PRIMARY FOUR SOCIAL STUDIES

TERM II – 2020

TOPIC –VEGETATION IN OUR DISTRICT

Vegetation is the plant cover of an area.

TYPES OF VEGETATION

- Natural vegetation
- Plantation vegetation

Natural vegetation is the plant cover of an area that grows on its own

Examples: bushes, swamps, shrubs, savanna

Natural

Plantation vegetation/ planted vegetation

The plant covers of an area that is grown by man.

Types of natural vegetation.

- Equatorial vegetation Tropical rain forests.)
- Savanna vegetation
- Semi – desert
- Mountain vegetation
- Swamps.

Examples of trees under natural forests.

- Muvule (Troika)	- Ebony
- Rose wood	- African walnut
- Nkago	
- Musizi	

Natural forests provide people with hard wood timber

Things made from hard- wood.

- Bed
- Cup boards
- Tables
- Chairs
- Doors etc

SAVANNA VEGETATION.

- This type of vegetation covers the largest part of Uganda.
- It is subdivided in to savanna grass land and savanna wood land.

<u>Examples of trees growing under planted forests.</u>

- Cyprus
- Eucalyptus
- Pines
- Spruce
- Cypress
- Fig trees
- Conifers

Products made from soft wood (Trees from planted forests produce soft wood)

- Ply wood
- Match boxes
- Papers
- Pencils
- Some rlers
- Furniture

Examples of natural forests

- Mabira   biggest natural forest
- Budongo
- Bugoma
- Malabigabo
- Bwindi impenetrable.

<u>Examples of planted forests.</u>

- Lendu – biggest planted forst.
- Magamaga
- Mafuga
- Nyabyeya
- Bugamba

<u>Importance of forests to man</u>

- They are sources of timber
- They are sources of wood fuel.
- They attract rain formation
- They attract tourists
- They are a habitat for wild life.
- They are used for scientific study and research
- They are sources of herbs.
- They help in controlling soil erosion.

REASONS WHY PEOPLE CUT DOWN TREES.

- To get land for farming, industrialization road construction e.t.c
- To get wood fuel.
- To get timber
- To get herbal medicine.

Human activities which affect the vegetation

- Deforestation
- Bush burning
- Over grazing
- Uncontrolled cultivation
- Un controlled lumbering

Problems facing forests.

- Wild fires
- Encroachment on their land.
- Defforestation

Ways of conserving forests.

- Afforestation
- Re- afforestation
- Practicing Agro-forestry
- Enforcing laws against deforestation
- Gazetting land for forest.
- Massive sensitization of people on uses of forests.

TOPICAL QUESTIONS.

TERM II 2020

1. What do you understand by the term vegetation?
_____2. Nam

any two examples of vegetation.

i) _____

ii) _____

3. Name the two types of vegetation.

i) _____

ii) _____

4. Nam the two types of forest.

i) _____

ii) _____

5. State any two products of hard wood.

i) _____

ii) _____

6. Give two examples of trees that grow in natural forests.

i) _____

ii) _____

7. Name any two planted forests in Uganda.

i) _____

ii) _____

8. Write down three things that are made from timber.

i) _____

ii) _____

iii) _____

9. Name any two examples of bad people who hide in the forests.

i) _____

ii) _____

10. Write any two examples of common grass.
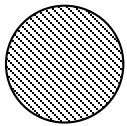
i) _____

ii) _____

P.4 MATHEMATICS TERM II 2020
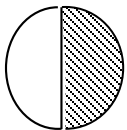
LESSON 1

TOPIC : **FRACTIONS**

SUBTOPIC : **Revision of fractions (lower work)**
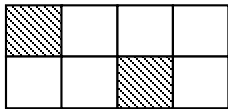
CONTENT : Definition:
A fraction is a part of a whole.

Naming and shading fractions and writing in words.

 1 a whole

 $\frac{1}{2}$ a half

 $\frac{2}{8}$ Two eights

Shade these fractions.

(a) $\frac{4}{6}$ (b) $\frac{1}{3}$ of 6
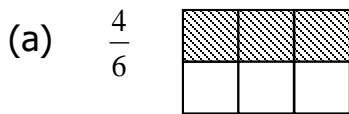
LESSON 2

TOPIC : **FRACTIONS**

SUBTOPIC : **Finding equivalent fractions**

CONTENT : How to get equivalent fractions.
- We can use the knowledge of multiples.

Examples: $\frac{2}{3}$

$\frac{2}{3} = \frac{2}{3}$ x $\frac{2}{2} = \frac{4}{6}$, $\frac{2}{3} = \frac{2}{3}$ x $\frac{4}{4} = \frac{8}{12}$

$\frac{2}{3} = \frac{2}{3}$ x $\frac{3}{3} = \frac{6}{9}$, $\therefore \frac{2}{3} = \{\frac{2}{3}$ x $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}.......\}$

ACTIVITY: List the first equivalent fractions for:

(a) $\dfrac{1}{3}$ (b) $\dfrac{2}{5}$ (c) $\dfrac{1}{2}$ (d) $\dfrac{1}{4}$ (e) $\dfrac{4}{7}$

LESSON 3

TOPIC : **FRACTIONS**

SUBTOPIC : **Equivalent fractions**

CONTENT : Finding the missing part of a fraction

Example: (a) $\dfrac{1}{2} = \dfrac{\square}{6}$

$\therefore \dfrac{1}{2} = \dfrac{3}{6}$

(b) $\dfrac{3}{5} = \dfrac{\square}{20}$

$\therefore \dfrac{3}{5} = \dfrac{12}{20}$

$\dfrac{1}{2} \times \dfrac{2}{2} = \dfrac{2}{4}$

$\dfrac{1}{2} \times \dfrac{3}{3} = \dfrac{3}{6}$

$\dfrac{3}{5} \times \dfrac{2}{2} = \dfrac{6}{10}$

$\dfrac{3}{5} \times \dfrac{3}{3} = \dfrac{9}{15}$

$\dfrac{3}{5} \times \dfrac{4}{4} = \dfrac{12}{20}$

LESSON 4

TOPIC : FRACTIONS

SUBTOPIC : Reducing fractions

CONTENT : Reduce $\dfrac{6}{12}$ to its lowest term.

