PRIMARY FIVE MATHEMATICS NOTES

TERM III

Topical breakdown

Theme	Topic	Sub-topic
Measurements	Money	• Recognition of money • Simple rates • Buying and selling (Shopping bill) • Table • Listing • Find profits and losses • Cost price and selling price
	Length, Mass, Capacity	• Conversion of length into cm/km to ma and vice versa. • Calculating perimeter and area of figures i.e. squares, triangles and rectangles only. • Perimeter of a square, triangle and rectangle • Conversion of mass; kg to grams and vice versa. • Solving mathematical problems involving mass. (addition and subtraction) • Conversion of units in capacity. • Solving problems in measurement of capacity. • Addition and subtraction of capacity.
Numeracy	Integers	• Drawing number lines and identifying positive and negative integers • Arranging integers • Comparing integers using symbols ≤, ≥ • Addition and subtraction of integers • Mathematical statements and interpreting number lines. • Solving word problems involving integers.
	Algebra	• Forming algebraic expressions • Collecting like terms • Substitution • Solving equations by (subtracting, adding) • Word problems involving addition and subtraction. • Solving by dividing • Solving by multiplying • Word problems involving division and multiplication • Solving equations involving mixed equations. • Solving equations involving square roots • Application of algebra in (perimeter, area and volume)

Week One

Theme: Measurements

Topic One: MONEY

Lesson 1

Sub Topic: Denominations of Money

Coins e.g. 50, 100, 200, 500 and 1000
Notes e.g. 1000, 2000, 5000, 10000, 20000, 50000

Example One

Peter had 3 notes of Sh. 1000 each. How much money did he have?

1 note = Sh. 1000

3 notes = Sh. (3 x 1000)

3 notes = Sh. 3000

Example Two

Alex had 5 coins of 500 Shillings in his wallet. Calculate the amount of money he had altogether.

1 coin = 500 Shillings

5 coins = Sh. (5 x 500)

= Sh. 2500

Example Three

How many five hundred Shillings coins can be changed from a Ten Thousand Shillings note?

Number of Sh. 500 = Sh. 10,000 ÷ Sh. 500

= 20 coins

Therefore, one would get 20 five hundred Shillings coins in exchange for Ten Thousand Shillings.

NB: Do also calculations on a number of coins and notes of different denominations

Ref: Teacher's collections

Lesson 2

Sub topic: Buying and Selling

Example One

a)   1 book costs Sh. 200 what is the cost of 5 similar books?
1 book = Sh. 200

5 books = Sh. (5 x 200)

5 books = Sh. 1000

Trial Numbers

a) Grace bought 1 kg of sugar at Sh. 4000 and 3 kgs of maize flour at Sh. 1200 each. Calculate the amount of money She paid for all the items.

b) Marion sold 2 sacks of beans at Sh. 120,000 each and 4 sacks of sweet potatoes at Sh. 65,000 each. How much money did She earn altogether?

Ref

New MK Maths bk 5 Pg 143

Old Mk pp 222

Lesson 3

Sub Topic: Shopping Bills and Change

Example One

Kiyaga had 10,000/= he bought 2kg of sugar at Sh.s.1600 per kg, 3bars of soap at 1000/= each bar, ½ kg of salt at 400/= @ kg

(a) How much did he spend altogether?

(b) How much did he spend altogether?

(c) What was his balance?
    10,000

    - 6400
    _____
       3600/=

Item	Method	Amount
2kg of sugar at 1600/= @	2 x 1600/=	3200/=
3bars of soap at 1000/=@	3 x 1000/=	3000/=
½ kg of salt at 400/=@	½ x 400/=	200/=
Total		6400/=

Ref

New Mk maths bk5 Pg 145-146

Old MK Pg 223

Lesson 4

Sub topic: completing bill tables

Example two

A father gave the Shopping list below to his children

Item	Quantity	Unit cost	Total
Blue band	½ kg	Shs. 4600 each kg	Shs. 2300
Bread	.......loaves	Shs. 800 each loaf	Shs. 2400
Tea leaves	¼ kg	Shs......... @kg	Shs. 1500
Sugar	4kg	Shs. 1800 @ kg	Shs............
		Total	Shs............

    a)   Complete the Shopping bill
Show all the calculations and fill in later and add

Bread	Tea leaves	Sugar
	1kg cost 1800/=	1kg cost 1800/=
800/= can buy 1 loaf	¼ kg cost 1500/=	4kg = 1800/=
		x 4
1/= can buy = 1/800 x 2400/=	1kg cost 1500 x 4	

1kg costs 1500 ÷ ¼   <u>7200/=</u>

2400/= buy 3 loaves

= 6000/=

b)   Calculate the total amount spent altogether.
Ref

New Mk maths bk 5 Pg145-146

Old MK Pg 224

Remarks: ....

Lesson 5

Sub topic: Transport fare

Example one

A taxi driver charges Shs 5,000 for a trip from Kampala to Jinja per person How much will 7 people pay for the trip? 1 person pays Shs. 5,000/=

7 people pay = 5000 x 7

= 35,000/=

Ref: New MK Pg 243

Old Mk Pg 225-226

Lesson 6

Content: profit and loss

Example one

Andrew bought a goat at 20,000/= and sold it at Shs. 25000/=. What profit did he make?

Profit = selling price – cost price

Profit = 25,000 – 20,000

Profit = 5,000/=

Example two

Matovu bought a goat at 30,000/= and sold it at Shs 20,000/= how much was his loss?

Loss = buying price – selling price

Loss = 30,000 – 20,000

Loss = 10,000/=

Ref: New Mk maths bk5 Pg 147-149

Curriculum Pg 100

Lesson 7

Sub topic: Finding cost price using profit and selling price

 Example one

Nambi sold a radio set at 50,000/= She made a profit of 10,000/=. What was his cost price?

Selling price = 50,000/=

Profit = 10,000/=

Cost price = selling price – profit

Cost price = 50,000 – 10,000

Cost price = 40,000/=

Ref: New MK maths bk 5 Pg 152

Lesson 8

Sub topic: Finding cost price using loss

Example one

Oketch sold a goat at 15,000 and made a loss of 3000. How much did he buy the goat?

Selling price = 15,000/=

Loss = 3,000

Buying price = selling price + loss

Buying price = 15,000 + 3,000

Buying price = 18,000/=

Ref: New Mk maths bk 5 Pg 151

Remarks: ....

Week Two

Lesson 9

Sub topic: Finding selling using profit and cost price

Examples

A trader bought a Shirt at 7500/= and sold it making a profit of Shs. 3500. what

was his selling price?

Buying price Shs. 7500

Profit = 3500

Selling price = buying price + profit

Selling = 7500 + 3500

Selling price = 11000/=

Ref: New MK maths bk5 Pg 150-152

Remarks: ....

Lesson 10

Sub topic: Finding selling price using loss

Examples

A pupil bought a ball at 15000/= and sold it at a loss of 3000/=. What was the

selling price of the ball?

Buying price = 15000/=

Loss = 3000/=

Selling price = buying price – loss

Selling price = 15000 – 3000

Selling price = 12000/=

Ref

New MK maths bk 5 Pg 150-152

Remarks: ....

Theme: MEASUREMENTS
Lesson One

Topic 2: Length, Mass, Capacity
Sub topic: Length (distance from one point to another

A   ___ =3   B

Estimate in cm and mm

Pupils will measure objects/lines in centimeters and millimeters and record the answers (group activity)

Ref: New MK maths bk 5 151 and 152 Old MK Pg 198

Remarks: ……………………..

Lesson 2

Subtopic: Conversion of metric units

Example one

How many mm are in 8cm

1cm = 10mm

8cm = (8 x 10)mm

8cm = 80mm

Example two

Convert 120mm to cm

10mm = 1cm

$1 = (\frac{1}{10})$

$120 = (\frac{1}{10} \times 120)$

120 = 12

Ref: New MK maths bk Pg 157

Lesson 3

Sub topic: Conversion of metres to cm and vice versa

Content

Examples one

Change 5m to cm

5m = 100cm

5m = (5 x 100)cm

5m = 500cm

Example Two:

Change 200cm to m

```
   1m = 100cm
? = 200cm
```
Let the unknown be x

$X = \dfrac{200\text{cm} \times 1\text{m}}{100\text{cm}}$

X = 2x1m

X = 2m

Ref: New MK maths bk 5 Pg 157 Old Mk pp 198

Lesson 4

Sub topic: Addition of m and cm

Examples

A

Add

a)
```
     m   cm
     8   45
     1   55
  _____

  _____
```

b)
```
     M   cm
     2   73
  +  3   13
  _____

  _____
```

Ref:

Understanding MTC bk 5 Pg 144-145

Trs' collection

Week Three

Lesson5

Subtopic: Subtraction of m and cm

Examples: Subtract

a)
```
     M    cm
     4    93
  -  2    22
  _____

  _____
```

b)
```
     M    cm
     9    45
  -  3    65
  _____

  _____
```

Ref:

Understanding mtc bk 5 Pg 142-146

Lesson 6

Sub topic: **Expressing km to m**

Example one
Express 2km as metres

1km = 1000m

2km = (2 x 1000)m

2km = 2000m

Example two

Change 15km to m

1km = 1000m

15km = (15 x 1000)m

15km = 15000m

Convert 0.5km to m

1km = 1000m
0.5km = 5 x 10~~00~~m
    = 1~~0~~
    = 5 x 100m
    = 500m
Ref: New Mk maths bk 5 Pg 158/ Old Mk pp 199

Lesson 7

Sub topic: Converting metres to km

Examples
 a) Change 5000m to km
1km = 1000m

Xkm = 5000m

Xkm = ~~5000m~~ x 1km

~~1000m~~

= 5 x 1km

= 5km

b)   Change 16500m to km

1km = 1000m

X = $\dfrac{16500m}{1000m}$ x 1km

= $\dfrac{165}{10}$ x 1km

= 16.5km

Ref: New Mk maths bk 5 Pg 156 Old MK pp 199

Remarks: ……………………………..

Lesson 8

Sub topic: **Comparing units of measures**

>, < or =

Example

60mm_____20cm

1cm = 10mm

20cm = (20 x 10)mm

20cm = 200mm

60mm < 200mm

60mm < 20cm

Do comparison examples with m and cm and vice vasa, km and m and vice vasa

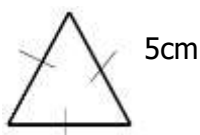Ref: New Mk Maths Bk 5 Pg 156

Week Three

Lesson 9

Sub topic: **Perimeter**

Content: Finding perimeter of polygons

i) Regular figures are polygons with all sides equal
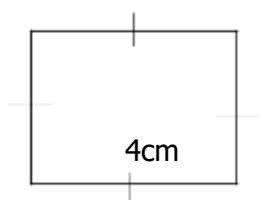
ii) Perimeter is the distance around the figure

Examples

a) Find the perimeter of the equilateral triangle below

5cm
$P=S_1+S_2+S_3$
$P=5cm+5cm+5cm$
$P=10cm +5cm$
$P = 15cm$

b) Do examples of squares, pentagon, octagons, heptagons etc Square

$P = S_1 + S_2 + S_3 + S_4$
$P=4cm+4cm+4cm+4cm$
$P = 8cm + 8cm$
$P = 16cm$

4cm

Ref: New Mk maths bk 5 Pg 159-161

Old edition Mk pp 203-204
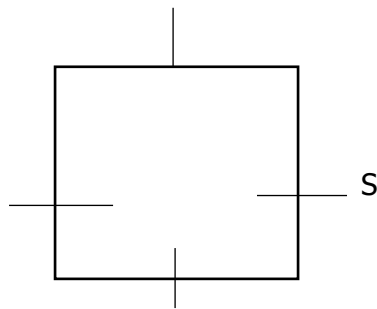
Curriculum Pg 101-102

Lesson 10

Sub topic: **Finding sides using perimeter**
Examples

a) The perimeter of a square is 12cm. what is the length of each side?

A square has 4 sides

$$\frac{\cancel{4}}{\cancel{4}} = \frac{\cancel{12}}{4}$$

$$= 3$$

S   Each side = 3cm

b) The perimeter of a square is 40cm find the length of each side A square has four sides

$P = S_1 + S_2 + S_3 + S_4$

$40cm = 4s$

$$\frac{40cm}{\cancel{4}} = \frac{4s}{\cancel{4}}$$

$S = 10cm$

c) The perimeter of a regular pentagon is 20cm. how long is one of its sides? A pentagon has 5 sides

$P = S_1 + S_2 + S_3 + S_4 + S_5$

$P = 5S$

$$\frac{20cm}{\cancel{5}} = \frac{5S}{\cancel{5}}$$
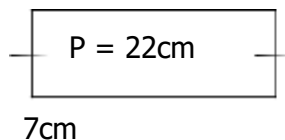
$S = 4cm$

One side = 4cm

Ref: Old MK pp 205-206

New MK pp 284

Lesson 11

Sub topic: **Finding one side of a rectangle using perimeter** Examples

a) The perimeter of a rectangle is 22cm and its length is 7cm find its width.

