P.3 LITERACY I

TERM 1

THEME	SUB THEME	INSTRUCTIONAL MATERIAL
1. Our environment in our sub-county division	Soil	- Soil lump - Beaker - Source of heat - Water
	Types of soil	- Soil (clay, sand and loam
	Drainage of water in the soil.	- 3 containers (glasses). - Cotton - Funnel - Water - Soil (clay, sand and loam)
	Soil texture	- Soil (clay, sand & loam) - A chart showing soil texture.
	Soil profile	- A chart showing the soil layers. - Bottles, stones and soil.
	Natural changes in the environment.	- Environment. - Teacher's resource.
	Man made changes in the environment.	- Environment. - Teachers' resource.
	Ways of managing changes in the environment.	- Local environment.
	Simple projects.	- Our school compound
Air and sun	Air	- Local environment. - A chart showing the components of air. - Soda, fire extinguishers.
	Properties of air.	- Balloons - Candles - Match boxes - Bottles - Basins - Weighing scale - Water - Paper cards - Straws - Balls - Tyre tube
	Dangers of winds	- A chart showing plants and houses destroyed by wind.
	The Sun	- The local environment.
	Experiment to show how plants need sunlight.	- Seedlings in a tin. - A chart showing different crops in response to sunlight.
	Shadows	- Local environment. - A chart showing the formation of

		shadows.
	Characteristics of shadows	- Torch - Objects (balls) - The local environment.
	Sources of light	- Local environment. - Torch - Mobile phones. - Candles - Lamp - Electricity.
	Water	- A chart showing the rainfall cycle. - Stove - Saucepan - Bottle (cold and ice) - Water - Kettle - plate
	Types of clouds	- Atmosphere
	Monitoring weather changes	- A weather chart. - Atmosphere
	Weather instruments	- A chart showing weather instruments. - A thermometer - Barometer - Wind/sock
	Importance of rain	- Water
	Harvesting water	- Jerrycans - Basins - Source pans - Tanks - Buckets.
	Things to keep proper sanitation.	- Brooms - Soap - Water - Dustbin.

TERM II

INSTRUCTIONAL MATERIALS FOR P.3

THEME	SUB THEME	INSTRUCTIONAL MATERIALS
Living things and non living things.	Examples of living things and non living things.	- Our environment. - Modles. - Cutouts - Objects, insects - A chart showing birds.
Animals in our sub-county	Types of living things.	A chart showing; - Domestic animals. - Types of hutches. - Types of rabbits. - Wild animals.
	Animal habitants	- Collected insects. - A chart showing different animals at home, in forest, in swamps, aquarium.
	Animal movements	- Teacher's resource - Our environment.
	The fish	- Fish (real) - A chart showing different fish. - A chart showing the parts of a fish.
	Fish preservation	- Dried fish.
	The birds	- A chart showing parts of a bird. - A chart showing different birds.
Living thing (Animals in our sub-county)	- Types of birds. - Uses of birds to people. - Dangers of birds to the environment.	- Birds in our environment - " - "
	- (Insects) External parts of an insect. - Characteristics of insects. - Harmful and dangerous insects. - Habitants of insects.	- Real insects. - A chart showing parts of an insect. - A variety of insects. - "
	- Caring for domestic birds and wild animals.	- Our environment.
	- Plants and their habitants.	- Different plants. - Our environment. - A chart showing parts of a plant.
	- Characteristics of plants.	- The environment
	- Caring for crops	- Our garden - Our compound.
	- Parts of a flowering plants.	- Environment

