

PRIMARY THREE

MATHEMATICS

WORKBOOK

TERM III 2023

TOPIC: BREAKDOWN

THEME: ELEVEN, BASIC TECHNOLOGY

TOPIC LENGTH

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

THEME: TWELVE, ENERGY

TOPIC: ALGEBRA

- ❖ Use of letters
- ❖ Collecting capacity
- ❖ Perimeter
- ❖ Subtraction

❖ Word sum

GEOMETRY

❖ Perimeter and area

❖ Solid shapes

❖ Cubes

LESSON 1: Length

Date :

| Mental work | | Corrections |
|-------------|----------|-------------|
| 1. | 4 x 2 = | |
| 2. | 5 x 2 = | |
| 3. | 6 x 2 = | |
| 4. | 7 x 2 = | |
| 5. | 13 x 2 = | |

Length

This is how long or short an object is.

Measuring length is about measuring distance.

The basic unit for measuring length is a metre.

LEARNER'S ACTIVITY

Measure the following things in class

1. Exercise book = _____

| | | | |
|-----|-------------|---|-------|
| 2. | Desk tops | = | _____ |
| 3. | Text books | = | _____ |
| 4. | Work books | = | _____ |
| 5. | Shoes | = | _____ |
| 6. | Windows | = | _____ |
| 7. | Door | = | _____ |
| 8. | White board | = | _____ |
| 9. | Shelf | = | _____ |
| 10. | Their feet | = | _____ |

LESSON 2: Length

Date : _____

Mental work

| | | Corrections |
|----|---------------|-------------|
| 1. | $6 \div 2 =$ | |
| 2. | $12 \div 2 =$ | |
| 3. | $30 \div 2 =$ | |
| 4. | $2 \div 2 =$ | |
| 5. | $9 \div 2 =$ | |

Introducing the units

Metric system

Km Hm Dm M dm cm mm

1 m = 100cm

1 dm = 10cm

Converting different units changing to cm

| | |
|---|---|
| (a) 2m $1\text{m} = 100\text{cm}$ $2\text{m} = ?$ $= 100 \times 2$ <u>$= 200\text{cm}$</u> | (b) 4dm $1\text{dm} = 10\text{cm}$ $4\text{dm} = ?$ $= 10 \times 4$ <u>$= 40\text{cm}$</u> |
|---|---|

| LEARNER'S ACTIVITY | | | | | | | | | | | | | | | | | | | |
|--------------------|---|-------|---|---|---|-----|--|-----|--|--|----|-----|--|--|--|--|-----|--|-----|
| | Change the following to cm | | | | | | | | | | | | | | | | | | |
| (a) | <div>2m</div> <div>(b) 6m</div> | | | | | | | | | | | | | | | | | | |
| (c) | <div>7m</div> <div>(d) 5m</div> | | | | | | | | | | | | | | | | | | |
| (e) | <div>4dm</div> <div>(f) 6m</div> | | | | | | | | | | | | | | | | | | |
| | Complete the table below:- <table border="1"> <tbody> <tr> <td>Metre</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td></td> <td>6</td> <td></td> <td></td> </tr> <tr> <td>Cm</td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td>600</td> <td></td> <td>700</td> </tr> </tbody> </table> | Metre | 1 | 2 | 3 | 4 | | 6 | | | Cm | 100 | | | | | 600 | | 700 |
| Metre | 1 | 2 | 3 | 4 | | 6 | | | | | | | | | | | | | |
| Cm | 100 | | | | | 600 | | 700 | | | | | | | | | | | |

LESSON 3:

Date : _____

Mental work

| Find the value of the following | Corrections |
|---------------------------------|-------------|
| 1. 3 tens = | |
| 2. 3 ones = | |
| 3. 7 twos = | |
| 4. 8 fours = | |
| 5. 2 tens = | |

Adding length

Examples:

| | | | | | |
|----|----------|-----------|----|----------|-----------|
| 1. | M | cm | 2. | m | dm |
| | 2 | 45 | | 10 | 4 |
| | + 6 | 36 | | + 14 | 7 |
| | | | | | |

Work out

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

| | |
|----------|-----------|
| M | cm |
| 1 | 35 |
| + 2 | 10 |
| | |

| | LEARNER'S ACTIVITY | |
|----|--|---|
| 1. | <div>M cm</div> <div>3 42</div> <div>+ 4 17</div> <div>_____</div> <div>_____</div> | <div>6. M cm</div> <div>2 4 20</div> <div>+ 19 15</div> <div>_____</div> <div>_____</div> |
| 2. | <div>M cm</div> <div>4 25</div> <div>+ 4 10</div> <div>_____</div> <div>_____</div> | <div>7. M cm</div> <div>25 24</div> <div>+ 12 16</div> <div>_____</div> <div>_____</div> |
| 3. | <div>M cm</div> <div>7 25</div> <div>+ 3 16</div> <div>_____</div> <div>_____</div> | <div>8. M cm</div> <div>8 35</div> <div>+ 2 49</div> <div>_____</div> <div>_____</div> |
| 4. | <div>M cm</div> <div>9 47</div> <div>+ 6 24</div> <div>_____</div> <div>_____</div> | <div>9. M cm</div> <div>10 4</div> <div>+ 14 7</div> <div>_____</div> <div>_____</div> |
| 5. | <div>M cm</div> <div>16 10</div> <div>+ 6 10</div> <div>_____</div> <div>_____</div> | |

- 10 Lubega's mat is 2m 57cm long and Nalubega's Mat is 3m 36cm long. Find the total length of the two mats?

LESSON 4:

Date : _____

Mental work

| | Corrections |
|-------------------|-------------|
| 1. $3 \times 3 =$ | |
| 2. $5 \times 3 =$ | |
| 3. $6 \times 3 =$ | |
| 4. $4 \times 3 =$ | |
| 5. $8 \times 3 =$ | |

Subtracting length

Examples:

| | | |
|----|----------|-----------|
| | M | cm |
| 1. | 6 | 40 |
| | - 6 | 10 |
| | <hr/> | |
| | <hr/> | |

| | | | | |
|----|---|----|------|----|
| 2. | Mulenga’s sugarcane was 2m 85cm long. He cut off 1m 10cm and gave it to his young brother. What length of the sugarcane was left? | | | |
| | M | cm | | |
| | 2 | 85 | | |
| | -1 | 10 | | |
| | | | | |
| | | | | |
| | LEARNER’S ACTIVITY | | | |
| 1. | M | cm | 6. M | cm |
| | 7 | 75 | 15 | 75 |
| | -4 | 35 | -8 | 22 |
| | | | | |
| | | | | |
| 2. | M | cm | 7. M | cm |
| | 7 | 15 | 9 | 40 |
| | -6 | 13 | - 3 | 20 |
| | | | | |
| | | | | |
| 3. | M | cm | 8. M | cm |
| | 6 | 50 | 22 | 45 |
| | - 4 | 30 | - 10 | 15 |
| | | | | |
| | | | | |

| | | | |
|-----|---|----|---|
| 4. | M cm 4 60 -3 46 <hr/> <hr/> | 9. | M cm 4 14 + 3 12 <hr/> <hr/> |
| 5. | M cm 10 25 -7 16 <hr/> <hr/> | | |
| 10. | Nakandi had a string of 8m 47cm. She cut off 2m 16cm What length of the string was left. | | |

LESSON 5:

Date : _____

Mental work

| | Corrections |
|-------------|-------------|
| 1. 9 x 3 = | |
| 2. 12 x 3 = | |
| 3. 11 x 3 = | |
| 4. 21 x 3 = | |
| 5. 27 x 3 = | |

Mass

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

The gram is the basic unit for mass.