P = 22cm $P = 2(L+W)$

7cm $22 = 2(7 + W)$

              $22 = 2 \times 7 + 2 \times W$
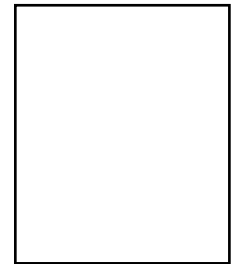
$$22-14 = \cancel{14-14} + 2w$$
$$8 = 2W$$
$$\frac{\cancel{8}}{\cancel{2}} = \frac{\cancel{2}W}{\cancel{2}}$$

w=9m

$$W = 4cm$$

b) The perimeter of a rectangle is 40m if its width is 9m find its length

$$P= L+W+L+W$$
$$40 = L+9+L+9$$
$$40 = L+L+9+9$$
$$40 = 2L+18$$
$$40-18=2L+18-18$$
$$22=2L+0$$
$$\frac{\cancel{22}}{\cancel{2}} = \frac{\cancel{2}L}{\cancel{2}}$$
$$L= 11m$$

Ref: New MK Pg 284

Old Mk Pg 205-206

Remarks: ....

Lesson 12

Sub topic: **Perimeter of irregular Shapes**

Examples

3cm

A

B

5cm
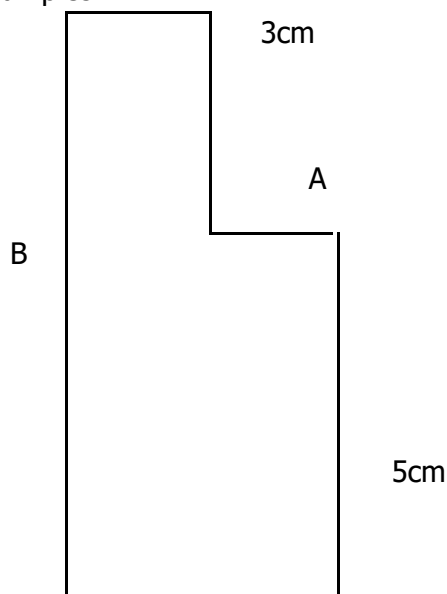
9cm

a) Find the missing sides

Side A	Side B
A = (9 − 7)cm	B = 5cm + 3cm
A = 2cm	B = 8cm

b) Find the perimeter of the figure

P = S+S+S+S+S+S

P = 7cm + 3cm + 2cm + 5cm + 9cm + 8cm P = 34cm

c) Find the perimeter of the scalene triangle below
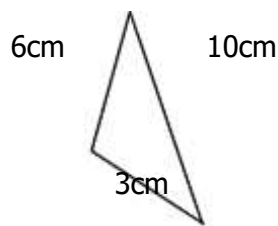
P=S+S+S

P = 6cm + 3cm + 10cm

6cm   10cm   P = 19cm

3cm

Example 3

Consider more solutions

Trapezium

Pentagons

Hexagons

Ref

Teacher's collections and refer to Bk 4

Week Four

Lesson 13

Sub topic: Area of a rectangle

Examples

a) Find the area of the rectangle below

A = L x W

A = 6m x 4m

A= 24m^2

4m
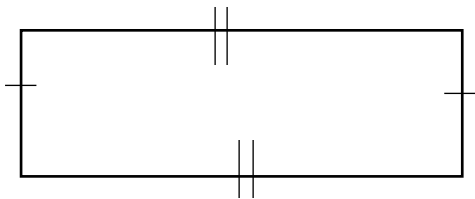
b) The area of a rectangle is 40dm^2 and its width is 8dm. find the length.

L x W = 40dm^2

$\dfrac{8 \times L}{8} = \dfrac{40dm^2}{8dm^2}$

L = 5dm

Ref

Exercise 11:7 Pg 162- Pg 163 Mk new edition / Exercise 8h Pg 208 old edition

Lesson 14

Sub topic: Area of a square. Find the area of a square.

6cm

A = S x S

A = 6 x 6

A = 36cm^2

The area of a square is 36cm^2. Find its sides

S x S = A

S^2 = A

$\sqrt{S^2} = \sqrt{36}$

S = 6cm

Ref: New MK Maths Bk 5 Pg 160 7.9 and Pg 281 exercise 12.17. Old MK Pg 207
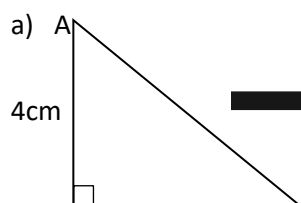
a) A

4cm

$A = \frac{1}{2} x\ b\ x\ h$ $\qquad$ $A = \frac{1}{2} x\ b\ x\ h$ $\qquad$ $A = \frac{1}{2} x\ b\ x\ h$

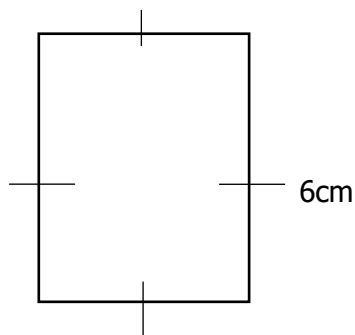$A = \frac{1}{2} x\ 3cm\ x\ 4cm$ $\qquad$ $A = \frac{1}{2} x\ 10cm\ x\ 7cm$ $\qquad$ $A = \frac{1}{2} x\ 9cmx6cm$

$A = 3cm\ x\ 2cm$ $\qquad$ $A = 5cm\ x\ 7cm$ $\qquad$ $A = 9cm\ x\ 3cm$

$A = 6cm^2$ $\qquad$ $A = 35cm^2$ $\qquad$ $A = 27cm^2$

Ref

New MK maths bk5 Pg 164

Old mk bk5 page 209-210

Lesson 16

Sub topic: Word problems involving area of triangles

Examples

The base of a triangle is 4cm and its area is 28cm². Find its height

$$A = \frac{1}{2}xbxh$$
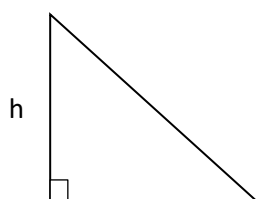
$$28cm = \frac{1}{2}x4cmxh$$

$$\frac{28}{2} = \frac{2h}{2} = 14$$

Ref: New mk math bk5 Pg 163

Lesson 17

Sub topic: area of combined figures

Content:

Find the area of the figures below

| 8c |
| 6cm A |
| 12cm |

| 6cm |
| 8cm |

| 6cm B |
| 4cm |

A = L x W
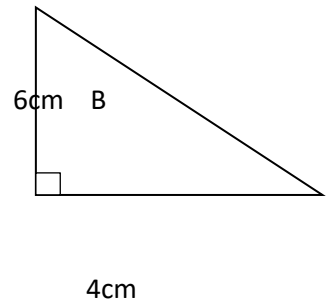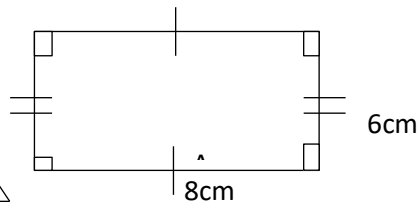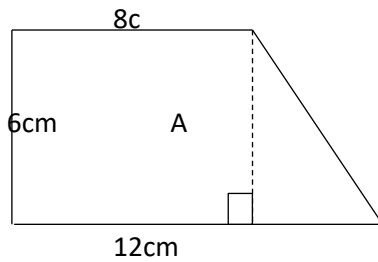
A = 8cm x 6cm

A = 48cm^2

Total area = 48cm^2 + 12cm^2

Total area = 60cm^2

$A = \frac{1}{2}xbxh$

$A = \frac{1}{2}x4x3$

$A = 4cmx3cm$

$A = 12cm^2$

Ref
New mk maths bk5 Pg 164-165
Old Mk pp 210-211

Lesson 18

Sub topic: area of shaded and unshaded regions

Content

Examples

Area of big rectangle – area of small rectangle

| 5cm 6cm |
| 8cm |
| 10cm |

= (L x W)
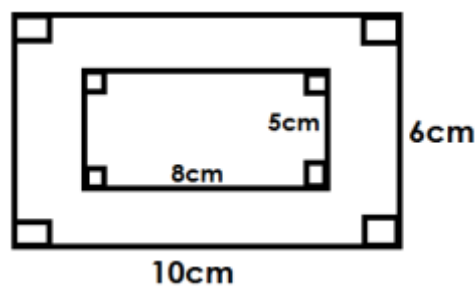
= (10x 6)cm^2 − (8 x 5)cm^2

= 60cm^2 − 40cm^2

=20cm^2

Ref

Old mk maths bk5 Pg 212 to 213 exercise 8k

New MK pp 166-167

Lesson 19

Sub topic: volume

Content: definition (volume) amount of space inside a container, cubes and cuboids

Examples

Find the volume of the cuboid
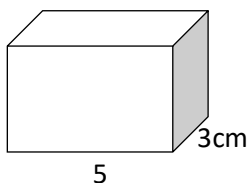
Volume	Shaded area
V = L x W x H	A = L x W
V = (5 x 4 x 3) cm^3	A= (4 x 3) cm^2
V = 60cm^3	A = 12cm^2

Find the volume of the cube below

V = S x S x S
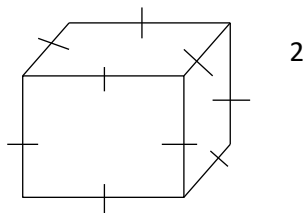
V = 2 x 2 x 2

V = 8cm^3

Ref

New MK pp 168-171

Trs' collection

Lesson 20

Sub topic: application of volume

Content:

Examples

Find the missing side of the cuboid given the volume = 50cm³.
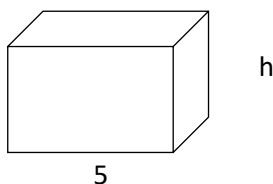
$V = L \times W \times h$

$60cm^3 = 5cm \times 3cm \times h$

$$\frac{60cm^3}{15} = \frac{15cm^2 h}{15cm^2}$$

$4cm = h$

Ref

New mk bk5 Pg 287 exercise 12.22

Lesson 21

Sub topic: total surface area

Content:

Example

A cuboid has faces
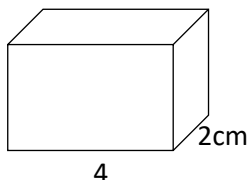
$TSA = 2(L \times W) + 2(L \times h) + 2(h \times W)$

$TSA = 2(4 \times 3) + 2(4 \times 2) + 2(2 \times 3)$

$TSA = 2 \times 12cm^2 + 2 \times 8cm^2 + 2 \times 6cm^2$

$TSA = 24cm^2 + 16cm^2 + 12cm^2$

$TSA = 52cm^2$

Ref

Teacher's collection

Lesson 22

Sub topic: capacity

Content: measuring in litres and millilitres

$1L = 1000cm^3$ or 1000Ml

Examples

Express 5litres of water as

(a)   Cubic centimetres   (b) as millilitres
        $1L = 1000cm^3$ $1L = 1000ML$
        $5L = (5 \times 1000)cm^3$ $5L = (5 \times 1000)ML$
        $5L = 5000cm^3$ $5L = 5000ML$Ref

New mk bk 5 page 168 exercise 11:12

Lesson 23

Sub topic: comparing metric units

Content: comparing length to weight to capacity

Example

Place value	Kilo	Hect or	D eca	Basic	Deci	Centi	Milli
Meaning	1000 m	100 m	1 0m	Metre gram litre	$^1/_{10}$of m	$^1/_{100}$ x m	$^1/_{1000}$ x m

Change 3000ML to Litres   change 3litres to ML

$1000ML = 1L$ $1L = 1000ML$

$3000ML = \frac{3000}{1000}L$ $3L = (3 \times 1000)ML$

$3000ML = 3Litres$ $3L = 3000ML$

Ref

New mk math bk5 Pg 263 exercise 11.25

New mk math bk 5 page 263 exercise 11:24

MASS

Lesson 24

Sub topic: expressing grams to kilograms vice versa

Content:

Examples

Change 4000gm to kg

1000g = 1kg

$$4000g = \left(\frac{4000}{1000}\right)kg$$

4000g = 4kg

Example 2

Change 3kg to g

1kg = 1000g

3kg = (3x1000)g

3kg = 3000g

Ref

New mk maths bk5 Pg 262 exercise 11.23

Lesson 25

Subtopic: Addition of kg and g

Content

Example 1

a)
```
   kg    g
    5    456
+   2    204
_____
```

b)
```
   kg    g
    4    596
+   2    405
_____
```

Ref:

New Mk pp 263

Tr's collection

Subtopic: Subtraction of kg and g

Example

a)
```
   kg    g
    8    765
+   3    273
_____

_____
```

b)
```
   kg    g
    9    576
+   3    623
_____

_____
```

Ref:

Tr's collection

Theme: INTEGERS

Lesson 1

Sub topic: Definition

Content:

Integers are numbers represented using a number line.

(a) Integers – positive and negative numbers including a zero on a number line.
(b) Identifying positive integers
Positive integers have an arrowhead pointing to the right.

Negative integers have an arrowhead pointing to the left.

