LESSON NOTES FOR PRIMARY TWO
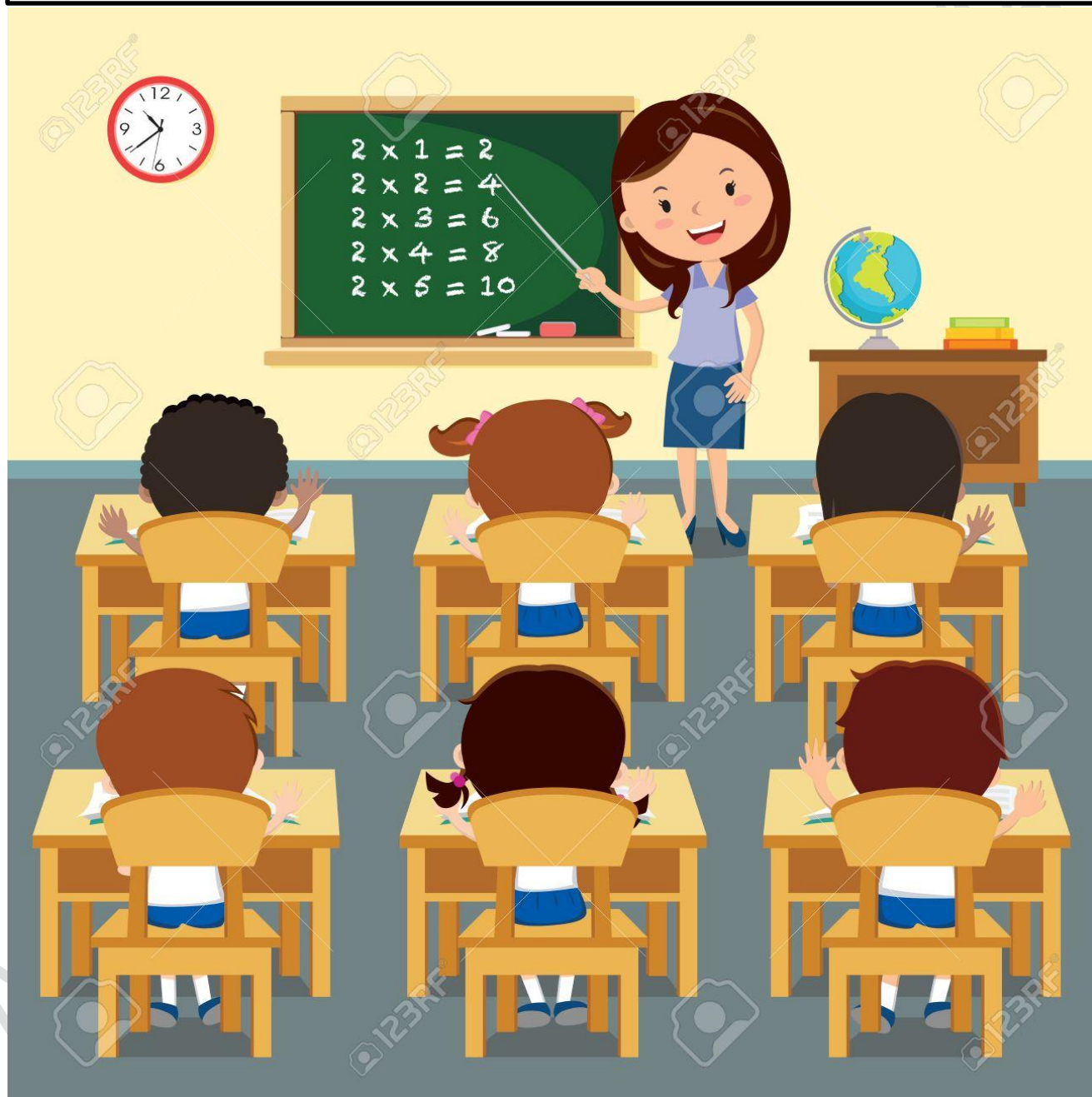# TERM I MATHEMATICS TOPICAL BREAKDOWN FOR P.2.

1. Sets
    i)   Naming sets
    ii)   Drawing sets
    iii)   Matching sets
    iv)   Comparing sets
    v)   Ordering sets
    vi)   Subsets
    vii)   Intersection set
    viii) Empty sets
    ix)   Joining (addition sets
    x)   Subtraction of sets

2. Numeration system and place values
i)   Drawing tens and ones
ii)   Filling in tens and ones
iii)   Showing tens and ones on the abacus
iv)   Drawing hundreds , tens and ones
v)   Filling in hundreds , tens and ones
vi)   Finding place values of the given number
vii)   Expanded form

3. Operation of number s
    i)   Addition of tens and ones

ii) Addition of hundreds, tens and ones

iii) Word statements

iv) Addition of number line

4. Multiplication

i) Multiplication as repeated addition

ii) Multiplying two digit numbers by one digit number

iii) Word statements in multiplication

5. Subtraction

i) Subtraction of tens and ones

ii) Subtraction of hundreds, tens and ones

iii) Word statements

iv) Subtraction using a number line

6. Number sequence

i) Counting in ones

ii) Counting in twos

iii) Counting in threes

iv) Counting in fours

v) Counting in fives

vi) Counting tens

7. Graphs

i) Picto graph

ii) Bar graphs

8. Geometry

Shapes

a) Naming shapes

b) Drawing shapes

c) Matching shapes

d) Colouring shapes

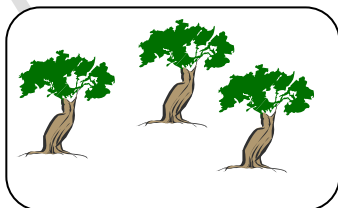## 1. Theme 1: <u>Our school and neighborhood</u>

Content: sets
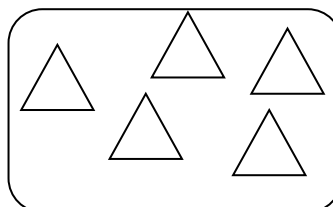
What is a set? A set is a collection of things or objects.
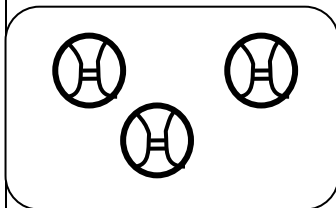
Naming sets   drawing sets

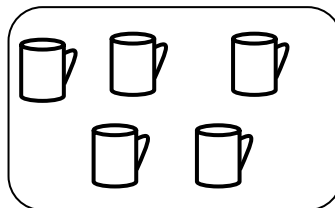A set of trees   A set of triangles
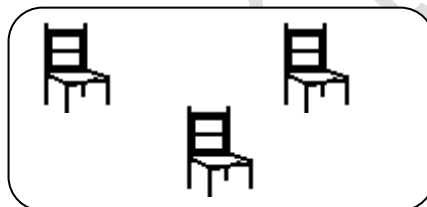
A set of balls
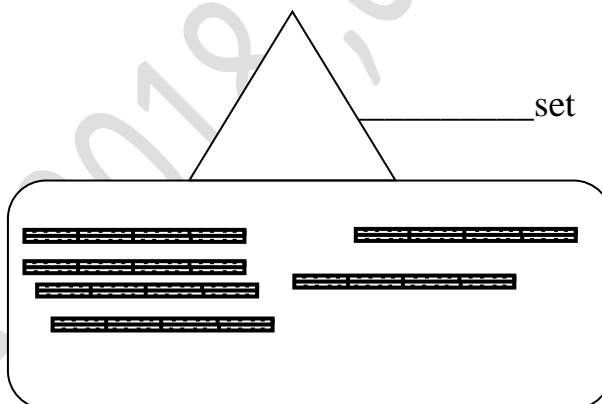
A set of cups

This is an empty set

A set of 3 chairs
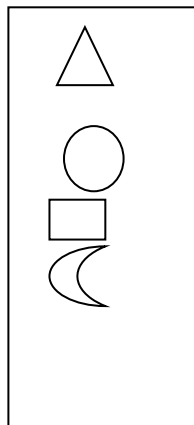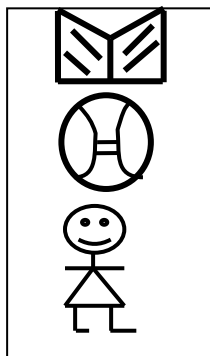
2.   Drawing of sets

A set of four flowers

_____set

A set of six rulers

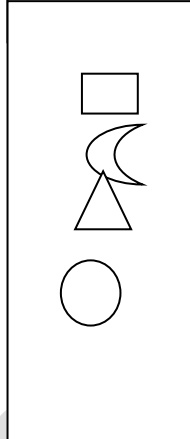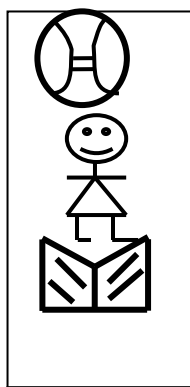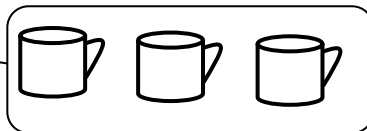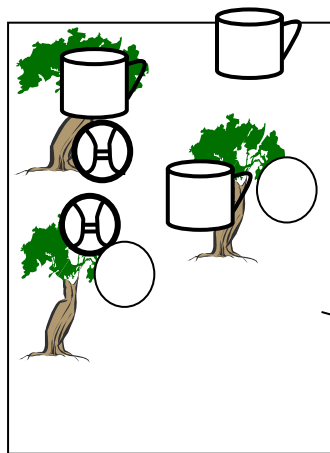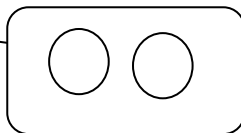*More work showing the sets to be given to learners.*
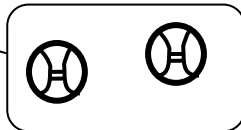
3.   Matching sets