Example:

(a) $\dfrac{6}{12} \div \dfrac{2}{2} = \dfrac{3}{6}$

$\dfrac{3}{6} \div \dfrac{3}{3} = \dfrac{1}{2}$

$\therefore \dfrac{6}{12} = \dfrac{1}{2}$

(b) Write $\dfrac{3}{9}$ to its lowest terms (By using the GCF / HCF

$\dfrac{3}{9} \div \dfrac{3}{3} = \dfrac{1}{3}$

$F_3 = \{ 1, ③ \}$

$F_9 = \{ 1, ③, 9 \}$

H.C.F = 3

LESSON 5

TOPIC : **FRACTIONS**

SUBTOPIC : **Comparing fractions without a number line**

CONTENT :

(a) Example: Which is greater $\frac{1}{3}$ or $\frac{1}{2}$?

$$\frac{1}{2} = \frac{2}{4}, \frac{3}{6}, \frac{4}{8} \ldots\ldots\ldots$$

$$\frac{1}{3} = \frac{2}{6}, \frac{3}{9}, \frac{4}{12} \ldots\ldots\ldots$$

$\therefore$ $\frac{1}{2}$ is greater than $\frac{1}{3}$

LESSON 6
TOPIC: **FRACTIONS**
SUBTOPIC : **Ordering fractions**
CONTENT : **Arranging fractions starting with the largest.**
Example 1

(i) $\frac{1}{2}, \frac{2}{3}, \frac{1}{6}$

$$\frac{1}{2} = \frac{2}{4} = \boxed{\frac{3}{6}} = \frac{4}{8} = \frac{5}{10} \ldots\ldots\ldots$$

$$\frac{2}{3} = \boxed{\frac{4}{6}} = \frac{6}{9} = \frac{8}{12} \ldots\ldots\ldots$$

$$\boxed{\frac{1}{6}} = \frac{2}{12} = \frac{3}{18} \ldots\ldots\ldots$$

$\therefore$ $\frac{1}{2}, \frac{2}{3}, \frac{1}{6}$ starting from the biggest is $\frac{2}{3}, \frac{1}{2}, \frac{1}{6}$

Example 2

Arrange: $\frac{1}{3}, \frac{1}{2}, \frac{1}{5}$ starting with the smallest.

$$\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12} = \frac{5}{15} = \frac{6}{18} = \frac{7}{21} = \frac{8}{24} = \frac{9}{27} = \boxed{\frac{10}{30}}$$

$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12} = \frac{7}{14} = \frac{10}{20} = \frac{13}{26} = \frac{15}{30}$$

$$\frac{1}{5} = \frac{2}{10} = \frac{3}{15} = \frac{4}{20} = \frac{5}{25} = \frac{6}{30} = \frac{7}{35}$$

$\therefore$ $\frac{1}{3}, \frac{1}{2}, \frac{1}{5}$ from the smallest is $\frac{1}{5}, \frac{1}{3}, \frac{1}{2}$

LESSON 7

TOPIC : FRACTIONS

SUBTOPIC : Operation on fractions

CONTENT : Addition of fractions with the same denominators

Example: 1

$$\frac{1}{5} + \frac{2}{5} = \frac{1+2}{5} = \frac{3}{5}$$

Example II

$$\frac{4}{12} + \frac{3}{12} = \frac{4+3}{12} = \frac{7}{12}$$

ACTIVITY: Exercise 5g page 87

LESSON 8

TOPIC : FRACTIONS

SUBTOPIC : Addition of fractions with the same denominator in word problem.

CONTENT : Jesca dug $\frac{1}{6}$ of the garden and Mary dug $\frac{4}{6}$ of the garden. What part of the garden was dug?

Jesca dug $\frac{1}{6}$

Mary dug $\frac{4}{6}$ so $\frac{1}{6} + \frac{4}{6} = \frac{1+4}{6} = \frac{5}{6}$

LESSON 9

TOPIC : FRACTIONS

SUBTOPIC : Subtraction of fractions with the same denominators.

CONTENT : Example 1:

$$\frac{3}{3} - \frac{1}{3} = \frac{3-1}{3} = \frac{2}{3}$$

Example II

$$\frac{5}{7} - \frac{2}{7} = \frac{5-2}{7} = \frac{3}{7}$$

LESSON 10

TOPIC : **FRACTIONS**

SUBTOPIC : **Subtraction of fractions with the same denominators in word problem.**

CONTENT : **Example 1:** Subtraction $\frac{2}{7}$ from $\frac{5}{7}$

$$\frac{5}{7} - \frac{2}{7} = \frac{5-2}{7} = \frac{3}{7}$$

Example 2

Andrew had $\frac{7}{9}$ of a cake, he ate $\frac{5}{9}$ of it. What fraction remained?