Examples

i)
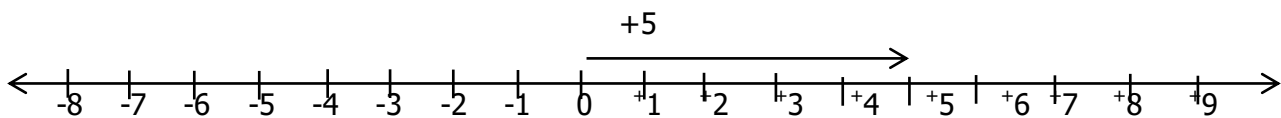
ii)
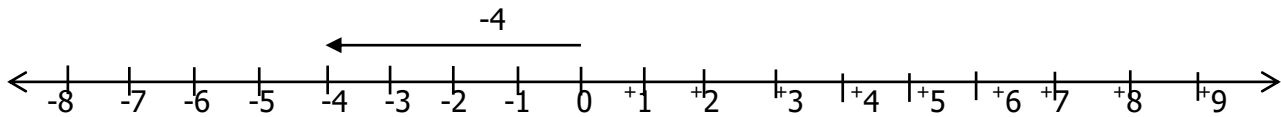
Example: Show +3 on a number line
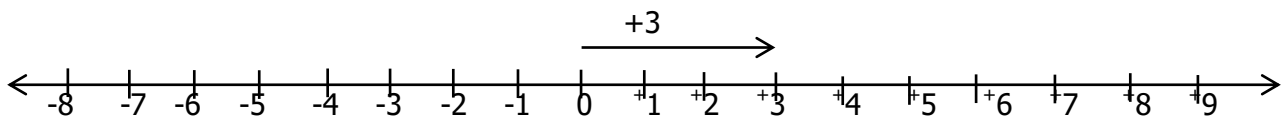
Ref

Exercise 5: New MK mtc bk5 Pg 83-84

Lesson 2

Subtopic: Expressions using integers

Content

(a)   A boy who got no marks in a test is represented by = 0.

(b)   A profit of Sh.s 300 - +300

(c)   3 metres below the ground = -3m

Ref

Exercise: Class discussion 3 page 96 New MK bk5

Exercise: Class discussion 2 page 158 old MK bk5

Teachers' collection

Lesson 3

Subtopic: Writing integers represented on a number line

Content:
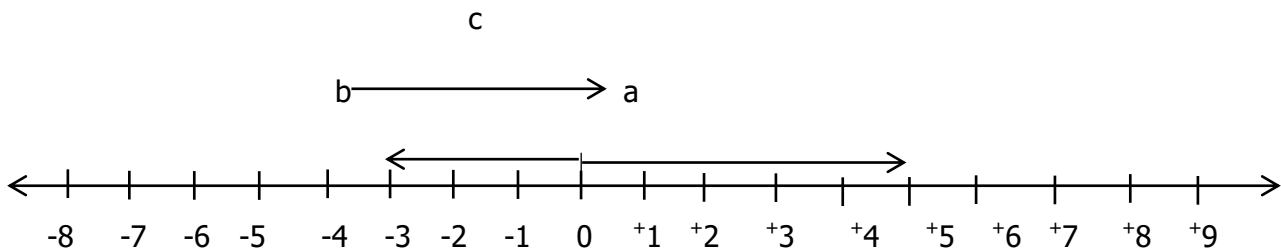
a = +5   b = -3 c = +4

Ref

New Mk bk5 Pg 85

Lesson 4

Subtopic: Comparing integers

Content: comparing integers

Examples: i) Which is smaller -4 or +2?
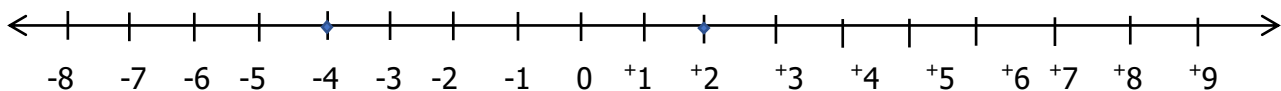
The one on the left side is always smaller.

∴ -4 is smaller than +2

ii) Use >, <, = to complete

+3 > -3

Ref

Exercise 6:2 Pg86 New MK mtc bk5

Exercise 6e Pg 169 old Mtc bk5

Lesson 5

Subtopic: ordering integers

Content: In ascending and descending order

Examples: Arrange -3, +1, -2, 0 and 3 in ascending/ descending orders

$$\xleftarrow{\hspace{1cm}}\overset{\displaystyle |\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad|}{}\xrightarrow{\hspace{1cm}}$$

-8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9
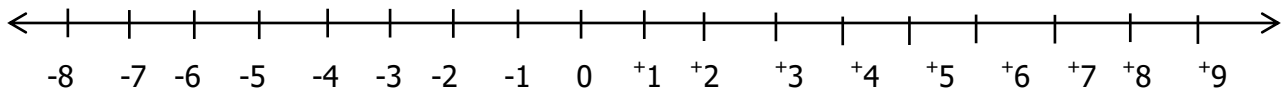
{-3, -2, 0, +1, +3}: ascending order

{+3, +1, 0, -2, -3}: descending order

Ref:

Exercise 6:4 Pg 85-86

Exercise 6e Pg 169 old mtc bk5

Lesson 6

Subtopic: solution sets

Content: Using >, <, $\geq$, $\leq$

Y $\geq$ 0 (means Y are integers greater than or equal to 0)

$$\xleftarrow{\hspace{1cm}}\overset{\displaystyle |\quad|\quad|\quad|\quad|\quad|\quad|\quad|\quad\diamond\quad\diamond\quad\diamond\quad\diamond\quad\diamond\quad\diamond\quad\diamond\quad|\quad|\quad|}{}\xrightarrow{\hspace{1cm}}$$

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

Y = {0 +1, +2, +3, +4, +5, +6, ...}

Ref
Exercise 5:3 Pg99 New Mtc bk5

Lesson 7

Subtopic: Inverse of integers

Content: Pairs of inverse

-3   -2   -1   0 $^+1$ $^+2$ $^+3$
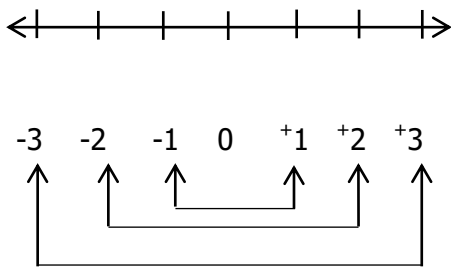
The inverse of -1 is +1

The inverse of +1 is -1

Additive inverse

Example 1: +4 + -4

-8   -7   -6   -5   -4   -3   -2   -1   0 $^+1$ $^+2$ $^+3$ $^+4$ $^+5$ $^+6$ $^+7$ $^+8$ $^+9$
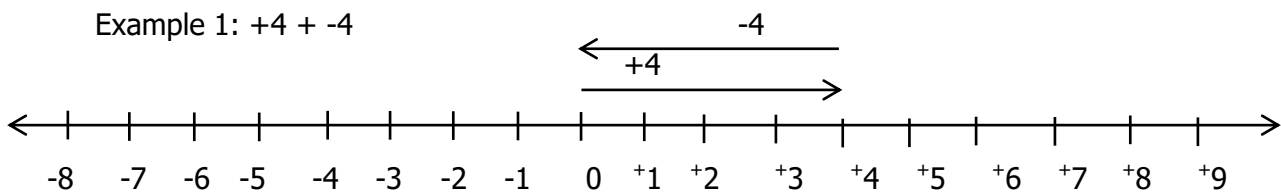
Note: The additive inverse is a number which gives 0 when added to a number.

Example 2: Calculations

What is the additive inverse of +4:

Let the inverse be x

$x + 4 = 0$

$x + 4 - 4 = 0 - 4$

$x + 0 = -4$

$x = -4$

Ref

Exercise 5:4 and 5:5 pages 100 – 102 New MK mtc bk5

Teachers' collection: Use calculations to find the inverses of 1, -3, 2, +5, 3, -6, 4, x

Lesson 8 (a)

Subtopic: Addition of integers

Content: Using a number line

Example: Add +5 + +3
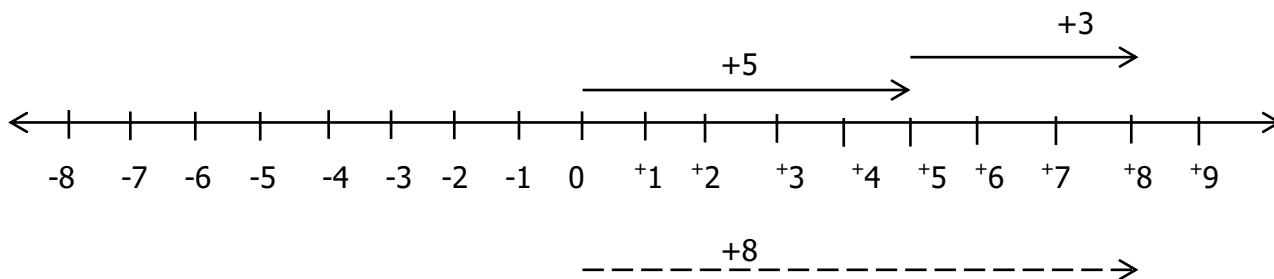
$\therefore +5 + +3 = +8$

Example 2
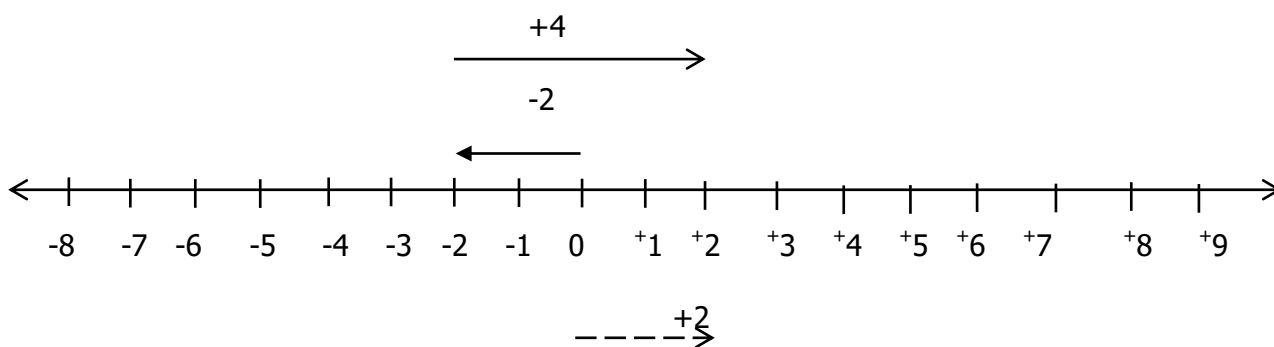
$\therefore -2 + 4 = +2$

Ref

Exercise 5:6 and 5:7 and 5:8 Pg 102 – 104 New MK mtc bk5

Exercise Pg 96 Oxford pri Mtc bk5 Pg96

Lesson 8 (b) Addition of +ve and –ve integers on a number line.

Example: Add +4 + -2
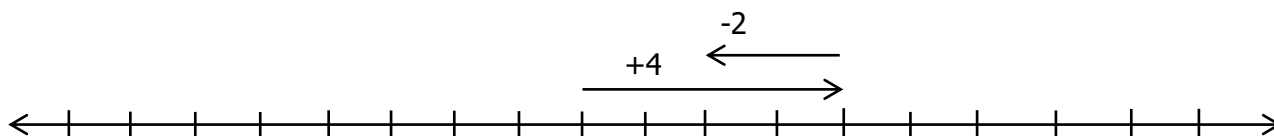
-8   -7   -6   -5   -4   -3   -2   -1   0 $^+1$ $^+2$ $^+3$ $^+4$ $^+5$ $^+6$ $^+7$ $^+8$ $^+9$

$- - - \rightarrow$
$+2$

$\therefore +4 + -2 = +2$

Exercise 5:7 New Mk edition Pg104

NB: Addition of –ve and +ve integers on a numberline

Lesson 8 (c)

Example: -5 + -3

-3

-5

-8   -7   -6   -5   -4   -3   -2   -1   0 $^+1$ $^+2$ $^+3$ $^+4$ $^+5$ $^+6$ $^+7$ $^+8$ $^+9$

-8
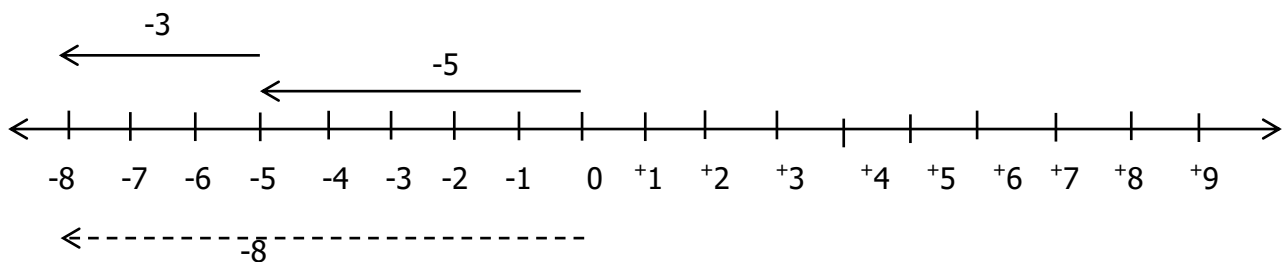
$\therefore -5 + -3 = 8$

Ref

New Mk (New edition) Pg 104

Lesson 8 (d) Multiplication of integers (repeated addition)

Example 3 x +2

+2   +2   +2

-8   -7   -6   -5   -4   -3   -2   -1   0 $^+1$ $^+2$ $^+3$ $^+4$ $^+5$ $^+6$ $^+7$ $^+8$ $^+9$