		- Real objects. - A chart showing parts of a flowering plant.
Living things (Plants in our sub-county	- Parts of a plant and their uses.	- Real stems - Real leaves - Real roots - Real flowers.
	- Types of roots	- Different types of roots (real roots) - A chart showing different roots.
	- The flowers	- Real flowers. - Environment - A chart showing parts of a flower.
	- Seeds	- Real seeds - Our environment.
	- Crop growing practices.	- Our garden - Our environment
Health in our sub-county	- Diseases - Vectors	- A chart showing common vectors e.g. housefly, cockroach, mosquitoes etc.
	- Types of mosquitoes	- A chart showing the types of mosquitoes. -
	- Types of mosquitoes	- A chart showing the types of mosquitoes. - A chart showing the life cycles of mosquitoes. - Broken bottles - Cups - Tins, sprays.
	- House flies	- A chart showing parts of a housefly and its life cycle.
	- Control of diseases spread by housefly	- Real objects - Sprays - Insecticides - Brooms - Clean utensils.
	- Cockroach	- Real cockroaches. - A chart showing the life cycle of a cockroach.
	- Tsetse fly	- A chart showing the life cycle of a tse tse fly. - A chart showing the vectors, diseases and their control
	- Malaria - Signs and symptoms - Control and treatment	- Mosquito nets. - Insecticides - Oil - Chloroquine, coatem
	- Cholera	- A chart showing a person suffering from cholera.
	- Typhoid - Diarrhea - Dysentery	- A chart showing the signs and symptoms of disease spread by vectors.
	- Diseases with causing germs.	- A chart showing diseases and their causing germs.
	- Ways in which vectors spread diseases	- A chart showing the cycle of the 4F's chain.
	- Dehydration	- A chart showing a person vomiting and passing out stool.
	- Preparation of the ORS	- Salt

		- Sugar - Water - Saucepan - Spoon - soap
	- Preventing and controlling vectors	- Brooms - Insecticides - Slashers.
	- HIV/AIDS	- Flash cards with HIV/AIDS messages
	- PIASCY	- Flash cards with printed messages
Energy in our sub-county	- Sources of energy	- Our environment - Charcoal - Paraffin - Candle
	- Wind as a source of energy	- Wind mill - Kites - Wind vanes
	- Artificial source of energy	- Wood - Charcoal - Coal, paraffin
	- Experiments to show that air moves things.	- Tins, plastic, bottles, nails, leaves, knife, razor blade, sticks, polythene, strings, threads.
	- Ways of saving energy	- Energy saver bulb. - Match box - Candle - Our environment.
	- Accidents	- A visit to the road side. - Sharp tools, nails, broken bottles.
	- First aid	- First aid box e.g. razor blade, plaster, cotton, water etc.

P.3 LITERACY I TERM I BREAKDOWN

Our environment in our sub-county/division.	- Soil - Components of soil. - Types of soil. - Soil texture - Soil profile - Uses of soil
Environment	- Natural causes of changes in the environment. - Effects of changes. - Human activities in the environment. - Possible ways of managing changes in the environment. - Simple project on tree planting.
(a) Air and the sun	- Properties of air. - Importance of air. - Experiment on properties of air.
(b) The sun	- Importance of the sun. - Dangers of the sun - Experiments why plants need light.
Water	(a) Formation of rainfall - Water cycle - Types of clouds - Effects of clouds - Monitoring weather - Process of water cycle - Measuring rainfall (b) Effects of rain:

	- Importance of rain on soil, plants and animals. - Dangers of rain on soil, plants and animals. (c) Managing water. - Importance of water - Sources of water - Water harvesting - Maintenance of water sources.

P.3 LITERACY 1 LESSON NOTES - BREAKDOWN
TERM II,

THEME	BREAKDOWN
Living things in our sub-county	- Definition of living things. - Types of living things i.e. plans and animals. - Characteristics of each type. - Uses of animals. - Domestic and wild animals
	Rabbits - Uses of rabbits. - Housing in rabbits - Gestation period - Group of young ones - Male, female and young one of rabbits. - Diseases - Caring for rabbits
	Animals habitats - School compound - Garden - Forests