3+2

2+2

3+3

4

5

6

4.Make small sets from the big set

A set of cups

A set of trees

A set of balls
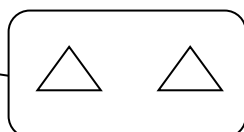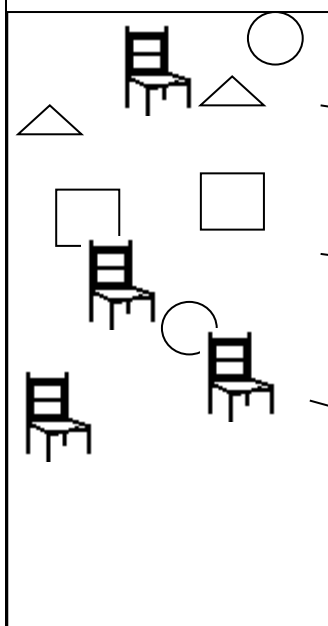
A set of triangles

A set of chairs
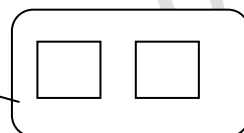
A set of squares

5.   Comparing sets

A   B   C
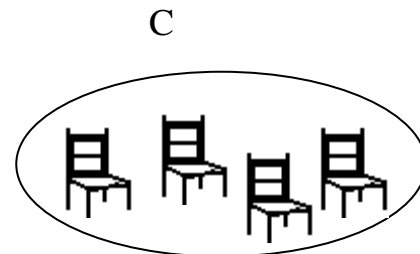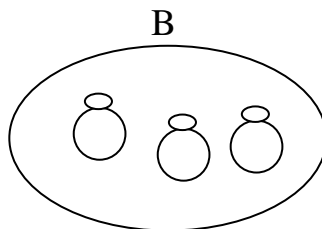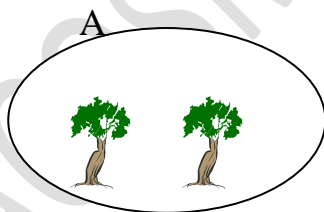
a. Set A has two members

b. Set B has three members

c. Set C has four members

d. Set A has less members than set B

e. Set B has more members than set A

f. Set C has more members than set B

g. Set A and B have five members altogether

h. Set B and C have seven members altogether

Ordering sets

We order sets according to number of members in any given set.

Sets can be ordered in the following ways;

a) Ascending order

We start with a set with fewer members so that with more members. (use ordinal nos.)

$$6^{th} \quad \text{sixth}$$

$$5^{th} \quad \text{fifth}$$

$$4^{th} \quad \text{fourth}$$

$$3^{rd} \quad \text{third}$$

$$2^{nd} \quad \text{second}$$

$$1^{st} \quad \text{first}$$

Example

Arrange the given sets in ascending order
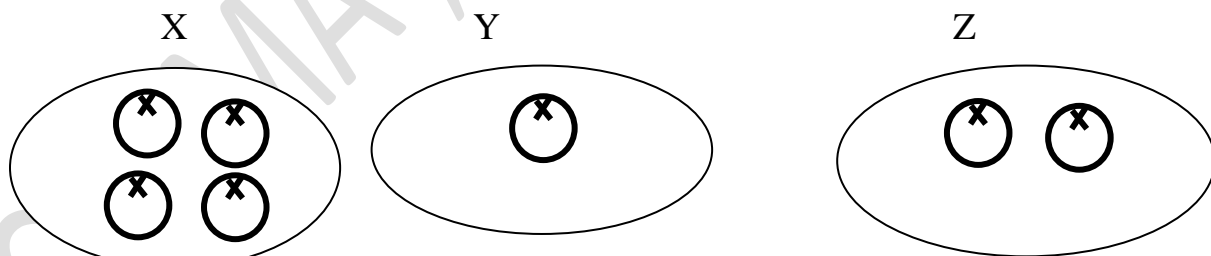
Set Y comes first (1st)

Set Z comes second (2nd)

Set X comes third (3rd)

7.Descending order

We start with a set with more members to that with fewer members

Arrange these sets in descending order (from biggest to the smallest)
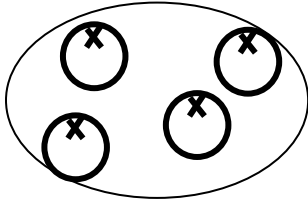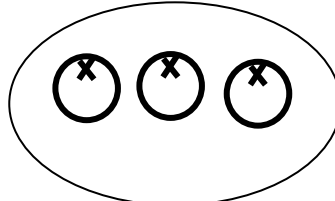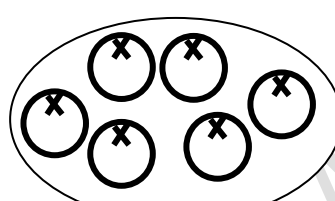
R   S   T   V
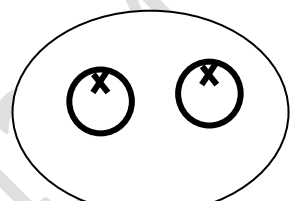
Set T comes first (1st)

Set R comes second (2nd)

Set S comes third (3rd)

Set V comes fourth (4th)

8.   Subsets

What is a subset?

This is a small set got from a big set
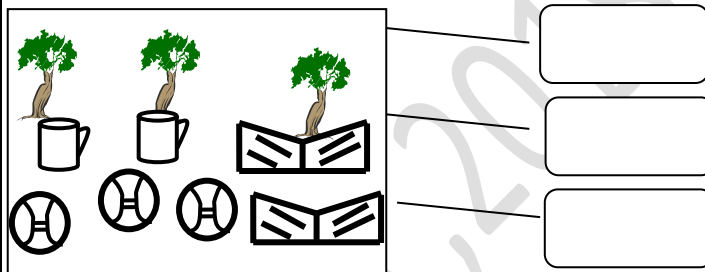
A set of _____

A set of _____

A set of _____

Form a big set from the small sets
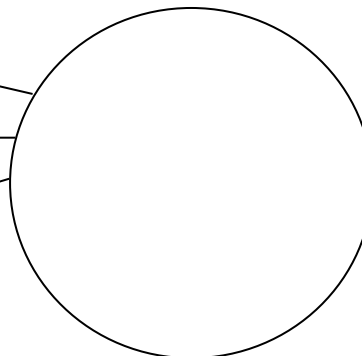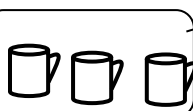
9.   Ringing or grouping sets

Ring sets of twos.
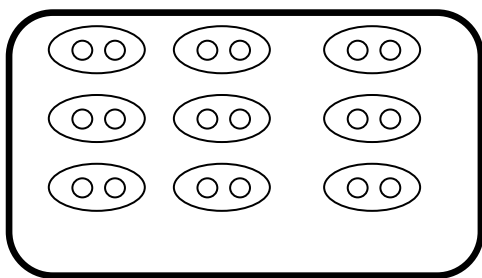
How many groups have you formed?

How many members are in each sub set?

How many members are there altogether?

NB: a teacher has to ring in threes, fours, fives etc.

10.   The intersection set

This is the set where we write the common members

10.   The intersection set

This is the set where we write the common members

Example of intersection areas (common parts)

A   B   X   Y
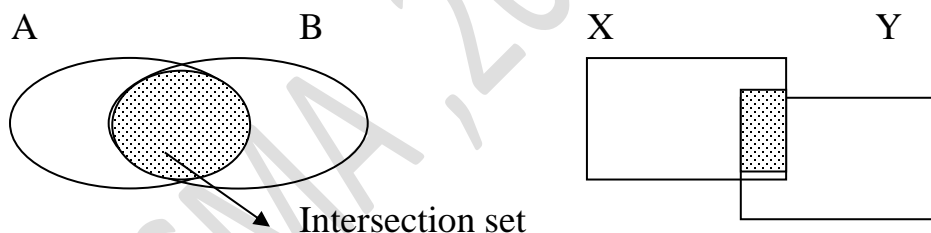
Intersection set

Ⴖ = it is the symbol for intersection set
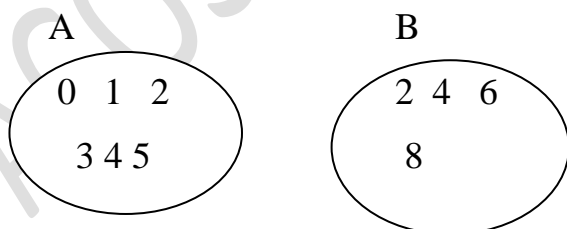
A   B   A = {0, 1, 2, 3, 4, 5}

B = {2, 4, 6, 8}

List down the common members

A ∩ B = {2, 4}

How many members are in the intersection set or common parts? Two members

Representing the information on the venna diagram

M   N

M   N
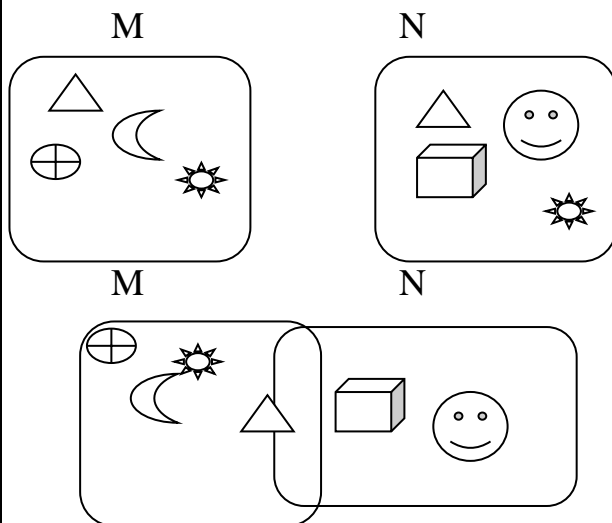
11. <u>Empty sets</u>

An empty set is a set with out or with no members

The symbols of an empty set are

∅   0r   { }

More examples of empty sets

A set of boy with four legs

A cow with three eyes

A girl with two heads

Another name for empty set is null set.