$\therefore 3 \times +2 = +6$

2 x -4
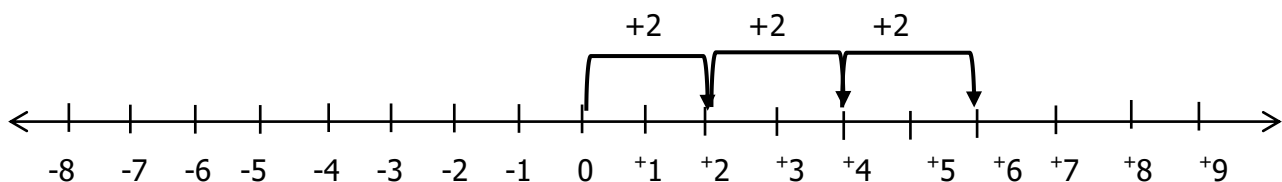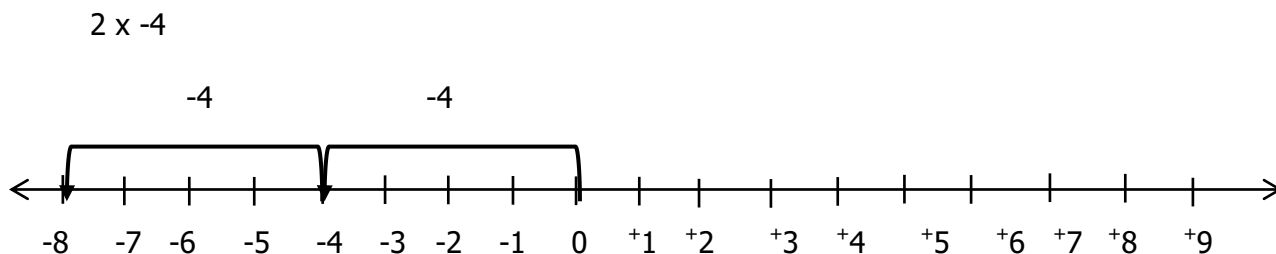
∴ 2 x -4 = -8

Ref

Exercise 8 Pg102 Oxford primary Mtc bk5

Trs' collection

Subtraction of integers on a number line

Lesson 9a: Positive and positive

Example: Subtract +6 - +2

= +6 − 2
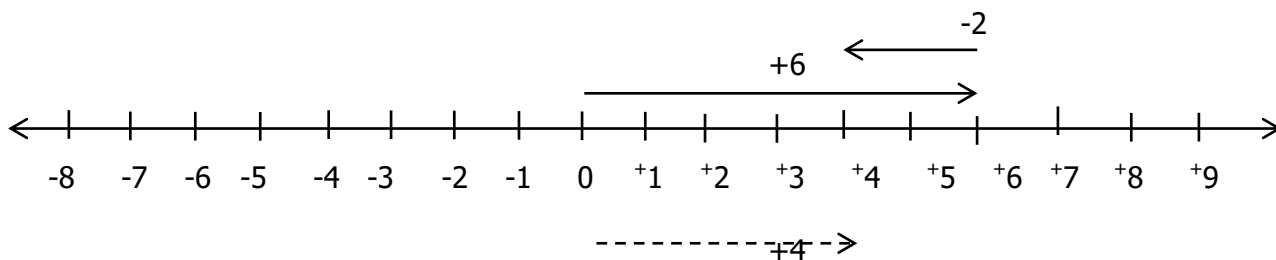
+6 - +2 = +4

Ref

Exercise 5:15 Pg 105-108

Lesson 9b: Negative and positive

Example 1: -4 - +3 = -4 - +3
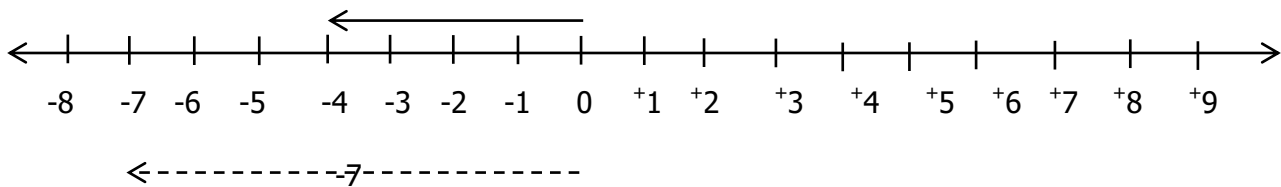
$$-4 - {}^+3 = -7$$

Ref

Exercise 5:9 and 5:10 Pgs105 and 106 new Mtc bk5

Lesson 10a: More subtraction of integers

Content: Positive and negative

+

Example $+3 - - 2 = +3 \ominus 2$

$= 3 + 2$

$$+3 - -2 = +5$$
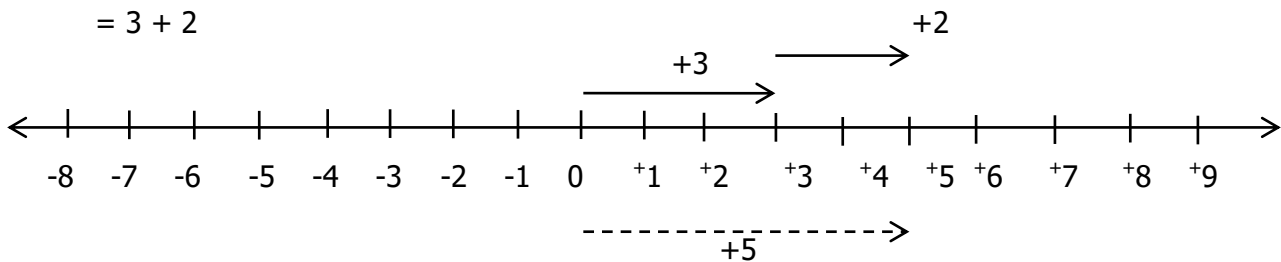
Lesson 10b: Negative and negative

Example: Subtract $-3 - - 2 \ominus 3 - - 2$

$= -3 + 2$
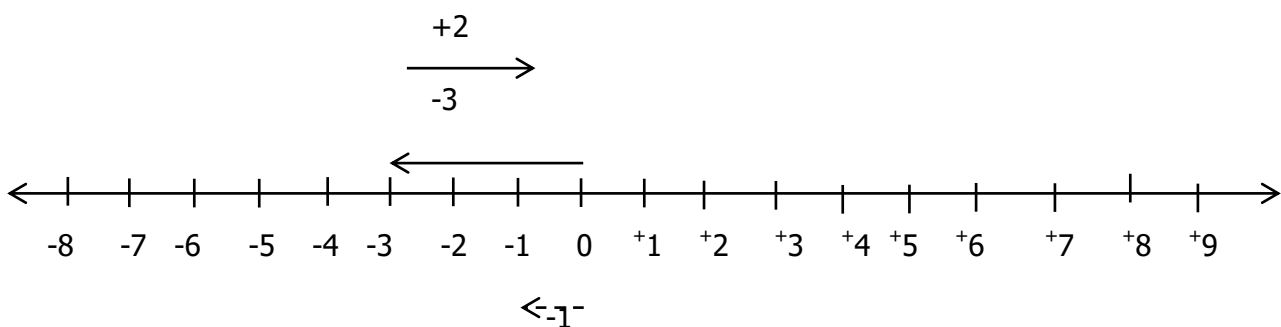
$$\therefore -3 - - 2 = -1$$

Ref

Exercise 5:11 and 5:12 Pg 107 – 108 New Mk bk5

Lesson 11

Subtopic: Forming mathematical statements

Number lines

Content: Write the mathematical statement shown on the numberline
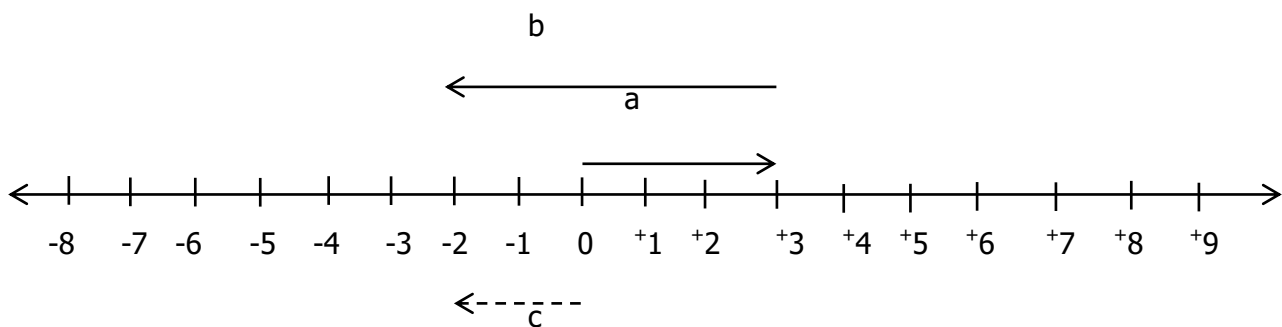
a = +3, b = -5 and c -2

Statement: +3 + -5 = -2

NB: Teach also situation when arrow starts from a –ve side and crosses zero to positive and vice versa

Ref

Exercise 5:13 Pg109-110 New MK bk5

Exercise 6c Pg106 old edition bk5

Lesson 12a

Subtopic: Addition of integers without using a numberline

Content: Addition

Note:

i)   (+) + (+) = (+)
ii)   (-) + (-) = (-)
iii)   (-) + (+) = (-) if –ve figure is greater

iv)   (-) + (+) = (+) if +ve figure is greater

Example

Simplify: +7 + -3

= +7 -3

= +4

(b) -3 + -4 = -3 + -4

= -7

(d)   -7 + + 3
       = -7 + 3
       = -4

(e)   +3 + +4
       +3 + 4
       = +7

Ref: 5:15 Pg111 New Mk bk5

Lesson 12b

Subtopic: Subtraction of integers without using a numberline

Content note

i)   (+) - (+) = (-) if the 2nd figure is greater
ii)   (+) - (+) = (+) if the 2nd figure is greater
iii)   (-) - (-) = (+) if the 2nd figure is greater
iv)   (-) - (+) = (-)

Examples

a) i) +3 - +7 = 3 − 7 = -4   ii) +7 - +3 = 7 − 3 = +4
b) i) -3 - -7 = -3 + 7 = +4   ii) -7 - -3 = -7 + 3 = -4
c) i) -3 - +7 = -3 − 7 = -10   ii) -7 - +3 = -7 − 3 = -10
d) i) +7 - -3 = +7 +3 = +10   ii) +3 - -7 = +3 +7 = +10

Ref: Exercise 5:15 Pg112 new MK bk5

ALGEBRA

Lesson 1

Sub topic: forming algebraic expressions

Content

Example

1. 4 boys visited my home and later other 2 boys. Later 5 of them left. Form an algebraic equation and simplify it

    2 boys + 4 boys − 5 boys

    2b + 4b − 5b

    6b − 5b

    = b

2. A number multiplied by 3 gives 15 let the number be represented by x

    3x = 15

Ref

New MK pp 267-270

Lesson 2

Sub topic: simplifying algebraic expressions

Content

Examples

Write in Short

q+ 7q + 4q = 12q   4b + 3b − t = 7b-t

10x − 3x + x   =10x + x − 3x   =11x − 3x = 8x

Ref: New MK pp 268

Lesson 3

Sub topic: collecting like terms and simplifying

Content:

Example : collect like terms and simplify

4b − 3b + 3t + t   7y − 8m + y + 10m − 6
4b − 3b + 3t + t   7y + y + 10m − 8m − 6

B + 4t   8y + 2m − 6

Ref

New mk bk 5 Pg 269 exercise 12.4

Old Mk pp 174-175

Remarks: ....

Lesson 4

Sub topic: substitution

Example

If a = 1, b = 3 , c = 5

Find the value of 5c + 4b − 8a   find the value of $\frac{2b}{a+c} = \frac{2xb}{a+c} = \frac{2x3}{1+5} = \frac{6}{6} = 1$

(5 x 5) + (4 x 3) − (8 − 1)

25 + 12 − 8

37 − 8

29

abc = a x b x c

abc = 1 x 3 x 5

abc = 3 x 5

abc = 15

Ref

Exercise 12.6 Pg 271 new mk bk5 new edition

MK old edition bk5 pp 177

Lesson 5

Sub topic: solving equations by subtracting

Content

Example

(i) Find the value of a

16 + a = 20

16 − 16 + a = 20 − 6

0 + a = 4

a= 4

(ii) There are 50 pupils in a class 30 are boys. How many girls are there?

Let the number of girls be g

Boys + girls = 50

30 + g = 50

30 − 30 + g = 50 − 30

0 + g = 20

G = 20

Ref

New Mk Bk 5 Pg273 exercise 12.8

Old MK pp 179

Lesson 7

Sub topic: solving equations by adding

Content

Example

(1)   Solve n − 5 = 3
N − 5 + 5 = 3 + 5

N − 0 = 8

N = 8

(2)   A boy used 3 of his exercise books and remained with 4 books

How many books did he have at first?

B − 3 = 4

B − 3 + 3 = 4 + 3

B − 0 = 7

B = 7

He had 7 books

Ref

New mk bk5 Pg 275 exercise 12.10

Old MK pp 180

Remarks: ....

Lesson 8

Sub topic: **solving equations by dividing**

Content

Example

(1)   Solve 5a = 20

$$\frac{5a}{5} = \frac{20}{5} = 4$$

(2) The length of a rectangle is 9cm. the width is Ycm. If its area is 72cm^2, find its width.

L x W = area

9cm x y = 72cm^2

$$\frac{9cmY}{9cm} = \frac{72cm2}{9cm}$$

Y = 8cm

Ref

New Mk Bk5 Pg276 exercise 12.11, 12.12

Old Mk pp 181

Remarks: ....

Lesson 10

Sub topic: more equations involving dividing

Content

Solve $x + x + x = 24$ solve $2p + 5p = 14$

$3x = 24$ $7p = 14$

$\dfrac{3x}{3} = \dfrac{24}{3}$ $\dfrac{7p}{7} = \dfrac{14}{7}$

X = 8   p = 2

Ref

New mk bk5 Pg 277 exercise 12.13

Old MK pp 182-183

Remarks: ....