	- Swamps - Water bodies - Ponds - Animals movements - Reasons why animals move.
	The fish - External parts - Common types of fish caught in Uganda. - Uses of fish - Fish preservation - Reasons for preservation
	Birds - External parts - Characteristics of birds - Types of birds (domestic and wild) - Examples of each type - Habitats of birds - Uses of birds.
	Insects - Parts of an insect - Examples of insects. - Characteristics of insects. N.B: ***Spiders, ticks are not insects***. - Harmful and useful insects. - Edible and inedible insects - Insect habitats.
Plants in our sub-county	**Groups of plants**. - Flowering and non flowering plants. - Definition. - Characteristics of plants. - Examples of flowering and non flowering plants. - Parts of a flowering plant. - Functions of parts of a flowering plant.
	Plants and their habitats. - School compound. - School garden. - Importance of school garden - Swamps - Water bodies - Rocks - Deserts/dry areas.
	Nursery - Definition - Uses of nursery bed - Examples of crops grown in a nursery bed. - Reasons why some crops are first grown. - Reasons why some crops are first grown in a nursery bed.

	Caring for crops in a nursery bed. - Watering - Weeding - Spraying - Thinning - Hardening off - Transplanting.
	Parts of flowering plants. - Diagram of a flowering plant. - Name the parts of a flowering plant. - Leaves 0 Name the parts 0 give uses of parts to the plant. 0 give uses of the parts to animals.
	Stems; - Types of stems. 0 Upright stems 0 climbing stems 0 underground stems - Examples of plants with the above stems. - Uses of stems to plants - Uses of stems to animals.
	Roots - Definition - Types of roots. - Examples of crops with the above root types - Uses of roots to plants - Uses of roots to animals
	Flowers - Definition - Categories of flowers - Diagram of flower - Examples of crops (plants) within each category. - Uses of flowers to plants. - Uses of flowers to animals (bees)
	Seeds - Definition - Examples of plants that produce seeds. - Uses of seeds.
	Dangers of plants - Poisonous plants - Examples of poisonous plants. - Thorny - Weeds - Habitat for dangerous animals - Completion for oxygen (water hyacinth)
	Crop growing practices - Clearing land

	- Ways of clearing land - Slashing - Digging/ploughing
	Planting - Seed selection - Methods 0 row planting 1 broad casting 2 transplanting
	Caring for crops - Weeding - Staking - Pruning - Thinning - Mulching - Spraying - Crop rotation - Harvesting - Drying harvested crops - Storing harvested crops 1. Granaries 2. Stores 3. Silos
	Marketing - Definition - Ways of marketing - Problems we face in marketing
	Pests - Definition - Examples of pests - Control of pests
	Diseases. - Examples of diseases. - Effects of diseases - Control of diseases
	Garden tools - Definition - Examples of garden tools - Uses of garden tools (tabulate)
	Experimentation - Seed germination - Definition - Conditions necessary for germination
	Observation - Hypogeal - Epigeal **Interrelate**

	- Germination - Burning - Breathing - And rusting

P.3 LITERACY 1 TERM III BREAKDOWN

Health in our sub-county	(a) Disease vectors - Definition of vectors - Examples of vectors - Characteristics of vectors
	(i) Mosquitoes - Diseases spread by mosquitoes. - Control of mosquitoes - Life cycle of anopheles mosquito - Life cycle of a culex mosquito.
	(ii) House flies - A diagram of a housefly - Features of a house fly. - Diseases spread by house flies. - Control of diseases spread by houseflies. - Life cycle of a housefly.
	(iii) Cockroach - Places where cockroaches live. - Control of diseases spread by cockroaches. - Life cycle of a cockroach.
	(iv) Tse tse flies - Characteristics of tse tse fly. - Control of diseases spread by tse tse flies. - Life cycle of a tsetse fly. - A table showing vectors, diseases and their control.
	Diseases spread by vectors. (a) Malaria - Causes of malaria - Signs and symptoms of malaria - Control and treatment of malaria
	(b) Cholera - Causes of cholera - Ways of spreading cholera - Signs and symptoms of cholera - Control and treatment of cholera.
	(c) Typhoid _ Causes of typhoid. - Ways of spreading typhoid. - Signs and control of typhoid. - Control and treatment of typhoid
	(d) Diarrhea - Definition - Causes of diarrhea - Ways of spreading diarrhea - Signs and symptoms of diarrhea - Control and treatment of diarrhea
	(e) Dysentery - Causes of dysentery. - Signs and symptoms of dysentery. - Control and treatment.