Andrew had $\frac{7}{9}$ he ate $\frac{5}{9}$

$$\therefore \frac{7}{9} - \frac{5}{9} = \frac{7-5}{9} = \frac{2}{9}$$

LESSON 11

TOPIC : **FRACTIONS**

SUBTOPIC : **Addition of fractions with different denominators**

CONTENT : **Example 1**

Add: $\frac{1}{2} + \frac{1}{3}$

Using equivalent fractions

$$\frac{1}{2} = \frac{2}{4} = \boxed{\frac{3}{6}} = \frac{4}{8} = \frac{5}{10} \ldots\ldots\ldots\ldots$$

$$\frac{1}{3} = \boxed{\frac{2}{6}} = \frac{3}{9} = \frac{4}{12}$$

$$\frac{1}{3} + \frac{2}{6} = \frac{3+2}{6} = \frac{5}{6}$$

LESSON 12

TOPIC : **FRACTION**
SUBTOPIC : Subtraction of fractions with different denominators.
CONTENT : Example 1

Subtraction of $\frac{3}{4} - \frac{2}{3}$

Using equivalent fractions.

$$\frac{3}{4} = \frac{6}{8} = \frac{9}{12} = \frac{12}{16} = \frac{15}{20}, \ldots\ldots\ldots\ldots$$

$$\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12} = \frac{10}{15}$$

$$\frac{9}{12} + \frac{8}{12} = \frac{9+8}{12} = \frac{17}{12}$$

LESSON 13

TOPIC : **FRACTIONS**

SUBTOPIC : **Mixed fractions as improper fractions**

CONTENT : Example 1:
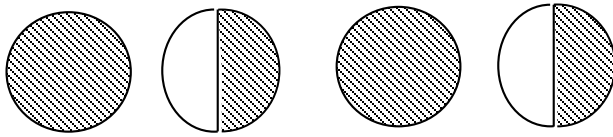
$$1\frac{1}{2} = 1 + \frac{1}{2} = \frac{2}{2} + \frac{1}{2} = \frac{3}{2}$$

Example II
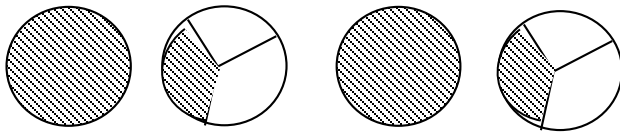
$$1\frac{1}{3} = 1 + \frac{1}{3} = \frac{3}{3} + \frac{1}{3} = \frac{4}{5}$$

LESSON 14

TOPIC : **FRACTIONS**

SUBTOPIC : **Changing improper fractions to mixed fractions.**

CONTENT : Example 1: Change $\frac{5}{2}$ to a mixed fraction.

Working 1

$\frac{5}{2}$ is $\frac{2}{2} + \frac{2}{2} + \frac{1}{2}$

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

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

Working 2

$$\frac{5}{2} = 2\overline{)5}^{\,2} \begin{array}{l} \underline{-4} \\ \ 1 \end{array}$$

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

10

LESSON 15

TOPIC :   **FRACTIONS**

SUBTOPIC   :   **Addition of mixed fractions with the same denominators.**

CONTENT   :   Add: $1\frac{1}{3}$ + $4\frac{1}{3}$ to a mixed fraction.

Re-arrange: $= (1 + \frac{1}{3}) + (4 + \frac{1}{3})$

$$= 1 + 4 + \frac{1}{3} + \frac{1}{3}$$

$$= 5 + \frac{2}{3}$$

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

LESSON 16

TOPIC: **FRACTIONS**

SUBTOPIC   :   **Addition of fractions with the same denominators in word problem.**

CONTENT   :   James bought $6\frac{1}{4}$ kg of meat on Monday and $7\frac{3}{4}$ kg on Tuesday.

How many kilograms did he buy altogether?

$6\frac{1}{4}$ kg + $7\frac{3}{4}$ kg.

Rearrange $= (6 + \frac{1}{4}) + (7 + \frac{3}{4})$

$$6 + 7 + \frac{1}{4} + \frac{3}{4}$$

$$13 + \frac{4}{4}$$

$$13 + 1$$

$$= \underline{14kg.}$$

LESSON 17

TOPIC   :   **FRACTIONS**

SUBTOPIC   :   **Subtraction of mixed fractions with the same denominators**

CONTENT   :   Subtract $4\frac{3}{5}$ - $2\frac{1}{5}$.

Re-arrange $= (4 + \frac{3}{5}) - (2 + \frac{1}{5})$

$$= (4 - 2) + (\frac{3}{5} - \frac{1}{5})$$

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

$$= 2\frac{2}{5}$$

LESSON 18

TOPIC:　　　　**FRACTIONS**

SUBTOPIC   :　　　**Fraction of a group.**

CONTENT :　　　Example 1: What is $\frac{1}{2}$ of 8?
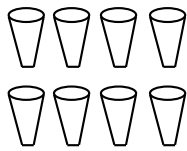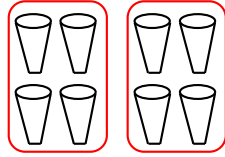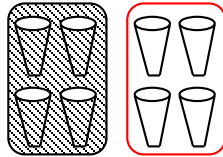
8 glasses　　　　　2 groups　　　　$\frac{1}{2}$ shaded　　　　$\frac{1}{2}$ of 8 = 4
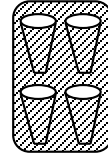
LESSON 18

TOPIC :　　　**FRACTIONS**

SUBTOPIC   :　　　**Application of fractions**

CONTENT :　　　A man had 100 cows on his farm. He gave away $\frac{2}{5}$ to his wife and remained with the rest. How many cows did he give his wife?

$$\frac{2}{5} \text{ x } 1\overset{20}{\cancel{00}} \quad = \quad 2 \text{ x } 20$$

$$= \quad \underline{40 \text{ cows}}$$

Find the number of cows his remained with

　　　100 - 40   = 60 cows.

