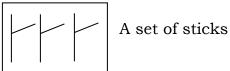
P.2 MATHEMATICS LESSON NOTES

THEME: SETS SUB-THEME: SET CONCEPTS A set is a collection of things/objects. Things found in a set are called members or elements. Naming sets Examples a) A set of stools. A set of vowel letter b) aeiou **Exercises** Name these sets More work from MK Bk 2 Mathematics P.1 & 2 Understanding Mathematics Bk2 P.1 Evaluation **SUB THEME:** Reading and drawing sets

Examples



Peter	John
Moses	Mark

A set of 3 names of boys

Exercise

Read and draw these sets

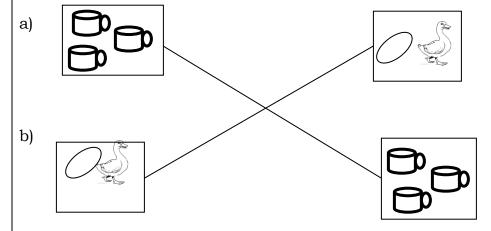
- 1. A set of 6 girls
- 2. A set of 5 bags
- 3. A stet of 4 baskets
- 4. A set of 2 brooms
- 5. A set of 9 oranges
- 6. A set of furniture
- 7. A set of furniture
- 8. A set of buildings

MK Bk2 Mathematics P.1 & 2 Understanding Mathematics BK2 P.1

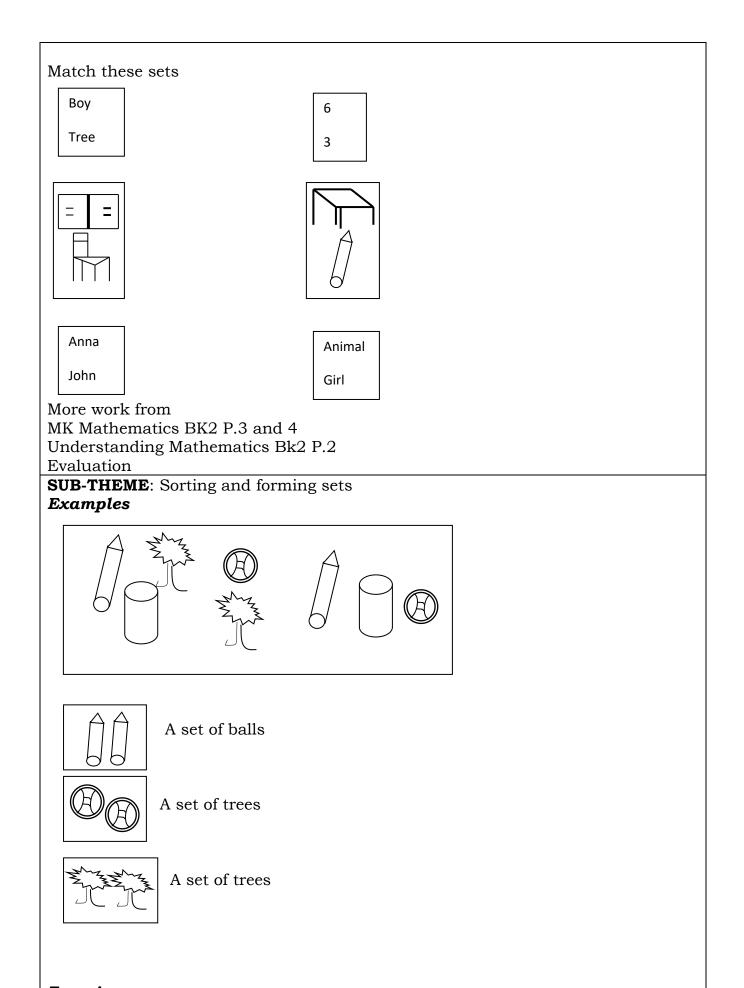
Evaluation

SUB-THEME: Matching sets

Examples

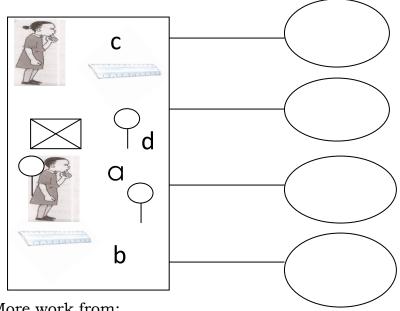


Exercise



Exercise

Form other sets



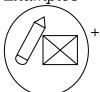
More work from;

Understanding Mathematics Bk2 P.3 New MK BK2 Mathematics P.5

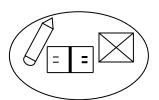
EVALUATION

SUB-THEME: Joining sets

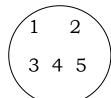
Examples

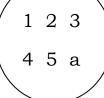






b a d c



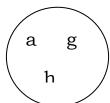


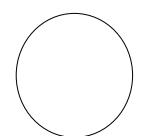
Exercise

Join these:

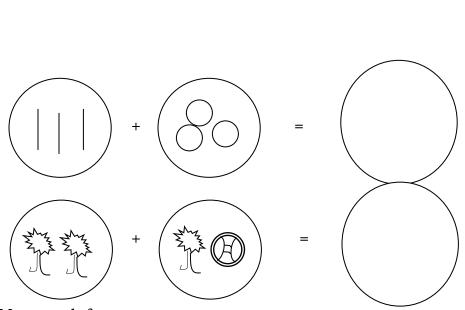










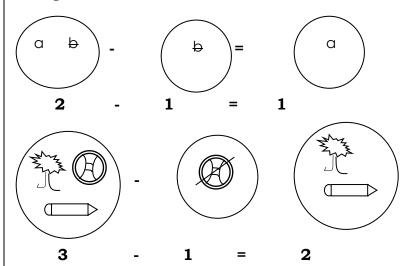


More work from; A new MK Bk2 P8 Understanding Mathematics BK2 P.4

EVALUATION

SUB-THEME: Separating sets

Examples



Separate these sets 3 1 1 2 More work from; MK Bk2 Mathematics P9 - 10 Understanding Mathematics Bk2 Pg.5 **EVALUATION** SUB - TOPIC: Ordinal numbers Ordinal numbers 1 - 1st - first 2 - 2nd - second - third 3 - 3rd - fourth 4 - 4th - fifth 5 - 5th 6 - 6th - sixth 7 - 7th - seventh Exercise

Match correctly

- second 1 6th
- 4 3rd fourth
- 2 1st sixth third 4th

Write in figures seventh eighth tenth

Evaluation

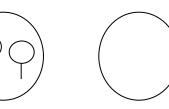
SUB-THEME: Ordering sets

Examples

Α



C



3

Set B comes first

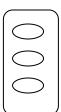
Set A comes second

Set C comes third

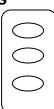
Exercise

Order these sets in ascending order

R

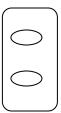


S



2

T

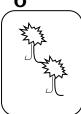


5

Set ___ comes first

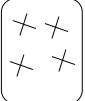
Set ___ comes second

Set ___ comes third





Q



Set comes first. Which set comes third?

Which set comes second?

More work from;

MK Mathematics BK2 Pg.11

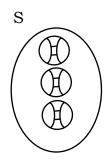
Understanding Mathematic BK2 Pg.6 - Pg.7

Evaluation

SUB-THEME: Comparing sets using less or more

Examples







Set R has less members

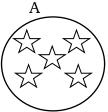
Set T has more members

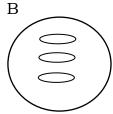
Set S has members than set T

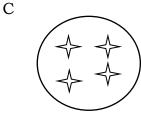
Set T has more members than set S

Exercise

Compare these sets







- 1. Which set has less members?
- 2. Which set has more members?
- 3. How many members are in set B?
- 4. Which set has 3 members?
- 5. Find the total number of members in all the three sets.
- 6. How many elements are in set A and C altogether?

