LEGIT

EDUCATION

CONSULTANT

P.2 MATHEMATICS

LESSON NOTES AND ACTIVITIES

ISSUE 4

NAME:----------------------------

SUB-TOPIC: Table and circle filling involving addition.

Examples

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

3 + 2   3 + 0

Exercise
Complete
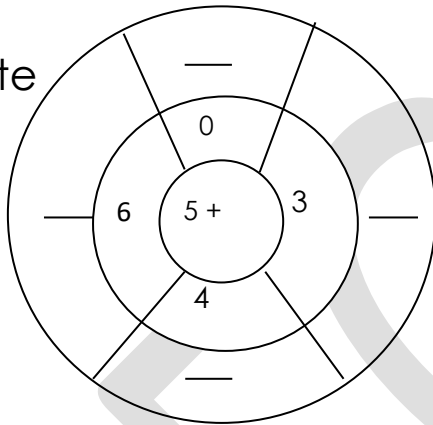
+	3	2	0	1	5	6	7	
7	—	—	—	—	—	—	—	

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

8 _ 2 = 6

14 – 6 = 8

```
  T   O
  9   8
- 2   5
  7   3
```

MN

Exercise

Work out:

```
   7   4          4   0          7   7
-  2   0        - 1   0        - 2   4
_____       _____        _____
```

15 - 5 =   10 – 2 =

```
   9   9          8   0          6   4
- 1   0        - 2   0        - 2   4
_____       _____        _____
```

SUB-TOPIC: Subtraction of hundreds tens and ones.

Examples

```
H  T  O          H  T  O
5  3  4          9  0  0
-  2  3        - 2  0  0
_____       _____
  5  1  1        7  0  0
```

3

Exercise

Work out:

H T O	**H T O**	**H T O**
2 0 0	8 0 0	4 3 6
-1 0 0	- 3 0 0	- 2 1 0
————	————	————

H T O	**H T O**	**H T O**
6 4 2	3 8 9	1 3 4
-5 4 0	-2 7 8	- 2 1
————	————	————

H T O	**H T O**	**H T O**
6 0 0	2 6 0	8 0 0
-1 0 0	- 4 0	-1 0 0
————	————	————

Subtraction with borrowing

<u>Examples</u>

5 3	3 7	3 4
- 2 4	- 1 9	- 2 6
————	————	————

Activity

4 6	3 5	5 6
- 1 7	- 1 8	- 2 7
————	————	————

4

```
  6   4              3   2
 -    5            - 2   5
 _____           _____
```

Word problems
Examples
Tom had 36 pens and gave Peter 18 pens.
How many pens did Tom remain with?

```
   3   6 |
  -1   8
  _____
```

Subtract 25 from 51

```
   5   1
  - 2   5
  _____
```

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?

SUB-TOPIC: Subtraction with borrowing
Examples

a)
```
    4  2
 -  1  6
 ─────────
    2  6
 ─────────
```

b)
```
    8  4
 -  1  5
 ─────────
    6  9
 ─────────
```

Exercice

```
    6  6          4  0          3  6
 -  2  7       -  2  4       -  2  9
 ─────────     ─────────     ─────────

 ─────────     ─────────     ─────────
```

```
    8  8          4  4          9  0
 -  2  9       -  1  6       -  2  5
 ─────────     ─────────     ─────────

 ─────────     ─────────     ─────────
```

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?
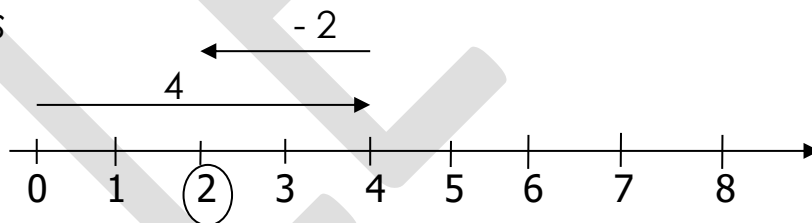
3. What is 60 less 20?

  1. Twenty take away five equal equals___

5. Cindy had 8 ckaes. She gave 2 cakes to her friend.
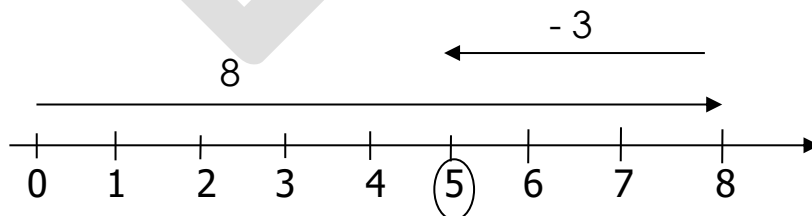   How many cakes were left?