	(f) Trachoma - Causes of trachoma - Spread of trachoma - Parts affected by trachoma - Signs and symptoms. - Control and treatment
	(g) Yellow fever - Causes of yellow fever. - Spread of yellow fever. - Signs and symptoms - Control and treatment.
	(h) Sleeping sickness (Trypanasomiasis) - Causes of sleeping sickness. - Spread of sleeping sickness. - Signs and symptoms - Control and treatment
Health in our sub-county	- Ways through which vectors spread diseases. - Through the 4 F's chain. - Diseases spread through the 4 F's. - Diseases spread through bites. **Dehydration** - Definition - Causes of dehydration. - Sings and symptoms of dehydration. - Treatment of dehydration. - Preparation of ORS (steps taken) - Contents used to prepare ORS (solute, solvent, solution)
HIV/AIDS	- Causes of HIV/AIDS. - Ways through which Aids is spread. - Signs and symptoms of HIV/AIDS. - Prevention and control of HIV/AIDS - Effects of HIV/AIDS to; (i) An individual (j) The family (k) The community
HIV/AIDS	- Caring for HIV/AIDS patients. - Protective measures during the caring for the patients. PIASCY - Meaning of PIASCY - PIASCY messages to the youth.
Sources of energy	- Definition of energy. - Natural and artificial/sources of energy. - Wind as a source of energy and its uses. - Things moved by wind. - Water as a source of energy. - Uses of energy from the sun. **Artificial sources of energy** - Fuels and examples. - Uses of fuels to man. - Uses of electricity.

	Experiments on wind as a source of energy. - Making of propellers using plastic fins, nails, leaves and sticks. - Making a kite using polythene, sticks, strings, threads and a knife. - Ways of saving energy/energy conservation in a home. - Importance of saving energy. - Dangers of energy. - Ways of avoiding the dangers of energy in a home.
Accidents and First Aid	- Definition of accidents. - Accidents at the road and its causes. - Road users. - Controlling road traffic accidents. **Accidents at home** - Things that cause accidents at home. - Causes of accidents at home. - Ways of controlling accidents at home. **Accidents at school** - Causes - Examples of accidents at school. - Ways of preventing accidents at school. **First Aid** - Definition - Aims/importance of First Aid. - First Aider and his qualities. - Types of first aiders. - The first Aid box and its components. - Importance of each component found in the first Aid box. - First Aid for simple injuries like burns, cuts, scalds, fractures, nose bleeding and drowning.

P.3 LITERACY I TERM ONE

THEME 3: OUR ENVIRONMENT IN OUR SUB COUNTY / DIVISION.

SUB THEME: Soil

- Soil is a composition of air, water, dissolved mineral salts and living organism, particles of rocks and humus.
- Soil is where plants grow from. It is the top layer of the earth's surface.

Composition of soil (components / constituents)

1. Air
2. Water
3. Dissolved mineral salts
4. Living organisms
5. Particles of rocks
6. Humus – The dead plants and animals in soil.

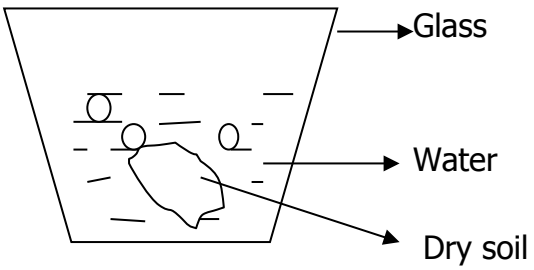
Experiment about soil components

1. An experiment to show that soil contains air.

Things needed.