Find the fraction that he remained with;

$$1 - \frac{2}{5} \quad = \quad \frac{5}{5} - \frac{2}{5} = \frac{5-2}{5}$$

$$= \quad \frac{3}{5}$$

LESSON 20

TOPIC :　　　**FRACTIONS**

SUBTOPIC   :　　　**Multiplication of fractions**

CONTENT :　　　**Multiply:**　　　$\Rightarrow \ \frac{1}{2} \text{ x } \frac{1}{4} = \frac{1}{8} \quad \Rightarrow \quad \frac{3}{4} \text{ x } \frac{2}{3} = \frac{6}{12}$

$\Rightarrow \frac{1}{4}$ of $\frac{1}{3} \quad \Rightarrow \quad \frac{1}{10}$ of $\frac{5}{8}$

$\Rightarrow \frac{1}{4} \text{ x } \frac{1}{3} = \frac{1}{12} \quad \Rightarrow \quad \frac{1}{10} \text{ x } \frac{5}{8} = \frac{5}{80}$

LESSON 21

TOPIC: FRACTIONS

SUBTOPIC   :   **Reciprocals of given fractions**

CONTENT :   (i)   The reciprocal of $\frac{1}{2}$ is 2

Example   (ii)   Find the reciprocal of $\frac{2}{3}$.

Let the reciprocal be m

$m \times \frac{2}{3} = 1$

$\cancel{3} \times \frac{2}{\cancel{3}} m = 1 \times 3$

$2m = 3$

$m = \frac{2}{3}$

NOTE: The product of a number and its reciprocal is 1

LESSON 22

TOPIC: FRACTIONS

SUBTOPIC   :   **Writing decimal fractions in words.**

CONTENT :   Example 1

Write 0.2 in words

0.2
    └─Tenth
0.2 is either two tenths

Or zero point two

LESSON 23

TOPIC   :   FRACTIONS

SUBTOPIC :   Writing fractions in decimals

CONTENT :   Example 1

ACTIVITY:

1. Describe the shaded fraction.

     = _____

2. Work out: $\frac{1}{2} + \frac{1}{4}$ using equivalent fractions.

3. Express $\frac{9}{2}$ as a mixed fraction.

4. What is $\frac{3}{4}$ of 8 oranges?

5. Change $7\frac{1}{3}$ into an improper fraction.

6. List the first three equivalent fractions for;

    a) $\frac{1}{5}$ b) $\frac{3}{8}$

7. Find the missing number.

    $$\frac{2}{7} = \frac{\square}{21}$$

8. Reduce $\frac{4}{8}$ to its lowest term

9. In a village of 120 people. $\frac{1}{3}$ are male and the rest are female.

a) How many male are in the village?

b) Find the number of female in the village.

c) Work out the fraction for females.

10. Multiply: $\frac{4}{7} \times \frac{1}{3}$

11. Use <, > or = to complete the statements below.

a) $\frac{1}{4}$ _____ $\frac{1}{3}$ b) $\frac{1}{2}$ _____ $\frac{1}{7}$

b) $\frac{3}{5}$ _____ $\frac{2}{5}$

12. Arrange $\frac{2}{3}$, $\frac{1}{2}$, $\frac{1}{5}$ in ascending order

13. What is the un shaded fraction.   14. Subtract $5\frac{2}{3} - 1\frac{1}{3}$

15. Kapere had $\frac{7}{9}$ of a pan cake, he ate $\frac{2}{9}$ of it. What fraction remained?

SCIENCE

OUR FOOD
VOCABULARY
1. **Food**
2. **hunger**
3. **healthy**
4. **habit**
5. **hospitality**
6. **happiness**

Food is anything we eat or drink to get energy, be healthy and build our bodies.
 Sources of food
- Plants
- Animals

Places where we get food
- Gardens
- Markets
- Shops
- Forests and bushes
- Water bodies
- Granaries

Ways of getting food
- By harvesting
- By buying
- By hunting
- By fishing

Activity
1. Give any one source of food.

   _____

2. Why so we grow crops?

   _____

3. Name any one food we get from water bodies.

   _____

4. Give one way of getting food from water.

   _____

5. Name the food value we get from eating fish.

   _____

NUTRITION

Nutrition is the process by which organisms obtain food and uses it for growth and repair body cells.

Nutrition is also called feeding.

Uses of food to the body.
i)   Food provides energy to the body
ii) Food keeps the body healthy
iii) Food builds the body
iv) Food provides warmth to the body.

Why we eat food

We eat food every day for the following reasons;
i)   Because we are hungry.
ii) To be healthy
iii) Because it is a habit
iv) Because of hospitality
v)   Because of happiness.

Note: The above reasons are known as the 5Hs, that is,
i)   Hunger (because our stomachs feel empty)
ii) Health (because we know that we need food and drink in order to live)
iii) Habit (because it is the time of day when we normally out)
iv) Happiness (because we enjoy eating certain foods)
v)   Hospitality (because we have guests and it is our custom to offer them food)

ACTIVITY

1. Briefly explain nutrition.

   _____

2. How is food useful in the body?

   _____

3. Why do people eat food?

   _____

4. How do people get food?

   _____

5. Write any two 5Hs in full.

   (i) _____   (ii) _____

6. Name the food stuff obtained from water bodies.

   _____

VOCABULARY
1. *Classes of food*
2. *food values*
3. *proteins*

Note: Go, Grow and Glow foods are known as the 3Gs, that is
i)   Go foods
ii)   Grow foods
iii) Glow foods

Classes of food/food values:
Sorting sources
(*Practical lesson on animal plant proteins*)

They are;
i)   Proteins
ii)   Carbohydrates
iii) Vitamins
iv)   Fats and oils (lipids)
v)   Minerals

PROTEINS
Uses;
These are body building food values.
i)   They make new cells in the body.
ii)   They repair worn out cells// replace worn out cells.