SUB-TOPIC: Subtraction using a number line.
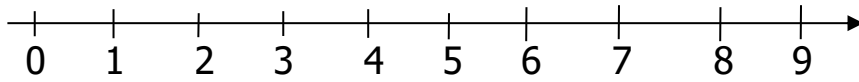*Examples*   - 2
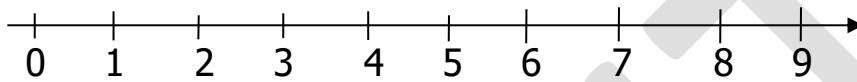4 – 2 = 2   4

    0   1 ② 3   4   5   6   7   8

                              - 3
8 – 3 = 5   8

    0   1   2   3   4 ⑤ 6   7   8

Exerice

Subtract these.

5-2 =

```
+----+----+----+----+----+----+----+----+----+--->
0    1    2    3    4    5    6    7    8    9
```

6-2 =

```
+----+----+----+----+----+----+----+----+----+--->
0    1    2    3    4    5    6    7    8    9
```

4-3 =

```
+----+----+----+----+----+----+----+----+----+--->
0    1    2    3    4    5    6    7    8    9
```

9-2=

```
+----+----+----+----+----+----+----+----+----+--->
0    1    2    3    4    5    6    7    8    9
```
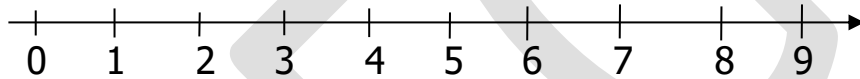
<u>SUB-TOPIC</u>: Subtraction in tables and cirles.

example

$$10 - 3 = 7$$

$$10 - 5 = 5$$ $$10 - 8 = 2$$

(Circle diagram: center 10 +, with 3, 5, 8, 4)

$$10 - 4 = 6$$

Exercise

Complete

-	3	2	1	0	6	7
12	—	—	—	—	—	—

(Oval diagram: center 9 -, with 0, 9, 5, 3)

SUB- TOPIC: Multiplication of one digit number horizontally and vertically.

Examples

2 x 3 = 6
⌒⌒⌒ ⌒⌒⌒

$$\begin{array}{r} 2 \\ \times\ 5 \\ \hline 1\ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times\ 3 \\ \hline 9 \\ \hline \end{array}$$

2 x 7 = 14

Exercise

Work out these:

3 x 4 =   5 x 2 =

6 x 1 =   8 x 1 =

$$\begin{array}{r} 4 \\ \times\ 2 \\ \hline \\ \hline \end{array}$$ $$\begin{array}{r} 6 \\ \times\ 3 \\ \hline \\ \hline \end{array}$$ $$\begin{array}{r} 8 \\ \times\ 3 \\ \hline \\ \hline \end{array}$$ $$\begin{array}{r} 5 \\ \times\ 5 \\ \hline \\ \hline \end{array}$$

```
    9            6            2            4
x   6        x   6        x   6        x   1
  ─────        ─────        ─────        ─────
```

SUB-TOPIC: Multiplication by 2 and 3.
Examples

```
a)   1  2        b) 3   2
   x    2           x    3
   ──────           ──────
```

Exercise
Work out:

```
    1  3        b) 2   2         4   0
  x    2           x    2        x    2
  ──────           ──────        ──────
```

```
    3  3        b) 1   0         1   2
  x    3           x    2        x    4
  ──────           ──────        ──────
```

```
    2  0        b) 5   0
  x    3           x    2
  ──────           ──────
```

<u>SUB-TOPIC</u>: Multiplication of 2 and 3 digit numbers by one digit number.

<u>Examples</u>

```
  2  4          1  1  0
 x  2          x     4
 ----          --------
  4  8          4  4  0
 ----          --------
```

Exercise

Workout:

```
  2  0  2          2  0  0          4  0  1
 x     2          x     3          x     3
 --------          --------          --------

 --------          --------          --------
```

```
  6  0  0          6  2  1          4  0  1
 x     2          x     2          x     3
 --------          --------          --------

 --------          --------          --------
```

<u>SUB-TOPIC</u>: Table and circle filling involving multiplication.