More work from;

MK BK2 Mathematics Pg.7

SUB-TOPIC: Set symbols

Examples of set symbols

 $\{ \}$ or \bigcirc - Empty, null or void set

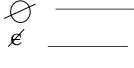
 \cap - Intersection of

U - Union with

- C Subset of
- Not a subset of
- Element of
- € Not element of
- = Equal to
- *+* Not equal to

Exercise

- 1. Read and draw these set symbols.
 - i) Null set
 - ii) Intersection
 - iii) Element of
 - iv) Not subset of
- 2. Name the set symbols.



U _____

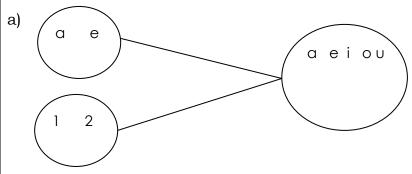
е

SUB-THEME: Forming Union Sets

Union Sets

Union sets are sets which combine members from two or more sets.

Examples of union sets

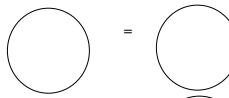


- b) R = {
 - S = {

Form Union Sets



U



U





=













mat bag





EVALUATION

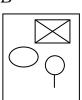
SUB-THEME: Forming intersecting sets

Examples

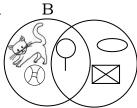
a)



В



A



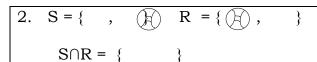
b) $A = \{c, a, t\}$ $B = \{b, a, g\}$

$$A \cap B = \{a\}$$

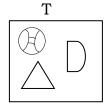
Exercise

1. C {0, 1, 2, 3} D = {1, 2, 4, g}

$$C \cap D = \{$$





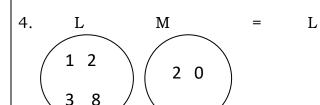


M



L M

M



EVALUATION

SUB-THEME: Identifying empty sets

Empty sets

Empty sets are sets which completely have no members.

Examples of empty sets

A - A set of boys with tails

B - A set of snakes singing

C – A set of books dancing

Activity

Write: empty or not empty set.

A set of pigs flying

A set of boxes roaring

A set of girls with wings

A set of pupils learning

A set of men putting on dresses

A set of birds in the sky

Read and draw

A set of 2 balls

A set of monkeys cooking

A set of days of the week which start with letter S

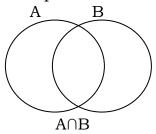
A set of men who breast feed babies

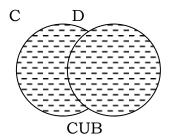
From MK Bk3 Mathematics Pg.12, 11

EVALUATION

SUB-THEME: Describing shaded regions

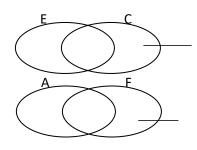
Examples

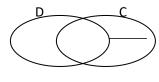


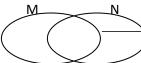


Exercise

Name the shaded regions







EVALUATION

THEME: Numeracy

SUB-THEME: Counting from 100 – 200

Counting, reading and writing numbers (100 – 200)

<u>Examples</u>

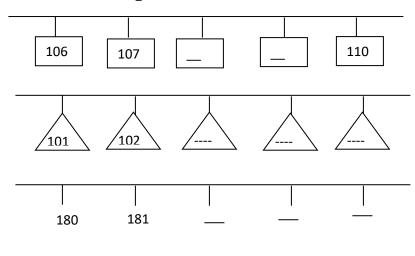
100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, ___ 200.

Exercise

198

197

Fill in the missing numbers



196

More work from;

Understanding Mathematics Bk2 Pg.12 - 13

EVALUATION

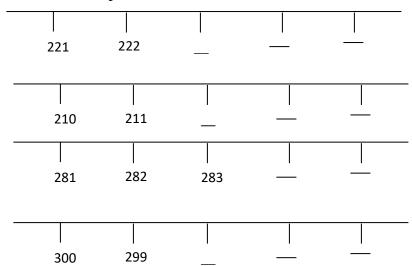
SUB-THEME: Counting 200 – 300

Examples

200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, ----- 300

Exercise

Fill in correctly



More work from;

Understanding Mathematics Bk2 Pg.12 - 13

A new MK Bk2 Mathematics Pg.18 & Pg.22

EVALUATION

SUB-THEME: Counting numbers: 900 – 1000

Examples

901 900 902 903 904 905 906 907 908 915 909 911 913 914 910 912 916 917 919 920 921 ----1000

Complete correctly:

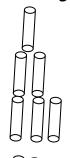
Which number comes after?				
920				
936				
999				
EVALUATION				
SUB-TOPIC : Number names 0 – 20)			
Examples				
0 - Zero 5 - five	10 - ten			
1 - One 6 - Six	11 - eleven			
2 - two 7 - seven	12 - twelve			
1 - One 6 - Six 2 - two 7 - seven 3 - three 8 - eight	13 - thirteen			
4 - four	14 - fourteen			
15 - Fifteen 16 - sixteen	17 - seventeen			
18 - Eighteen 19 - nineteen	20 – twenty			
Exercise				
1. Write the following in words.				
6 19				
7 0				
6 19 7 0 10 3				
15				
2. Akello is 20 years old. How old	is she in words?			
3. Mummy went to the shop and be	ought 12 dozens of			
books. Change the number of b	_			
_				
4. Tino weights 19kg. Write her we				
A new mk Bk2 Mathematics Pg.24				
Understanding Mathematics BK2 P	g.14			
Evaluation				
Dvaluation				
SUB- THEME: Writing number nar	mes 10 - 70			
<u>Examples</u>				
10 427				
10 - ten				
20 - twenty				
30 - thirty				
40 - forty				
50 - fifty				
70 - seventy 80 - eighty				
90 - ninety				
100 - ninety 100 - one hundred				
100 one nanarea				
Durante				
Exercise				

Write the following in words.
10 _ 70 _ 30 _ 40 _ 90 _ 100_
Write correctly
Write correctly. fotry
sxity
ent
neinty
tytwen
More work from;
A new MK BK2 Mathematics Pg.28
EVALUATION
CIID THEME - Writing number words to figures
SUB-THEME : Writing number words to figures
Examples
zero - 0
ten - 10
thirteen - 13
one hundred - 100
Activity
1. Match correctly
1. Mater correctly
14 eighteen
5 zero
0 one hundred
9 five
100 fourteen
18 nine
2. Write in figures
eighty
eighteen
fourteen
forty
3. Write the number symbol for:
a) Twenty
b) Zero
A MICH II DEC D 00
A new MK Mathematics BK2 Pg. 28
SUB-THEME: Place values

Examples of place values

- __ Ones
- __ Tens
- __ Hundreds
- __ Thousands

Drawing ones



1 ones



5 ones

2 ones











Exercise

1. Draw ones

- 2 ones
- 4 ones
- 8 ones
- 6 ones
- 2. Count and complete



__ ones



SUB-TOPIC: Place values

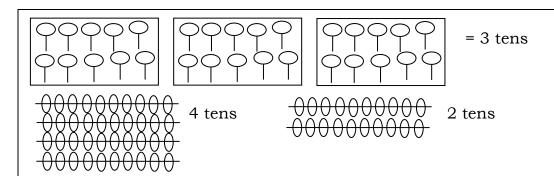
Tens

Ten sticks, objects or items make a bundle.