ACTIVITY

Learners weighing themselves using a weighing scale.

LESSON 6:

Date : _____

Mental work

| | Corrections |
|-------------------------|-------------|
| 1. M5 = ____, / ____, / | |
| 2. _____ | |
| 3. M2 = ____, / ____, / | |
| 4. _____ | |
| 5. M6 = ____, / ____, / | |
| _____ | |
| M3 = ____, / ____, / | |
| _____ | |
| M10 = ____, / ____, / | |
| _____ | |

Changing from kg to g.

Kg Hg Dg g dg cg mg

1kg = 1000g

| | | | | | | |
|-----------------|------|---|------|---|------|---|
| Kilogram | 1 | 2 | 3 | 4 | | 6 |
| Grams | 1000 | | 3000 | | 5000 | |

1. 4kg to gms

1kg = 1000g

2. 2kg 300g

1kg = 1000g

| | | |
|-----|--|---|
| | $4\text{kg} = (4 \times 1000)$ $= \underline{\underline{4000\text{g}}}$ | $2\text{kg } 300\text{g} = (2 \times 1000 + 300)$ $= 2000 + 300$ $= \underline{\underline{2300\text{g}}}$ |
| | LEARNER'S ACTIVITY | |
| | Change the following to g | |
| (a) | 2kg | (b) $\frac{1}{2}$ kg |
| (c) | 3kg | (d) 5kg |
| (e) | 4kg | 7 kg |

LESSON 7:

Date : _____

Mental work

| | | Corrections |
|----|----------------|-------------|
| 1. | $9 \times 4 =$ | |
| 2. | $7 \times 4 =$ | |
| 3. | $1 \times 4 =$ | |
| 4. | $0 \times 4 =$ | |
| 5. | $40 \div 4 =$ | |

Changing from g to Kg.

Example

Change 5000g to Kg

$$\begin{aligned} 1\text{kg} &= 1000\text{g} \\ &= 5000\text{g} \\ &= \underline{5000} \\ &\quad \underline{1000} \\ &= \underline{\underline{5\text{Kg}}} \end{aligned}$$

LEARNER'S ACTIVITY

Change the following to Kilograms (Kg)

(a) 3000g

(b) 6000g

| | | |
|-----|--------|-----------|
| | | |
| (c) | 1000g | (d) 7000g |
| (e) | 5000kg | |

LESSON 8:

Date : _____

Mental work

| | | Corrections |
|----|-------|-------------|
| 1. | 1 x 1 | |
| 2. | 2 x 2 | |
| 3. | 3 x 3 | |
| 4. | 4 x 4 | |
| 5. | 5 x 5 | |

Adding mass

| Kg | g |
|-------|-----|
| 32 | 630 |
| + 15 | 180 |
| <hr/> | |

| 2. | Kg | g |
|-------|------|-----|
| | 68 | 550 |
| | + 34 | 600 |
| <hr/> | | |

Word sums

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

| Kg | g |
|-------|-----|
| 5 | 150 |
| + 3 | 250 |
| <hr/> | |
| 8 | 400 |

LEARNER'S ACTIVITY

| 1. | Kg | g |
|-------|-----|-----|
| | 2 | 250 |
| | + 3 | 150 |
| <hr/> | | |

| 6. | Kg | g |
|-------|------|-----|
| | 13 | 240 |
| | + 41 | 300 |
| <hr/> | | |

| 2. | Kg | g |
|-------|-------|-----|
| | 104 | 420 |
| | + 187 | 350 |
| <hr/> | | |

| 7. | Kg | g |
|-------|------|-----|
| | 85 | 141 |
| | + 60 | 289 |
| <hr/> | | |

| | | | |
|----|---|-----|---|
| 3. | Kg g 2 150 + 4 450 <hr/> <hr/> | 8. | Kg g 33 241 + 10 269 <hr/> <hr/> |
| 4. | Kg g 13 630 + 43 280 <hr/> <hr/> | 9. | Kg g 96 145 + 56 874 <hr/> <hr/> |
| 5. | Kg g 23 340 + 42 600 <hr/> <hr/> | 10. | Kg g 99 210 + 21 85 <hr/> <hr/> |

LESSON 9:

Date : _____

Mental work

| | | Corrections |
|----|-----------|-------------|
| 1. | 6 x 6 = | |
| 2. | 7 x 7 = | |
| 3. | 8 x 8 = | |
| 4. | 9 x 9 = | |
| 5. | 10 x 10 = | |

Subtracting mass

Examples

| | |
|-----------|----------|
| Kg | g |
| 7 | 800 |
| - 3 | 300 |
| <hr/> | |
| 4 | 500 |
| <hr/> | |

Word sums

Namono had 5kg 750g of salt. She gave 3kg 259 to her mother. How much salt did she remain with?

| | |
|-----------|----------|
| Kg | g |
| 5 | 750 |
| - 3 | 250 |
| <hr/> | |
| 8 | 400 |
| <hr/> | |

LEARNER'S ACTIVITY

1. **Kg g**

| | |
|-------|-----|
| 5 | 150 |
| - 3 | 250 |
| <hr/> | |
| <hr/> | |

6. **Kg g**

| | |
|-------|-----|
| 78 | 855 |
| - 24 | 355 |
| <hr/> | |
| <hr/> | |

2. **Kg g**

| | |
|-------|-----|
| 75 | 640 |
| -22 | 400 |
| <hr/> | |
| <hr/> | |

7. **Kg g**

| | |
|-------|-----|
| 57 | 600 |
| + 21 | 400 |
| <hr/> | |
| <hr/> | |

3. **Kg g**

| | |
|-------|-----|
| 59 | 423 |
| - 39 | 211 |
| <hr/> | |
| <hr/> | |

8. **Kg g**

| | |
|-------|-----|
| 81 | 680 |
| + 22 | 350 |
| <hr/> | |
| <hr/> | |

| | | | | | |
|----|-----------|----------|-----|-----------|----------|
| 4. | Kg | g | 9. | Kg | g |
| | 48 | 160 | | 55 | 680 |
| | -24 | 340 | | - 14 | 420 |
| | _____ | | | _____ | |
| | _____ | | | _____ | |
| 5. | Kg | g | 10. | Kg | g |
| | 55 | 680 | | 95 | 630 |
| | -14 | 420 | | - 84 | 110 |
| | _____ | | | _____ | |
| | _____ | | | _____ | |

LESSON 10:

Date : _____

Mental work

| Find the value | | Corrections |
|----------------|-------------------|-------------|
| 1. | 6 twos = | |
| 2. | 4 fives = | |
| 3. | 2 tens = | |
| 4. | 7 nines = | |
| 5. | 3 groups of six = | |

Capacity

The ability to hold or contain.