<u>Examples</u>

x	2	3	4	5	6
2	4	6	8	10	12

2 x 2 = 4

2 x 3 = 6

2 x 4 = 8

2 x 5 = 10

2 x 6 = 12

Multiply

x	3
3	-
4	-
5	-
6	-
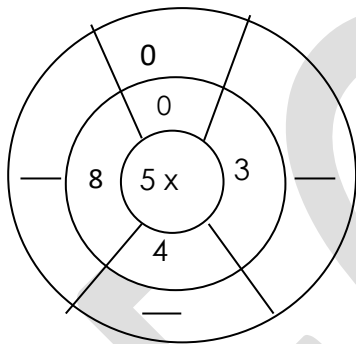
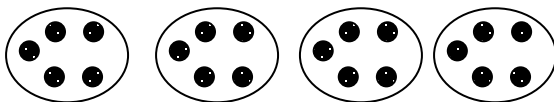SUB-TOPIC: Multiplication of numbers involving words.

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?
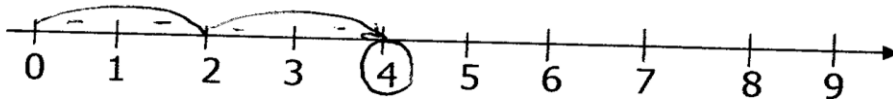
$4 \times 5 = 20$ fingers

14

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.
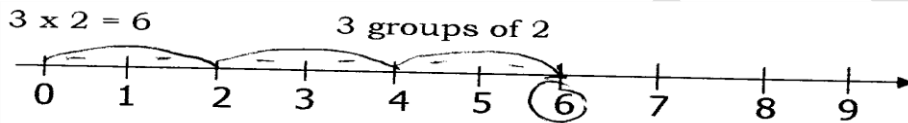
SUB-TOPICS: Multiplication on a number line.

Examples

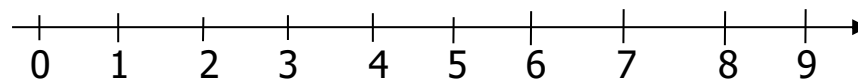2 x 2 = 4   2 groups of 2
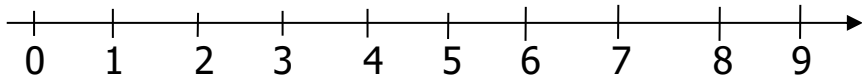

3 x 2 = 6   3 groups of 2

Exercise
Work out:

2 x 4 =

3 x 3 =

4 x 1 =


```
+---+---+---+---+---+---+---+---+---+---→
0   1   2   3   4   5   6   7   8   9
```

2 x 4


```
+---+---+---+---+---+---+---+---+---+---→
0   1   2   3   4   5   6   7   8   9
```
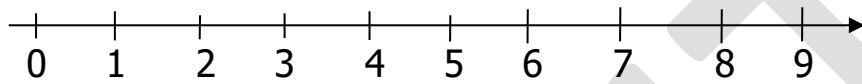
SUB-TOPIC: Division of one and 2 digits numbers horizontally.

Examples

a)   4 ÷ 2 = 2

b)   16 ÷ 4 = 4

Exercise

Work out:

$9 \div 3 =$ $6 \div 2 =$ $4 \div 4 =$

$10 \div 2 =$ $12 \div 3 =$ $16 \div 2 =$

$20 \div 5 =$

SUB-TOPIC: Long division of 2 digits

Examples

1)
$$
\begin{array}{r}
1\ 2 \\
2\overline{)2\ 4}
\end{array}
$$
       $2 \div 2 = 1$
       $4 \div 2 = 2$

2)
$$
\begin{array}{r}
3\ 2 \\
3\overline{)9\ 6}
\end{array}
$$
       $9 \div 3 = 3$
       $6 \div 3 = 2$

Exercise

Work out

$2\overline{)2\ 0}$ $2\overline{)4\ 4}$ $2\overline{)6\ 4}$

$$3 \overline{)15} \qquad\qquad 4 \overline{)16}$$

SUB-TOPIC: Division with remainders

Examples

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

b) $13 \div 2 = 6 \, r \, 1$

Exercise
Divide

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

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

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

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.

SUB-TOPIC: Division by repeated subtraction.