Examples







Exercise

Draw the bundles

1 ten = __

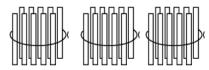
3 tens = __

8 tens = __

9 tens = _

4 tens = __

Write the tens



= __ tens

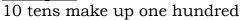
More work from;

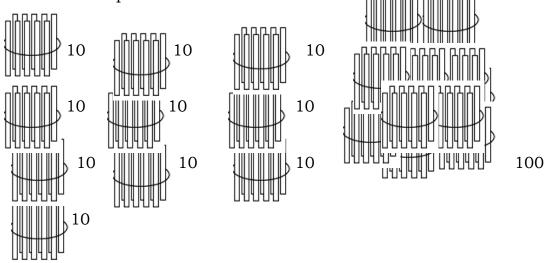
A new MK Mathematics Pg. 14

Understanding Mathematics BK2 Pg.8-9

Hundreds

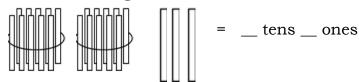
Examples





Exercise

Fill in the missing numbers



$$\triangle \triangle \triangle$$
 = _ tens _ ones

More work from;

MK Mathematics BK2 Pg.19 - 20, 21

Understanding Mathematics BK2 Pg.9, 10, 11

EVALUATION

SUB-TOPIC: Filling in hundreds, tens and ones

Examples

28 = 2 tens and 8 ones

8 = __ tens and __ ones

156 = __ hundreds __ tens __ ones

Exercise

Complete correctly

20 = __ tens __ ones

88 = __ tens __ ones

3 = __ tens __ ones

77 = __ tens __ ones

284 = __ hundreds __ tens __ ones

3 =tens and ones = ___

__ = 9 tens 4 ones

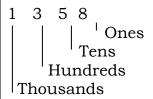
120 = _ hundreds _ tens _ ones

188 = __ hundreds __ tens __ ones

EVALUATION

SUB-TOPIC: Writing place values of number.

Examples



More work from;

A new MK Mathematics Pg.15, 22, 23 Understanding Mathematics Bk2 Pg.10

Exercise

Write the place values of te circled number.

$$384 =$$
 $371 =$ $29 =$ $1234 =$ $800 =$

What is the place value of 2 in the number 329?

What is the place value of 4 in 384?

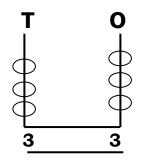
More work from;

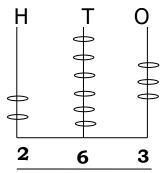
A new MK Mathematics Bk3 Pg.35

EVALUATION

SUB-TOPIC: Writing numbers shown on the abacus.

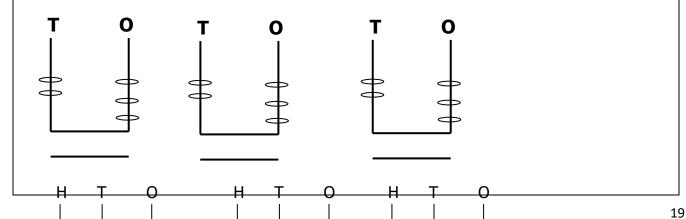
Examples





Activity

Complete the abacus.

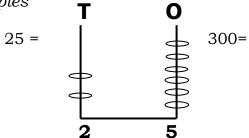


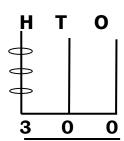
More work from;

A new MK Bk2 Mathematics Pg.16 Understanding Mathematics Bk2 Pg.23

SUB-TOPIC: Representing numbers on the abacus

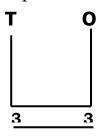


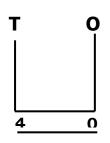


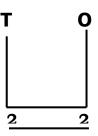


Exercise

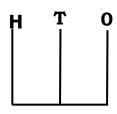
Complete



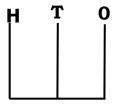


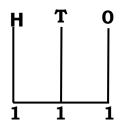


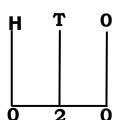
200 =











More work from;

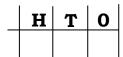
A new MK Bk2 Mathematics Pg.17

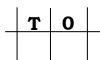
SUB-TOPIC: Putting numbers on number trays

Examples

Exercise

Put the number on number trays





A new MK Mathematics Bk3 Pg.35

SUB-TOPIC: Expanding numbers of tens and ones Examples

$$10 = 10 + 0$$
 $14 = 10 + 4$

$$14 = 10 + 4$$

$$11 = 10 + 1$$

$$15 = 10 + 5$$

$$12 = 10 + 2$$

$$11 = 10 + 1$$
 $15 = 10 + 5$
 $12 = 10 + 2$ $16 = 10 + 6$
 $13 = 10 + 3$ $17 = 10 + 7$
 $28 = 20 + 8$ $34 = 30 + 4$

$$13 = 10 + 3$$

$$17 = 10 + 7$$

$$28 = 20 + 8$$

$$34 = 30 + 4$$

Exercise

Expand these numbers

More work from;

Standard 2 Mathematics Pg.16

EVALUATION

Finding expanded numbers

Examples

$$47 = 4 \ 0 \\ + 7 \\ \hline 4 \ 7$$

Exercise

Which numbers have been expanded?

$$80 + 8 = 10 + 1 = 50 + 4 = 10 + 7 = 30 + 6 = 10 + 2 = 10 + 4 = 1$$

$$20 + 1 = 10 + 4 =$$
 $10 + 1 = 30 + 9 =$

Standard Bk2 Mathematics Pg.16

SUB-TOPIC: Expanding numbers of thousands, hundreds, tens and ones. **Examples**

H T O
a)
$$1 \ 2 \ 3 = 100 + 20 + 3$$

Exercise

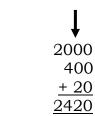
Expand these:

More work from:

Standard 2 Mathematics Pg.16

SUB-TOPIC: Finding expanded numbers of thousands, hundreds, tens and ones.

Examples



Exercise

Which numbers were expanded?

$$= 800 + 10 + 3$$

$$100 + 40 + 2 =$$

More work on

Standard 2 learning Maths Pg.17

SUB-TOPIC: Writing hindu arabic numerals in Roman numerals.

1 – I

7 - VII

2 - II

8 - VIII

3 - III

9 - IX

4 -1V

10 - X

5 - V

11 - X1

6 - VI

12 - XII

Exercise

Change the following number in Roman numerals.

3 -

5 -

20 -

6 -

10 -

21 -

4 -

15 -

28 -

EVALUATION

SUB-TOPIC: Changing Roman numerals to Hindu Arabic numerals.

Examples

V - 5

1X - 9

XX - 10

XXV - 25

VI - 6

VIII - 8

Exercise

Change to Hindu Arabic numerals.

Bob is IX years old. Change his age to Roman numerals.

More work from;

MK Bk4 Maths Pg.33

THEME: Operating on numbers.

Addition of 1 and 2 digit number vertically and horizontally.

Examples

$$4 + 9 = 13$$

Exercise

Work out:

More work from;

A new MK Bk2 Maths Pg.34

Understanding Maths BK2 Pg.16 standard 2 learning Maths Pg.3

SUB-TOPIC: Addition of thousands, hundreds, tens and ones.

Examples

Exercise

Work out

More work from

A new MK Bk2 Maths Pg. 38

Understanding Maths BK2 Pg. 21

Standard 2 learning Maths Pg.19

SUB-TOPIC: Additon with carrying.

Examples

a)
$$\begin{array}{cccc} & 1 & & \\ & 4 & 6 & \\ & + 2 & 5 & \\ \hline & 7 & 1 & \\ \hline & & 11 & \\ \end{array}$$

Exercise

Add these numbers

EVALUATION

SUB-TOPIC: Addition of numbers involving words.

Examples

- a) Julie had 18 apples and Betty had 21 apples. How many apples do they have altogether?
 - 18 apples
 - + 21 apples
 - 39 apples
- b) Find the sum of 13 books and 10 books.
 - 1 3 books
 - <u>+ 1 0 books</u>
 - 2 3 books

Exercise

- 1. 16 plus 20 equals
- 2. Otoi has 12 sweets. Moses has 2 sweets. How many sweets do they have altogether?
- 3. Find the sum of:
 - a) 20 cups and 10 cups
 - b) 8 balls and 3 balls
- 4. There are 45 pupils in P.2 and 36 pupils in P.2S. How many pupils are there altogether?