Lesson 11

Sub topic: solving equations involving mixed operations

Content

Example

Solve

(a) $4a + 2a + 5 = 23$ (b) $2x + 5 = 17$
      $6a + 5 - 5 = 23 - 5$ $2x + 0 = 17 - 5$

      $6a + 0 = 18$ $2x + 0 = 12$

      $\underline{6a} = \underline{18}$ $\underline{2x} = \underline{12}$

        6   6   2   2

        a = 3   x = 6

Ref

New mk bk5 Pg 278 exercise 12.14

Lesson 12

Sub topic: equations involving squares

Content: Applying square roots

Example

Solve $b^2 = 4$

$$\sqrt{b^2} = \sqrt{4}$$

$$\sqrt{b x b} = \sqrt{2 x 2}$$

B = 2

Ref

New mkbk 5 Pg 280 exercise 12.16

Old MK pp 187

Remarks: ....

Lesson 13:

Sub topic: equations with fractions

Content:

Example

(1)   What number when divided by 4 gives 3?
Let the number be x

$$\frac{x}{3} = 4$$

$$\frac{x}{3} = 4 x 3$$

X = 4 x 3

X = 12

(2) A man divided his money among his three children and each got 450/=. How much money did he give out?

Let the amount of money be represented by m

$$\frac{m}{3} = 450 \neq$$

$$3x\frac{m}{3} = 450x3$$

$$m = 1350 \neq$$

Ref

New MK pp 282-283

Lesson 16

Sub topic: equations involving two fractions

Content:

Example (involving use of LCM)

Find the value of the unknown

$\frac{3}{5} = \frac{a}{10} LCM = 10$

$\frac{3}{5}x10 = \frac{a}{10}x10$

$3x2 = a$

$a = 6$

$\frac{8}{n} = \frac{1}{2} LCM = 2n$

$\frac{8}{n}x2n = \frac{1}{2}x2n$

$8x2 = n$

$n = 16$

Ref

Exercise 7q Pg 185 old mk edition bk5

Remarks: ....

Lesson 17

Sub topic: application of square roots in algebra

Content

Example (Word problems)

The area of a square is 16cm². Find its side
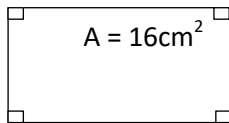
$$s \times s = 16cm^2$$

$$s^2 = 16cm^2$$

$$\sqrt{s^2} = \sqrt{16cm}$$

$$s = \sqrt{2 \times 2 \times 2 \times 2}$$

$$s = 2 \times 2cm$$

$$s = 4cm$$

A = 16cm²

6

Ref

Exercise 12.17 Pg 281 new edition mk bk 5

Exercise 7x Pg 191 old edition mk bk65

Remarks: ....

Lesson 18

Sub topic: application of algebra (perimeter)

Content

Find the unknown side of a figure when perimeter is given

Example

The perimeter of a square is 36cm find its side in cm

Let side be s

s + s + s + s = 36cm

4s = 36cm

$$\frac{4s}{4} = \frac{36}{4}$$

$$s = 9cm$$

P = 36
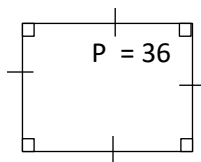
The perimeter of a rectangle is 4cm. if its length is 15cm. calculate its width

Let the width be represented by w

P = 40cm

W

2(L x W) = P
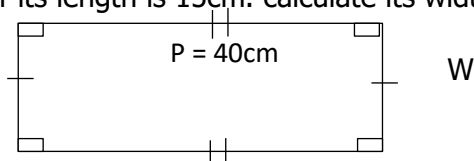
2(15cm + W) = 40cm

(2 x 15cm) + (2 + W) = 40cm

30cm + 2W = 40

30 − 30 + 2W = 40 - 30cm

0 + 2W = 10cm

2W = 10cm

2   2

W = 5

Ref

Exercise 12.20 page 284 / 285 New Edition Mk Bk 5

Exercise 7z (ii) page 195 old edition mk bk5

Lesson 19

Sub topic: finding unknown side when given area (rectangle)   15cm

Content: rectangle

A long the length   a + 2 ⬚ P = 40cm

                                                                          7cm
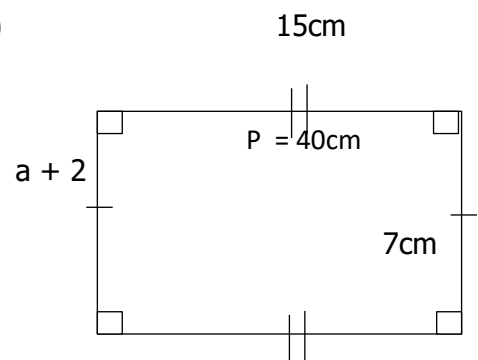
3x = 15cm (opposite sides of rectangle are equal)

$$\frac{3x}{3} = \frac{15}{3}$$

X = 5cm

Along the width

A + 2 = 7cm (2 opposite sides of a rectangle are equal)

A + 2 − 2 = 7 − 5

A + 0 = 5

A = 5cm

Find (i) x   (ii) length

2x

(4x – 3) cm

9cm
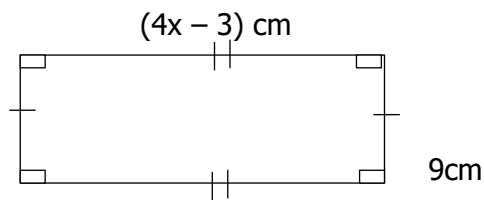
Ref: Teacher's collections

Lesson 20

Sub topic: finding unknown sides when given area

Content

Example

The area of a rectangle is 32cm^2 its length is 8cm. what is its width?

Let the width be represented by w

L x w = area

8cm x w = 32cm^2

A = 32cm^2 W

$$\frac{8w}{8} = \frac{32}{8}$$
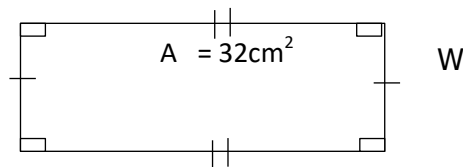
W = 4cm

Ref

Exercise 12.21 Pg 286 new edition mk bk5

Lesson 21

Sub topic: finding unknown sides of cuboids when given volume

Content: example

The volume of a box is 60cm^3. Its length is 5cm and width is 4cm. find its height

Let h be height

L x W x h = volume

5cm x 4cm x h = 60cm^3

$$\frac{20h}{20} = \frac{60}{20}$$

h = 3cm

NB: do the same for unknown width and length

Ref: Exercise 12.22 Pg 287 new edition MK bk 5. Exercise 7z (iii) Pg 196 old edition MK bk 5
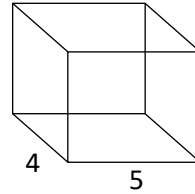
PRIMARY FIVE SCIENCE NOTES-TERM 3

TERM III

Types of changes – Biological, Physical and Chemical changes
Keeping Goats, Sheep and Pigs
Food and Nutrition
Primary Health Care (PHC)

Week One

LESSON 1

Topic 1: TYPE OF CHANGES (BIOLOGICAL, PHYSICAL AND CHEMICAL CHANGES)

Environment: These are people and their surrounding of people.

Types of changes in our environment

i. Physical changes
ii. Chemical changes
iii. Biological changes
iv. Atmospheric change

Biological changes: Are changes that take place in our body cells and affect the growth.

Examples of biological changes

Growth	Moulting
Germination	Flowering
Fertilization	Fruiting etc.

Characteristics of biological changes

- New organisms come into being e.g. young ones of animals, seedlings in plants.
- Young ones grow old.
- Increase in number of off springs
- Increase in harvest / yields.

Chemical changes

These are changes where a new substance is formed or

Chemical changes are changes which are irreversible

Characteristics of chemical changes

- A new substance is formed

- They are irreversible

- Heat or light is sometimes given off or absorbed

- The amount size and weight of the object changes.

Examples of chemical changes

- Burning
- Digestion
- Rusting
- Photosynthesis
- Respiration

Advantages of chemical changes

- Chemical changes like burning produce heat

- The heat produced is used to cook

- Production of energy during respiration

Disadvantages of chemical changes

- Rusting results into wearing out of iron materials, steel equipment
- Bolts become difficult to open or unscrew.
- Keys fail to fit in the padlock after rusting
- Water and air become poisonous to human life.
- Pollutes the environment ie smoke.

Physical changes

Physical changes are changes where no new substances are formed.

OR

Physical changes are changes which are reversible.

Examples of physical changes

Evaporation
Melting
Condensation
Sublimation
Freezing
Deposition

Characteristics of physical changes

No new substance is formed

Are reversible

No heat or light is given off or absorbed

Advantages of physical changes

- Formation of rainfall

- Formation of ice cubes

- Forms water for drinking

Disadvantages of physical changes

- Results into soil erosion
- Forms gulleys
- Causes loss of soil fertility

Weather changes in the atmosphere (atmospheric changes)

- Humidity

- Cloudy

- Rainy

- Sunny

ACTIVITY

1. In one sentence give the meaning of the word environment.
2. Mention any two types of changes in the environment.
3. What are physical changes?
4. Give any two examples of physical changes.

LESSON 2

1. Of what advantage are physical changes to man?

2. Suggest one characteristic of a chemical change.

Natural changes: Means changes that occur by themselves e.g. wind movement, changes in climate e.g. dry season, wet season, and rainfall formation **Man made Changes:** Are changes that are caused by man.

Examples of man made changes.

- Tree planting
- Deforestation (Tree cutting)
- Bush burning
- Construction of houses
- Road construction

Effects of changes in the environment to plants and people

Mulching
- Control the growth of weeds
- Preserves moisture in the soil

* Improves soil fertility

Tree cutting effect:
* Destroys the environment
* Exposes soil to agents of soil erosion
* Reduces the amount of rainfall

Bush burning Effects
* Causes Soil erosion.
* Loss of soil fertility
* Exposes soil to agents of soil erosion

Building houses
Effects
* Houses protect people and their property from bad weather e.g. rain fall, coldness, sunshine.
* Houses also protect people from thieves and wild animals.

Effect of road construction.
* Road construction helps to improve transport
* Destruction of vegetation
* Poor roads cause/lead to accidents and damage of vehicles

Pollution
Pollution is when toxic substances are released into the environment. Pollutants are the materials which pollute the environment.

EXAMPLES OF POLLUTANTS

* Plastics
* Polythene papers
* Oil
* Scraps
* Chemical
* Fumes from industries
* Fumes from cars
* Bush burning

TYPES OF POLLUTION

* Air pollution is when toxic substances are released into the air.

- Water pollution is when toxic substances are released into the water.
- Land pollution is when toxic substances are released into the land.
- Sound pollution is when there is too much noise in the area.

GENERAL EFFECTS OF POLLUTION TO THE ENVIRONMENT

- Pollution lowers the quality of the environment
- Pollution leads to respiratory diseases
- Pollution leads to environmental degradation
- Pollution leads to mental retardation.
- Pollution leads to death of organisms in the soil
- Pollution leads to death of aquatic animals.
- Pollution destroys the rain cycle

ACTIVITY
1. Give the meaning of term pollution.
2. Mention the four types of pollution.
3. State any two effects of pollution to man.
4. Briefly explain the term air pollution.

LESSON 3

Topic 2: KEEPING GOATS, SHEEP AND PIGS

Topic 2:1 Keeping Goats

Common terms used
A nanny goat: Is a mature female goat.
   A Billy goat: Is a mature male goat.
   A kid: Is any young goat.
   Kidding: Is the act of giving birth in goats.
   Browsing: Feeding on the soft parts of a plant.
   Tethering: Is the system of grazing where an animal is tied on a peg (stake) on a rope.
   Heat period: Is a period when a nanny goat is ready to be mated.
Weaning: Is the introduction of kids to other foods on addition to milk from the mammary gland.
Kidding: The act of giving birth to kids.
Gestation period: The period between fertilization and birth in mammals (animals).
Lactation: Is the milking period in animals.

Why farmers keep goats and sheep

1. For milk production.
2. For meat production.
3. For source of income (for sale and get money)

Other uses of goats to man.

1. The skins from goats are used to make leather products like shoes, straps for watches, belts, drum tops, bags and costumes for dancing among others.
2. The dropping from goats is used to make farmyard manure.
3. For giving dowry/bride price.

EXTERNAL PARTS OF A GOAT
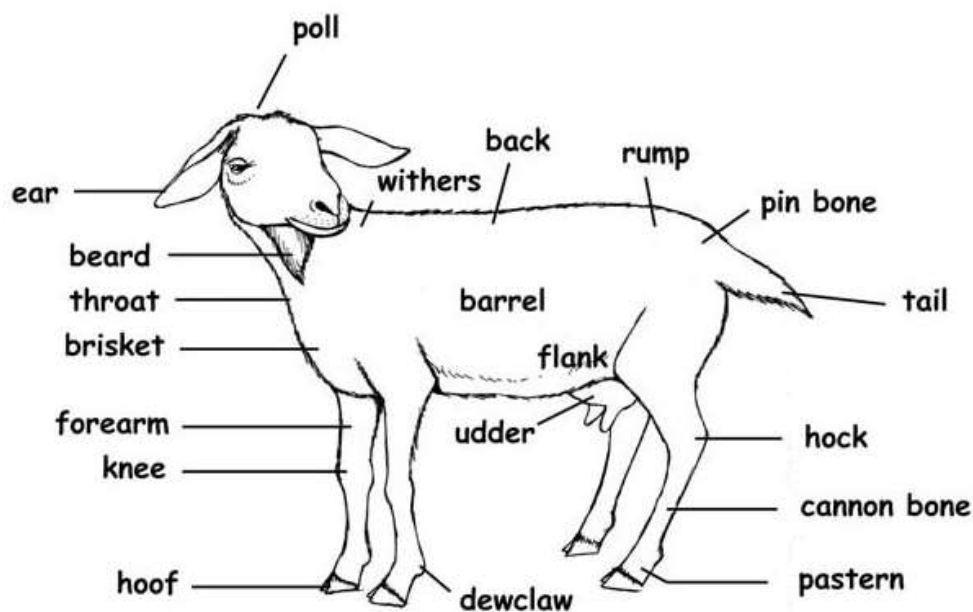
ACTIVITY

1. Briefly explain the following terms

- Anny goat
- Billy goat
- Browsing
- Heat period
3. Why do farmers keep goats?