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

Comparing litres and half litres.

Using bottles of litres and half litres

How many $\frac{1}{2}$ litre cups of water will fill a 10 litre pail?

How many $\frac{1}{2}$ litre bottles will fill a 10 litre container?

How many 1 litre jugs will fill 5 litre jerry can?

1 litre in a jerry can = 1 litre jug

5 litres in a jerry can = 1 x 5 (litre jugs)
= 5 litre jugs.

How many $\frac{1}{2}$ litre jug will fill a 6 container.

1 litre = 2 half litres

6 litres = 2 x 6 half litre jugs.
= 12 half litre jugs

How many 1 litre cups will fill a 14 litre jerry can.

LEARNER'S ACTIVITY

1. How many 10 litre containers will fill a 20 litre jerry can?

| | |
|----|---|
| | |
| 2. | How many 5 litre jerrycans will fill a 20 litre jerry can? |
| 3. | How many Tumpeco mugs will fill a 1litre pack. |
| 4. | How many 1 litre cups will fill a 14 litre jerry can. |
| 5. | How many 1 litre bottles will fill a 20 litre jerry can. |
| 6. | How many 1 litre jugs will fill 5 containers of 20 jerrycans? |

7. How many $\frac{1}{2}$ litre cups will fill a 10 litre jerrycan?

LESSON 11:

Date : _____

Mental work

| How many days do the following weeks have? | | Corrections |
|--|-----------|-------------|
| 1. | 3 weeks = | |
| 2. | 4weeks = | |
| 3. | 5weeks= | |
| 4. | 7 weeks= | |
| 5. | 10 weeks= | |

Converting litres to centiliters.

Example

Convert 4 litres to cl

1 litre = 100cl

$$\begin{aligned} 4l &= 4 \times 100 \\ &= 400 \text{ cl} \end{aligned}$$

LEARNER'S ACTIVITY

| | | |
|----|--|------------|
| | Change the following to centiliters | |
| 1. | 5 litres | |
| 2. | 9 litres | 100 litres |
| 4. | 4 litres | 6 litres |

LESSON 12:**Date :** _____**Mental work**

| How many days do the following weeks have? | | Corrections |
|--|----------------|-------------|
| 1. | $4 \times 9 =$ | |
| 2. | $9 \div 9 =$ | |
| 3. | $0 \times 9 =$ | |
| 4. | $5 \times 9 =$ | |
| 5. | 7×9 | |

Converting centiliters to litres

500cl to l

1 litre = 100cl

? = 500cl

= $500 \div 100\text{cl}$ = 5l**LEARNER'S ACTIVITY****Change the following to litres**

1. 100cl

2. 200cl

3. 300 cl

| | |
|----|--------|
| | |
| 4. | 500cl |
| 5. | 3000cl |

LESSON 13:

Date : _____

Mental work

| | Corrections |
|-------------|-------------|
| 1. 1 x 12 = | |
| 2. 3 x 12 = | |
| 3. 4 x 12 = | |
| 4. 2 x 12 = | |
| 5. 0 x 12 = | |

Adding capacity

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

$$\begin{array}{r} 850 \text{ litres} \\ + 350 \text{ litres} \\ \hline 1200 \text{ litres} \\ \hline \end{array}$$

LEARNER'S ACTIVITY

1.

$$\begin{array}{r} 150 \text{ litres} \\ + 350 \text{ litres} \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 350 \text{ litres} \\ + 650 \text{ litres} \\ \hline \\ \hline \end{array}$$

| | | | | | | | | | | | | | | | | | | |
|-----|---|-------------------|---|--|---------------|-------------------|--|---|----|--|-----|----|--|-------|--|--|-------|--|
| 3. | 120 litres + 150 litres <hr/> <hr/> | 4. | 690 litres + 850 litres <hr/> <hr/> | | | | | | | | | | | | | | | |
| 5. | 435 litres + 146 litres <hr/> <hr/> | 6. | <table><tr><td></td><td>Litres</td><td>centlitres</td></tr><tr><td></td><td>3</td><td>25</td></tr><tr><td></td><td>+ 2</td><td>60</td></tr><tr><td></td><td colspan="2"><hr/></td></tr><tr><td></td><td colspan="2"><hr/></td></tr></table> | | Litres | centlitres | | 3 | 25 | | + 2 | 60 | | <hr/> | | | <hr/> | |
| | Litres | centlitres | | | | | | | | | | | | | | | | |
| | 3 | 25 | | | | | | | | | | | | | | | | |
| | + 2 | 60 | | | | | | | | | | | | | | | | |
| | <hr/> | | | | | | | | | | | | | | | | | |
| | <hr/> | | | | | | | | | | | | | | | | | |
| 7. | 247 litres + 352 litres. | | | | | | | | | | | | | | | | | |
| 8. | 17 litres + 18 litres. | | | | | | | | | | | | | | | | | |
| 9. | 109 litres + 452 litres | | | | | | | | | | | | | | | | | |
| 10. | 450 litres + 350litres + 660litres | | | | | | | | | | | | | | | | | |

LESSON 14:

Date : _____

Mental work

| Work out | Corrections |
|------------------|-------------|
| 1. 2 tens x 3 = | |
| 2. 6 tens x 3 = | |
| 3. 10 tens x 2 = | |
| 4. 8tens x 3 = | |

Subtracting capacity

Examples

1.

$$\begin{array}{r} 48 \text{ litres} \\ - 23 \text{ litres} \\ \hline 25 \text{ litres} \end{array}$$

2.

$$\begin{array}{r} 436 \text{ litres} \\ - 57 \text{ litres} \\ \hline \end{array}$$

LEARNER'S ACTIVITY

1.

$$\begin{array}{r} 56 \text{ litres} \\ - 32 \text{ litres} \\ \hline \\ \hline \end{array}$$

2.

$$\begin{array}{r} 73 \text{ litres} \\ - 51 \text{ litres} \\ \hline \\ \hline \end{array}$$

3.

$$\begin{array}{r} 27 \text{ litres} \\ - 18 \text{ litres} \\ \hline \\ \hline \end{array}$$

4.