More work from;

A new MK Maths Bk2 Pg.35, 39

SUB-TOPIC: Addition in expanded form.

<u>Examples</u>

Exercise

Add while expanding.

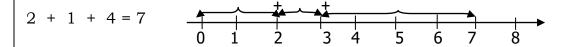
More work from;

A new MK Maths Bk2 Pg.37

EVALUATION

SUB-TOPIC: Addition of numbers on a number line.

Examples



Exercise

Add on a numberline.

$$3 + 4 = 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8$$

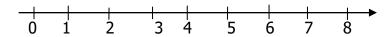
2

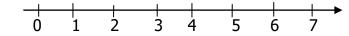
3 4

5

1 + 6 =







More work from;

Uganda primary Maths BK2 Pg.20

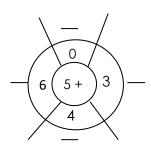
SUB-TOPIC: Table and circle filling involving addition.

Examples

+	2	0	3	4	6
3	5	3	6	7	9
	3+2	3 + 0	3 + 3	3 + 4	3 + 6

Exercise

Complete



+	3	2	0	1	5	6	7	
7				_				

A new MK Maths Bk2 Pg.64 Understanding Maths Bk2 Pg.30

EVALUATION

SUB-TOPIC: Substraction of one and two digit numbers.

Examples

Exercise

Work out:

$$15 - 5 = 10 - 2 =$$

More work on;

A new MK Bk2 Maths Pg.59

Understanding Maths Bk2 Pg.22 - 25

Uganda primary Maths Bk2 Pg.10

SUB-TOPIC: Subtraction of hundred tens and ones.

Examples

Exercise

Work out:

More work on;

A new MK Bk2 Maths Pg.60 Understanding Maths Bk2 Pg.27

Lesson

Subtraction with borrowing

Examples

Activity

More

Mk maths bk page 112 - 113

Word problems

Examples

Tom had 36 pens and gave Peter 18 pens.

How many pens did Tom remain with?

$$16 - 8 = 8$$
 Tom remained with 18 pens.

Subtract 25 from 51

Activity

- 1. What is the difference between 24 and 17?
- 2. Floura bought 43 cakes and ate 25 cakes. How many cakes did she remain with?
- 3. Jane had 63 bottles. 25 bottles broke. How many remained? **More**

Mk Maths Bk 2 pg 115

SUB-TOPIC: Subtraction with borrowing *Examples*

a) $\frac{3}{4} \quad 2^{12}$

b) $\begin{array}{r} 7 \\ 8 \\ 4 \\ -1 \\ \hline 6 \\ 9 \end{array}$

Exercise

More work on;

Uganda primary Maths Bk2 Pg.16

Understanding Maths Bk2 Pg.42 - 44

SUB-TOPIC: Subtraction of number involving words.

Examples

a) Daddy had 25 cows. He sold 15 cows. How many cows remained?

2 5 cows - 1 5 cows 1 0 cows

b) Find the difference between 20 and 10.

	2	0
_	1	0
	1	0

Exercise

- 1. A school has 300 pupils. 100 pupils did not attend the lesson. How many pupils attended the lesson?
- 2. A lice bought 14 apples. She ate 10 apples. How many apples remained?
- 3. What is 60 less 20?
- 4. Twenty take away five equal equals___
- 5. Cindy had 8 ckaes. She gave 2 cakes to her friend. How many cakes were left?

More work on;

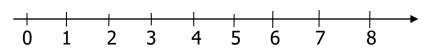
A new MK Maths Bk2 Pg.61

A new MK Maths Bk3 Pg.51

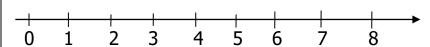
SUB-TOPIC: Subtraction using a number line.

Examples

$$4 - 2 = 2$$



$$8 - 3 = 5$$



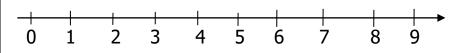
<u>Exerice</u>

Subtract these.

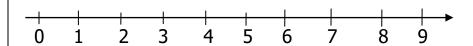
$$5-2 =$$



$$6-0 =$$



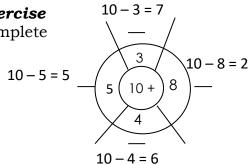
9-2=



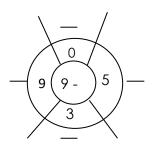
SUB-TOPIC: Subtraction in tables cirles.

example

Exercise Complete



-	3	2	1	0	6	7
12						



More work on;

A new MK Bk2 Maths Pg.64

Understanding Maths Bk2 Pg.30

SUB- TOPIC: Multiplication ot one digit numbers horizontally and vertically.

Examples

600600

Exercise

Work out these:

 $2 \times 7 = 14$

$$3 \times 4 =$$

More work on;

A new MK Maths Bk2 Pg.41 – 42

Standard 2 learning Maths Bk2 Pg.25 – 26, 54

SUB-TOPIC: Multiplication by 2 and 3.

Examples

Exercise

Work out:

A new MK Bk2 Maths Pg.43 Understanding Maths Bk2 Pg.51

 $\underline{\text{SUB-TOPIC}}$: Multiplication of 2 and 3 digit numbers by one digit number. $\underline{\text{Examples}}$

$$\begin{array}{c|cccc}
1 & 1 & 0 \\
x & 4 \\
\hline
4 & 4 & 0
\end{array}$$

Exercise

Workout:

More work on;

A new Mk Maths Bk2 Pg.125

 $\underline{SUB\text{-}TOPIC}\text{: Table and circle filling involving multiplication.}$

Examples

		0		4	-	_
2	X	2	ろ	4	5	b
4	2	4	6	8	10	12

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

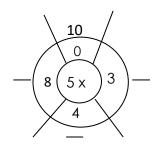
$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

Exercise

Multiply

X	3
3	-
4	-
5	-
6	-



More work on;

A new MK Bk2 Maths Pg.86

SUB-TOPIC: Multiplication of numbers involving words.

Examples

- a) There are 2 shoes in a pair. How many shoes are there in 6 pairs? $6 \times 2 = 12$ shoes
- b) How many fingers do 4 hands have?

 $4 \times 5 = 20$ fingers

Exercise

Solve

- 1. One fly has 2 wings. How many wings do 5 flies have?
- 2. There are 5 eggs in a basket. How many eggs are in 2 similar baskets?
- 3. 6 groups of 3 equals
- 4. What is the product of 7 and 0?
- 5. There are 12 books in a dozen. How many books are in 2 dozens?
- 6. 3 groups of 3 gives.

More work on

Standard 2 learning Maths Bk2 Pg.27

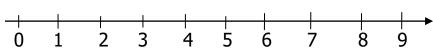
SUB-TOPICS: Multiplication on a number line.

Examples

 $2 \times 2 = 4$ 2 groups of 2

 $3 \times 2 = 6$

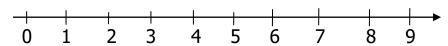
3 groups of 2



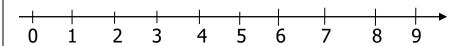
Exercise

Work out:

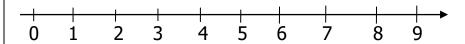
 $2 \times 4 =$



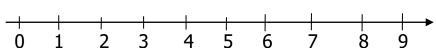
 $3 \times 3 =$



 $4 \times 1 =$



 $2 \times 2 \times 2 =$



EVALUATION

SUB-TOPIC: Division of one and 2 digits numbers horizontally.