- Dry soil , water , container (glass)

Fill the container half way with water add the soil lump and observe what happens.



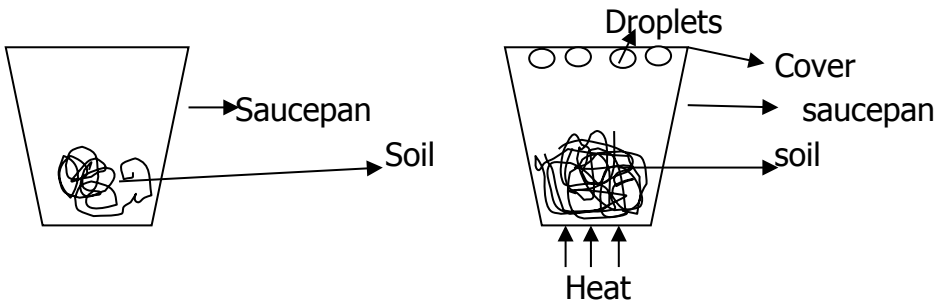
Bubbles represent air coming from the soil. The spaces are then filled with water and its level goes.

2. An experiment to show that soil contains water or moisture.

Things needed.

- Wet soil.
- Sauce pans
- Cover
- Source of heat (fire), stone

Get wet soil and put it in the sauce pan. Put the sauce pan on fire and heat while covering.



Water droplets will be seen on the cover and sides of the saucepan.

Droplets of water represent the water escaping from soil in form of vapour.

3. An experiment to show that soil contains humus.

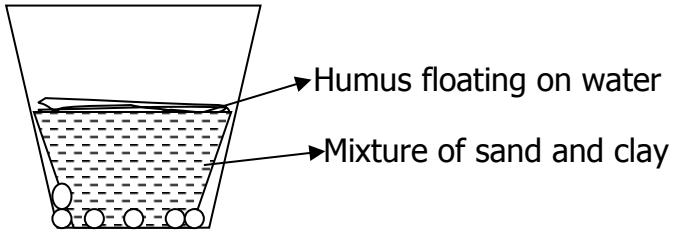
Things needed.

- Lump of soil.
- Water
- Glass

Get some soil and put it in the glass.

Add water to the glass and stir or shake.

Let the mixture settle.



Humus are the dead plant and animals in soil. It makes the soil fertile.

4. An experiment to show that soil contains living organisms. (animals)

Collect sample of soil and look for any living organisms. (animals)

Some of the living organisms found in soil.

- Termites , red ants, snails, slugs etc.
- Earth worms aerate the soil.

Types of soil.

There are three types of soil.

- Loam soil
- Clay soil
- Sand soil

Characteristics of loam soil. (features of soil)

- It is a mixture of sand and clay.
- It has a lot of humus.
- It is well aerated.
- It has moderate particles.
- It is dark in colour.
- It is the best for growing crops.
- It also has filtration of water
- It has high drainage
- It is always fertile.

Clay soil.

- It has the smallest particles.
- It is sticky.
- Its particles are closely packed together.
- It has smooth fine particles
- It is poorly aerated because it has the smallest air spaces.
- It has little humus.
- It drains water slowly.