Sources of proteins

Animal proteins
- Beef
- Chicken
- Eggs
- Milk
- Fish
- Insects

Insect proteins
- grasshoppers
- white ants
- locusts

Plant proteins
- Beans   - sim-sim
- Soya beans   - sun-flower
- Cow peas
- Peas
- Ground nuts

ACTIVITY:

1. List down **any two** classes of food.

    (i) _____   (ii) _____

2. How are proteins important to a sick person?

    _____

3. Identify **any two** examples of the following:

    (i) Animal proteins   (i) _____   (ii) _____

    (ii) Plant proteins   (ii) _____   (ii) _____

4. Why do we include foods rich in proteins to the diet of a pregnant mother?

    _____

5. Name the deficiency disease got due to lack of proteins in the diet.

    _____

CARBOHYDRATES
VOCABULARY
   1. **Carbohydrates**
   2. **energy**
   3. **source**

Uses:

These are energy giving food values.
They provide energy to the body.

Sources of carbohydrates
i)   Maize
ii) Millet
iii) Cassava
iv) Rice
v)   Sorghum
vi) Sweet potatoes
vii) Irish potatoes
viii)Coco yams
ix) Matooke
x)   Sugar cane
xi) Honey
xii) Bread
xiii)Wheat

ACTIVITY:

1. How are carbohydrates useful to an athlete?

   _____

2. Identify any one example of foodstuff suitable for a footballer.

   _____

3. Why should people be encouraged to eat foods rich in carbohydrates?

   _____

4. Identify any three food stuffs rich in carbohydrates.

   (i) _____   (ii)   _____

   (iii) _____

VITAMINS
VOCABULARY
   1. **Vitamins**
   2. **immunity**
   3. **source**
   - They are health giving foods:
   - They increase body immunity

Types of vitamins

i)   Vitamin A   vi)   Vitamin E
ii) Vitamin B1   vii)   Vitamin K
iii) Vitamin B2
iv) Vitamin C
v)   Vitamin D

Uses of Vitamins

Vitamin/ mineral	Sources	Importance	Deficiency	Signs /symptoms
Vitamin A	i) Liver ii) Cheese iii) Butter iv) Margarine v) Milk vi) Eggs vii) Spinach viii) Carrots ix) Red palm oil	i) Increases resistance to diseases. ii) For god night vision	i) (night blindness)	i) Blurred objects ii) Poor eye sight iii) Reduced night vision.
Vitamin B1	i. Unpolished cereals ii. Beans iii. Groundnuts iv. Green vegetables v. Meat	i) For mental health ii) For proper growth	i) Beriberi disease	i) Poor growth ii) Paralysis iii) Forgetfulness iv) Lack of appetite v) Body weakness

	vi. Yeast			
Vitamin B2	i. Beans ii. Lean meat iii. Liver iv. Yeast v. Kidney vi. Groundnuts	i) For mental health ii) For proper growth	i) Pellagra	i) Body weakness ii) Poor growth
Vitamin C	i. Oranges ii. Lemons iii. Guavas iv. Tomatoes v. Mangoes vi. Pawpaw vii. Fresh green vegetables	i) For strong skin membranes	i) Scurvy	i) Bleeding of the gums ii) Poor healing of wounds iii) Reduced resistance to diseases. iv) Poor growth of the skin.
Vitamin D	i. Butter ii. Milk iii. Cheese iv. Egg York v. Liver vi. Fish liver oil	i) For absorption of calcium ii) For strong bones and teeth.	i) Rickets	i) Week bones

ACTIVITY 1:

1. Give any one source of vitamin A.

   _____

2. Suggest one importance of Vitamin B to the body.

   _____

3. Identify the deficiency disease caused due to lack of vitamin B2 in the body.

   _____

4. Kato has poor night vision. Which deficiency disease is he suffering from?

   _____

5. Name the deficiency disease caused due to lack of Vitamin D in the body.

   _____

6. How is scurvy prevented in young children?

   _____

7. Kato's brother has a bleeding gum and poor healing of wounds. What deficiency
   disease is he suffering from?

8. **Complete the table below**.

Deficiency disease	Lack of
Scurvy	…………………………….
………………………….	Vitamin D
Beri-beri	…………………………….
………………………….	Night blindness

FATS AND OILS
VOCABULARY
1. source
2. Fats and oils
3. all sources of fats

(iii)   They are energy giving foods.
(iv)   They are used by the body to produce heat.

Sources of fats and oils
i)   Milk
ii) Butter
iii) Cheese
iv) Egg York
v)   Ground nuts
vi) Margarine
vii) Sunflower
viii)Simsim
N.B. Fats are solid while oils are liquids at room temperature

MINERAL SALTS
VACABULARY
1. **Sources**
2. **mineral salts**
3. **all examples of mineral salts.**
Mineral salts are foods responsible for the proper growth of bones and teeth.
Use:
 For proper growth of teeth and bones.
EXAMPLES OF MINERAL SALTS
i)   Iron
ii) Calcium
iii) Phosphorus
iv) Iodine
v)   Sodium
vi) Potassium
vii) Magnesium

IRON:

Use: For making red blood cells.

<u>Sources of Iron</u>
i)   Meat
ii) Green vegetables e.g. spinach
iii) Liver
iv) Beet root.

CALCIUM
i)   Beans
ii) Milk
iii) Millet
iv) Green vegetables
v)   Dry fish

N.B. Phosphorus and calcium and magnesium also strengthen bones and teeth.

IODINE
Use:
 For proper functioning of the thyroid gland.