$$\begin{array}{r} 38 \text{ litres} \\ - 24 \text{ litres} \\ \hline \\ \hline \end{array}$$

| | | | |
|----|--|-----|---|
| 5. | $\begin{array}{r} 247 \text{ litres} \\ - 25 \text{ litres} \\ \hline \\ \hline \end{array}$ | 6. | $\begin{array}{r} 475 \text{ litres} \\ - 46 \text{ litres} \\ \hline \\ \hline \end{array}$ |
| 7. | $\begin{array}{r} 569 \text{ litres} \\ - 34 \text{ litres} \\ \hline \\ \hline \end{array}$ | 8. | $\begin{array}{r} 569 \text{ litres} \\ - 54 \text{ litres} \\ \hline \\ \hline \end{array}$ |
| 9. | $\begin{array}{r} 610 \text{ litres} \\ 200 \text{ litres} \\ \hline \\ \hline \end{array}$ | 10. | $\begin{array}{r} 573 \text{ litres} \\ - 222 \text{ litres} \\ \hline \\ \hline \end{array}$ |

LESSON 15:

Date : _____

Mental work

| | Corrections |
|-------------------|-------------|
| 1. $36 \div 12 =$ | |
| 2. $24 \div 12 =$ | |
| 3. $60 \div 12 =$ | |
| 4. $48 \div 12 =$ | |
| 5. $72 \div 12 =$ | |

Collecting like terms

1. Kevin has 3 shirts and Amos has 4 shirts altogether
 $(3 \text{ shirts} + 4 \text{ shirts}) = 7 \text{ shirts}$

3 shirts = 38 and 4 shirts = 45

So both boys have $35 + 45 = 75$.

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

5 balls plus 4 balls equals 9 balls

Let b stand for a ball

$$5b + 4b = 9b$$

LEARNER'S ACTIVITY

1. $m + m + m =$

2. $x + x =$

3. $y + y + y + y =$

4. $m + m + m + m + m + m + m =$

| | |
|----|---------------------------|
| 5. | $t + t + t + t + t + t =$ |
| 6. | $5b + 9b =$ |
| 7. | $2m + 4m =$ |
| 8. | $4s + 3s =$ |
| 9. | $9g + 11g =$ |

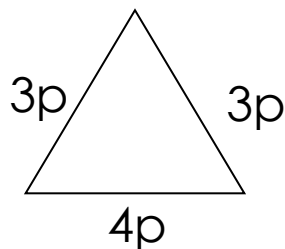
LESSON 16:

Date : _____

Mental work

| | | Corrections |
|----|------------|-------------|
| 1. | 1 seven = | |
| 2. | 3 sevens = | |
| 3. | 2 sixes = | |
| 4. | 2 eights = | |
| 5. | 6 nines = | |

Finding perimeter using unknown



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

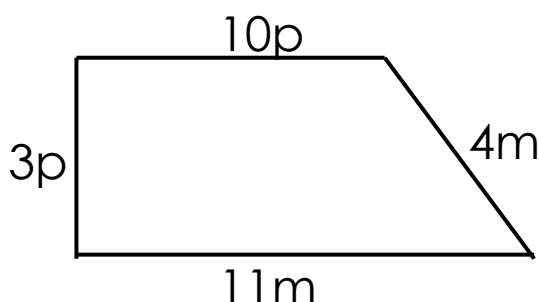
$$P = 5p + 4p$$

$$= \underline{\underline{9p}}$$

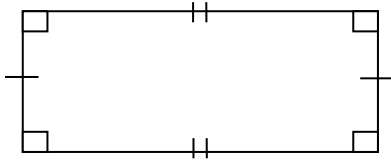
LEARNER'S ACTIVITY

Find the perimeter of the following polygons

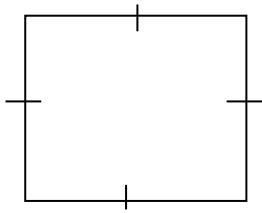
1.



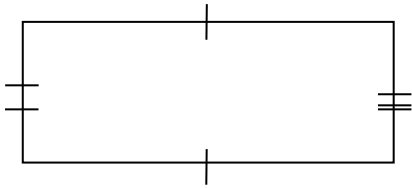
2.



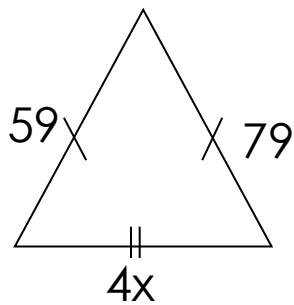
3.



4.



5.



LESSON 17:

Date : _____

Mental work

| | | Corrections |
|----|---------------|-------------|
| 1. | $6 \div 6 =$ | |
| 2. | $12 \div 6 =$ | |
| 3. | $18 \div 6 =$ | |
| 4. | $30 \div 6 =$ | |
| 5. | $66 \div 6 =$ | |

More about colleting like terms

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

Kalyango - 8 exercise books, 2 pens

Tavanga - 12 exercise books, 3 pens

Altogether - $(8 + 12)$ exercise books, $(2 + 3)$ pens
 $= 20$ exercises + 5 pens.

Let ***b*** stand for exercise books and ***p*** for pens.

Kalyango has $(8b$ and $2p)$

Tavanga has $(12b + 3p)$

Altogether $8b + 2p + 12b + 3p$
 $= 8b + 12b + 2p + 3p$

$$= 20b + 5p$$

LEARNER'S ACTIVITY

Collecting like terms

| | | |
|----|-------------------------|---------------------|
| 1. | $a + b + a + b$ | $2g + 3h + 5g + 2h$ |
| 2. | $2r + 3t + r + 2t + 2r$ | $2x + 9x + 12s$ |
| 3. | $8p + 2b + 12b + 3p$ | $5o + 2o + 9s$ |
| 4. | $2p + 2m + 2m + 12p$ | $9y + 3q + 2y + 3q$ |
| 5. | $11n + 10m + 4m + 3n$ | $2c + 8c + 5a + 2a$ |

LESSON 18:

Date : _____

Mental work

| | Corrections |
|-------------------|-------------|
| 1. $4 \times 4 =$ | |
| 2. $2 \times 4 =$ | |
| 3. $8 \times 4 =$ | |
| 4. $5 \times 4 =$ | |
| 5. $1 \times 4 =$ | |

Substitution

Let us replace and workout.

If $P = 3$

What is the value of $P + 4$?

$$\begin{aligned} P + 4 &= 3 + 4 \\ &= 7 \end{aligned}$$

If $m = 5$

What is the value of $6 + m$

$$\begin{aligned} 6 + m &= 6 + 5 \\ &= 11 \end{aligned}$$

| | LEARNER'S ACTIVITY | |
|-----------|--|--------------|
| 1. | If $P = 6$ and $K = 12$, Find the value of | |
| | (a) $P - 2$ | (c) $30 - k$ |
| | (b) $9 - p$ | |
| 2. | If $x = 3$, $y = 4$, $z = 5$, Find the value of; | |
| | (a) $x + y + z$ | (c) $y + z$ |
| | (b) $x + y$ | (d) $x + z$ |
| 3. | If $a = 2$, $b = 3$, $c = 4$, find the value of; | |
| | (a) $b - a$ | (c) $c = a$ |
| | (b) $c - b$ | |

LESSON 19:

Date : _____

Mental work

| | Corrections |
|--------------------|-------------|
| 1. $10 \times 3 =$ | |
| 2. $20 \times 3 =$ | |
| 3. $70 \times 3 =$ | |
| 4. $40 \times 3 =$ | |
| 5. $60 \times 3 =$ | |

Algebra

Finding the missing numbers involving addition.