Examples

a)
$$4 \div 2 = 2$$

(0000) (0000) (0000)

b) $16 \div 4 = 4$

Exercise

Work out:

$$9 \div 3 =$$

$$6 \div 2 = 4 \div 4 =$$

$$4 \div 4 =$$

$$10 \div 2 =$$

$$12 \div 3 = 16 \div 2 =$$

$$16 \div 2 =$$

$$20 \div 5 =$$

More work on;

A new MK Maths Bk2 Pg.76, 78 Uganda primary Maths Pg.44

SUB-TOPIC: Long division of 2 digits

Examples

1)
$$2 2 4$$

$$2 \div 2 = 1$$

 $4 \div 2 = 2$

$$9 \div 3 = 3$$

 $6 \div 3 = 2$

$$6 \div 3 = 2$$

Exercise

Work out

More work on;

Standard 2 learning Mathematics Pg.50, 60

SUB-TOPIC: Division with remainders

Examples

a)
$$7 \div 2 = 3 r 1$$

b)
$$13 \div 2 = 6 \text{ r } 1$$

Exercise

Divide

$$10 \div 4 = 9 \div 2 = 22 \div 4$$

$$9 \div 2 = 22 \div 4$$

$$15 \div 6 =$$

$$6 \div 5 =$$

$$15 \div 6 = 6 \div 5 = 18 \div 7 =$$

$$16 \div 9 =$$

$$16 \div 9 = 13 \div 5 =$$

EVALUATION

SUB-TOPIC: Division of numbers involving words

Examples

a) Share 14 mangoes between 2 boys What does each boy get?

$$14 \div 2 = 7$$
 mangoes

b) Divide 18 sweets among 3 girls

$$18 \div 3 = 6$$
 sweets

Exercise

- 1. Divide 10 pencils among 5 children
- 2. Three men sharedf 12 nets equally How many nets did each man get?
- 3. Share 40 sweets among 5 boys.
- 4. Mum had 8 cakes. She shared them equally between 2 girls. How many cakes did each girl get?
- 5. Share 13 boxes among 9 women.

More work on:

New MK Maths Bk2 Pg.75

Standard 2 learning Maths Pg.51

SUB-TOPIC: Division by repeated subtraction.

Examples

a)
$$9 \div 3 = 3$$

$$9 - 3 = 6$$

$$6 - 3 = 3$$

$$3 - 3 = 0$$

b)
$$10 \div 2 = 5$$

$$10 - 2 = 8 \text{ step } 1$$

$$8 - 2 = 6 \text{ step } 2$$

$$6 - 2 = 4 \text{ step } 3$$

$$4 - 2 = 2 \text{ step } 4$$

$$2 - 2 = 0$$
 step 5

Exercise

Try these

$$15 \div 3 =$$

$$8 \div 4 =$$

$$8 \div 4 = 10 \div 5 = 14 \div 2 =$$

$$14 \div 2 =$$

$$8 \div 2 =$$

$$8 \div 2 = 20 \div 5 =$$

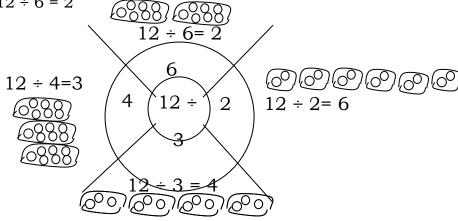
More work on;

New MK Maths Bk2 Pg.78 - 82

SUB-TOPIC: Division in tables and circles.

Examples

$$12 \div 6 = 2$$



Exercise

÷	2	5	4	10	20
20	_	-	_	-	-

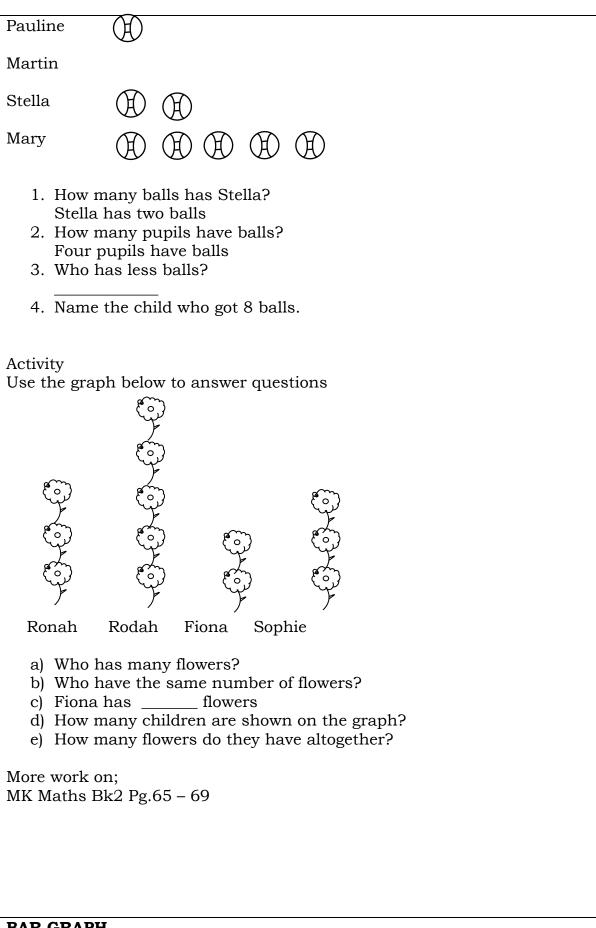
GRAPHS

Picto graphs

Use the graphs below to answer the questions.

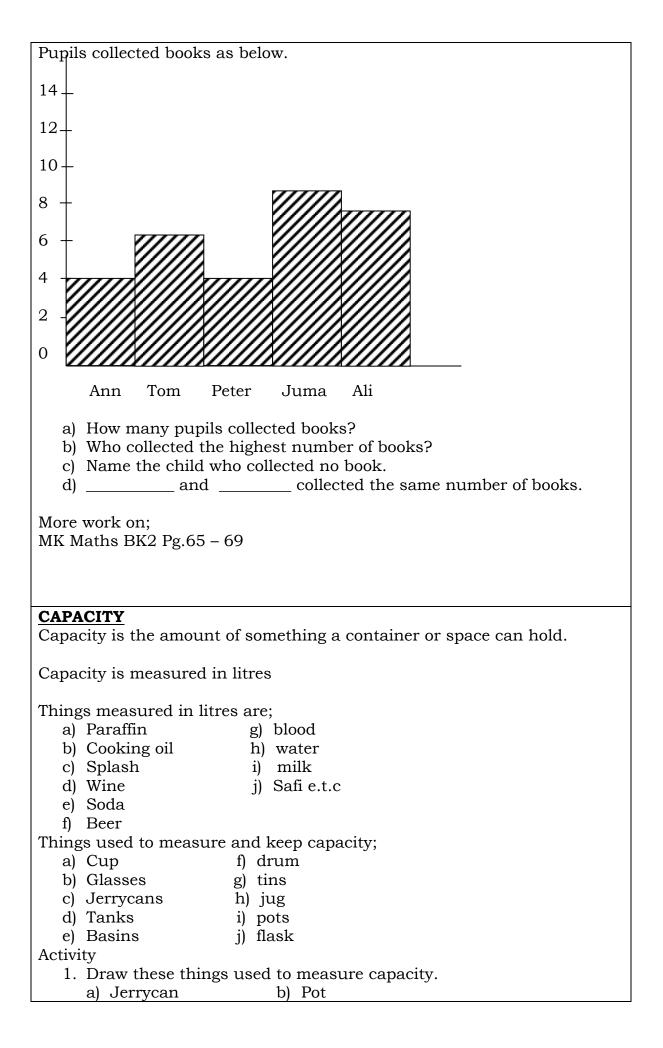
Alfred





BAR GRAPH

Use the graph below to answer questions.



- 2. What container do we use to pack;
 - a) Soda

- b) water
- 3. Name any three examples of liquids you know.