1**2.** <u>Joining or adding sets</u>

6   +   3   =   9   ref. bk 2 pg 8
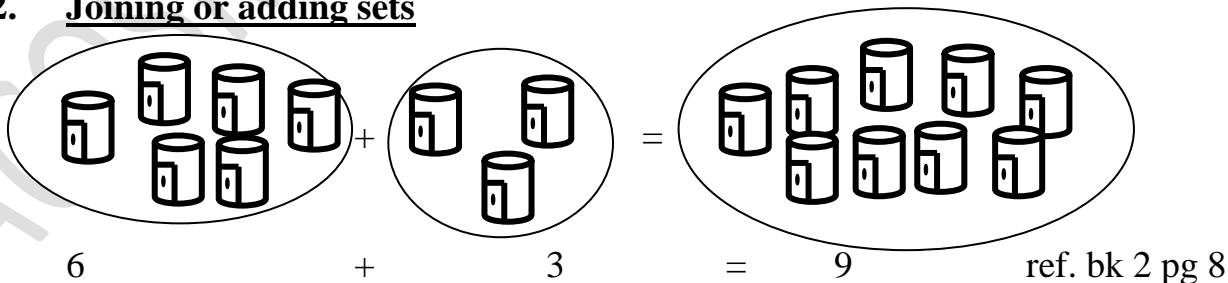
13. **Subtraction of sets**

     4   -   1 =   3   Ref Mk bk 2 pg 9-10

(More of this work will be given to learners)

Topical revision of sets

14. Numeration system and place values

Review of primary one work i.e. counting orally from zero to fifty

Write number names from 0-50

(NB: mind the spellings)

Review of counting from 50 – 100 (in tens)

Write number names from 50 – 100

Counting from 100-200

Write in hundreds from 100 – 900

NB: Let these can be 3-4 lessons)

(More lessons can be taught from this content depending on theavailabity and time)

Number words from 100 – 1000

15. Tens and ones

The teacher should draw ten sticks to show one bundle of tens e.g (Review of P.1 work)

    IIIIIIIIII = IIIIIIIIII = 1 bundle of tens

 I I I I = 24
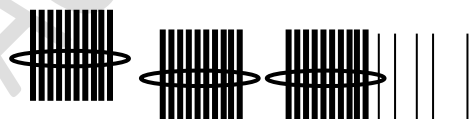
    2tens 4 ones   = 24

3 tens   5 ones   = 35

Draw tens and ones

a)   1 tens   5 ones =   b) 2 tens 0 ones =
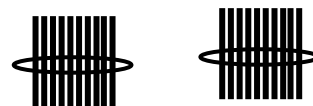
c)   0 tens and 6 ones =   d) 3 tens and 4 ones =

e)   0 tens 8 ones   f) 5 tens and 5 ones

h)   6 tens and 3 ones

D16. <u>Completing hundreds, tens and ones</u>

        T   O   =

a)   1   4   1 tens   4 ones

        T   O

b)   5   6____tens _____ones

c)   3 tens 5 ones =   ☐

d)   ____ tens _____ 0nes = 65

e)   146 = _____ hundreds ____ tens _____ ones.

f)   200 = _____ hundreds ____ tens _____ ones.

g)   754 = _____ hundreds _____tens _____ ones.

17.   <u>Fill in the missing numbers</u>

_____tens _____ones = 18   _____tens _____ones = 7

_____tens _____ones = 24   _____tens _____ones = 30

_____= 0 tens 6 ones   _____= 1 tens 9 ones

_____ hundreds ____ tens ____ ones = 156

_____ hundred _____ tens ____ ones = 239

9 hundred 7 tens 6 ones =   ☐

2 hundred 7 tens 4 ones =   ☐

18. <u>What number is shown on the abacus?</u>

T   O

= [ ]

T   O

= [ ]

T   O

= [ ]

H   T   O

= [ ]

H   T   O

= [ ]
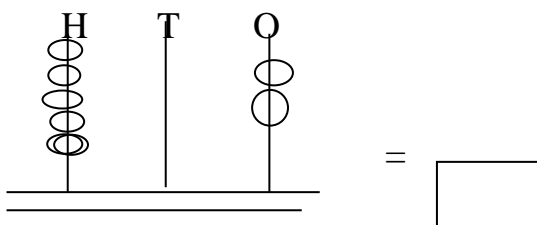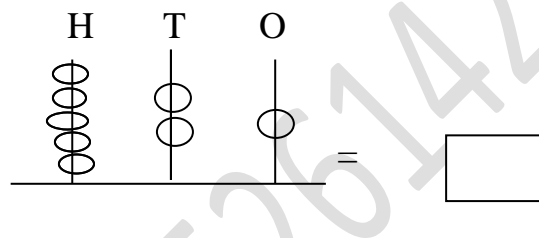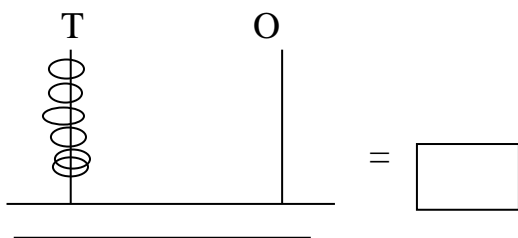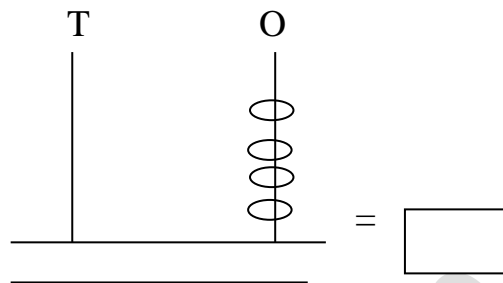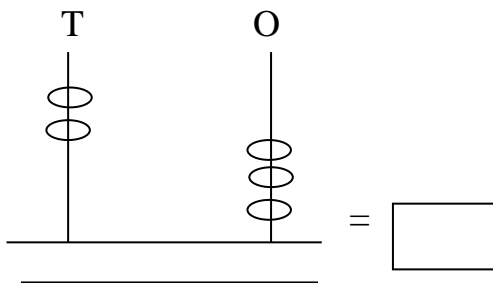
- Drawing hundreds, tens and ones.

19. <u>Write place value for each digit.</u>

1.   1   3   4

Ones

Tens

Hundreds

2.   7   1   6

ones

tens

hundreds
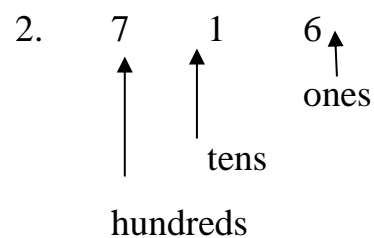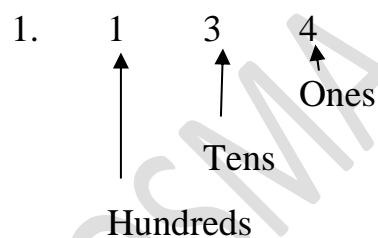
3.   46

4.   702

5.   23

6.   812

7.   93

8.   06

Write the place values of the circled numbers

1. 1 (9) 3   = tens

2. 7 (8)   = ones

3. 4 (0) 6   = _____

4. 2 (1) 6   = _____

5. 4 3   = _____

6. What is the place value of 7 in 374?

20. <u>Expanded form</u>

Expand these numbers

18 = _____+_____

24= _____+_____

106=_____+_____ + _____

400=_____+_____ + _____

580=_____+_____ + _____

What number has been expanded?

13 = 10 + 3   700 + 0 + 0 = _____

30 = 30 + 0   10 + 8 = _____

400 + 0 + 6 = _____   _____= 500 + 50 + 5

21. <u>Operation of numbers</u>
Addition
24 + 10 = _____

```
    2   4              1   0              2   3   5
+   1   0            +   4            +   2   3
_____          _____          _____


    2   0   7            5   0   0            4   8   3
+   2   4   0        +   2   3   6        +   4   0   3
  _____          _____          _____


  _____          _____          _____
```

22. **Word statements**

Dora has 24 pens. Daddy gave her more 10 pens. How many pens does she have altogether?

```
      T      O
   ─────────────
      2      4
+     1      0
   ─────────────
      3      4  pens
   ─────────────
```

NB: The teacher should emphasize the key words in the statements

Ref: Mk bk 2 page 35

23. **Adding using a number line**

3+2 = 5

0   1   2   3   4   ⑤   6   7   8   9   10

4+4= 8

0   1   2   3   4   5   6   7   8   9   10
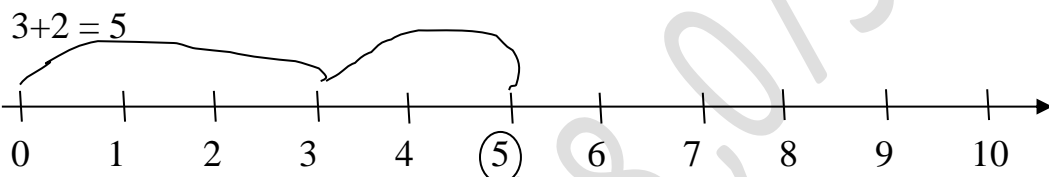
NB: Teachers should discourage learners from jumping a number line or using

24. **Multiplication**

Multiplication as repeated addition

2 +   2+   2 = 6

○○   ○○   ○○

3 x 2 = 6

3 twos = 6

    = 6

NB: Continue with 3,4,5 etc

Multiply two digit numbers by one digit number. (Vertically)

Multiply by (2, 3, 4, and 5)

	2	3			4	1			2	0			1	3	0
X		2		x		3		x		5		x			3
_____				_____				_____				_____			
_____				_____				_____				_____			

Word statements about multiplication.