<u>Sources of Iodine:</u>
i)   Sea fish
ii) Iodised salt
iii) Onion
iv) garlic

ACTIVITY:
1. Give any two sources of fats and oils.
2. Identify any one example of a mineral salt.
3. How is iron important in the body?
4. Name the body mineral that enables our bones and teeth grow stronger.
5. Write down any one source of Iodine.

BALANCED DIET
VOCABULARY:
   1. **Balanced diet**
   2. **components**
   3. **roughages**
   4. **fibre**
   5. **peristalsis**

A meal which has all food values in their right amounts.

Components of a balanced diet
i)   Proteins
ii) Carbohydrates
iii) Fats and oils
iv) Vitamins
v)   Water
vi) fibre.
vii) Mineral salts.

WATER
Uses of water in the body
i)   Softens food during digestion
ii)   Dissolves digested food for transportation by blood.
iii) Dissolves waster products for transportation to the excretory organs.
iv)   It cools the body
v)   Water dissolves medicine in the body.
vi)   It prevents constipation
vii) It prevents dehydration
viii) It bathes body cells
NB: Distilled water is not recommended for drinking because it lacks minerals.
- Distilled water can be made for drinking when you mix fruit juice.
Sources of water in the body.
i.   Drinking water directly.
ii.   Tea, porridge, milk.
iii. Juice
iv.   Fruits e.g. mango, oranges and pineapples.
v.   Soup.

ACTIVITY:
1.   Briefly explain a balanced diet.

    _____

2.   Give **any three** components of a balanced diet.

    (i)   _____ (ii)   _____

    (iii)   _____

3.   How is water useful in the body?

    _____

4.   Why is distilled water not recommended for drinking?

    _____

ROUGHAGES (FIBRE)
Roughages are plant fibres which can be digested

Use:
i)   Controls constipation
ii) Facilitates peristalsis
iii) It controls indigestion

NB: Peristalsis is the movement of food along the alimentary canal.

Sources of roughages
i)   Cereals
ii) Vegetables
iii) Fruits
iv) Root tubers such as sweet potatoes, cassava
v)   Mushrooms

ACTIVITY:
1.   State the importance of roughages in the diet.

_____

2.   Outline any two sources of roughages.

(i)   _____   (ii)   _____

3.   Which digestive disorder is experienced due to lack of roughages in the body?

_____

4.   Briefly explain peristalsis.

_____

_____

5.   How can distilled water be made good for drinking?

_____

DEFICIENCY DISEASES

VOCABULARY
1. **Marasmus**
2. **Kwashiorkor**
3. **Prevention**
4. **Signs**
5. **Anaemia**
6. **Goitre**

-   Diseases caused by lack of certain food values in the body.

1. KWASHIORKOR
a) It is caused by lack of enough proteins in the diet.
b) Signs of kwashiorkor

i)   Swollen belly
ii)   Swollen moon face
iii)   Swollen feet and hands.
iv)   Skin rash
v)   Brown hair

c) Prevention
Eat foods rich in proteins.

2. MARASMUS

a) Cause
It is caused by lack of enough carbohydrates in the diet.

b) Signs of marasmus
i)   Old man's face
ii)   Pot belly
iii)   Thin body
iv)   Always hungry
v)   Weaknesses
vi)   Wasted body muscles

c) Prevention
Eat food rich in carbohydrates.

ACTIVITY:

1.   What are deficiency diseases?

_____

2.   State the cause of kwashiorkor.

_____

3.   Suggest one way of preventing kwashiorkor.

_____

4.   Name one deficiency disease caused due to lack of carbohydrates in the diet.

_____

5.   Identify one sign seen on a baby suffering from marasmus.

_____

3. ANAEMIA – is the condition when the body lacks enough iron in it.
i)   It is caused by lack of enough iron in the diet.
ii) It is prevented by eating foods rich in iron, like liver, eggs, cereals and kidney.

4. GOITRE

i) It is caused by lack of enough iodine in the diet.
ii) It is prevented by eating foods rich in iodine, like sea foods and iodised salt.

Signs of goitre
(i) A swelling in the neck.

Activity:
1. Briefly explain the term anaemia.

_____

2. What causes anaemia?

_____

3. Mary has a swelling around the neck. Name the deficiency disease she is suffering

from.

_____

4. **Match the diseases to their cause**.

Disease	**Cause**
Marasmus	lack of proteins
Goitre	lack of carbohydrates
Kwashiorkor	lack of iron
Anaemia	lack of iodine

a) Marasmus _____

b) Goitre _____

c) Kwashiorkor _____

d) Anaemia _____

PROPER HANDLING OF FOOD
VOCABULARY:
1. *Food handling*
2. *contamination*
3. *food contamination*
4. *eating habits*
5. *food preservation*
6. *food security*

Handling of food in a way that prevents it from being contaminated.
Ways of proper handling of food.

i) Wash hands before preparing food.
ii) Wash hands before serving food.
iii) Wash vegetables and fruits before eating them.
iv) Prepare food in a clean place.
v) Serve food in clean containers.

Importance of proper handling of food

1. It prevents food contamination
2. It preserves food for future use.
3. It protects the food from pests.

ACTIVITY:

1. Suggest **one** proper way of handling food.

    _____

2. Give **one** effect of improper handling of food.

    _____

3. Identify **any one** disease that can result from poor handling of food.

    _____

FOOD CONTAMINATION

(v) The making of food dirty.
(vi) When food gets exposed to dirt and germs.

Dangers of poor handling of food

i) It spreads germs
ii) It causes the food to go bad
iii) It may cause food poisoning.

Ways food gets contaminated

i) Serving food with dirty hands.
ii) Serving food in dirty utensils.
iii) Houseflies and cockroaches
iv) Preparing food in a dirty environment.
v) By dust falling on uncovered food.