Examples

a) $9 \div 3 = 3$

$9 - 3 = 6$
$6 - 3 = 3$
$3 - 3 = 0$

b) $10 \div 2 = 5$
$10 - 2 = 8$ step 1
$8 - 2 = 6$ step 2
$6 - 2 = 4$ step 3
$4 - 2 = 2$ step 4
$2 - 2 = 0$ step 5

Try these

$15 \div 3 =$ $\qquad$ $8 \div 4 =$ $\qquad$ $10 \div 5 =$ $\qquad$ $14 \div 2 =$

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

SUB-TOPIC: Division in tables and circles.

Examples

$12 \div 6 = 2$

$12 \div 6 = 2$

$12 \div 4 = 3$

$12 \div 2 = 6$

$12 \div 3 = 4$

(inner circle: 4, $12 \div$, 2, 6, 3)
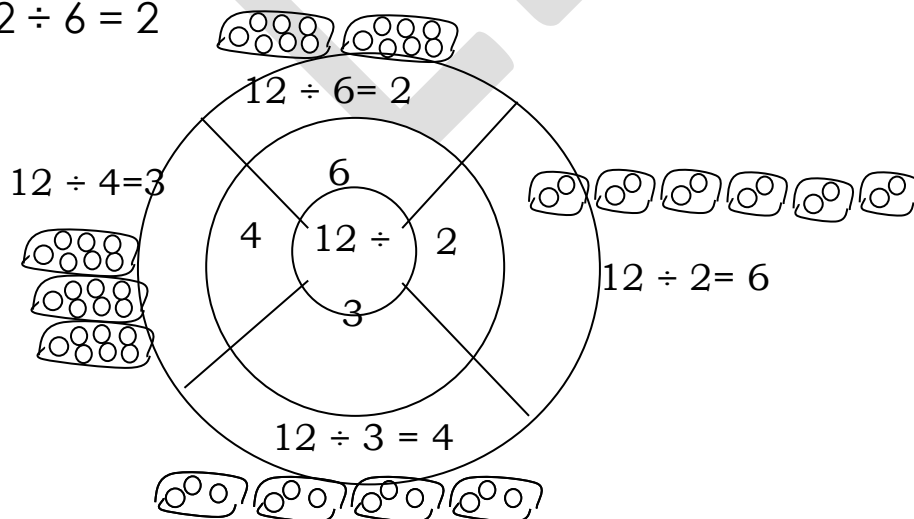
Exercise

÷	2	5	4	10	20
20	-	-	-	-	-

GRAPHS
<u>Picto graphs</u>
Use the graphs below to answer the questions.

Alfred   ⊕

Pauline   ⊕   ⊕

Martin

Stella   ⊕   ⊕

Mary   ⊕   ⊕   ⊕   ⊕   ⊕

1. How many balls has Stella?
   Stella has two balls
2. How many pupils have balls?
   Four pupils have balls
3. Who has less balls?
   <u>   Alfred   </u>
4. Name the child who got 8 balls.
   <u>No girl</u>

Activity
Use the graph below to answer questions
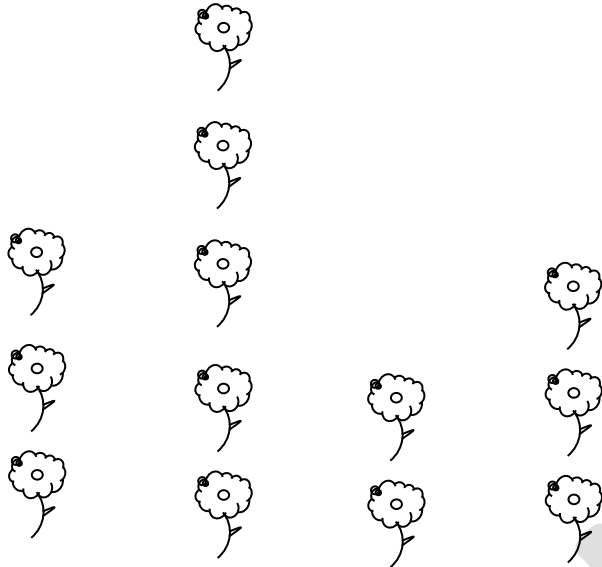
Ronah   Rodah   Fiona   Sophie

a) Who has many flowers?

b) Who have the same number of flowers?

c) Fiona has _____ flowers

d) How many children are shown on the graph?

e) How many flowers do they have altogether?