One hen has two legs. How many legs have four hens.

    4 x2 = _____legs   NB: Teacher should give more examples.

Word statements about multiplication.

One hen has two legs. How many legs have four hens.

    4 x2 = _____legs   NB: Teacher should give more examples.

```
          _____
            5
___   3   2x   2   ____
            0
```
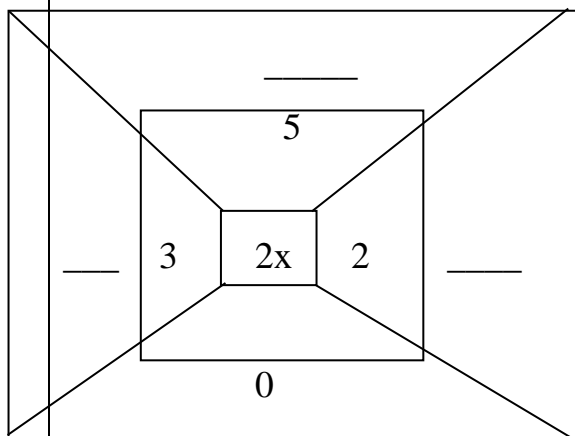
3	0	2	3	4
X		6		

26.   <u>Subtraction</u>

Ten balls – six balls =

10 balls – 6 balls = ____ balls

22 eggs – 11 eggs = _____eggs

Subtraction of two and three digit numbers but without regrouping.

NB: Use the knowledge of place values to re-arrange the figures

a)   3 6 - 0 4

	3	6
-	0	4

b)   5 5 – 40

	5	5
-	4	0

8	2	4
-	2	1

3	9	6
-	3	0	4

7	5	2
-	7	0	2

---

27. <u>**Word statements**</u>

-   Sixteen takeaway nine equals = _____

-   Subtract eight from ten equal _____

-   What is the difference between 343 and 140

-   A class has 44 children, ten of them are absent. How many are present?

    NB: the teacher should give more examples.

    The teacher should emphasis the key words

28. <u>**Subtract using a number line**</u>

9-6=3
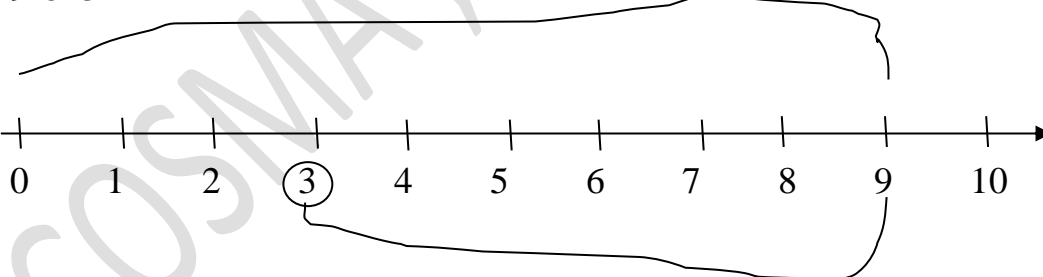
7 – 5 = 2
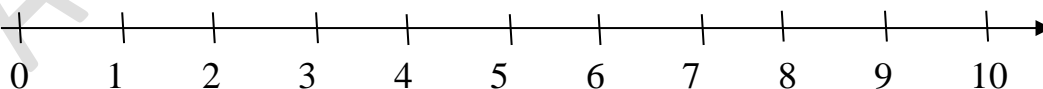
NB: |Encourage the learner to circle the answer.

29. Number sequence

Count in ones and fill in the missing numbers eg

0,1,2,3,____, _____,6,7,_____,9,____

56, 57, _____, ____, 60

101, 102, 103, _____, _____, 106

NB:

- Teacher will guide the learners to fill in the missing numbers in twos, threes, fives and tens
- Filling in the missing numbers should be done both in ascending and descending order.
- Teach about the numbers; before, after and between
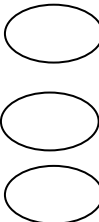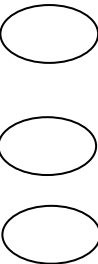
30. Graphs

Picto graphs / picture graphs

This is information represented in form of pictures

Example 1

Four girls picked eggs on Saturday

| Ann | Nora | Dora | Sara |

Questions

1. How many eggs did Dorah pick?
2. Who picked the least number of eggs?
3. Name the children with the similar number of eggs?
4. How many eggs were picked by the four girls altogether?

The teacher should give more examples on picto graphs

32. Bar graph
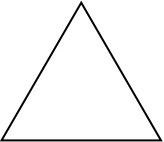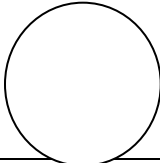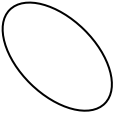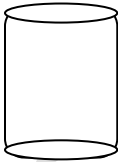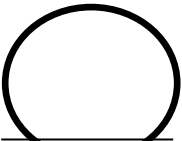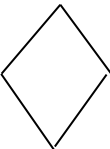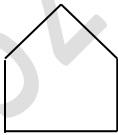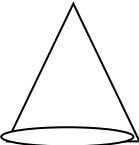
This is a graph having bars that pupils should study and interpret in order to answer the questions

Ref: fountain primary mathematics book 2 pg 56-59

    MK bk 2 page 69

33.   GEOMETRY
Shapes: Examples of shapes and their sizes

Triangle	**Square**	**Circles**
Rectangle	Oval	Cylinder
Semi circle	Kite	Pentagon
Cone		

NB: the teacher should give varying exercises about shapes;

- Matching

- Drawing

- Shading

- Counting

- Naming

- Comparing

Ref: MK bk 2 pg 72

TERM TWO MATHS TOPICAL BREAKDOWN

1. **Capacity**
- Defining and identifying liquids
- Comparing capacity
- Addition of litres
- Subtraction of litre
- Word statements
2. **Operation of number**
- Addition of two-digit numbers with regrouping
- Word statement in addition of two-digit numbers with regrouping
- Division (short and long without getting a remainder)
- Word statements about division
3. **Fraction**
- Definition
- Drawing and naming fraction
- Shading fractions
- Reading and writing fractions
- Comparing fractions
- Addition of fractions
- Subtraction of fractions
4. **Algebra**
- Finding missing numbers by adding
- Finding missing numbers by subtraction
- Word statements about finding missing numbers in addition and subtraction
5. **Measurements**
- Lengths
- Definition
- Things used to measure length
- Examples of things or objects whose lengths can measured and units to measure length
- Comparing length of different objects
- Addition of length
- Subtraction of lengths
- Picture interpretation
6. **Weight (mass)**
- Definition
- Things whose weight can be measured

- Things used to measure weight and units comparing weight of different objects
- Subtraction of weight

TERM TWO NOTES

1. Capacity

Capacity is the amount of liquid a container can hold.

Examples of liquids

Examples of liquids.

- Water   - Paraffin
- Soda   - Cooking oil etc
- Milk
- petrol

Some of the common containers we use to measure liquids.

- Kettle   - glass
- Bottle   - pot
- Bucket   - drum
- Basin   - jerry can

2. Comparing containers we use to hold liquids.

Mug   bucket   pot   jerry can

A mug holds less water than a bucket.

A pot holds more water than a mug.

A jerry can holds more water than a pot.

A pot holds less water than a jerry can.
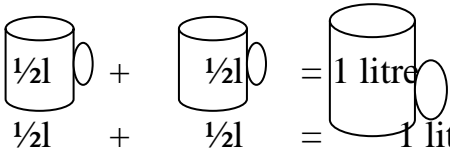
- The standard unit for capacity is litres (L)
- We can also use ½ litre to measure capacity.

- Less liquids like medicine, safi etc are measured in mililitres (ml)

3. Practical activity

- Children will use 1 litre and ½ litre containers to fill the bigger container.

a) How many ½ litre containers can fill a 1 litre container?

b) Find how many ½ litres fill a 2 litre container

c) Find how many ½ litres fill a 5 litre container?

4. Addition of litres

- ½l + ½l = 1 litre
  ½l + ½l = 1 litre

| - | 2 litres | + | 3 litres | = | 5 litres |

5 litres + 4 litres = ___ litres

9 litres + 5 litres + 4 litres = ____ litres

	2 litres		1	2 litres		2	4 litres
+	7 litres	+ 1		0 litres	+ 1		3 litres

_____   _____   _____

Word statements.

5. Subtraction of litres.

9 litres – 4 litres = ___ litres

10 litres – 3 litres = ____ litres

	7 litres		3	6 litres
-	2 litres	- 2		0 litres

_____   _____

6. Word statements

Addition of 2 digit numbers with regrouping

5 9	7 9	4 2	1 6	2 5	
+1 4	+ 1 3	+ 2 9	+ 1 4	+1 5	
_____	_____	_____	_____	_____	

7. Word statements in addition of 2 digit numbers with regrouping

- There are 13 boys and 17 girls in P.2 class.

  How many children are there altogether?

- Joan had 26 sweets. Her mother gave her 9 more sweets. How many sweets did

  she have altogether?

8. Division:

The signs used are ÷ or ⌐‾

Examples:

$4 \div 2$	$16 \div 4$	$25 \div 5 =$
$6 \div 3$	$20 \div 5$	$18 \div 2 =$
$10 \div 2$	$24 \div 4$	$21 \div 3 =$

9. Long division

Examples:

$2\overline{)12}$ $4\overline{)20}$ $4\overline{)16}$ $3\overline{)30}$

$5\overline{)15}$ $5\overline{)25}$ $2\overline{)22}$ $3\overline{)15}$

10. Statements

Examples

1. Share 4 mangoes equally between 2 girls

   How many mangoes does each get?

2. Divide 12 by 2

3. 4 boys shared 24 pencils equally.

How many pencils did each get?