Examples

1. $\square + 3 = 62.$ $a + 8 = 12$
 $\square = 6 - 3$ $a = 12 - 8$
 $\square = \underline{\underline{3a}} = \underline{\underline{4}}$

LEARNER'S ACTIVITY

1. $\square + 5 = 10$ 2. $a + 8 = 12$

| | | |
|----|-------------------------------|-------------------|
| 3. | $n + 1 = 8$ | 4. $x + 4 = 11$ |
| 5. | <input type="text"/> + 7 = 12 | 6. $m + 1 = 6$ |
| 7. | $Y + 9 = 12$ | 8. $w + 0 = 3$ |
| 9. | $b + 12 = 12$ | 10. $c + 10 = 15$ |

LESSON 20:

Date : _____

Mental work

| How many weeks are in | Corrections |
|--|-------------|
| 1. 42 days 2. 56 days 3. 63 days 4. 49 days 5. 21 days | |

Finding the missing numbers involving subtraction

1.

Examples

$$- 5 = 3$$

$$= 5 + 3$$

$$= \underline{\underline{8}} = \underline{\underline{20}}$$

(b)

$$- 12 = 8$$

$$= 8 + 12$$

LEARNER'S ACTIVITY

1.

$$- 2 = 1$$

2.

$$- 7 = 3$$

| | | |
|----|-------------------|----------------------|
| | | |
| 3. | $\square - 1 = 8$ | 4. $\square - 3 = 9$ |
| 5. | $\square - 5 = 8$ | 6. $r - 9 = 4$ |
| 7. | $k - 2 = 12$ | 8. $f - 8 = 15$ |
| 9. | $q - 10 = 17$ | 10. $a - 14 = 26$ |

| | | |
|--|--|--|
| | | |
|--|--|--|

LESSON 21:

Date : _____

Mental work

| Complete correctly | | Corrections |
|--------------------|-------------|-------------|
| 1. | $8 + 8 =$ | |
| 2. | $9 + 9 =$ | |
| 3. | $12 + 12 =$ | |
| 4. | $3 + 3 =$ | |
| 5. | $4 + 4 =$ | |

Finding the missing numbers involving multiplication.

Examples

1. $\square \times 2 = 10$
 $= 10 \div 2$
= 5

2. $3 \square = 12$
 $= 12 \div 3$
= 4

LEARNER'S ACTIVITY

| | | | |
|----|-------------------------------|----|-------------------------------|
| 1. | <input type="text"/> x 2 = 8 | 2. | <input type="text"/> x 2 = 16 |
| 3. | <input type="text"/> x 3 = 15 | 4. | <input type="text"/> x 4 = 12 |
| 5. | <input type="text"/> x 3 = 21 | 6. | 9 x <input type="text"/> = 36 |
| 7. | 2 x <input type="text"/> = 12 | 8. | 4 x <input type="text"/> = 16 |

9. $3 \times \square = 18$

10. $5 \times \square = 20$

LESSON 22:

Date : _____

Mental work

| | Corrections |
|---------------|-------------|
| 1. $19 - 1 =$ | |
| 2. $4 - 2 =$ | |
| 3. $11 - 2 =$ | |
| 4. $12 - 2 =$ | |
| 5. $9 - 5 =$ | |

Finding the missing numbers involving division.

Examples

1. $6 \div m = 3$

$m = 6 \div 3$

$m = 2$ $x = 5$

(b) $35 \div x = 7$

$x = 35 \div 7$

| | LEARNER'S ACTIVITY | |
|----|------------------------|--------------------|
| 1. | $8 \div \square = 4$ | 2. $15 \div b = 3$ |
| 3. | $24 \div r = 6$ | 4. $45 \div m = 5$ |
| 5. | $64 \div x = 7$ | 6. $63 \div c = 9$ |
| 7 | $84 \div \square = 12$ | 8. $96 \div a = 8$ |

| | | | |
|----|------------------|-----|-----------------|
| 9. | $48 \div y = 12$ | 10. | $72 \div z = 8$ |
| | | | |

LESSON 23:

Date : _____

Mental work

| Complete correctly | | Corrections |
|--------------------|------------|-------------|
| 1. | $19 - 1 =$ | |
| 2. | $4 - 2 =$ | |
| 3. | $11 - 2 =$ | |
| 4. | $12 - 2 =$ | |
| 5. | $9 - 5 =$ | |

Finding the missing numbers involving division.

Examples

1. $6 \div m = 32.$ $35 \div x = 7$
 $m = 6 \div 3$ $x = 35 \div 7$
 $m = 2$ $x = 5$

LEARNER'S ACTIVITY

1. $8 \div \square = 4$ 2. $15 \div b = 3$

| | | |
|----|------------------------|---------------------|
| 3. | $24 \div r = 6$ | 4. $45 \div m = 5$ |
| 5. | $64 \div x = 7$ | 6. $63 \div c = 9$ |
| 7 | $84 \div \square = 12$ | 8. $96 \div a = 8$ |
| 9. | $48 \div y = 12$ | 10. $72 \div z = 8$ |
| | | |

LESSON 23:

Date : _____

Mental work

| Workout | Corrections |
|---|-------------|
| 1. 7 tens 2. 6 hundreds 3. 3 thousands 4. 4 thousands 5. 9 tens | |

Algebra

Examples

1. $2a = 10$
 $a = 10 \div 2$
 $a = 5$

LEARNER'S ACTIVITY

| | |
|--------------|--------------|
| 1. $2a = 24$ | 2. $3p = 12$ |
|--------------|--------------|

| | | | |
|----|-----------|-----|-----------|
| 3. | $6m = 18$ | 4. | $5n = 25$ |
| 5. | $2y = 8$ | 6. | $7x = 14$ |
| 7 | $4c = 16$ | 8. | $4d = 12$ |
| 9. | $4t = 49$ | 10. | $2x = 30$ |
| | | | |

LESSON 24:

Date : _____

Mental work

| Find the product | Corrections |
|------------------|-------------|
| 1. 5 and 9 | |
| 2. 10 and 9 | |
| 3. 2 and 9 | |
| 4. 4 and 9 | |
| 5. 7 and 9 | |