24

BAR GRAPH

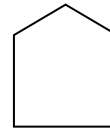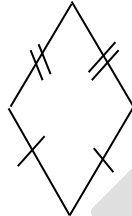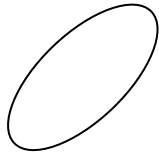Use the graph below to answer questions.
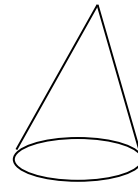
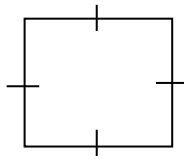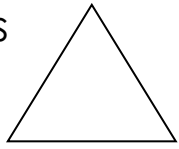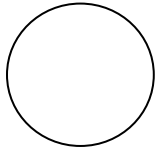Pupils collected books as below.
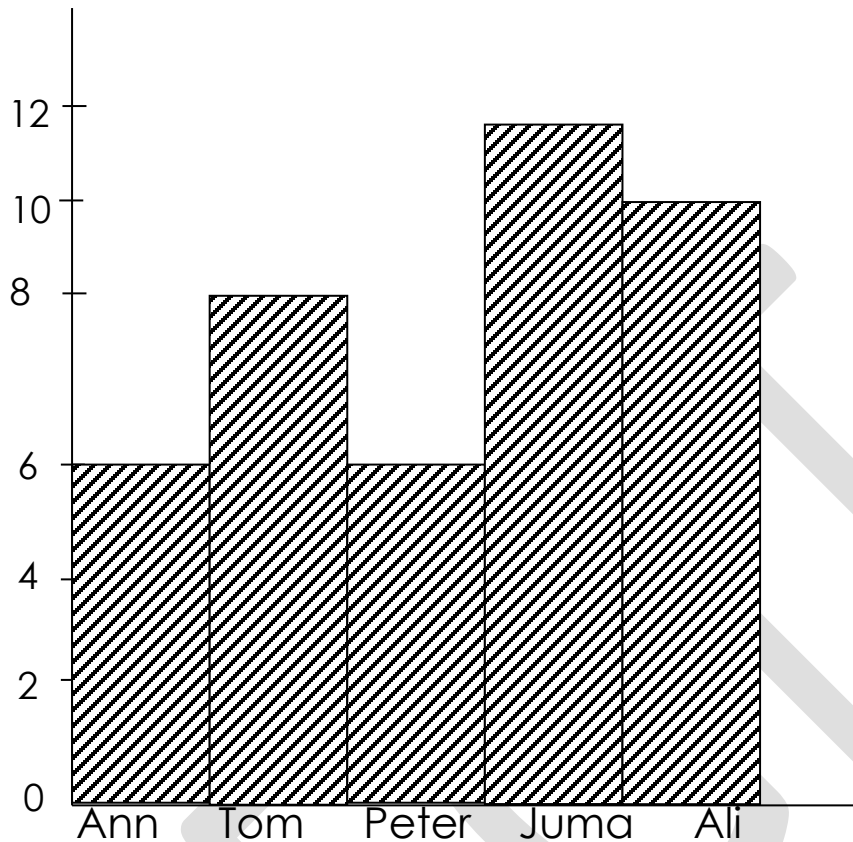
a) How many pupils collected books?

b) Who collected the highest number of books?

c) Name the child who collected no book.

d) _____ and _____ collected the same number of books.

GEOMETRY

Shapes

Naming shapes

kite

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?
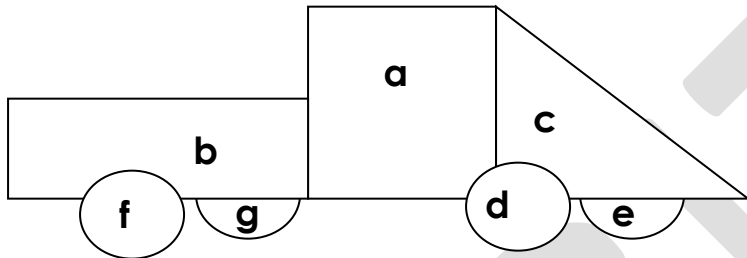
6. Name the shape of the following objects;
   a) door   b) an orange   c) a wheel

Exercise two

1. Identify the shapes on Mr. Olum's car

a_____

g_____

b_____

d_____

c_____

e_____

f_____

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

   b) rectangle