More work on;

MK Maths Bk2 Pg.151

NCDC Primary Bk2 Pg. 104

Comparing capacity

Examples

Which container holds more water?



bottle



bucket

A bucket holds more water than a bottle.





A spoon holds less water than a cup.

<u>Activity</u>

Which container holds more liquid?



pot



A ____ holds less liquid than a _





A _____ holds more liquid than a _____

MK Maths Bk2 Pg.151

Addition in litres

Examples

$$3L + 4L = 7L$$

+ 4 <u>litres</u>

Activity

Add the litres

- 1. 5 litres + 3 litres = ____
- 2. 1 litre + 5 litres = _____
- 3. 2L + 2L = ____
- $4. 9L + 3L = ____$
- 5. L 4 + 6
- L
- L + 3 2
- 6. Ann has 16L and 23L. How many litres are they altogether?

Subtraction in litres

- 1. 6L 4L = 2L
- 2. L 8
- L 48 - 2 <u>5</u> 2 <u>3</u>

Activity

Subtraction

- 1. 8L 3L = 2. 10L 5L = 3. 6L 2L = 4. 32L 30L =

More work on; MK Bk2 Maths

GEOMETRY

Shapes

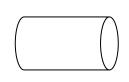
Naminhapes

















rectangle

Exercise one

- 1. Name the shapes drawn above.
- 2. How do we call a shape with 5 sides.
- 3. Fill in the missing letters.
 - a) p ___ ntago____
- b) r ___ cta ___ gle

c) sq ___ are d) o ___ al

- 4. Which shape has 4 equal sides?
- 5. How do we call a half a circle?
- 6. Name the shape of the following objects;
 - a) door
- b) an orange c) a wheel

Exercise two

- 1. Identify the shapes on Mr. Olum's car
- 2. Match the spaes and their sides.

triangle

5 sides

pentagon

4 equal sides

square

3 sides

- 3. Name any one thing you know and it has a shape of;
 - a) A cylinder
- b) a circle
- c) rectangle

More work is on;

New MK Maths Bk2 Pg.70 - 72

Understanding Maths Bk2 Pg.33 – 36

TERM II- III 2017

FRACTIONS

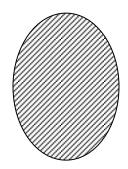
What is a fraction?

A fraction is a part of a whole.

A fraction has 2 parts. i.e. numerator and denominator.

- 2 Numerator
- 6 Denominator

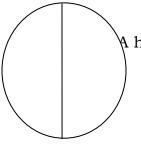
Dividing/folding and drawing fractions.



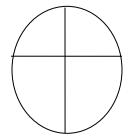
A whole = 1



A whole = 1



A half ½ you divided a whole into 2 two halves make a whole



A quarter 1/4 (you divide a whole into 4

4 quarters make a whole

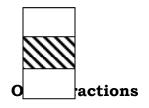


A third

In order to get a third, you divide a whole into 3 equal parts.

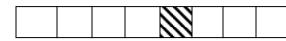
1/3 a third

Three thirds make a whole.





1/5 a fifth



1/8 an eighth



1/6 a sixth

 $\frac{3}{4}$ = three thirds

 $^{2}/_{4}$ = two quarters

1/7 = a seventh

Naming shaded fractions.

Examples



= 2/4

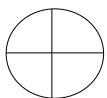


= 1/3

= 3/6

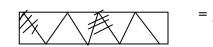
ACTIVITY

Name the shaded fractions.



= ____







 $\quad \text{More} \quad$

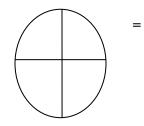
MK Math book 2 page 93



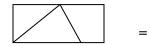


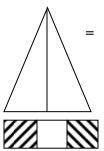
<u>1</u> 3

ACTIVITY Name the shaded fractions











MK Mathematics book 2 page 93

Drawing and shading fractions

Examples





Draw and shade the following fractions

1. 1/4



2. <u>1</u> 3

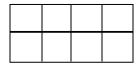


3. <u>4</u> 6



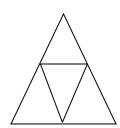


5. <u>3</u> 8

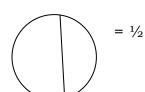


MK Mathematics book 2 page 94

Naming un-shaded fractions



 $= \frac{3}{4}$

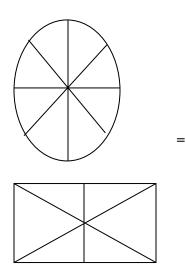


= <u>6</u> 8

ACTIVITY

Name the un-shaded fractions

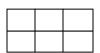




New Mathematics book 2 page 94

Naming the shaded and un-shaded fractions

 $\underline{Examples}$



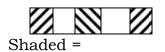
Shaded = $\frac{2}{6}$

Un-shaded = $\frac{4}{6}$

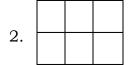


Shaded = 1/3

Un-shaded= 2/3



Un-shaded=



Shaded=

Un-shaded =

3.



Shaded =

Un-shaded =

4.



Shaded =

Un-shaded=

A new MK Mathematics Book 2 page 93 – 94

Comparing fractions

Using greater than "and" less than"

>is greater than < is less than

1 whole	1 whole
	1/2
	$\frac{1}{3}$

½ is less than 1-1 is bigger than

1/3 is greater than $1/5 - \frac{1}{2}$ is greater than $\frac{1}{4}$

ACTIVITY

Use greater than or less than

 $\frac{1}{4}$ is <u>less</u> than $\frac{1}{2}$

 $^{1}/_{5}$ is greater than $^{1}/_{10}$

½ is ______ ½

Use > or <

1/2 _____ 1/6

¹/₄ _____ 1/3

2/4 _____ ½

A new MK book2 page 96 - 97

Ordering fractions starting with the smallest to biggest

Example

$$\frac{1}{2}$$
, $\frac{1}{9}$ $\frac{1}{5}$ $\frac{1}{9}$ = $\frac{1}{5}$ $\frac{1}{2}$

ACTIVITY

Arrange these fractions starting with the smallest

$$\frac{1}{4}$$
, $\frac{1}{2}$, $\frac{1}{5}$

$$1/6, 1/9, \frac{1}{2}$$

$$^{2}/_{10}$$
, $^{2}/_{30}$, $^{2}/_{40}$

$$\frac{1}{4}$$
, $\frac{1}{3}$, $\frac{1}{2}$

MK book 2 page 95 – 96 and 97

Arranging fractions starting with the biggest to smallest

Examples

- 1. 1/9, 1/3, 1/2, = 1/2, 1/3, 1/9
- $2. \ ^{1}/_{10}, \ ^{1}/_{6}, \ ^{1}/_{7}, \ = ^{1}/_{6}, \ ^{1}/_{7}, \ ^{1}/_{10}$

ACTIVITY

Arrange the fractions starting with the biggest.

- 1. 1/9, 1/3, 1/5 =
- $2. \ ^{1}/_{6}, \ ^{1}/_{10}, \ ^{1}/_{4} =$
- $3. \frac{2}{6}, \frac{1}{6}, \frac{3}{6}$
- 4. $\frac{1}{100}$, $\frac{1}{10}$, $\frac{1}{1000}$
- 5. $\frac{1}{15}$, $\frac{1}{10}$, $\frac{1}{10}$

New MK Mathematic book 2 page 95 – 96

Primary Mathematics for Uganda book 2 page

Examples

1.
$$\frac{2}{6} + \frac{1}{6} = \frac{2+1}{6}$$

$$=$$
 $^{3}/_{6}$

$$2. \ 4/9 + 3/9 = \frac{4+3}{9}$$

ACTIVITY

Add the following fractions

1.
$$\frac{1}{5} + \frac{2}{5} =$$

$$2. \ ^{3}/_{10} + ^{4}/_{10} =$$

$$3. \ ^{5}/_{6} + ^{1}/_{6} =$$

4.
$$1/7 + 2/7 + 3/7 =$$

$$5. \ ^{3}/_{9} + ^{5}/_{9} =$$

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

MK Mathematics book 2 page 69 Primary Mathematics for Uganda book 2 page 70

Word problems

Examples

1. Tom had $^2/_3$ of a cake. He was added 1/3 of the cake. What fraction did he have?

$$2/3 + 1/3 = \frac{2+1}{3}$$

 $3 \div 3 = 1$
 $= 1$

ACTIVITY

- 1. Floura had 3/8 of sugarcane and Mitual had $^2/_8$ of the sugarcane. Which fraction do they have altogether?
- 2. Sefera has 4/10 of the orange and Miguel has $^3/_{10}$ of the orange. What fraction do they have?
- 3. What is the sum of 3/9 and 4/9?
- 4. Mark ate 3/5 of an apple and Angel at 1/5 of the same apple. What fraction of the apple was eaten?