LESSON 4

BREEDS OF GOATS

The two main groups of breeds of goats are: -

1. Local breeds (indigenous or native breed)
2. Exotic breeds

Examples of local breeds of goats

i. Mubende goats
ii. Golla goats
iii. Turkana
iv. Sambaru goats
v. Anglo– Nubian
vi. The Somali goat East African small goats

Advantages of local breeds

i. Local breeds are more resistant to tropical diseases.
ii. Local breeds can with stand harsh weather conditions.
iii. Local breeds are easy to manage as they feed by browsing.

Disadvantages

a) They long to mature
b) They provide hard meat.
c) They provide less meat and milk.

EXOTIC BREEDS OF GOATS

Exotic breeds are kind of breeds imported into Uganda from other countries.

Examples of exotic breed of goats

i. Toggenburg
ii. Angora goats
iii. Saanen goats
iv. Boar goats

Meat breeds

i. Boar goat
ii. Galla goats
iii. Mubende
iv. The Somali goats.

Milk producing breeds

i. Saanen goats
ii. Toggenburg

Wool breeds

Angora goats (mohair)

Cross breeds

Somali goats

ACTIVITY

1. Identify any two breeds of goats kept for milk production.
2. Mention two breeds of goats kept for meat.
3. Give any two reasons why people keep goats.
4. What is the gestation period of a nanny goat?

LESSON 5

Advantages of keeping Exotic breeds of goats.

i.   They grow very fast.
ii. They fetch a lot of money when sold.
iii. Produce tender meat.
iv. They produce a lot of meat and milk.

Disadvantages of keeping exotic breeds.

i.   They are expensive to keep.
ii. They are not resistant to worms and diseases.
iii. They cannot withstand harsh weather.
iv. They need special feeds to produce better products.

ACTIVITY

1. What is a breed?
2. Mention two main breeds of goats in Uganda.
3. State any two signs of heat period in goats.
4. What is lactation period?

LESSON 6

BREEDING IN GOATS

A female goat is mated for the first time at the age of 14 – 18 months.

Gestation period of a goat.

The gestation period of a nanny goat is 5 months (150 days)

HEAT PERIOD IN GOATS

Heat period is the time when the nanny goat is ready to be mated by a Billy goat.

Signs of a nanny goat on heat

i.   Becomes restless (unsettled)
ii. The vulva swells and becomes reddish.
iii. Whitish discharge from the vulva.
iv. Mounting other goats.
v.   Standing still when mounted.
vi. Loss of appetite.

CARING FOR A PREGNANT GOAT

- A pregnant goat needs special care.
- Concentrates should be given one month before kidding.
- These feeds have a high carbohydrates and protein content.
- Mineral licks should be given.
- Pregnant goats should be separated from others and kept in a clean place.
- Weaning should be done at least 3 - 4 months after kidding.

Signs of a good milk breed

i.   It has a large under and teats.
ii. Have large milk veins which appear below the belly.
iii. Have strong and well-placed hind legs.
iv. Have strong back muscles.

ROUTINE JOBS IN GOAT MANAGEMENT

What are routine jobs?

Routine jobs are any good management practices carried out on any livestock farm.

Examples of routine jobs on a livestock farm.

i.	Castration		v. Drenching	ix. Culling
ii.	Disbudding		vi. Spraying or dusting	
iii.	Hoof trimming		vii. Feeding	
iv.	Dipping		viii. Feeding	

ACTIVITY

1. What are routine jobs?
2. Mention any three routine jobs in goat management.
3. What is castration?
4. Give any two methods of castration.

Week Two
Lesson 7 & 8
Castration
Castration is the removal of testes from a young male animal.

Methods of castration
i.   Closed castration (using a burdizzo castrator or elastrator)
ii.   Open castration. (Scaped operation) – The knife can be used to cut the scrotum/scalped used by veterinarians.

Advantages of castration.

A castrated animal grows fatter and faster.
Castration prevents in-breeding.
Prevents the spread of venereal diseases (VD)
Helps to make the male animal calm (docile) and easy to handle (tame).
Castration helps to improve on the quality of meat.

Disadvantages of castration
i. Animals feel a lot of pain.
ii. The wound may become septic.
iii. The cut opens way to germs.
iv. It is expensive to buy a burdizzo or hire a qualified person to carryout castration.

Dehorning
Dehorning is the removal of horn buds to prevent the growth of horns.

Disadvantages of disbudding
i. Creates space on the farm.
ii. Helps in identification of ones animals.
iii. Prevents livestock animals from injuring others.

Hoof trimming: Is the cutting off of over grown hooves. It is normally done in sheep. A trimming knife or hoof trimming shears are used.

Importance: To reduce the chances of infections and injuries.

Dipping: Is the bathing of livestock in acaricides in a dip tank to kill ecto-parasites.

Importance: Helps to kill ecto-parasites e.g ticks.

Drenching: Is the giving of liquid medicine to the livestock through the mouth. Drenching is done using a drenching gun or bottle.

Spraying: Is when a fumigator or knap sack sprayer is used to spray insecticides / pesticides to kill ecto parasites.

Importance: Prevents tick borne diseases like Red water, Heart water, etc.

Dusting: Is the application of powdered medicine on the body of an animal to kill ecto-parasites.

Dosing: Is the giving of solid medicine e.g Tablets using a dosing gun to kill endo-parasites like worms.

Feeding: Is done using supplements, mineral licks, concentrates and fodder.

GRAZING GOATS
These are many methods of grazing animal, namely:
Define the scientific term browsing.
Browsing is the feeding on the soft parts of a plant by goats.
a) Rotational grazing
i. Tethering
ii. Strip grazing
iii. Paddock grazing
iv. Free range grazing (herding)

Tethering: Is when an animal is tied with a rope onto a peg to graze around.

Diagram of a tethering goat

Advantages of tethering
  i.   Ensure efficient use of pasture.
  ii.   Enables the growth of pasture in other areas.
  iii. Controls soil erosion as over grazing is avoided.
  iv.   Controls spread of parasites and diseases.
  v.   Allows pasture conservation.

Disadvantages tethering grazing

Animals cannot get enough food (pasture).
It is tiresome to keep on changing the animals.
The rope can cause injuries to the animal.

Free range grazing (herding)
Is when the animals are left to roam and gaze freely?

Disadvantages:
Animals can easily get lost and stolen by thieves.
Animals can stray and spoil crops.
Animal diseases are easily spread.

Zero grazing (stall feeding)
Zero grazing system needs more attention than tethering.
This method is suitable for small scale farmers and in areas where most land is used for crop growing.

ACTIVITY
  1. What is grazing?

2. Mention any two methods of grazing goats.
3. Give the meaning of tethering grazing.
4. State one disadvantage of free-range grazing.

The shelter for goats

LESSON 9

Topic 2.2   SHEEP REARING

TERMS USED IN SHEEP REARING
a) Ram: a mature male sheep.
b) Ewe: a mature female sheep.
c) Lamb: a young one of a sheep.
d) Lambing: Is the act of giving birth in sheep.
e) Mutton: Is the meat of sheep.
f) Shearing: Is the removal of over grown wool from the sheep.
g) Docking: Cutting short of lamb's tail.
h) Gestation period: Period of pregnancy in animals OR
Gestation period is a period between conception and birth.

Importance of docking sheep.
To allow easy mating
Why do farmers keep (rear) sheep?
  i. For mutton production.
 ii. For wool (mohair) production mostly in cold climate areas.
iii. For sale (income generation)

A part from wool and mutton, give any other products got from sheep.

i. The skin used to make feather, product like belts, bags, shoes, e.t.c

ii. Horns and hooves used for making office glue, buttons or decorations.

iii. For cultural purposes e.g sacrifice, rituals, pay dowry or bride wealth.

External parts of a sheep
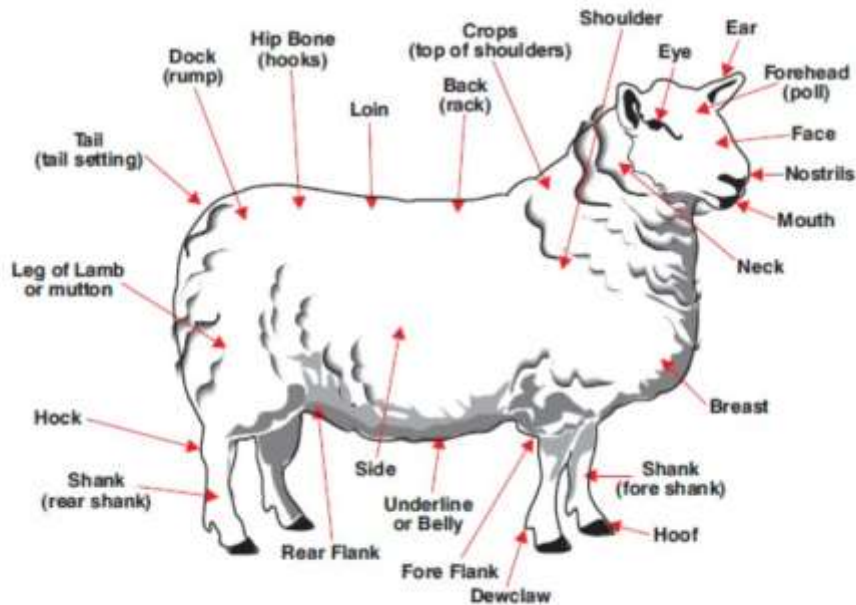
1. LOCAL BREEDS (indigenous)

- East African breed / Blacks headed Persian.
- The Somali
- The Masai

ACTIVITY

1. Explain the meaning of the following terms
   - Lamb
   - Mutton
   - Shearing
   - Docking
2. Give the importance of docking a female sheep.
3. Why do farmers keep sheep?

LESSON 10

2. EXOTIC BREEDS OF SHEEPS
i. Hampshire down sheep.
ii. Dorper sheep.
iii. Romney marsh
iv. Corriedale
v. Merino
vi. Ramboulet

Mutton breeds of sheep.
All local breeds are reared for mutton e.g
i. Black headed Persian.
ii. The Somali
iii. The masai e.t.c

Exotic meat breeds kept for mutton
i. Hampshire
ii. Dorper
iii. Chirot
iv. Sufflock
v. Dorset

Dual purpose sheep
Dual purpose sheep are the sheep kept for production of mutton and wool e.g Romney marsh/corriedate.

Wool breeds
Marino sheep (fine wool)
Romney marsh (long wool)

BREEDING IN SHEEP
A ewe should be served at the age of 16 -18 months. (1 year 4 months – 1 year 6 months) The gestation period of sheep is 5 months (150 days).

Weaning is done by giving.
Weaning is done by giving semi solid food to young ones besides milk from their mothers.

Weaning is done between 3 – 4 weeks.
Weaning sheep should be sheared at 8 months.
A mature sheep should be sheared once a year.

Identify the factors considered when choosing a good ewe/ram.

Calmness/docile appearance/easy to handle.
The udder and teats should be well developed.
Should have good motherly and lambing ability.
Should be free from diseases.
Should be free from hereditary effects.

ACTIVITY
1. Mention two examples of exotic breed of sheep.
2. Which exotic breed of sheep is well known for wool?
3. What is the gestation period of the sheep?
4. How do call a male sheep?
5. Mention any one sheep keep for meat.

LESSON 11

Topic 2.3: **PIGGERY (KEEPING OF PIGS)**
Piggery is the rearing and management of pigs.

TERMS USED IN PIGGERY

A SOW	Is a mature female pig
BOAR A	Mature male pig
PIGLET	Is any young pig
GILT	Is a female young pig
STY	Housing structure for pigs
HOG	A castrated male pig
FARROWING	Is the act of giving birth in pigs
LITTER	Is group of pigs born at once
PORK	Fresh meat from pigs
BACON	Meat from the back and sides of pigs.
LARD	Fats from pork.
HAM	Dry processed meat of pigs.

Why farmers keep pigs
a) Pigs are sources of income to farmers.
b) To get pork and other products like lard.
c) Sources of employment to farm workers.

d) Pork, bacon, lard are source of proteins and fats to people.

ACTIVITY

1. Explain the following term in piggery.

- A sow
- A gilt
- Sty
- Farrowing

2. Give two reasons why farmers keep pigs.

3. State any one characteristic of local breeds of pigs.

Other uses of pigs

Hair from pigs can be used to make bristles fro tooth brushes and other brushes. cushions head wigs etc.

Hooves from pigs can be burnt and used as ingredients in animal feeds.

Blood from pigs can be used as ingredients in animal feed.

Advantages of piggery

Piggery is very profitable if managed well.

Need little to begin.