4.   Divide 24 by 3

11. <u>Fractions</u>

A fraction is a part of a whole.

- Cutting, folding and naming fractions (practical work)

Examples:
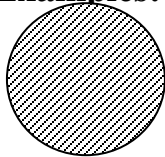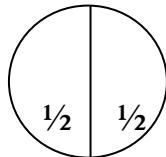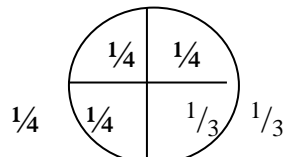
a whole   a half   a quarter   a third
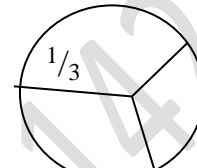
<u>Naming fractions.</u>

12. <u>Identifying the fraction of the shaded part</u>

Examples:

(a)   (b)   (c)

$\dfrac{2}{4}$ $\dfrac{3}{9}$ $\dfrac{}{6}$
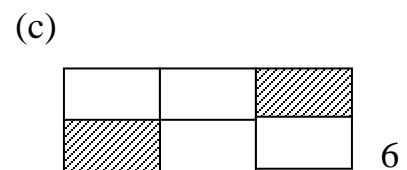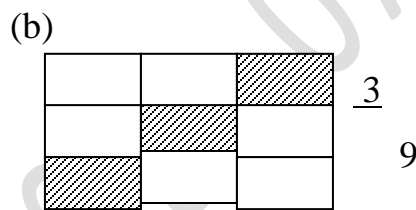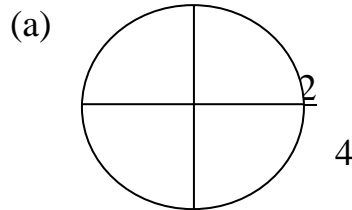
13. <u>Shading the given fraction</u>

Examples:

Shade these fractions

$\dfrac{3}{8}$ $\dfrac{1}{4}$ $\dfrac{5}{8}$
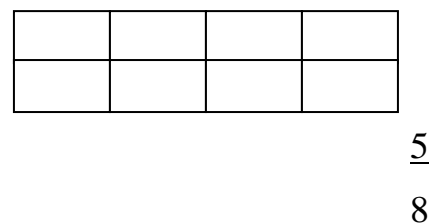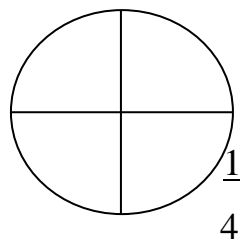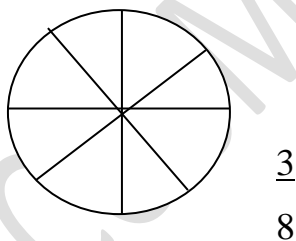
14. <u>Comparing fractions.</u>

- Using bigger than or smaller than (practical work)

- Using greater than, less than or equal to

   (>)   (<)   =

Examples:
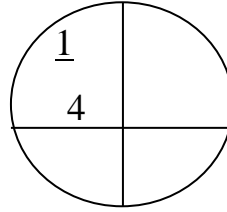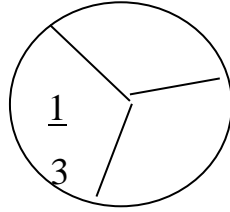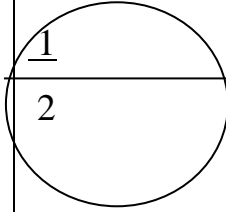
Which part is bigger?

Which part is smaller?

15. Use greater than, less than or equal to (>, < or =)

½ is _____ ¼

¼ is _____ $^1/_3$

$^1/_3$ is _____ $^1/_3$

16. Fraction of the unshaded part

What fraction is unshaded? (Not shaded)

Examples:
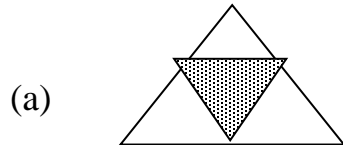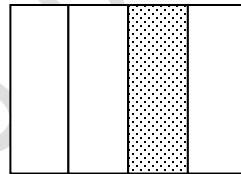
(a)   (b)   (c)
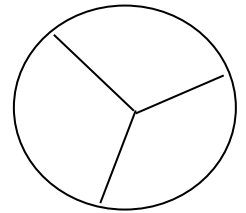
17. Addition of fractions with the same denominations

Examples:

(a) $\dfrac{1}{2} + \dfrac{1}{2} = \dfrac{1+1}{2} = \dfrac{2}{2} = 1$

(b) $\dfrac{1}{4} + \dfrac{2}{4} = \dfrac{1+2}{4} = \dfrac{3}{4}$

(c) $\dfrac{2}{9} + \dfrac{3}{9} + \dfrac{1}{9} = \dfrac{2+3+1}{9} = \dfrac{6}{9}$

Word statements

18. Subtraction of fractions.

Examples:

(a) $\underline{3} - 2 = 3 \underline{- 2} = 1$

   4   4   4   4

(b) $\underline{5} - 3 =$

   9   9

(c) $\underline{7} - 5 =$

   10   10

Word statements

19. ALGEBRA:

Find the missing numbers

Examples:

$\square + 4 = 7$

$\square + 6 = 10$

$8 + \square = 12$

$5 + \square = 15$

20. Word problems:

Examples

1.   _____ plus four equals seven.

2.   _____ plus zero equal nine.

3.   Ten plus _____ equals twelve.

Revision:

21. Finding missing numbers in subtraction

Examples:

1. $9 - 3 = \square$

2. $5 - 0 = \square$

3.　　10 - □ = 4

4.　　8 - □ = 6

5.　　15 - □ = 10

22. Find the missing numbers when the box is at the beginning of a statement

Examples:

1.　□ - 3 = 6

2.　□ - 7 = 10

3.　□ - 5 = 12

4.　□ - 0 = 15

23. Word problems

Examples:

1.　　Eight takeaway three equals _____

2.　　Ten takeaway three equals _____

3.　　Seven takeaway _____ equals fifteen.

4.　　Sixteen takeaway _____ equals twelve.

5.　　_____ takeaway three equals seven.

Topical revision exercise:

24. Length

Length is how long or short an object is. Or

Length is the distance between two points.

25. Things we use to measure length

- meter ruler　　　- hands pan

- short ruler　　　- arm's length

- string　　　　　- fathom

- stick　　　　　- feet

- stride

- Measuring different objects at school practically – using strings, sticks, strides, arm's length etc.

26. **Comparing length of different objects**

A

B

String A is longer than string B

String B is shorter than string A

X

Y
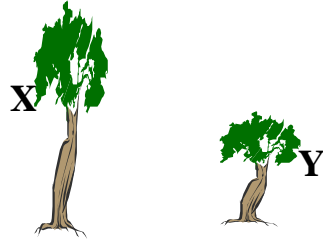
Tree x is taller than tree Y.

Tree Y is shorter than tree X.

The units for length are metres (m) and centimeters (cm)

27. **Addition of length.**

$7m + 2m =$

$9m + 4m + 2m =$

6 cm	3 2cm	4 4m	4 3m
+ 2 cm	+ 1 4cm	+ 2 3m	+ 6m
_____	_____	_____	_____

28. Picture interpretation:

House

7 metres

girl

6 metres

5 metres
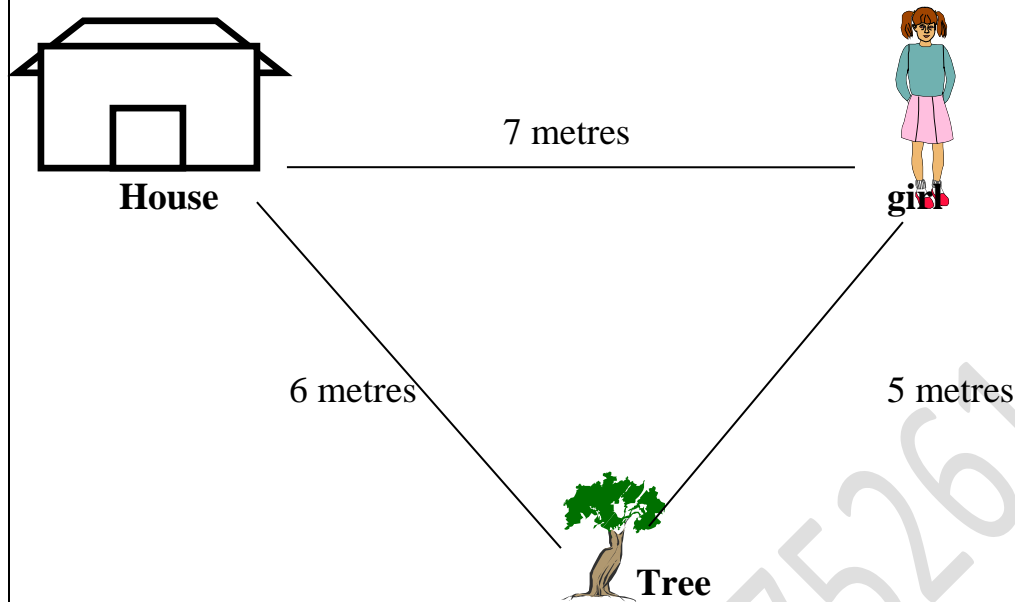
Tree

(a)   What is the distance from the house to the tree?
(b)   What is the distance from the tree to the girl?
(c)   What is the distance from the house to the girl?
(d)   What is the longest distance?
(e)   What is the shortest distance?
(f)   What is the total distance around the pictures?

29. Subtraction of length.

9m - 6m = ___m   8cm – 3cm = ____cm
14m – 5m = ___m   12cm – 6cm = ____cm

```
 1    6m          2    6m               4    9m
-     4m        - 1    3m             - 3    4m
_____          _____             _____

 6    3cm          7    4cm
- 2    0cm        - 1    4cm
_____          _____
```

30. Weight (mass)

How heavy or light someone or something is.