More substitution

Examples

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

$$x + y + 2$$

$$x + y + z$$

$$= 3 + 4 + 5$$

$$= 12$$

2. If $h = 2$, Find the value of $5h$

$$5h \text{ means } 5 \times h$$

$$= 5 \times 2$$

$$= \underline{\underline{10}}$$

| | LEARNER'S ACTIVITY | |
|----|--------------------------------------|----------|
| 1. | If $h = 2$. Find the value of $5h$ | |
| 2. | If $x = 10$, What is the value of:- | |
| | (a) $\frac{x}{2}$ | (b) $2x$ |
| 3. | What is the value of $7d$ if $d = 6$ | |
| 4 | If $x = 3$, Find the value of $5x$ | |

| | | |
|----|--|------------|
| 5. | If $g = 1$, What is the value of $8g$. | |
| 6. | Find the value of $5d$, if $d = 10$. | |
| 7. | If $K = 5$, What is the value of $9k$. | |
| 8. | If $r = 5$, Find the value of | |
| | (a) $2r =$ | (b) $5r =$ |

LESSON 25:

Date : _____

Mental work

| complete | | Corrections |
|----------|----------------------|-------------|
| 1. | 1 hr = _____ mins | |
| 2. | 1wk = _____ days | |
| 3. | 1min = _____seconds | |
| 4. | 1 month = ____ weeks | |
| 5. | 1 year - _____ weeks | |

Geometry

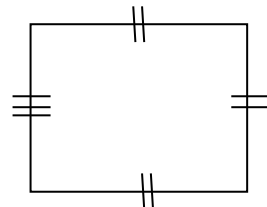
Naming shapes sides

Base, height, diagonal, length, width.

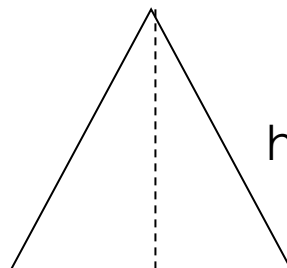


length

width

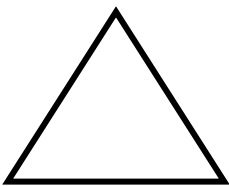
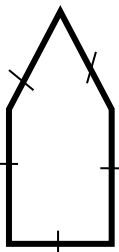


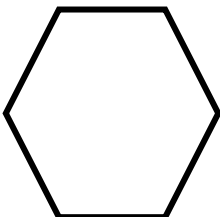
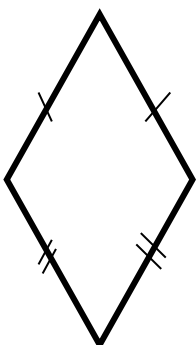


sides



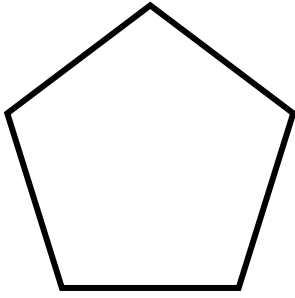
height

width

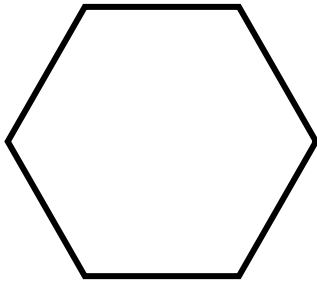
| | LEARNER'S ACTIVITY | | |
|--|---|-----------|--------------|
| | Shape | Name | No. of sides |
| |  | Triangle | |
| |  | Pentagon | |
| |  | Rectangle | |
| |  | Trapezium | |
| |  | Hexagon | |
| |  | Kite | |

How many sides do these shapes have.

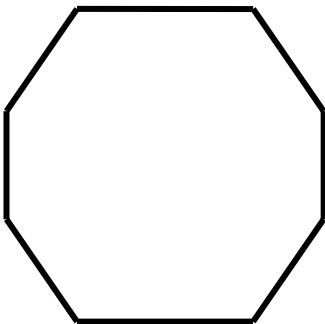
(a)



(b)



(c)



LESSON 26:

Date : _____

Mental work

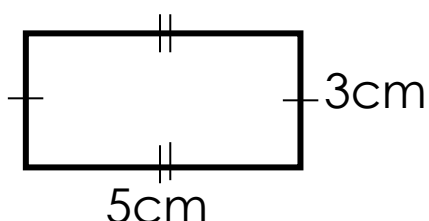
| Write in words | | Corrections |
|----------------|------|-------------|
| 1. | 11 = | |
| 2. | 12 = | |
| 3. | 40 = | |
| 4. | 30 = | |

Measuring perimeter of shapes

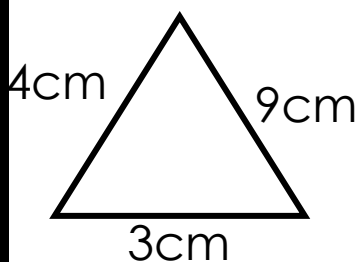
Perimeter is the total distance around the figure.

Example

Find the perimeter of the shapes below:-



$$\begin{aligned}P &= L + W + L + W \\&= 5\text{cm} + 3\text{cm} + 5\text{cm} + 3\text{cm} \\&= 8\text{cm} + 8\text{cm} \\&= \underline{\underline{16\text{cm}}}\end{aligned}$$

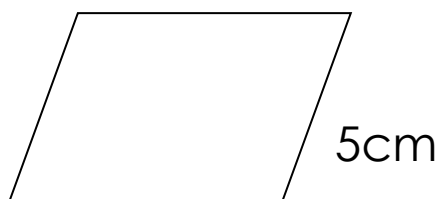


$$\begin{aligned}P &= S_1 + S_2 + S_3 \\P &= 3\text{cm} + 9\text{cm} + 4\text{cm} \\P &= 12\text{cm} + 4\text{cm} \\P &= \underline{\underline{16\text{cm}}}\end{aligned}$$

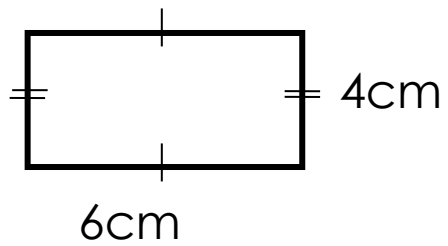
LEARNER'S ACTIVITY

Find the area of the following.