Requires a small piece of land to start the piggery farm.

Creates employment to farmers and other people in the community.

Profits can be realized in short period.

Pigs are easy and cheap to manage as they feed on all types of food.

Week Three
BREEDS OF PIGS

There are two groups of breeds of pigs kept in Uganda namely:

Local breeds (Indigenous breeds)

Exotic breeds (Foreign breeds)

LOCAL BREEDS

There are breeds that have been in Uganda for a very long.

Example of breeds of pigs:

Black pigs

Spotted pigs

CHARACTERISTICS OF LOCAL BREEDS OF PIGS

- Local breeds grow slowly

- Local breeds produce low quantities of pork
- They are small in size.
- They are easily attacked by disease.

WILD PIGS

There are pigs that live entirely in the bush.

Examples:
- Wart hogs
- Bush logs
- Hedge hogs.

CROSS – BREEDS (HYBRIDS)

Cross-breeds (hybrids)

These are a result of mating two different pure breeds.

CHARACTERISTICS OF HYBRID

Produce better quality products compared to local breeds.

They are more resistant to diseases than the local breeds.

EXOTIC BREEDS

Are breeds that were imported from other countries.

Examples of exotic breeds.
- Large white
- Land race
- Polland China.
- Hampshire
- Saddle back/sessex.

CHARACTERISTICS OF EXOTIC BREEDS.

- Have the same ancestor.
- Have the same ability to produce pork, bacon and ham.
- Have the same ability to grow fat and mature quickly.
- They mainly have the same colour.
- They have the ability to farrow the same number of litter.

ACTIVITY

1. What is piggery?
2. Cite the meaning the following terms.

- A Sow
- Gilt
- Boar
- Farrowing

3. Why do farmers keep pigs?

4. Mention one characteristic of local breed of pigs.

5. Give one example of exotic breed of pigs.

6. Suggest one reason for keeping exotic breed of pigs.

LESSON 12
EXTERNAL STRUCUTURE OF A PIG.
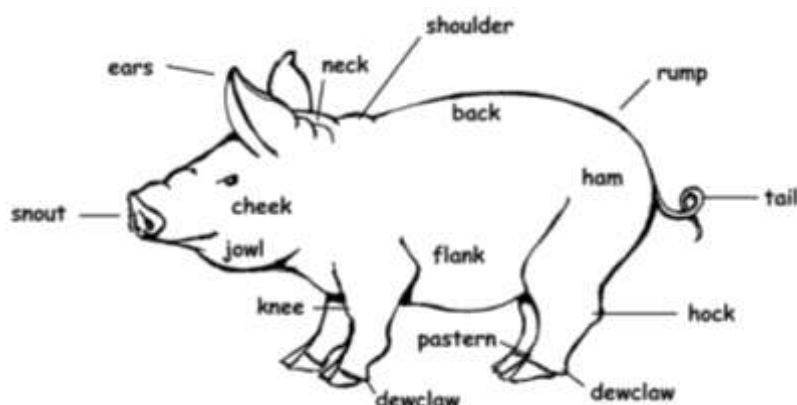
ACTIVITY
1. Draw a pig and name the external parts

LESSON 13

ADVANTAGES OF KEEPING EXOTIC BREEDS OF PIGS.
- Produce high quality of pork and bacon.
- Mature fast and early.
- Can grow to a large size.

FACTORS CONSIDERED WHEN SELECTING A GOOD QUALITY PIG
- Heredity – The piglet should come from a good castral family.
- Good health – The piglet should show no signs of sickness/ poor health.
- Mammary glands – The piglet should have at least ten functional teats.
- Good body formation – The piglets should be well built in body structure.

SYSTEMS OF KEEPING PIGS
Extensive system (out door system)
- Semi-intensive system.
- Intensive system.

EXTENSIVE SYSTEM

Is where the pigs are left to roam about looking for food.
Sometimes they are tethered.

Advantages of extensive system

It is cheap to maintain.
Pigs get to eat a variety of food.
Extensive system requires less labour.

Disadvantages of extensive system

- Pigs are easily infected with diseases.
- The pigs can easily be stolen by thieves.
- Pigs can easily be killed by wild animals.
- Pigs can stray and destroy farmer's crops.
- The pigs can turn wild.
- Pigs can easily get worms and other parasites.

INTENSIVE SYSTEM

Is where pigs are permanently kept indoors (stys)

Advantages of the intensive system

- The pigs give high yields.
- Pigs are in most cases healthy (free from diseases)
- The death rate is low.
- Pigs receive maximum care and attention.
- It is easy to monitor individual pigs.
- Pigs grow and mature quickly.
- Pigs are not wild but rather friendly.

Disadvantages of intensive system

It is expensive to manage.
It is tire-some as it requires a lot of labour.
Food and treatment are expensive.

ACTIVITY

1. Mention systems of rearing pigs.
2. Give the advantages of free range system.
3. Mention one disadvantage of free range system of keeping pigs.
4. Of what advantage is intensive system over extensive system?

LESSON 14
FACTORS CONSIDERED WHEN CHOOSING A GOOD SITE FOR A STY.
- Well drained land (area).
- Nearness to the water source.
- Cool environment.

CHARACTERISTICS OF A GOOD STY.
- Strong and well build to prevent the pigs from escaping.
- The floor should be slating to allow easy cleaning and flow of urine and faeces. Good drainage system inside and outside the sty to allow easy flow to wastes.
- Well ventilated to allow free circulation of air.
- Enough space for storage of feeds, water and farm equipment.
- Should have a farrowing pen for farrowing.
- Guard rails to prevent the sow from injuring the piglets while suckling.

SELECTION AND BREEDING OF PIGS
QUALITITIES OF A GOOD BOAR.
- Vigorous and healthy
- Well developed straight fat and short legs.
- Free from hereditary defects.
- Calm and easy to handle.

QUALITIES OF GOOD GILT
- Efficient use of feeds.
- Healthy and vigorously built.
- Free from furrowing problems.
- Should have at least ten functional teats.

HEAT PERIOD
This is when a sow is ready to be mated.
A sow first comes on heat at 6 months.

Signs of a sow on heat
- Restlessness
- The sow mounts other animals.
- Stands still when mounted.
- The vulva swells and becomes reddish.
- Whitish discharge from the vulva.
- Loss of appetite.

GESTATION PERIOD OF A SOW

3 months, 3 weeks, and 3 days (112-225 days)

Steaming up

Steaming up is the feeding of female animals on special feeds to stimulate milk production.

When steaming should up be done in pigs.
At least 1½ months (45 days to farrowing)

Advantages of steaming up

- Increase in milk production.
- Prevents low birth weights.
- Enables the foetus to grow well.
- Builds up the animal's body to prepare for farrowing.

Week Four
CARE FOR PREGNANT SOW
Feeds

Sow meal and wearer's meal are given to all breeding stock like boars, gilts, weaners, etc.

- A pregnant sow should be well fed to promoted the growth of the (fetuses)
- It should not mix with other pigs to minimize injuries.
- It should not be allowed to walk long distances since it is bulky (heavy).
- The sow meal contains fewer proteins than the creep feed.
- Creep feed has a higher protein content than any other feed.
- The creep feed is therefore used to feed piglets between 10 days-8 weeks) till they make 50 kg.
- Concentrates are also used as feeds in piggery.

Examples of feeds.

- Sow meals
- Bulky meal (food)
- Weaner's meal.

Diseases and parasites of pigs.
There are many diseases and parasites that attack a pig for example:

African swine fever (hog cholera)
Pneumonia
Anthrax
Nagana (trypano somiasis)

Anaemia (piglet anaemia)

Heart water

Foot rot.

ACTIVTY

Identify two qualities of good gilt.

Give two characteristics of a good sty

What is heat period?

Give any sign of heat period in a sow.

LESSON 16

Among the parasites that attack pigs include Liver Flukes, Tape worms, Round worm and Ecto-parasites like ticks, red mites, depluming.

DISEASE	CAUSE	SIGNS	SYMPTOMS	CONTROL /PREVENTION
Swine fever (Hog cholera)	Virus	Bloody diarrhea Difficulty in breathing Sore eyes Dullness Less of appetite	High fever	Isolation of infected animals. Keep the house, water and equipment clean. Quarantine Kill, burn and burry infected animals. Vaccination at 6-7 weeks of age.
Pneumonia	Bacterial	Difficulty in breathing Coughing Discharge from the nose Loss of appetite		Treat with antibiotics Isolate the infected pigs.

Foot and mouth	Virus	Signs Sharp rising temperature Swelling of the mouth and feet. Loss of appetite Limping Reduction in milk.		Vaccination Applying Quarantine in the infected areas. Isolate the infected animals. Otherwise, there is no treatment.
Intestinal worms e.g. tape worms, round worms.		Swollen pot belly Loss of appetite		Regular deworming Drenching or closing the animals regularly. Keep the feeds clean.

KEEPING FARM RECORDS

Types of records kept on a piggery.
• Litter records
• Furrowing records
• Feed records.
• Operation records.

Litter records: The litter records contain the number of piglets born together, piglet weaned in each round and the number of times a pig produces every year.
Farrowing records: Is where we record the date of mating, the expected date of farrowing or delivery and the actual date of farrowing.
Feed records: Is where we record the amount of feed given to the pigs daily.
Operation records. This includes the weaning date, and the dates weighing, vaccination and drenching.

Reasons for keeping records
• Records help the farmer to maintain the growth of the animals.
• They help the farmer to know the income and expenditure of the farm.
• They help the farmer to make decisions about the development of the farm plan.
• It helps the farmer to know whether he is operating at a loss or profit.

- Tell the history of the farm.
- Get loans.
- For fair taxation.

ACTIVITY

1. Identify any two diseases of pigs.
2. State two signs of swine fever in a pig
3. What are farm records?
4. Mention any three types of records kept in piggery.

LESSON 17

Topic 3: FOOD AND NUTRITION

Nutrition is the process of intake food and using it in the body for its proper growth.
Food is anything good eat or drink.

Why do people eat food?

There are many reasons why people eat and drink
Some reasons may be represented with 5 Hs namely:
Hunger, Habit, Happiness, Health and hospitality

BREAST FEEDING

Advantages of breast feeding to baby:

Breast milk is a complete balanced diet for the new born baby
It has some antibodies especially in the colostrums which helps to protect babies against some diseases. Colostrum is the first milk produced by the breast soon after delivery
Breast milk is always clean and ready
Breast milk is always at the right body temperature Breast milk is easily digested by babies

Advantages of breast feeding to mothers:

Breast feeding can delay the next pregnancy

Breast feeding is cheap to the family and mother in terms of expenditure Breast feeding is time saving, convenient and available whenever the baby needs it even at night.
It improves the health of the mother as she has to eat in order to maintain breast feeding.
Creates a love bond between the mother and the baby.

Disadvantages of breast feeding

It spreads HIV/AIDS.

It cannot be applicable to a mother of working class.

The mother suffering from breast cancer cannot breast feed a baby.

Milk contains synthetic nutrients which are not readily digested by a baby's digestive tract.

It's time consuming.

ACTIVITY

1. What is nutrition?
2. What is food?
3. Why do people eat food?
4. Mention two advantages of breast feeding to baby and a mother
5. Suggest anyone disadvantage of feeding.

Week Five
LESSON 18

BOTTLE FEEDING:

This is done by filling a bottle with boiled cow milk or powdered milk and then giving it to the baby to suckle.

Advantages of bottle feeding

- It can be used when the mother dies.
- It controls the spread of HIV/AIDS.
- It can be used when the mother is at work.
- The baby can be fed in the absence of the mother.

Disadvantages of bottle feeding:

- It can easily be contaminated by houseflies
- Bottles are difficult to clean properly hence causing germs to grow and spread.
- Bottle milk can easily get contaminated causing sickness to the baby Powdered milk is time consuming and difficult to prepare.
- Cow's or tinned powdered milk is expensive to buy
- Some cow's milk or powdered milk may be diluted so much causing milk lacking a complete diet.

VULNERABLE GROUPS

These are groups of people who are easily harmed by not having enough different types of to eat.

OR

These are groups of people who need special care and attention.

Examples of vulnerable groups:

Pregnant women and their un born children
Breast feeding women and their breast fed children
Weaning children
Sick people
Elderly people

People with special needs in the community

- Sick people
- The elderly
- Disabled
- Young people

Care for people with special needs
- Protection
- Medication
- Proper feeding
- Washing for them

ACTIVITY
1. Give one Advantage of bottle feeding.
2. State one disadvantage of bottle feeding to both the mother and the baby
3. What are the conditions that may allow a mother to bottle feed her baby?

LESSON 19
EACH VULNERABLE GROUP NEEDS A DIFFERENT TYPE OF DIET FROM OTHERS
1. **Babies and children:**
The special diet for babies and children includes;
Body building foods which contains proteins
Some of the foods which give us proteins are eggs, meat, milk, beans, fish and chicken
Proteins are needed in the making new body cells
New body cells are used for growth and repairing damaged body tissues and organs
Proteins are also needed to make enzymes and antibodies
Lack of proteins leads to sickness called kwashiorkor.
Kwashiorkor is a deficiency disease.

PROTECTIVE FOODS PROVIDE VITAMINS AND MINERALS
- Some sources of vitamin are liver, milk, fruit and vegetables.
- Vitamins and minerals help the body to resist diseases and boost body immunity
- A mineral like calcium is used in the growth of bones and teeth.
- Energy giving food are rich in carbohydrates:

- Some sources of carbohydrates are cassava, millet, maize and rice.
- If a child does not get enough carbohydrates, he/she will develop a deficiency disease called marasmus.
- **Carbohydrates** are needed in the body to generate energy
- **FATS:** These are used to produce energy to maintain body temperature and make the skin soft.