Weighing different objects practically

For example; stones, books, bags etc.

-   Weighing children in class using the weighing scale.

NB: show learners the different kinds of weighing scales.

31. <u>Comparing the weight of different objects</u>

Using heavier than or lighter than.

1.
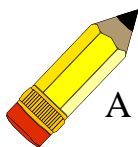
        A stone   A pencil

  (a)   Which object is heavier?
  (b)   Which object is lighter?

2.   Paul

    Ali
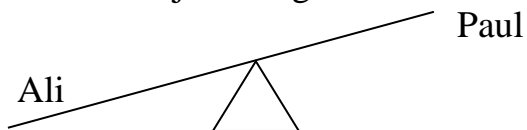
(a)   Who is lighter?

(b)   Who is heavier?

3.
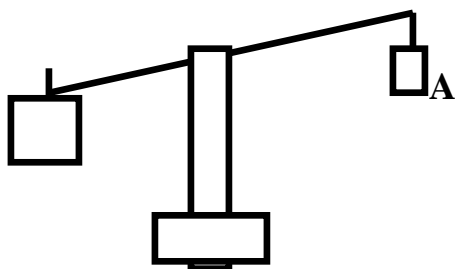
(a) Which box is heavier?

(b) Which box is lighter?

Introducing standard units in weight.

Kilograms (kg)

Grams (g)

32. <u>Addition of weight</u>

5kg + 3kg = _____kg   12kg + 2kg + 3kg =

13kg + 4 kg =   10kg + 7kg =

	1	2g			3	6kg			4	5kg
+	1	4g		+	1	2kg	+		2	3kg

33. <u>Subtraction of weight</u>

10kg = 3kg = _____kg

14kg – 5kg = _____kg

	1	9kg			2	3kg			9	4kg
-		6kg		-	1	3kg		-	5	0kg

	5	4g			7	4g			6	6kg
-	2	0g		-	5	4g		-	3	3kg

TERM THREE NOTES.
Topical Breakdown

1.   **<u>MEASURES</u>**

a)   <u>Time</u> (introduction)

b)   Telling time in full hours

c)   Showing time in full hours

d)   Telling time in half past

e)   Showing time in half hours

f)   Telling time using a quarter past……

g)   Showing time using a quarter past……

h)   Telling time using a quarter to ……..

i)   Showing time using a quarter to ……

j)   Telling time using …… minutes past ….. Minutes to

k)   Addition of time   -   horizontally

                                     -     Vertically

                                     -     Word statements

l)   Subtraction of time   -   horizontally

                                     -     Vertically

                                     -     Word statements

m)   Days of the week

n)   Months of the year.

o)   Months and their days

p)   The calendar.

2.   OPERATION ON NUMBERS

a)   Subtraction of numbers without regrouping up to three digits. (Vertically)

b)   Subtraction of numbers while regrouping. (2 digits by 1 digit)

c)   Subtraction of bigger or greater numbers while regrouping (2 digits by 2 digits)

d)   Subtraction of greater numbers while regrouping (3 digits by 2 or 1 digit)

e)   Word statements in subtraction with regrouping.

3.   MEASURES

Money

a)   Definition/ introduction of money

b)   Types/ examples of money

c)   Sources of money

d)   Uses of money

e)   Denominations

f)   Changing money

g)   Addition of money   -   horizontally

-    Vertically

-    Word statements involving addition.

h)   Subtraction of money   -   horizontally

-    Vertically

-    Word statements involving subtraction.

i)   Multiplication of money   -   horizontally

-    Vertically

-    Word statements involving multiplication.

j)   Money and shopping

4. **ALGEBRA**

a) Completing algebraic statements of multiplication (horizontally & vertically)

b) Word statements involving multiplication.

c) Completing algebraic statements of division (horizontally & vertically)

d) Word statements involving division.

1. **TIME**

1. There are 12 hours during the day.

2. There are 12 hours during the night.

3. Twenty four hours make a day.

4. There are 12 hours/ numbers in a clock face.

5. There are different activities done during the day and those done during the night.

6. There are five minutes from one hour to another.

7. There are 60 minutes in an hour.

8. There are 30 minutes in half an hour.

9. There are three hands in a clock face.

10. A clock face can be circular, rectangular, squared.

11. When the long hand points to 12, we say the hour where the hour hand is pointing.

5 minutes from one hour to another.
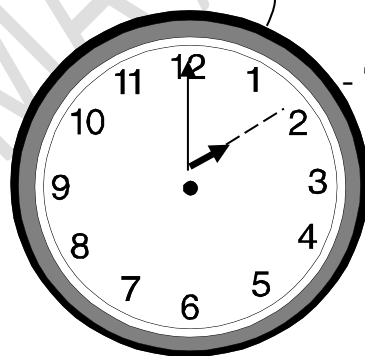
- The minute hand is long and thin.

- The hour hand is short, big black and thick.

Qn: What time is it?

It is two o'clock.

<u>**Activity**</u>

2.   <u>**Tell the time in full hours**</u>
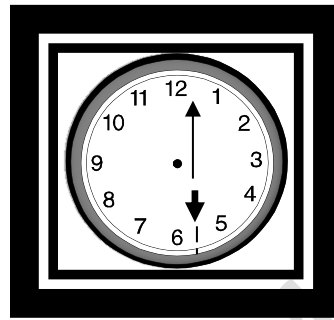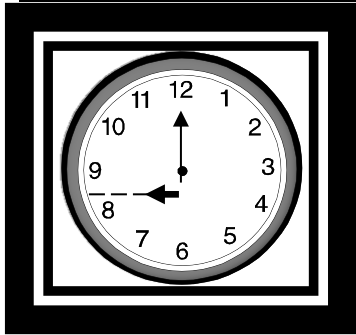
3.   <u>**Show the time in full hours.**</u>
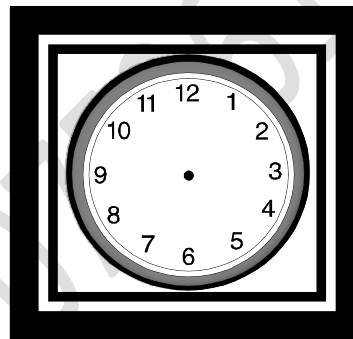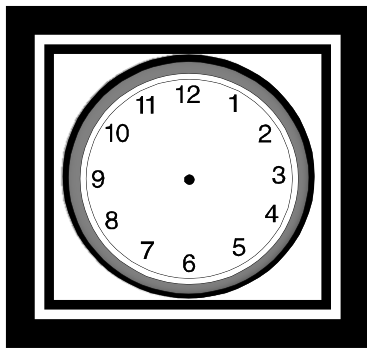
It is four o'clock   it is twelve o'clock

<u>**Note:**</u>

- More of this work will be done in pupil's books

- Pupils will write the time using words not figures as we emphasize in English and literacy 1.

Ref: Mk. Pri. MTC Bk.2 Pg. 131

4.   <u>**Telling and showing time on a clock face using a half past…**</u>

Note: When the minute hand points to 6, we say,   "A half past ……." (Do not add on o'clock)
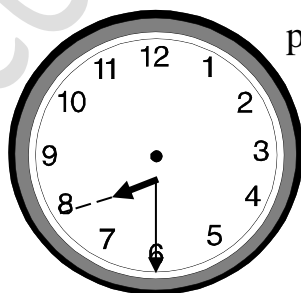
A half past 8

A half past eight.
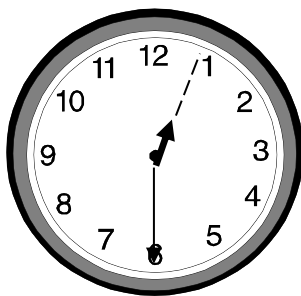
A half past twelve

Show correct time

_____   _____
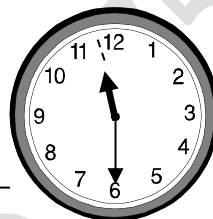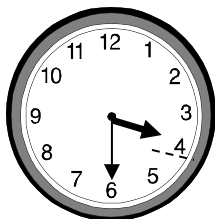
Note:

- More of this work will be given to learners

- Teacher can use paste work in order to waste time

5.   **A quarter past (15 minutes past /fifteen minutes past)**
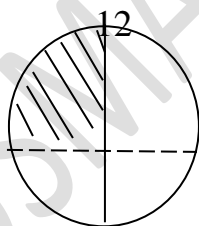
A quarter past

A quarter past six

A quarter

to   6 (a half past)

Activity
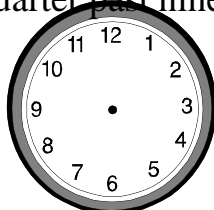
A quarter past nine   a quarter past four
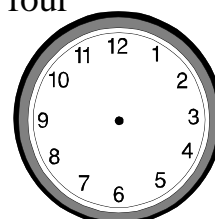
A quarter past one
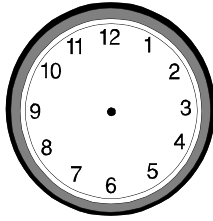
6. **How we can use a quarter to or …….. To.**

When the minute hand points to 9, we only count the minutes remaining to reach

12
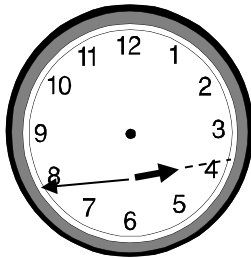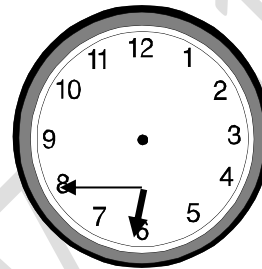
It's a quarter to 3   it's a quarter to 7