ACTIVITY:

1. Briefly explain the term food contamination.

    _____

2. Suggest **one** way food gets contaminated.

    _____

3. Mention **one** danger of poor handling of food.

    _____

LESSON SIX:

GOOD EATING HABITS

i)   Wash hands before eating food.
ii) Sit upright when eating food.
iii) Chew food properly before swallowing.
iv) Avoid talking while eating food.
v)   Chew food when the mouth is closed.

Bad eating habits

i)   Eating food with unwashed hands.
ii) Bending/lying down while eating food.
iii) Swallowing food before chewing it properly.
iv) Chewing food with an open mouth.
v)   Putting big lumps in the mouth at one time.

Dangers of bad eating habits.

i)   Eating food with unwashed hands contaminates food and may lead to diarrhea.
ii) Bending while eating food interferes with movement of food in the alimentary canal.
iii) Swallowing food before proper chewing can lead to indigestion. It can also lead to choking.
iv) Talking when food is in the mouth and spitting food on other people near you.
v)   Big lumps can lead to indigestion.

ACTIVITY:

1.   Identify any two good eating habits.

(i)   _____

(ii) _____

2.   Give any two bad eating habits.

(i)   _____

(ii) _____

3.   Suggest **any two** dangers of bad eating habits.

(i)   _____

(ii) _____

FOOD SECURITY

This is when a family / community has enough food for eating all year around.

Food security can be achieved through.

a)   Growing enough food.

i)   Proper storage of food.

ii) Preservation of food.

iii) Practicing proper farming methods.

Importance of food security

i)   The family has enough food to eat throughout the year.

ii) It prevents deficiency diseases in the family.

NB: Excess food is dried and stores in granaries and silos for future use.

ACTIVITY:

1.   Briefly explain food security.

   _____

   _____

2.   State two ways we can achieve food security.

   (i)   _____

   (ii) _____

3.   Suggest one importance of food security.

   _____

4.   Why should excess food be stored?

   _____

5.   Name one domestic animal that depends on left-over food.

   _____

ENGLISH
Verbs and tenses

Verbs are action words or words that express an action.

Types of verbs include

-   Regular verbs
-   irregular verbs
-   Helping verbs
-   main verbs

Use of Helping verbs

Helping (Auxiliary) verbs are used to

-   to form continuous, perfect, future tense
-   to write question tags
-   to write negatives
-   to write interrogative sentences

Forming questions tags using Helping verbs

A question tag is a short question that comes at the end of a statement. We use it to turn a statement to question. There are two expected tags one with a NO and one with YES.

A statement can be of the following helping verbs

<u>Verbs</u>

is	do
was	does
are	did
were	am
has	shall
have	will
can	

A statement without a helping verb commonly takes "do"

1.   A question tag is formed using a helping verb and pronoun in the statement.

<u>Example</u>:

Peter goes to school daily, doesn't he?

Your mother doesn't stay at home, does she?

2.   When "has" is used as the main verb doesn't is used in the tags.

e.g.   My father has four cars, doesn't he?

Mr. Mukasa has a good house, doesn't he?

In the above "has" has been used as main verb.

They have cut it, haven't they?

Mary has seen it, hasn't she?

3.   If the main verb is negative, the question tag is negative.

e.g. These children are not obedient, are they?

We needn't go for lunch today, do we?

<u>Note</u>:   need we? is wrong because need is a special verb which takes do or does and don't or doesn't.

4.   If the main sentence is in positive then the question tag is a Negative.

e.g. You are early today,   aren't you?

He is sick, isn't he?

However special helping verbs don't follow the rule i.e am, used to,   shall,   will,   need and needn't.

I am going with you, aren't I?

I am sick, aren't I?

I am not going going with you, am I ?

I am not sick, am I?

5. Shall / will

These are used to show politeness.

Examples

Lets sit down, shall we?

Let go to town now, shall we?

Let me open the window please, shall I?

Get me that chair, will you?

Don't go there, will you?

Let him go please, will you?

6. Used to, takes (didn't / did)

e.g   We used to take lunch, didn't we?

We used to write on the floor, didn't we?

We used not to play in class, did we?

Using Helping verbs to form Negatives

For a sentences to be negative "Not" is used   e.g.

Affirmative: John eats too much.

Negative: John doesn't eat too much.

Affirmative: She fought her sister yesterday.

Negative: She didn't fight her sister yesterday.

Affirmative: I was made to lie down.

Negative: I wasn't made to lie down.

Using helping verbs to form interrogatives

Affirmative: There are ten hens in the pen?

Negative: Are there ten hens in the pen?

Affirmative: He got a first grade.

Negative: Did he get a first grade?

Affirmative: Birds make nests.

Interrogative: Do birds make nests?

Affirmative: I have a nice pen?

Negative: Do I have a nice pen?

Activity 1

Underline the helping verbs in the following sentences.

1. The lion was chasing a cub.

2. He will be at school tomorrow.

3. She can climb trees using legs only.

4. Our exercise books are being marked.

5. They had been seeking for permission to go out.

6. I lost my pen last week.

7. John did the mistake himself.

8. The culprit will be stoned to death.

9. A mad man dreamt of dying.

10. We shall sing the National Anthem tomorrow.

Activity: 2

Supply the suitable question tag to the following statements

1. Our teachers are marking now.

   _____

2. Lets work hard together.

   _____

3. Our mother wont dress badly today.

   _____

4. Lets get answers for all these questions please.

   _____

5. Joseph begs for pancakes every day.

   _____

6.   I am not a fool.

    _____

7.   We needn't have done it.

    _____

8.   I am not very clever.

    _____

Activity: 3
Change the following statements to negative
1.   John has got nice shoes.

