$$

More about collecting like terms

Kalyango opened his bag and there were 8 exercise books and 2 pens. Tavaga's bag contained 12 exercise books and 3 pens.

Kalyango – 8 exercise books, 2pens

Tavaga – 12 exercise books, 3 pens

Altogether – $(8 + 12)$ exercise books $(2 + 3)$ pens = $(20 \text{ exercise} + 5\text{pens})$

Let b stands for exercise books and p for pens

Kalyango has $(8b \text{ and } 2p)$

Tavaga has $(12b + 3p)$

Altogether they have $8b + 2p + 12b + 3p$

$$= \underline{\underline{20b + 5p}}$$

Activity

Mk mathematics Book 4 page 250 to 251

Week Six

Lesson One and Two

Subtraction

Let us replace and workout

If $p = 3$

What is the value of $p + 4$?

$$P + 4 = 3 + 4$$

$$= \underline{\underline{7}}$$

If $m = 5$

What is the value of $6 + m$

$$6 + m$$

$$6 + 5 = \underline{\underline{11}}$$

If $p = 6$ and $k = 12$. Find the value of;

a) $p - 2$

$$= 6 - 2 = \underline{\underline{4}}$$

b) $9 - p$

$$= 9 - 6 = \underline{\underline{3}}$$

c) $30 - k$

$$30 - 12$$

$$= \underline{\underline{18}}$$

Activity

Mk mathematics Book 4 page 251 to 252

Lesson Three and Four

If $x = 3$, $y = 4$, $z = 5$. Find the value of;

a) $x + y + z$

$$x + y + z$$

$$= 3 + 4 + 5$$

$$7 + 5$$

$$= \underline{\underline{12}}$$

If $h = 2$

Find the value of $5h$

$5h$ means $5 \times h$

$$5 \times 2 = \underline{\underline{10}}$$

If $x = 10$

What is the value of $\frac{x}{2}$?

$\frac{x}{2}$ means the same as $x \div 2$

$$10 \div 2 = 5$$

Activity

Mk mathematics Book 4 page 254

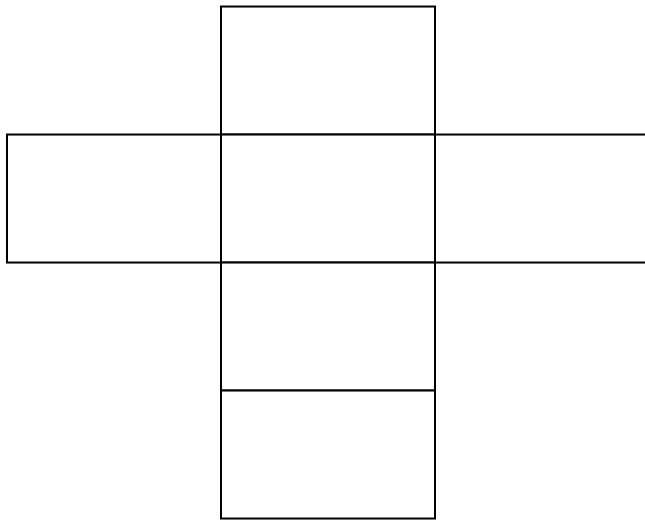
Lesson Five and Six

GEOMETRY

Solid shapes

Cube

Making a net for a cube and a cuboid



Making a net of a tetrahedron.