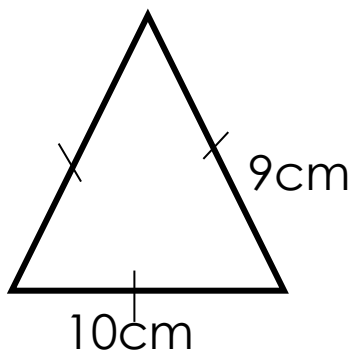
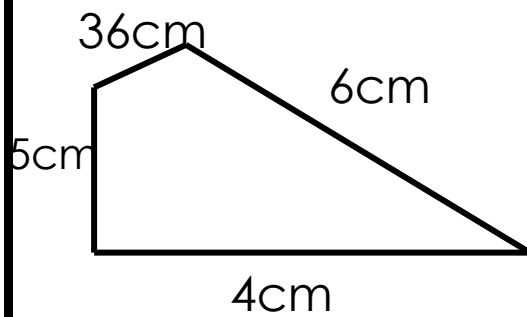
(a)



(b)



(c)



LESSON 27:

Date : _____

Mental work

| Write in roman numerals | Corrections |
|-------------------------|-------------|
| 1. x = | |
| 2. xx = | |
| 3. xxx = | |
| 4. xv = | |

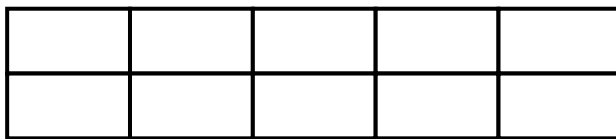
Measuring area of shapes

(a) Using squares

Example

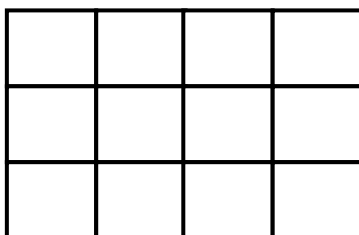
Find the area of the figure below

1.



Area = No. of square
= 10 square units

(b) *Using the formular.*



3cm

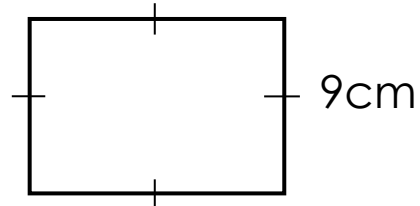
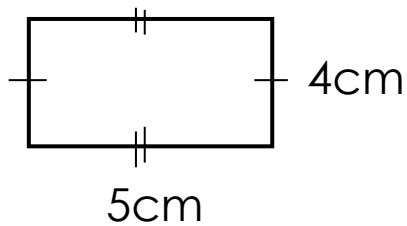
4cm

$$\begin{aligned} A &= L \times W \\ &= 4\text{cm} \times 3\text{cm} \\ &= \underline{\underline{12\text{cm}^2}} \end{aligned}$$

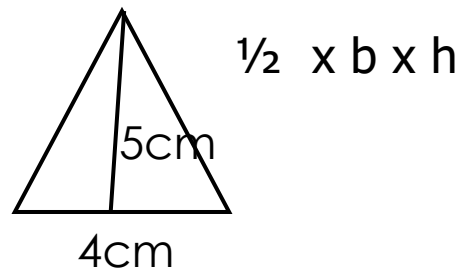
LEARNER'S ACTIVITY

Find the area of the following.

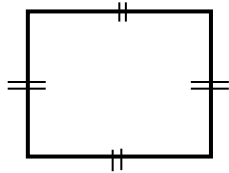
(a)



(b)



(c)



LESSON 28:

Date : _____

Mental work

| Expand | Corrections |
|----------|-------------|
| 1. 149 = | |
| 2. 11 = | |
| 3. 143 = | |
| 4. 29 = | |
| 5. 748 = | |

Word problems about using numbers

Example

1. Mugisha had 15 cows. Kapere gave him more cows now he has 18 cows. How many cows did Kapere give him.

$$15 \times \square = 18$$



$$= 18 - 15$$

$$= 3 \text{ cows.}$$

LEARNER'S ACTIVITY

1. Waiswa had 10 mangoes. His sister gave him more mangoes. He now has 20 mangoes. how many more mangoes was he given.
2. I had shs 20. Mother gave me more money. Now I have shs. 46. How much money did mother give me?
3. The shop keeper had 36 pancakes. He bought more pancakes. Now he has 61 pancakes. How many pancakes did he buy?
4. My sister baked 27 cakes on Monday. On Tuesday he baked more, she now has 50 cakes. How many cakes did she bake on Tuesday?

5. There were 32 pupils in our class. More pupils joined us. Now we are 44. How many pupils joined us?

LESSON 29:

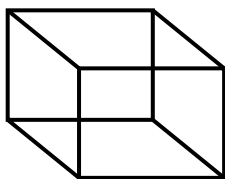
Date : _____

Mental work

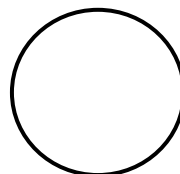
| Spellings | Corrections |
|-----------|-------------|
| 1. | |
| 2. | |
| 3. | |
| 4. | |
| 5. | |

Solid shapes

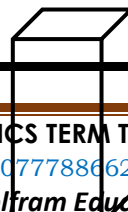
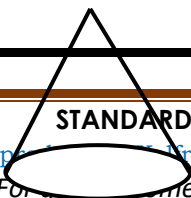
Three dimensional shapes.

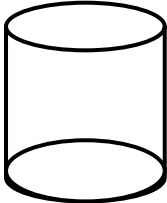
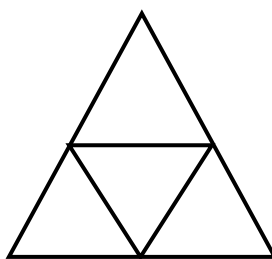


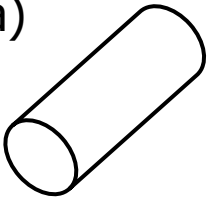
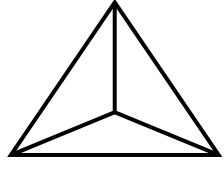
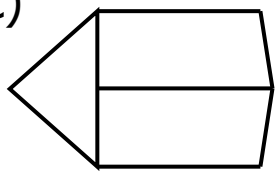

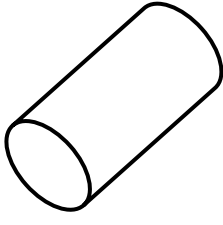
cube

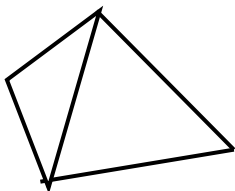
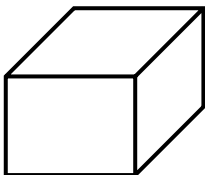
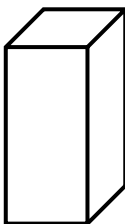


Sphere



| | | |
|--|--|--|
| | cone | Prism |
| |  cylinder |  Tetrahedron |

| | LEARNER'S ACTIVITY | | |
|----|---|--|-------------|
| 1. | Name these solid shapes | | |
| | (a)  | (b)  | |
| | (c)  | (d)  | |
| 2. | Which shapes can you get from these solids? | | |
| | Solid | shape | name |
| |  | | |

| | | | |
|--|---|--|--|
| |  | | |
| |  | | |
| |  | | |

LESSON 30:

Date : _____

Mental work

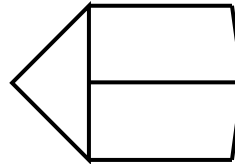
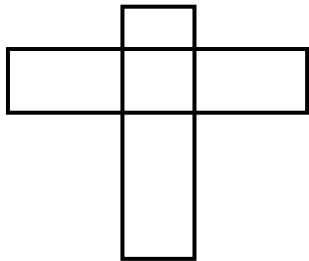
| Write in words | Corrections |
|---------------------|-------------|
| 1. $\frac{1}{2} =$ | |
| 2. $\frac{1}{4} =$ | |
| 3. $\frac{1}{3} =$ | |
| 4. $\frac{1}{12} =$ | |
| 5. $\frac{1}{10} =$ | |

1.