    _____

2.   The lion chased a passer-by on Sunday.

    _____

3.   The wild animals mostly feed on grass

    _____

4.   People die every day.

    _____

5.   She had gone to church.

    _____

6.   The python swallowed the whole cow.

    _____

7.   We might come and see you.

    _____

8.   I can try to fight Ggolola Moses.

    _____

Activity:
Make the following sentences into interrogative
1.   The hens bite using beaks.

    _____

2.   A bat can see at night.

    _____

3.   She will find us in Nateete

    _____

4.   The guest might be late for the function.

    _____

5.   Most animals have four legs.

    _____

6. The butcher had cheated the customer.

   _____

7. You need to bring my shoes today.

   _____

TENSES

A tense is a change of a verb according to time. i.e. verbs change depending on the

Examples

Regular verbs which take "**ed**"

Present simple	Past simple	Past perfect
walk	walked	walked
wait	waited	waited
work	………………	……………
stop	stopped	stopped
add	………………	……………
allow	………………	……………
slap	………………	……………
hang	………………	……………
laugh	………………	……………
talk	talked	talked
look	looked	looked
smile	smiled	smiled
agree	agreed	agreed
Add ………………….		

Regular verbs that take "**d**"

Present simple	Past simple	Past perfect
believe	believe	believed
deceive	……………	deceived
receive	…………..	…………….
arrive	…………..	…………….
change	……………	arrived
complete	completed	…………….
compare	………………	…………….
compose	……………..	…………….
care	………………	cared
Add ……………		

Regular verbs that take "**t**"

Present simple	Past simple	Past perfect
mean	…………..	………….
spoil	spoilt	spoilt
dream	……………	…………..
learn	…………..	……………
leap	leapt	leapt
deal	…………..	……………
creep	crept	crept
Add ………….		

Irregular verbs

These are verbs which don't take "d" "ed" or "t"

Present simple	Past simple	Past perfect
sleep	slept	slept
sweep	……………	…………..
feel	……………	……………
creep	……………	……………
kneel	……………	……………
weep	wept	wept
Add ……………		

Irregular verbs that change completely.

Present simple	Past simple	Past perfect
tear	tore	torn
go	went	gone
break	………….	………….
give	……………	…………
do	……………	………….
see	saw	seen
know	knew	know
run	……………	………….
beat	……………	……………
bite	……………	……………
wear	……………	………….
choose	choose	chosen
feed	………….	……………

Irregular verbs which change vowel "i" to "u"

Present simple	Past simple	Past perfect
dig	dug	dug
sting	stung	stung
stick	……………	…………..
cling	……………	……………
wring	wrung	…………..
Add more		

Irregular verbs that change completely

Present simple	Past simple	Past perfect
sit	sat	sat
find	found	…………..
shine	…………	…………..
wind	………….	…………..
spit	spat	spat
……………..	……………	…………..
……………..	……………	…………..
………………..	……………	……………
Add more		

Irregular verbs which don't have change

Present simple	Past simple	Past perfect
put	put	put
cut	………….	………….
read	………….	………….
hit	……………..	……………..
cast	……………..	……………..
shut	……………..	……………..
cost	……………..	……………..
hurt	……………..	……………..
spilt	……………..	……………..
knit	………….	………….
Add more ……….		

Activity

Complete the sentences below with correct verbs

1. Atim ………………………………. the school bell. (ring)

2. The girls ……………………………. their work in time. (do)

3. Namuli ……………………………….. all her sweets at once. (eat)

4. Awori ………………………….……. from his home to the school. (ride)

5. The instructor ……………………..………… us military skills. (teach)

6. The man was ………………………………….. in the car accident. (hurt)

7. That cup was …………………………………. their yesterday. (put)

THE PRESENT TENSE

Includes

- present simple
- present continuous
- present perfect
- present perfect continuous

THE PRESENT TENSE

In this tense actions happen, some times, daily, often, always, usually, rarely, seldom, and every day.

Guidelines

a) I
    We   do
    You
    They

b) She
    He   does
    It

i)   In a above don't take verbs with "s" "es" or "ies"
ii)   In b above you add "s" "es" or "ies" to the main verb.

Example

1.   I <u>do</u> my home work every day. (do)
2.   Suzan <u>breaks</u> cups every day. (break)
3.   It often <u>rains</u> at night in our villages. (rain)

Activity

1.   She ……………………………….. to me once a week. (write)

2.   I …………………………….….. maths to science. (prefer)

3.   Mariam ………………………………… in her garden every Saturday. (dig)

4.   We ……………………………… reading once in while. (study)

5.   Tailors usually ………………………. clothes. (sew)

6. Cats ……………………………….. mice at night. (catch)

7. That boy …………………………. pencils every day. (lose)

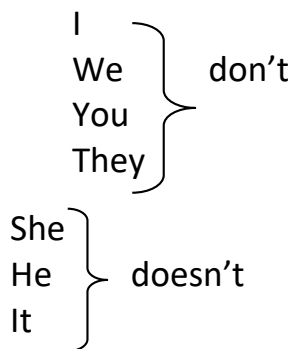8. A shop keeper ……………………………. in his shop every day. (work)

Negative of the present simple

Negative sentences are sentences which don't state facts.

Example

1. She always marks our books.
   She doesn't always mark our books.

2. The sun rises from the east.
   The sun doesn't rise from the east.

3. We always read newspapers.
   We don't always read newspaper.

Note:
```
I
We        don't
You
They

She
He        doesn't
It
```

Activity:

Change the following sentences to negative

1. He writes letters every day.

   _____

2. The moon appears at night.

   _____

3. The python swallowed the whole cow.

   _____

4. We bring books to school.

   _____

5. The teachers sometimes beat us.

   _____

6. She lights the candles in the main hall.

   _____