SUBTRACTION OF FRACTIONS

Examples

1.
$$\frac{4}{7} - \frac{3}{7} = \frac{4-3}{7}$$

$$=$$
 $1/7$

$$2. \ ^{8}/_{10} - ^{4}/_{10} = \frac{8 - 4}{10}$$

$$=4/10$$

ACTIVITY

Subtract these fractions

1.
$$\frac{3}{6} - \frac{1}{6} =$$

$$2. 6/8 - 4/8 =$$

3.
$$9/10 - 6/10 =$$

4.
$$5/7 - 1/7 =$$

5.
$$8/_{12} - 4/_{12} =$$

6.
$$\frac{4}{5} - \frac{2}{5} =$$

1. A boy had $\frac{5}{6}$ of a cake. He ate $\frac{2}{6}$ of it. What fraction remained?

$$\frac{5}{6} - \frac{2}{6} = \frac{5-2}{6} = \frac{3}{6}$$

ACTIVITY

1. A girl had 4/4 of an orange. She gave way 3/4 of it. What fraction remained?

- 2. What is the difference between $^{11}/_{12}$ and $^{6}/_{12}$?
- 3. What is the difference between $\frac{5}{7}$ and $\frac{3}{7}$?
- 4. A pupil did 5/9 of his homework. What fraction of the homework was left?

Reference: Primary Mathematics 2000 book 3 page 108.

Multiplication of fraction

Examples

1.
$$\frac{2}{3}$$
x $\frac{1}{2}$ = $\frac{2x}{3}$ x 3

2.
$$\frac{2}{3} \times \frac{3}{4} = \frac{2 \times 3}{3 \times 4}$$

ACTIVITY

Multiplication of fractions.

Example

1.
$$^{1}/3 \times ^{5}/_{6}$$

2.
$$\frac{3}{4} \times \frac{5}{6}$$

4.
$$^{2}/_{3}$$
 x $^{1}/_{4}$

5.
$$3/_5 \times \frac{1}{2}$$

6.
$$\frac{1}{7}$$
 x $\frac{1}{2}$

7.
$$1/_7 \times 1/_3$$

Lesson

Addition with carrying

Example

Activity

Standard learning bk 2 pg 13 and 12

Word problems

Example

Marylyn has 26 apples and Reja has 35 apples.

How many apples do they have altogether?

Activity

- 1. P.1 has 46 pupils and P.2 has 35 pupils. How many pupils are in P.1 and P.2?
- 2. Mary has 95 pans and Ali has 17 pans.

How many pans do they have altogether?

Multiplication with carrying

Examples

Activity

3	5
X	2

Algebra

Finding missing numbers (addition)

Examples

$$9 - 3 = 6$$

$$7 - 2 = 5$$

$$12 - 2 = 10$$

Activity

Find the missing numbers.

More

Mk maths bk 2 pg 99- 100

Finding missing number (subtraction)

Examples

$$6 - 0 = 6$$

$$3 + 7 = 10$$

$$8 - 5 = 3$$

Activity

Find the missing numbers

More

Mk math bk 2 pg 101

Understanding MTC bk 2 pg 98.

Lesson

Finding missing numbers (multiplication)

Examples

$$6 \div 2 = 3$$

$$12 \div 4 = 3$$

$$2 \quad 5 \text{ x} = 10 \quad 10 \div 5 = 2$$

$$10 \div 5 = 2$$

$$x 3 = 5$$

$$x 3 = 9$$

$$6 x = 12$$

1 x



5 x



Fill in the missing numbers

Finding missing numbers (division)

Example

$$9 \div 3 = 3$$

$$20 \div 5 = 4$$

$$2 \times 5 = 10$$

Activity

More

Money

Recognition of money

Money is a medium of exchange

Uganda money is called shillings/ or shs. Means shillings

There are two forms of money

- 1. Paper money
- 2. Coin money

Paper money

Coin money

$$1000/= note$$
 50/= coin

$$10,000$$
 = note 500 = coin

$$20,000/=$$
 note

$$50,000/=$$
 note

Features found on money

$$200/= a fish$$

500/= a head of a crested crane

- 1. Name the animal found on the 200/= coin which has a picture of a fish?
- 2. Which coin has a picture of a fish?
- 3. Draw the pictures of:

One hundred coin

Two hundred coin

Lesson

Addition of money

Examples sh sh

Activity

Sh. 500 sh. 450

Mk maths bk 2 page 127 Standard learning bk 2 page 36

More addition of money

Examples

Sh. 30 + sh. 10 = sh. 40

30

10

40

2. sh. 25 + sh. 60 = sh. 85

25

60

85

3. Sh. 2 + sh. 5 = sh. 7

Activity

- 1. sh. 50 + sh. 5 = sh.____
- 2. sh. 30 + sh. 30 = sh.____
- 3. sh. 30 + sh. 30 = sh.____
- 4. sh. 25 + sh. 10 = sh.____

Lesson

Word problem

1. Floura has 200/= and Mutual has 300/= How much money do they have altogether?

500/=

200

300

____<u>5</u>00

2. Ali brought 450/= and Peter brought 400/=. How much did both bring?

450

____400 850

They brought 850/=

Subtract of money

Example

1. Sh.500

Sh.300

- Sh.200

2. Sh.450

Sh.200

- Sh.250
- Sh. 10

3.

Sh. 30

Sh.40

Sh. 350 - sh. 200 = sh. 150

350

- 200

150

Activity

1. Sh.20 - Sh.10

2. Sh.400 - Sh.200

3. Sh.900 - Sh.800

Word problem

1. Mummy had 500/=. She brought a cake of 300/=. How much did she remain with?

500/=

- 300/=

200/=

She remained with 200/=

Activity

- 1. Mary had 300/= and she lost 100/=. How much is she having now?
- 2. Joan had 950/= and she bought bread at 500/=. How much did she remain with?

Multiplication of money

sh.200	sh.200
<u>x2</u>	<u>x 3</u>
	
sh.50	sh.250
<u>x3</u>	<u>x 2</u>

Word problems in multiplication of money

MK Maths Bk2 Pg.125

Complete the table

complete the table	By adding		By multiplying	
Sh. 200		Sh.200	\bigcap	Sh.200
		<u>+200</u>		<u>X 2</u>
50/=	\wedge	Sh. 50	Sh	n. 50
	Sh.50	7		<u>x3</u> –
	Sh	<u>sh.</u>		
	<u>150</u>			
300/=		300		300
		+ 300		x 2
		600		600

Shopping bill

Use the pictures below to answer the questions.





Sweet 50/=

 $\begin{array}{cc} \text{sh.50} \\ \hline \text{x} & 2 \end{array}$

Questions

- 1. How much will you pay for a book? 200/=
- 2. Which item is cheap?

A sweet

3. Which item is expensive?

A ball

More shopping bill

Mercy went for shopping and the items were sold as below.