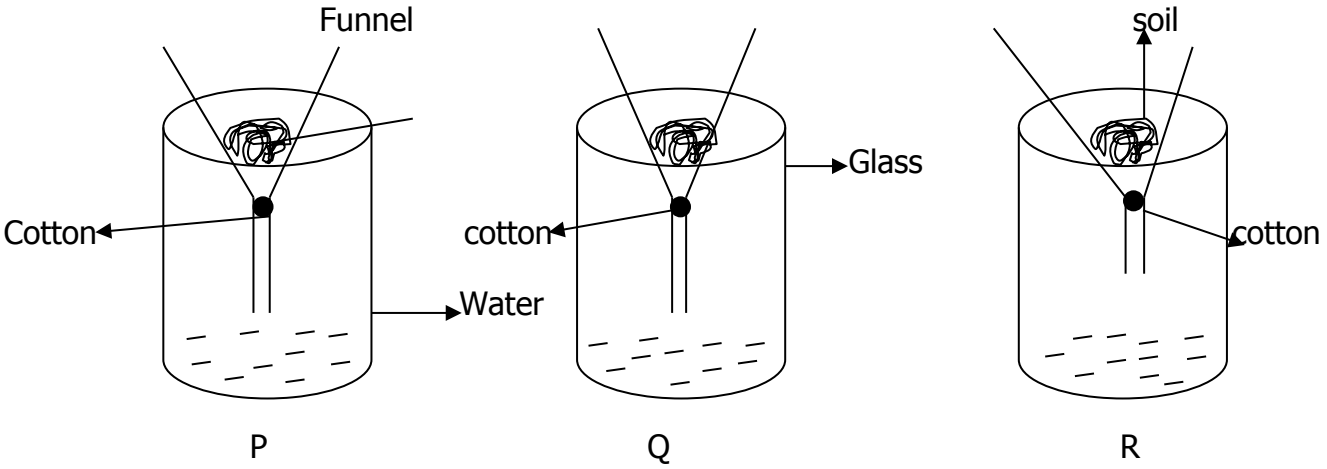
Sand soil.

- It has the biggest particles.

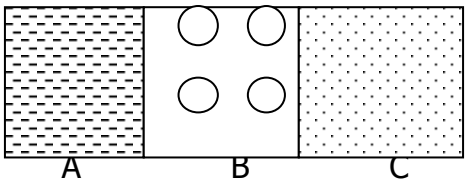
- Its particles are rough.
- It has humus.
- Its particles are loosely packed.
- It has large air spaces
- It drains water quickly.

5. An experiment to show and find out drainage of water through different soils.

- Collect sand , clay and loam soil.
- Take three glass funnels. Place cotton wool in each of the funnel.
- Half fill the funnel with equal volumes of dry sand clay and loam soil and stand them in three jars. (tins).



Types of soil in funnels according to the water collected.
P – Sand soil
Q – Clay soil
R – Loam
.
Sand soil allows water to pass through fastest.
Clay soil drains water slowly.
Loam soil drains water moderately.
Soil Texture: The different sizes of soil particles
Soil structure: The way in which soil particles are arranged.
Diagrams showing soil particles.

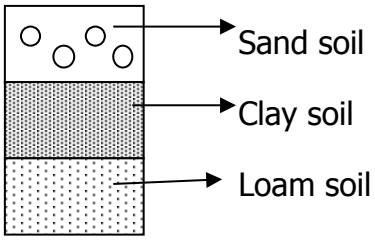


A – Clay soil

B- Sand soil

C -Loam soil

The diagram showing the air spaces (How soil particles are arranged)



Soil formation.

Soil formation is the way soil is formed soil is formed in two ways.

i) When dead plants and animals rot or decay. (decomposition).
ii) By weathering . the process by which rocks break down into small particles to form soil.

Agents of weathering. Things which help rocks to break down.

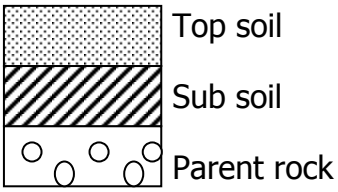
1. Man / animals
2. Running water.
3. Earth quake
4. Plants
5. Strong wind
6. High temperature.

Soil profile.

Soil profile is the vertical arrangement of soil layers. It is made up of the layers.

1. Top soil. – it is dark in colour and has a lot of humus.
   It is good for plant growth.
2. Sub soil. Brown and has no humus.
3. Parent rock. It is where weathering takes place.
   It is made up of stones.