Activity

a)   Pupils will be helped to tell time shown

b)   Pupils will be helped to show given time

7. **More work on time will be given. (Mixed work on time)**
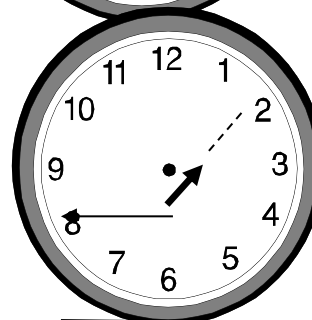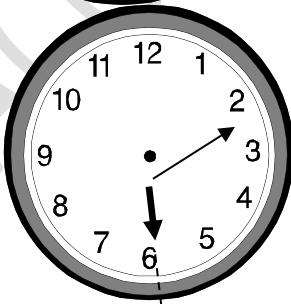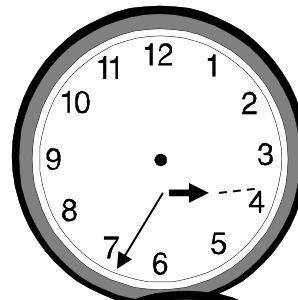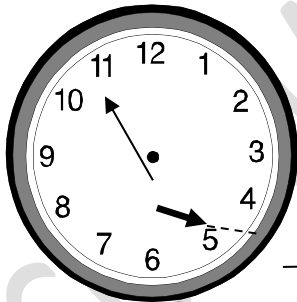
8. **Addition of time (Horizontally)**

3 min + 4 min = _____ min

5 hours + 10 hours = _____ hours

6 hours + 4 hours + 2 hours = _____ hours

24 hours + 12 hours = _____ hours

17 hours + 9 hours = _____ hours.

More addition of time (vertically)

8 hrs	1 6 min	1 3 4 min
+ 7hrs	+ 1 0 min	+1 0 2 min
_____	_____	_____

9.

3 8 9 hrs	6 5 2 hrs	6 9 8 min
+1 0 0 hrs	+ 1 9 hrs	+1 0 4 min
_____	_____	_____

10. **Read the word statements, copy the figure and add time correctly.**

a) Mr. Musoke taught for 7hrs. Mr. Ntuuyo taught for 6hrs. How many hours did both of them teach?

b) A bus driver drove for 103hrs. The lorry driver drove for 217hrs.

   i.   What is their total time?

   ii. Who drove for more hours

   iii. How many more hours did the lorry driver drove than the bus driver?

   iv. What is the difference between their time?

11. **Subtraction of time.**

Pupils will be helped to subtract time horizontally.

a)   9hrs – 7hrs = _____ hrs

b)   14hrs – 9hrs = _____hrs

c)   25min – 10min = _____ min

d)   100hrs – 50hrs = _____ hrs

e)   What is fifteen minute take away ten minutes equal to?

More work on subtraction of time vertically

a)

T	O		T	O		T	O
4	2min		6	3hrs		8	9mins
-1	0min		-5	2hrs		- 2	6mins

12.

H	T	O		H	T	O		H	T	O
6	7	2min		4	0	0min		5	9	4hrs
- 1	0	2min		-2	0	0min		- 7		1hrs

Work statements on subtraction of time.

a)   Find the difference between 24hrs and 13hrs.

b)   What is 376min and 124min less?

c)   A motorcycle moved for 836hrs. A lorry moved for 736hrs. Find the difference between the hours.

13.   Days of the week.

Pupils will be taught the days of the week in their orders.

- 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.

Teacher will give oral questions about the days of the week.

Fill in the missing days of the week.

a)   Saturday, _____, Monday, _____, Wednesday, _____

b)   Tuesday, _____, Thursday, _____, Saturday, _____

c)   Saturday, _____, Thursday, _____, Tuesday, _____

d)   Monday, Sunday, _____, _____, _____

e)   Wednesday, _____, Friday, _____, Sunday, _____

Pupils can write days from jumbled letters.

14.   <u>More questions about days of the week.</u>

a)   How many days are there in two weeks?

b)   What is the fifth day of the week?

c)   Write the days of the week that begin with letter S.

d)   When do you go for Juma prayers?

e)   For how many days do you come to school?

f)   On which day of the week do Christians go to church?

g)   What is the second day of the week?

h)   How many days form a week?

Ref: A new MK primary MTC. Bk 2 pg 122

15.   <u>Months of the year.</u>

There are twelve months in a year.

There are 365 or 366 days in a year.

Different months have different days.

Months have names according to the area/region.

Below are months of the year in their correct order.

January

February

March

April

May

June

July

August

September

October

November

December

Teacher can formulate questions from the lesson basing on the time and ability of the learners.

16.   Months of the year and their days.

 January 31 days

February 28/29 days

March 31 days

April 30 days

May 31 days

June 30 days

July 31 days

August 31 days

September 30 days

October 31 days

November 30 days

December 31 days

•   Teacher will give the learners a trick of learning months and their days easily.

•   Teacher will formulate question from that lesson.

•   Pupils will discuss answers orally with their teacher.

•   Pupils will do an activity with their teacher.

Ref: Mk. Bk.2 pg. 134   Pr. mtc for Ug. Bk2

17. The calendar.

September 2014

Sunday		7th	14th	21st	28th
Monday	1st	8th	15th	22nd	29th
Tuesday	2nd	9th	16th	23rd	30th
Wednesday	3rd	10th	17th	24th	
Thursday	4th	11th	18th	25th	
Friday	5th	12th	19th	26th	
Saturday	6th	13th	20th	27th	

Activity.

a)   Pupils will make numbers ordinal

b)   Pupils will answer questions about the calendar orally.

c)   Pupils will write the calendar in their books.

d)   Pupils will do an exercise about the lesson.

18. Operation on numbers (let the pupils together with the teacher subtract without regrouping.)

Subtraction with regrouping.

a)   Two digits on top and one digit below.

-    9___

-    3___

Note: teach the learners to master that we regroup when the number on top is less.

```
        T    O
ooo/  3⁴/  ⑪oooooobbbdo| \\
      1    8
      2    3
```

Activity (a)

T	O
1$\cancel{2}$	⑪
-	7
-	40

1 is less than tens go to

tens and borrow 1 ten

11 – 7 = 4

1 – 1 = 0

T	O
4	0
-	9

T	O
2$\cancel{3}$	⑯
-	8
2	8

6 is less than 8. Go to tens and

borrow 1 ten

16 – 8 = 8

2 - 0 = 2

19.   b.   (Two digits by two digits)

T	O
2	1
- 1	9

T	O
3	4
- 1	6

T	O
5	2
- 1	8

c.   (Three digits by two digits)

H	T	O
3	5	1
-	2	4

H	T	O
6	3	0
-	1	9

H	T	O
5	1	1
-	2	0

20.   d.   (Three digits by three digits)

H	T	O
2	2	4
- 1	0	6

H	T	O
9	3	7
- 4	2	8

H	T	O
2	6	0
- 1	0	8

These are many lessons. Teachers should be systematic and considerate.

21. Word problems on subtraction with regrouping.

Pupils will be helped to read the statements. Write them and copy out numbers correctly.

Example 1

a)   Mary had 25 eggs. 19 of them got broken. How many eggs remained?

```
    T      O
    1̶2̶    1̶5̶eggs      OOOOOOOO̶O̶O̶O̶O̶O̶O̶O̶
  - 1      9eggs
  ─────────────
    -      6eggs        six eggs remained.
  ─────────────
```

Example 2

b)   In a basket, there were 321 apples. 17 of them got rotten. How many apples remained?

```
    H    T      O
    3    1̶2̶    1̶1̶apples    OOOOO̶O̶O̶O̶OOO
  -      1      7apples      O̶
  ──────────────
    3    0      4           OOO
  ──────────────
```

Three hundred four apples were good.

(More of this work will be given to the learners.)

22.   MEASURES:

Money:

a)   **What is money?**

Money is what we use to buy what we want.

Money is a medium of exchange

Introduction

Long ago, people used to exchange goods for goods and services for services. This was known as Barter trade. As time went on, people introduced **Cowrie shells** as money to pay for goods and services. When Indians came, they introduced rupee (rupia). When the

people became modern, they improved on the rupee and formed **shillings** both in <u>coins</u> and <u>notes</u> which are used up to today.

b) **Examples of money used in different countries**.

- In Uganda we use shillings.
- In Kenya they use shillings.
- In Nigeria they use Naira.
- In England/United Kingdom they used pounds.
- In America they use American Dollars.
- In Rwanda they use Franks/ mafarang.

c) **Uses of money.**

Money is very useful in day to day life. We use money to run many things.

- Money is used to buy basic needs.
- We use money to pay for different bills.
- We use money to pay school dues.
- We use money to buy building materials.
- We use money to buy land and to buy cars.

Note: Pupils will mention many more things they know about money.

23. **Examples of cons used in Uganda.**

a) 50 (fifty shillings coin)

   100 (one hundred shillings coin)

   200 (two hundred shillings coin)

   500   (Five hundred shillings coin)

   1000 (One thousand shillings coin)

Note: Teacher will allow pupils have a look at all the above coins. They will tell the features on the coins. They can also trace these cons.

b) **Examples of notes used in Uganda.**

1000 (One thousand shillings note)

2000 (Two thousand shillings note)

5000 (Five thousand shillings note)

10,000 (Ten thousand shillings note)

20,000 (Twenty thousand shillings note)

50,000 (Fifty thousand shillings note)

Note: Each of the above notes will be shown to the pupils and different features will be discussed.

c)   What do you see on this coin or note?

- On a fifty coin?

     A head of a Kob with long horns

     The coat of arms

- On a two thousand shilling note?

     It is blue in colour.

24.   Changing money.

Teacher should use real coins and notes for children to get the concept.

How many coins of ……….. add up to …………?

a)   How many coins of sh.50 add up to sh.100?

b)   How many coins of sh.100 add up to sh.200?

c)   How many coins of sh.500 add up to sh.1000?

d)   How many coins of sh.100 add up to sh.400?

e)   How many notes of sh.1000 make sh.2000?