2. PREGNANT WOMEN AND THEIR UNBORN CHILDREN

Pregnant women need to eat food that will be enough for herself and for the un born baby growing in her womb.

A pregnant woman needs a balanced diet containing the following

Proteins

To build the body tissues of the embryo growing inside her womb and also repair her worn out cells.

Carbohydrates

To give her enough energy to carry the foetus in her womb and also to do her jobs

Iron

To build hemoglobin in her own and in her unborn baby

Calcium

To build strong bones and teeth of the unborn baby inside her womb.

Vitamin

To protect her and unborn baby from catching infections

3. BREAST FEEDING WOMEN AND THEIR BREAST FED CHILDREN

- Breast milk is the only food required for a baby up to four months
- A breast feeding mother needs to eat foods and drink fluids that will help her body produce enough milk for her baby
- She needs extra foods from all food values but two important ones needed are;

Fluids

To stimulate the production of more milk in her breast such as clean boiled water, milk, fruit juices, bushera, porridge etc

Calcium

To replace the calcium in her body that the child is taking in the breast milk

4. Weaning children

This is the gradual introduction of semi solid foods to baby other than breast milk alone

It is better to start weaning the child at four months because of the following reasons;

1. The baby's body needs more nutrients because the body is growing
2. The baby needs to get iron from other foods because the iron it was born with is used up and the mother's breast milk does not contain iron.
3. To prevent deficiency diseases like kwashiorkor and marasmus.

How to start weaning children:

Start with semi-liquid foods like porridge in which milk is added

Introduce one type of food at time until the baby gets used to it to avoid diarrhoea as the baby stomach is still weak to digest solid foods

Continue feeding frequently using other weaning food like porridge, mashed matooke, mashed posho, mashed rice, mashed fruit or all the food can be mashed and given at the same time

Remember children have small stomachs and need many meals a day.

SICK PEOPLE

These need good food and extra fluids in order to help the body fight sickness.

Most of the foods include the following;

Proteins:

To repair the worn-out cells during sickness

Vitamin and minerals salts:

The most important are vitamin C, Calcuim and iron to build the body defence and also help in manufacture of blood.

Fluids:

To prevent dehydration

Such foods include clean boiled water, fruit juices, ribena, lucozade, tea, soup, from meat, fish soup.

Frequent feeding:

Sick people may not be able to eat very much at one time so they should be fed with easy food.

6. Elderly people:

When people grow old, they often lose their teeth which cause health problems, such that they do not crush their food for easy digestion which can cause indigestion or constipation.

So elderly people need the following food which is easy to eat such as minced meat, fish without bones, mashed fruits etc.

Frequent feeding because they may not be to eat very much at one time.

Week Six

TRADITIONAL CUSTOMS AND FOOD TABOOS

These vary from community to another.

A custom is an established practice which is accepted in a community

Customs related to eating and drinking are usually based on religious or social beliefs.

Food taboos are traditional practices forbidding a community from preparation and eating some types of food.

These are many of these food taboos in different communities, below are some religious and cultural food taboos:

- Muslims and seventh day Adventists are not allowed to eat pork by their religion.
- Catholics are not supposed to meat on Fridays and during lent season
- In the past women were not allowed to eat chicken and eggs among some tribes in Uganda.
- In some tribes women are not supposed to eat mutton and goat meat
- Among some tribes, men are not allowed to eat lungs
- In some tribes newly wedded couple are not supposed to touch a bone until the bride's father-in-law has killed a bull
- One is not supposed to eat his totem for example members of the mamba clan in Buganda are not allowed to eat the lung-fish, which is their totem

Effects of food taboos in nutrition

Other food taboos can result into serious nutrition deficiency diseases eg kwashiorkor, marasmus etc

Children may lack certain food values in their body and become anaemic. Pregnant women may become malnourished and produce under weight babies. Alcoholic drinks, too, results in a family problem and can lead to malnourished children.

Advantages of traditional customs and food taboos:

Taboos help to conserve some plants and animal, because they are held in high esteem as totems

Food taboos help to shape our eating habits to suit the values and norms of our communities

Disadvantages of traditional and customs and food taboos:

- They affect mainly women and children yet these groups are vulnerable and often need the food they are forbidden to eat.
- Some food taboos are associated with food such as liver, chicken and eggs which are rich in proteins
- Such taboos mean that children and women are denied some protein-rich foods sometimes leading to food deficiency diseases like kwashiorkor

For example:

- People in Buganda eat mostly bananas, cassava, coco yams and white yams.

- People in Busoga eat sweat potatoes, cassava, millet, and some bananas.
- People in Teso, Karamoja, Acholi, Lang, and West Nile eat mostly millet, mixed with cassava, cassava alone, sweat potatoes, sorghum mixed with cassava.

Therefore, the feeding patterns of people depend on in which region these people are and the food mostly eaten is their staple food.

FOOD CONSUMPTION PATTERNS

People in different communities eat different food stuffs.

These food stuffs determine their staple food in that community.

Staple food is one's main food.

It is the basic food that is cheap and usually eaten mostly by everyone in that community.

ACTIVITY

1. What are vulnerable group of people?
2. Give examples of vulnerable group of people.
3. Identify any three people with special needs in the community.
4. How can a community care for people with special needs?

LESSON 20
Malnutrition and Deficiency diseases:

The common food deficiency diseases are kwashiorkor, marasmus, goiter, rickets, anaemia and beri-beri.

The table below shows deficiency diseases, their symptoms causes and prevention.

Scurvy	Bleeding gums Pain in joints and muscles.	Lack of vitamin C in the diet Feed on fruits and green vegetables
Rickets	Soft bones Deformed and swollen legs Brittle bones and teeth	Lack of enough vitamin D, Calcium and phosphorus Feed on egg yolk and fish

Beriberi	Muscular weakness Loss of nervous Loss of control and paralysis Slow growth	Lack of enough vitamin B1 in the diet Feed on beans, egg yolk and meat
Pellegra	Skin disorders Eye and mouth sores General body weakness	Lack of vitamin B2 in the diet Eat food rich in vitamin b2
Anaemia	Severe tiredness Pale skin	Lack of enough iron in the diet feed on green vegetables kidney egg and milk
Night blindness	Poor vision at night Dry skin	Lack of enough vitamin A in the diet Feed on green vegetables, carrots, liver, egg yolk and milk.
Goitre	Swollen neck	Lack of iodine Feed on fish and table salt
Low ability of blood to clot	Failure of blood to	Lack of enough vitamin K in the diet Feed on green vegetable like cabbages and dodo.

DISEASE	SYMPTOMS	CAUSE AND PREVENTION
Kwashiorkor	Pealing skin Swollen face (moon faced) Brown hair Loss of weight Wasted muscles Pot belly	Lack of enough proteins in the diet Feed on foods like meat, fish, eggs, milk which are rich in proteins
Marasmus	Constant hunger Loss of weight Children grow thin A sunken stomach	Lack of enough carbohydrates in the diet Feed on foods like maize, potatoes, cassava and yams

Staple food
This is also called one's main food.
It is the basic food that is cheap and most often eaten by everyone.
Depending on which area you live in Uganda, this may be matooke, maize meal, millet, sorghum, and cassava of potatoes.

Food security
This is the keeping of enough food for future use.

Importance of food security
- Humans can be fed more efficiently on plant-based diet as they require less water land and crops than meat-based diet.
- They reduce the risk of conflict over the scarce water and grazing land.
- They prevent deficiency diseases that can spread in humans.
- They do not require human reliance on domestic animals for food when survival of animals can be uncertain e.g in times of drought.

ACTIVITY
1. What are food taboos?
2. Mention two effects of food taboo to the body.
3. What are deficiency diseases?

Week Seven
LESSON 21
Topic 4: **PRIMARY HEALTH CARE (P.H.C)**
Primary health care is the essential health care in which individuals, families and communities work together to solve their health problems.

Principles of P.H.C
NB Principles are basic rules followed while carrying P.H.C programme.
a) P.H.C programmes must benefit everybody (total health for all people)
b) People's needs must be dealt with according to priority. (Starting with the most urgent)
c) All members of the community must be involved.
d) Many approaches must be used while carrying out P.H.C activities.
e) Total health for all.

HEALTH
Health is the physical, emotional, intellectual wellbeing of an individual and not merely the absence of a disease.

ELEMENTS OF P.H.C
Elements of P.H.C are programmes that are meant to protect and maintain good health.

Examples of elements of P.H.C
i. Accidents and first aid.
ii. Immunisation
iii. Family planning.
iv. Water and sanitation
v. Personal hygiene
vi. Food hygiene and nutrition.
vii. Oral and dental health care.
viii. Maternal and child health care.
ix. Community health education.
x. Control of Communicable Diseases.
xi. Public health, nursing and home visiting.
xii. Collection of statistical data.
xiii. Ante-natal and post-natal care for mothers.
xiv. CCD – Control of communicable diseases and CDD (control of Diarrheal Diseases)

Activities on PHC in promotion of community hygiene Rubbish burning.
- Proper disposal of faeces.
- Protecting water sources.
- Construction of bore holes.
- Construction of pit latrines.

ACTIVITY

What is primary health care?

What are the principles of P.H.C?

Cite the meaning of the term health.

LESSON 22 & 23
Community health education

i. Keep the people informed on how to care for their own health e.g boiling water for drinking.

ii. Food hygiene and nutrition: -
Enables people to know the importance of a balanced diet and the dangers caused by poor feeding.

iii. Immunisation: Helps people to prevent immunisable diseases in the community.

iv. Maternal and child health care.
Advises mothers and children about their health status and how to live healthy.

v. Water and sanitation – Help communities to have clean and safe water for drinking e.g by digging wells/ boreholes for people in the community and protecting water sources.

vi. Oral and dental health care: -
Is concerned with preventing dental problems like tooth decay and gum diseases among people in the community.

vii. Family planning: teach people methods of birth control.

viii. Accidents and first aid: teach and equip people with skills of giving first aid to causalities.

Responsibilities of individuals in P.H.C
- Maintaining good personal hygiene through.
- Proper washing of the body and face at least twice a day.
- Brushing of teeth in the morning and after every meal.
- Washing hands with soap before and after every meal and after using the latrine.
- Cutting short of fingers nails and toe nails.
- Washing clothes and beddings regularly.
- Washing the face and eyes every morning.
- Grooming hair.

Activities a family can do to promote P.H.C

- A family should avoid poor disposal of faeces and urine / proper use of latrines.
- Proper disposal of rubbish/house refuse.
- Boiling water for family members to drink.
- Cleaning breeding places for vectors near the home.
- Feeding family members on a balanced diet.
- Sharing information on health.
- Family members should avoid drug abuse.
- Practicing good food hygiene.

Week Eight-Nine
Activities of a community in promoting P.H.C

- Protecting water sources to avoid water pollution/contamination.
- Digging a rubbish pit/distributing garbage container for proper disposal of rubbish.
- Growing and caring for crops to promote good nutrition.
- Constructing public latrines in public places like taxi parks, e.t.c for proper disposal of faeces and urine.
- Creating public awareness about immunization activities.
- Constructing rehabilitation centres for people with disabilities.
- Organising communal work to improve on sanitation.
- Organising public fumigation to kill vectors like mosquitoes, houseflies, tsetse flies, e.t.c

SUITABLE LIFESTYLES AND HEALTH PRACTICES

- All people should live in a way that reduces chances of catching diseases e.g.
- Eating a balanced diet.
- Getting enough rest and sleep for body and brains to get refreshed.
- Maintain good body posture to avoid deformations.
- Avoiding drug abuse to minimize health problems like diseases.
- Washing and ironing clothes and bedding to kill germs.
- Doing physical exercise daily to refresh our bodies, burn excess fats, strengthen our body muscles, improve on the internal body organs, e.t.c. Visiting health workers early in case of any problem.
- Caring for other people with disabilities or health problems / complications.
- Reporting health problems like diseases outbreak early.

Good health practices in schools

i. Health parades to promote personal hygiene in the school.
ii. Having a school health committee to:
- Organise fellow children to do communal work.
- Encouraging parents to take their children for Immunization.
- Inviting health workers to have talks on health matters with Children.

- Promoting gardening to impart good farming methods in earners, promote good Nutrition and develop a positive attitude towards farming in learners among others.

Child to child programmes

Child to child programme is a programme where older children teach the younger ones good health habits.

They perform which help activities children learn how to work together and help each other on health matters.

Activities which are involved in child to child programme?

Older children teaching young children how to maintain personal hygiene e.g brushing teeth.

Older children can play with young children.

Helping the disabled children in washing their clothes, cooking food, fetching water for them, etc.

Teaching young children toilet habits.

Caring for other children who are sick.

TOPICAL QUESTIONS

1. Write P.H.C in full.
2. What is Primary Health Care?
3. Give any one principal of primary health care.
4. Which element of P.H.C promotes prevention of the six killer diseases.
5. Which activities can primary five pupils do to promote P.H.C
6. A part from the elements of P.H.C mentioned above give any other two elements of P.H.C.
7. How can people in the community promote good sanitation?
8. Identify any roles of a family in promoting P.H.C.
9. Give any one suitable lifestyle that can promote good health in an individual.
10. Give any two roles of a school health committee.
11. Why is it very necessary to have the following in a home?
 i. a latrine
 ii. A rubbish pit
12. Give any one activity of a health club in a school.