The diagram showing soil profile



Use of soil to man.

- Sand soil is used for building.
- Man sells soil and gets money.
- Clay soil is used for modeling.
- Man grows crops in soil.
- Clay soil is used for brick making.
- Clay soil used in pot making

Uses of soil to plants.

- Plants get water from soil.
- Plants get mineral salt from soil.
- The soil holds plants upright with the help of roots.
- Plants get humus from soil

Uses of soil to animals.

- Some animals live in soil. E.g. earth worms rats termites, moles, rats snakes, red ants, squirrels.

Natural causes of changes in the environment.

Natural / God made changes

These are changes n animals

i) Growth
ii) Death
iii) Movement
iv) Reproducing

Natural changes in plants.

- Growing of plants
- Ripening of fruits.
- Germination of seeds

Effects of natural changes in the environment .

i) Man (animals) gets food.
ii) Animals get shelter.
iii) Animals get air to breathe in.

Natural changes in the environment.

- Seasons (wet and dry season)
- Changes in weather.
- Drought – A period of two much sunshine .
- Soil erosion.

  Soil erosion
- Earth quakes
- Floods
- Rusting of metals.

Soil erosion is the washing away of top soil. Removal of top soil.

Agents of soil erosion . things which help the erosion to take place.

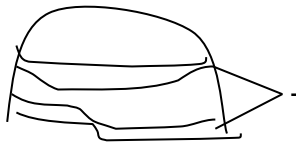
i) Strong wild
ii) Running water.
iii) Animals
iv) Man

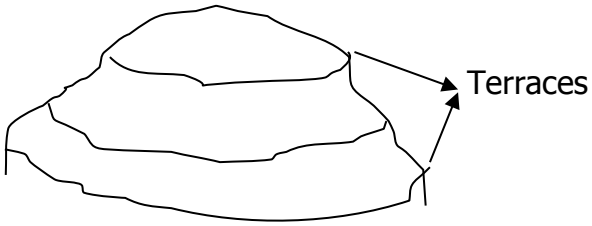
Causes of soil erosion. The are the man's activities which leave the soil bare.

i. Deforestation . (Cutting down of trees)
ii. Bush burning.
iii. Over grazing animals.
iv. Over cropping (cultivation)
v. Mono cropping/mon culture
vi. Swamp drainage.
vii. Over stocking animals

Methods / ways of controlling soil erosion.

i. By terracing – The slop is cut into steps to reduce the speed of running water.





ii. Contour ploughing – planting of crops across the hills.

iii. Strip cropping
iv. Bush fallowing.
v. Re- a forestation
vi. A forestation, mulching – covering of top soil with dry plants materials
vii. Crop rotation.
viii. Cover cropping
ix. Intercropping
x. Agro forestry

Changes in the sky.

- Formation of rainfall.
- Movement of clouds.
- Rising and setting of the sun.
- Change in the phases of the moon.
- Change in weather.

Man made changes (people made) human activities.

These are the changes made by people (man)

- Planting trees. (Aforestation)
- Cutting down trees building houses (Deforestation)
- Making roads.
- Painting building.
- Cultivation
- Bombing.
- Killing animals.
- Draining swamps.
- Accident.

Effects of man made changes.

- People die.
- Animals die.
- People become lame.
- Animals get food.
- People get easy transport.
- People get good shelter.

- Drought
- People get roads
- Rusting of tools

Ways of managing natural and man made changes.

Floods : - Digging trenches.
- Avoid clearing swamps.
- Avoid building in drainage system

Drought : - Planting trees
- Avoid clearing swamps.
- Digging valley dams.

Accidents : - Use road signs.
- Having traffic rules.
- Avoid reckless driving.
- Avoid incompetent drivers
- Cleaning tools after use.

Rusting : - keeping tools in dry place.
- Painting tool
- Oiling tools
- Greasing the tools.

Simple project on the planting.