Note: More work will be given to the learners considering the time and ability.

25.   Adding money horizontally

a)   Sh.50 + sh.50 = sh._____

b)   Sh.100 + sh.50 = sh._____

c)   Sh.200 + sh.100 = sh._____

d)   Sh.300 + sh.100 +sh.200 =sh._____

e)   Sh.500 + sh.500 =sh._____

26.   Money.

Add money correctly. Arrange figures going down.

a)   sh. 3 0 0   sh. 1 5 0   sh. 7 0 0

    sh. + 5 0   +sh. 1 0 0   +sh. 1 0 0

    _____   _____   _____

b)   sh. 1 0 0 0   sh. 4 0 0 0   sh. 5 0 0 0

    +sh. 1 5 0 0   +sh.   3 5 0   +sh. 3 0 0 0

    _____   _____   _____

27.   Word statements (pupils can divide the pages)

Read the statement, understand it, copy out the figures and add correctly.

a)   Rhena has sh.150.

    Mercy has sh.200. How much money do the girls have?

        Sh. 2 0 0

      +sh. 1 5 0

      _____

b)   Add sh.900 to sh.500. What do you get?
c)   Find the sum of sh.50 and sh.50.
d)   Tr. Doreen had sh.5000. Mr. Kafeero gave her more sh.3000. How much money did she spend altogether?

More of such work will be given to leaners

28.   Subtraction of money. (Horizontally)

a)   Sh.100 – sh.50 = sh. _____

b)   Sh.200 – sh.100 = sh. _____

c)   Sh.500 – sh.400 = sh. _____

d)   Sh.1000 – sh.500 = sh. _____

e)   Sh.750 – sh.700 = sh. _____

29. <u>Arrange the figures vertically and subtract.</u>

Sh.	5	0	0
- sh.	1	0	0
Sh.	4	0	0

sh.	1	5	0
- sh.	1	0	0

Sh. 1	0	0	0
- Sh.	5	0	0

sh.	9	5	0
- sh.	8	0	0

Sh.	4	0	0	
- sh.	2	0	0	

sh.	2	0	0	0
- sh.		5	0	0

30. <u>Read the statements carefully, subtract and show how you get the answer.</u>
Semusu had sh.900. He used sh.750. How much money did he remain with?

Sh.	8 9	10	0
- sh.	7	5	0
Sh.	1	5	0

0 – 0 = 0

0 is less than 5. Go to hundred an borrow 1 ten

10 – 5 = 5

8 – 7 = 1

He remained with sh.150.

Peter had sh.1000. He gave away sh.500. How much money remained?

Sh.	1 0 0 0
- Sh.	5 0 0
Sh.	5 0 0

More work will be given to the learners.

31. **Money and shopping at the market.**
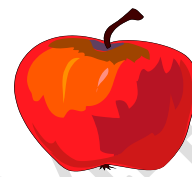
Cabbage	sugarcane	pineapple	orange	apple
Sh.700	sh.300	sh.1000	sh.100	sh.500

a) What is the cost of a pineapple?
b) Find the cost of a cabbage and an orange.
c) How much will daddy pay for 2 apples?
d) Find the cost of a sugarcane and cabbage.
e) Find the total cost of 3 sugarcanes.
   - Pupils will read the questions with teacher's guidance.
   - Pupils will do some numbers on the chalkboard.
   - Some work will be done in pupil's books.

32. **Shopping at the shop/ supermarket**
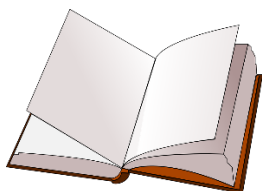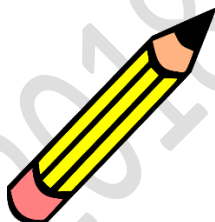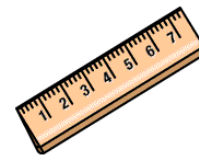
A book	a pencil	a cake	a ruler
Sh.200	sh.500	sh.800	sh.350

Study the prices carefully and answer the questions.

a) What is the cost of a cake?
b) What is the most expensive item?
c) What is the cheapest item?
d) How much shall I pay for 3 pencils?
e) What is the cost of a book, a ruler and a cake?

More of such questions will be given to the learners.

Note:

Teachers can give more of such work as revision, morning work or an additional homework.

33. <u>**Multiplication of money**</u>.

a)   sh. 2 0 0   sh. 1 0 0   sh. 5 0

$\quad$ x $\quad$ 2 $\qquad$ x $\qquad$ 4 $\qquad$ x $\qquad$ 2

$\quad$ sh. 4 0 0 $\qquad$ ─────── $\qquad$ ───────

0x2=0 0x2=0 2x2=4

b)   sh. 3 0 0   sh. 1 0 0 0   sh. 4 0 0

$\quad$ x $\quad$ 3 $\qquad$ x $\qquad$ 5 $\qquad$ x $\qquad$ 2

$\quad$ ─────── $\qquad$ ─────── $\qquad$ ───────

$\quad$ ───────

34. <u>**More multiplication of money**</u>

b)   One cake costs sh.300. Find the cost of 3 cakes.

$\qquad$ Sh. 3 0 0 $\quad$ 0 x 3 = 0

$\qquad$ X $\quad$ 3 $\quad$ 0 x 3 = 0

$\qquad$ Sh. 9 0 0 $\quad$ 3 x 3 = 9

Matiya bought 3 sambusas each at 500/=. Find the total cost.

$\qquad$ Sh. 5 0 0 $\quad$ 0 x 3 = 0

$\qquad$ X $\quad$ 3 $\quad$ 0 x 3 = 0

$\qquad$ Sh. 1 5 0 0 $\quad$ 5 x 3 = 15

If a book costs 150/= what is the cost of 2 books?

$\qquad$ Sh. $\quad$ 1 5 0 $\qquad$ 0 x 2 = 0

$\qquad$ X $\qquad$ 2 $\qquad$ 5 x 2 = 10

$\qquad$ Sh. $\quad$ 3 0 0 $\qquad$ 1 x 2 = 2 + 1 = 3

35. **Study the price list below and use it to answer the questions.**

<u>Item</u>	<u>price</u>
A bag	sh.10,000
Carrots	sh.1,000
A belt	sh.3,000
A kilo of meat	sh.7,000
Blue band	sh.1,500

a) How much is a tin of blue band?
b) What is the cost of 2 carrots?
c) How much is a kg of meat?
d) If Ann has sh.2,000 and buys carrots. How much money will she remain with?
e) If Mummy had sh.10,000 and bought a bag. How much balance will she get back?
   - <u>Teacher will formulate more questions from the price lists.</u>
   - <u>Teacher will guide learners to get correct answers.</u>

36. ALGEBRA:

<u>Complete the mathematical statements sensibly.</u>

Example 1

$$\boxed{} \; X \; 2 = 6$$

Note: When a missing number is at the beginning and sign in multiplication, we divide the given numbers to get the answer.
So the statement will be,

$$\boxed{3} \, x \, 2 = 6$$

$$= 6 \div 2$$

$$= 3$$

$$5 \, x \, \boxed{2} = 10$$

$$= 10 \div 5$$

$$= 2$$

- Teacher will give as many examples to the learners as possible to help them grasp the concept.

- Teacher will give numbers to individuals, groups and then in books.

37. Activity

$$\boxed{} \; X \; 3 = 9 \qquad\qquad 4 \, x \, \boxed{} = 16$$

$$\boxed{} \; X \; 4 = 8 \qquad\qquad 5 \, x \, \boxed{} = 15$$

$$\boxed{} \; X \; 5 = 25 \qquad\qquad 2 \, x \, \boxed{} = 20$$

$$\boxed{} \; X \; 2 = 12 \qquad\qquad 3 \, x \, \boxed{} = 18$$

Note: <u>let the activity be related to the examples given.</u>

38.Complete the statements arranged vertically

$$\boxed{2}$$

$$\text{X } 6 \qquad = 12 \div \enclose{circle}{6}$$

$$\underline{\quad 12 \quad} \qquad = 2$$

$$5 \qquad = 15 \div \enclose{circle}{5}$$

$$\text{X } \underline{\boxed{}} \quad = 3$$

$$\underline{\quad 15 \quad}$$

- More of such work will be given on the chalkboard for individuals and groups.
- An exercise will be given to the learners in their books.

39. **Read the statement and form an algebraic statement then complete it correctly.**

a) Think of a number, multiply it by two and get 16 as your answer. What is the number?

$$8 \times 2 = 16$$

$$\boxed{} \quad = 16 \div 2$$

$$= 8$$

b) Think of a number, multiply it by 3. You will get 9 as your answer. What is the number?

$$3 \times \boxed{3} = 9$$

$$= 9 \div 3$$

$$= 3$$

40. **Completing statements involving divisions**.

a) $6 \div \boxed{3} = 2$

$$= 6 \div 2$$

$$= 3$$

Note: These are direct statements. To get the answer you need to divide right away and get a correct answer.

41. b) $\boxed{} \div 4 = 4$

Note:

Here, in such statements when the box is at the beginning and the sign is a division sign, you will have to multiply because you are looking for a bigger number.

So, $\boxed{16} \div 4 = 4$

= 4 x 4

= 16

c) $\boxed{18} \div 3 = 6$

= 6 x 3

= 18

- More examples will be given to the learners.

- More practice is needed because the concept is not easy.

- There is need for one to one teaching.

42.   <u>Read the statements, copy out the figures and complete correctly</u>.

a) Find the box if divided by 2 you get 8

$\boxed{}$ ÷   2   =   8

=   8 x 2

=   16

<u>Box is equal to sixteen.</u>

b)   Think of a number, divide it by 3. The answer is 3

$\boxed{9} \div 3 = 3$

= 3 x 3

= 9