Cube

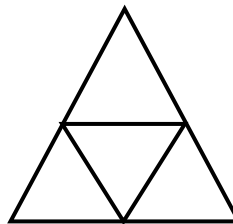
A cube is a three dimension solid object bounded by six square faces,

It has 6 faces, 12 edges and 8 vertices.



A tetrahedron

It is a triangular pyramid. It is composed of four triangular faces, six straight edges and four vertex corners.



LESSON 31:

Date : _____

REVISION EXERCISE

1.

1 6

x 2

2.

1 7

x 2

3.

1 8

x 2

4.

4 2

x 4

| | | | |
|--|--|-----|---|
| 5. | $\begin{array}{r} 15 \\ \times 4 \\ \hline \end{array}$ | 6. | $\begin{array}{r} 10 \\ \times 4 \\ \hline \end{array}$ |
| 7. | $\begin{array}{r} 53 \\ \times 4 \\ \hline \end{array}$ | 8. | $\begin{array}{r} 62 \\ \times 4 \\ \hline \end{array}$ |
| 9. | $\begin{array}{r} 11 \\ \times 4 \\ \hline \end{array}$ | 10. | $\begin{array}{r} 19 \\ \times 2 \\ \hline \end{array}$ |
| LESSON 32: Date : _____ | | | |
| REVISION EXERCISE Word problems | | | |
| 1. | Find the area of a rectangle whose length is 5cm and width 4cm. | | |
| 2. | Find the perimeter of a rectangle whose length is 8cm and width 6cm. | | |

| | |
|----|--|
| | |
| 3. | <p>(a) Find the area of a square whose side is 5cm.</p> <p>(c) Find its perimeter.</p> |
| 4. | <p>(a) Write in figures: five thousand seven hundred forty five.</p> <p>(b) Seven thousand two</p> |

5. If 1 m = 100cm, how many centimeters are there in 4cm.

LESSON 33

Date : _____

Mental work

| Write in words | | | | | Corrections | | | |
|----------------|---|---|---|---|-------------|---|---|---|
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 7 | | | | | | | | |

Word problem

Exercise 1

Adding length

1. The length of Orembe's garden is 40m 27cm. Okello's garden is 5m 46cm. Find the total length of the 2 gardens.

| | |
|----|---|
| 2. | Asaba;s rope is 2m 58cm long and Mugisha's rope is 3m 34 cm. Find the total length of the 2 ropes. |
| 3. | Musa's sugarcane is 1m 15cm. Ali's sugarcane is 1m 26cm. Find the length of the two pieces of firewood. |
| 4. | A shopkeeper has 4m 38cm of Nylon cloth and 6m 30cm of cotton. |
| 5. | Amina is 1m 25cm tall, and Cissy is 1m 8cm tall. Find the total height of the two girls? |
| | Subtracting length |

| | |
|----|---|
| 1. | A trader had 15m 53 cm of cloth. he sold 5m 10cm of it, What length of the cloth was left? |
| 2. | The height of 2 girls is 2m 42cm. If one of the girls is 1m 28cm tall. Find the height of the other girl. |
| 3. | A carpenter had a piece of wood 10m 60cm long. He cut off 4m 15cm to make a bench. What length of the piece of wood was left? |
| 4. | The length of 2 ropes is 13m 81cm. If one of the ropes is 6m 27cm, Find the length of the second rope. |

5. A trader had a ribbon 12m 56cm long. He sold 4m 17cm. Find the length of the remaining ribbon.

LESSON 34

Date : _____

Mental work

| Complete the table | | Corrections | |
|--------------------|------------|-------------|-------------|
| 1000gms | 4 wks | 4 goats | 4 days |
| _____ kg | _____ days | _____ legs | _____ hours |

1.

If $r = 5$, Find the value of

(a)

4r

(b) 9r

(c) 10r

2.

(b) If $y = 6$. What is the value of $\frac{24}{y}$

| | | |
|-----|---|--------------------|
| 3. | If $t = 10$. What is the value of $t + 17$? | |
| 4. | If $a = 2$. What is the value of :- | |
| (a) | $\frac{a}{3}$ | (b) $\frac{24}{a}$ |
| (c) | $\frac{a}{4}$ | (d) $\frac{1}{2}a$ |
| 5. | If $g = 5$. What is the value of $8 - g$. | |
| 6. | If $p = 6$ and $k = 12$, Find the value of | |
| | (a) $p - 2$ | (b) $9 - p$ |

| | (c) 30 - k | (d) $\frac{k}{2}$ | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|--|-------------------|-------------|---|-----|--|--------------------|--|--|-------------|--|--|-------|---|---|---|---|--|------------|-----|--|--|--|-----|
| | e) $\frac{k}{p}$ | f) $\frac{p}{3}$ | | | | | | | | | | | | | | | | | | | | | | |
| | LESSON 35 Date : _____ Mental work <table><tr><th colspan="3">Complete the table</th><th colspan="3">Corrections</th></tr><tr><td>Metre</td><td>1</td><td>2</td><td>3</td><td>4</td><td></td></tr><tr><td>Centimeter</td><td>100</td><td></td><td></td><td></td><td>500</td></tr></table> | | | | | | Complete the table | | | Corrections | | | Metre | 1 | 2 | 3 | 4 | | Centimeter | 100 | | | | 500 |
| Complete the table | | | Corrections | | | | | | | | | | | | | | | | | | | | | |
| Metre | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | |
| Centimeter | 100 | | | | 500 | | | | | | | | | | | | | | | | | | | |
| | <u>REVISION EXERCISE</u> Word problem Adding capacity | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | Mr. Ndaula made 24litres of juice and Kasozi made 78l. How much juice did the two men make? | | | | | | | | | | | | | | | | | | | | | | | |

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|----|--|
| | |
| 2. | Opit Junior School takes 156 litres of milk per week. How much milk does the school use in 2 weeks. |
| 3. | Jesco's water tank holds 125 l. Jonas tank hold 158l of water. Find the amount of water which the two tanks hold. |
| 4. | Namanya's pot holds 71 litres of water and Tayebwa's pot holds 59 litres of water. Find the amount of water both pots holds. |
| 5. | 350litres of water was collected in the morning and 659 litres in the afternoon. How much water was collected that day. |



STANDARD KOLFRAM IN USE

This book is designed for both the learners and the teachers in accordance to the bridged curriculum. Each specific child in a class at a particular school deserves a copy of this book.