A ruler - 500/=

A file costs -200/=

A book costs - 300/= A pencil costs - 50/=

1. How much did she pay for 2 books?

300

300

<u>60</u>0

2. Which item is expensive?

A ruler

More work in;

MK Maths Bk2 Pg.128

TELLING TIME

There is 24 hours in a day.

1 hour has 60 minutes

Things used to tell time.

- Sun

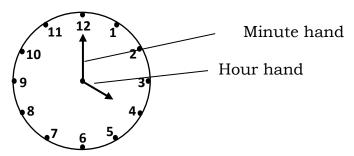
- Watches and clocks

Shadow

There are two major hands on a clock face i.e;

The minute hand

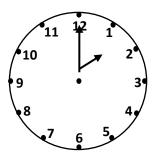
- The hour hand



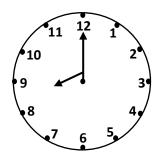
Telling exact time

When the long hand points at 12. We say;

Examples



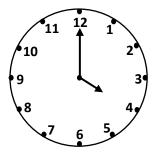
It is 2 o'clock



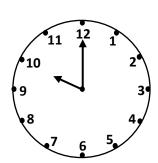
It is **8** o'clock

Activity

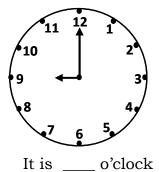
What is the time?



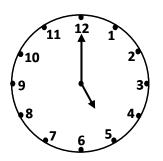
It is ____ o'clock



It is ____ o'clock



it is ____ o clock



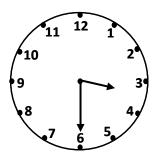
It is ____ o'clock

Standard learning Bk2 Pg45 MK Maths Bk2 Pg. 131

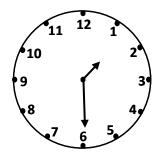
Telling time at a half past

When the long hand points to 6, we say a half past. A half past an hour has 30 minutes.

Example



It is a half past 3



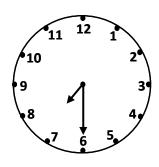
It is a half past 1

Activity

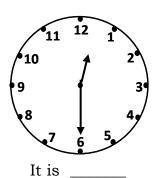
What is the time?



It is _____



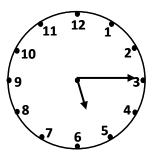
It is _____



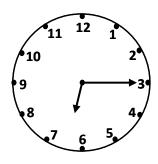
Telling time at aquarter past

When the long hand points to 3, we say a quarter past.

Examples



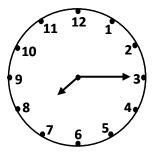
It is aquarter past 5



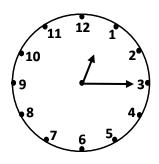
It is a quarter past 6

Activity

What is the time?



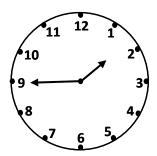
It is a quarter past _____



It is a quarter past _____

Telling time at a quarter to

Examples



Activity

Show the following time on the clock face.

- a) A half past 5
- b) It is 4 o'clock
- c) It is 9 o'clock
- d) It is a half past 2
- e) It is 11 o'clock

Days of the week

There are seven (7) days in a week. These are;

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

Activi	ty	
	1.	Wha
	2.	Writ

- I. What is the last day of the week?
- 2. Write the first day of the week.
- 3. Fill in the missing letters
 - a) M ___ nday
- b) Frid ___ y
- c) Thu ___sday

- 4. Write true or false
 - a) A week has 12 days
 - b) Tuesday is the third day of the week.
 - c) The word Friday has 6 letters.
 - d) Saturday is the last day of the week.
- 5. Write correctly.
 - a) dayTues

b) daySun

c) dayMon

- d) dayWednes
- 6. Which day comes before Tuesday?
- 7. Which day comes after Thursday?
- 8. On which day do Christians go to church?
- 9. If today is Saturday, tomorrow will be a _____
- 10. On which day do Muslims go for Juma prayers?
- 11. How many days make 2 weeks?
- 12. What is the third day of the week?

Months of the year

There are 12 months in a year.

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Activity

- 1. Fill in the missing letters
- a) Janu___ ry
- b) Febr__ary

- c) M___y
 - 2. Write in full
 - a) Dec.

- b) Jan.
- 3. In which month do we celebrate Christmas?
- 4. What is the sixth month of the year?
- 5. How many months make a year?
- 6. How many months have 30 days in a year?
- 7. How do we call a year having 28 days in the month of February?

The calendar

Use the month of July below to answer the questions.

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

Questions

- 1. How many days has the month?
- 2. Which month is shown above?
- 3. How many Sundays are in the month?
- 4. When did the month start (day)?
- 5. Which day was 10th?
- 6. When was the 2nd Tuesday?
- 7. What is the next month?

Measuring weight

Weight is the heaviness or lightness of something. The standard unit is grams Weight is measured in kilograms (kg)

Weight is measured using a weighing scale

Something measured in kilograms

- Sugar
- Beans
- Rice
- Millet
- Posho e.t.c

Comparing weight using heavier and lighter









- 1. Which of the above is lighter?
- 2. Which of the above is heavier?

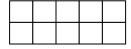
Measuring area

Area is the space covered by an object.

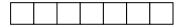
Area is measured in square units.

Measure the area by counting squares.

Examples

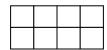


= 10 square metres



= 7 square metres

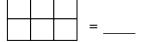
3. How many square metres cover this blackboard?

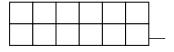


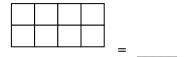


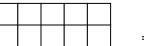
Activity

Count the squares and tell the area.







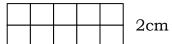


= ____

Measuring area

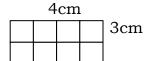
Finding area by multiplying

Examples



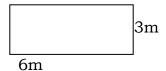
$$A = L \times W$$
$$A = 5 \times 2$$

$$A = 10$$
 square units



$$A = L \times W$$

$$A = 4 \times 3$$



$$A = L \times W$$

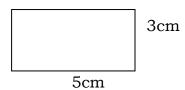
 $A = 6 \times 3$
 $A = 18$ square units

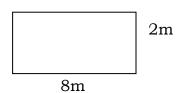
$$A = L \times W$$

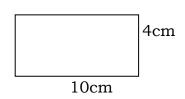
$$A = 8 \times 4$$

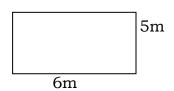
Activity

Find the area by multiplying









Filling in the missing numbers (multiplication)

Examples

$$= 21 \div 7$$

ACTIVITY

Find the missing numbers

6.
$$x = 5 = 20$$

MK Mathematics book 2 page 103

Filling the missing numbers

(Division statements)

$\underline{Examples}$

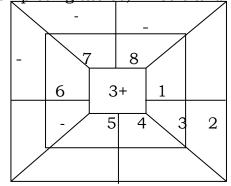
$$4 \times 4 = 16$$

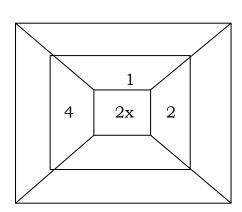
$$20 \div 5 = 4$$

ACTIVITY

Find the missing numbers

Completing tables, wheels and circles





MK Mathematics book 2 page 86

MEASURING HEIGHT

Height is the tallness or shortness of something. Compare height using <u>taller than</u> or <u>shorter than</u>

Example



lupo Akit

- Alupo
 - a) Alupo is shorter than Akit.
 - b) Akit is taller than Alupo.

Activity

Use taller than or shorter than



a)

Ρ



- Tree P is _____ tree Z.
- b) Tree Z is _____ tree P.



Y



- a) Stick Y is _____ stick X
- b) Stick X is _____ stick Y

More work on Primary School Curriculum Bk2 Pg.15