- Tree planting/afforestation

Example of trees in our compound

- Mango trees
- Eucalyptus trees.
- Muvule trees
- Musisi trees
- Mutuba trees
- Oranges
- Ovacado trees
- Musasa trees
- Molinga trees
-

Uses of trees

- Trees provide fire wood.
- Trees provide timber.
- Trees provide shade.
- Trees form rainfall.
- Trees provide medicine
- Trees are habitat for wild animals and birds.
- Some trees provide fruits
- Tree act as wind brakes
- Trees provide poles

- Trees provide oxygen

Reasons why people plant trees

- To get fire wood.
- To get timber.
- To get shade.
- To get oxygen.

SUB THEME. 4:1 AIR AND SUN

AIR

1. What is air?

Air is a mixture of gases.

2. Components / parts of air

The gases that make up air are;

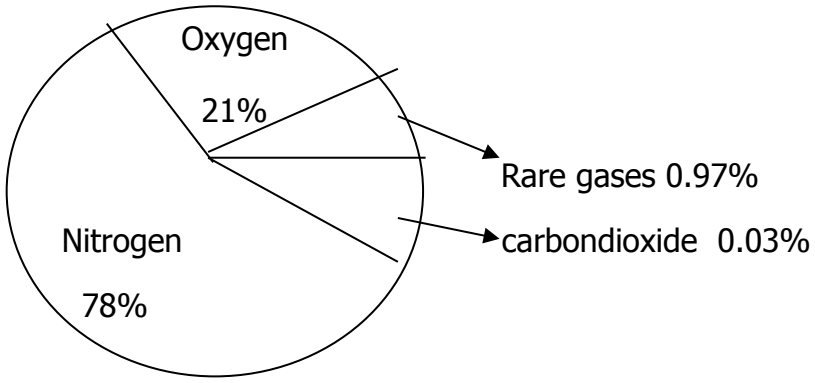
- Carbondioxide
- Oxygen
- Nitrogen.
- Rare gases / inert gases / noble gases.

3. Percentages of gases in atmosphere / space

- Nitrogen takes the largest part in the atmosphere .
- Rare gases take the least part in the atmosphere.

Gases	Percentage
a) Nitrogen	78% or 78/100
b) Oxygen	21% or 21/100
c) Rare gases.	0.97% or 0.97/100
d) Carbon dioxide	0.03% or 0.03/100

Percentage of air in atmosphere.



General uses of air

1. Air helps to fly kites.
2. Air is used to fill balloons , floaters, tyres.
3. Moving air helps boats to sail.
4. Air helps in winnowing
5. Moving air helps to dry clothes
6. Air helps animals to breathe in and out.

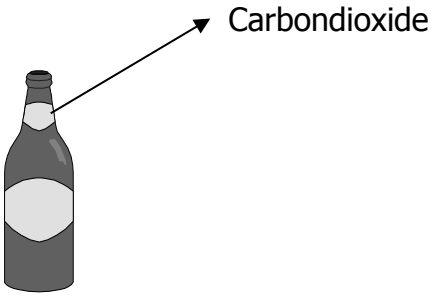
Uses of different gases.

Oxygen

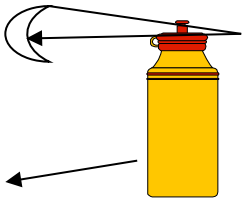
- Support life. (breathing)
- Oxygen supports burning.
- Oxygen helps seeds to germinate.

Carbon dioxide .

- Plants use carbondixide in the process of making their own food. (photosynthesis)
- Carbondioixide is used to preserve drinks eg. soda, beer, and tinned food.



- Carbondioixide is used in extinguishing fire. Why?
- It does not support burning.



Places where fire extinguisher are found.

- Schools
- Hospitals
- Vehicles
- Petrol stations
- Hotels
- Homes.

Nitrogen

- Nitrogen helps in formation of artificial fertilizers.
- Nitrogen privides nutrients to plants through minerals

Rare gases

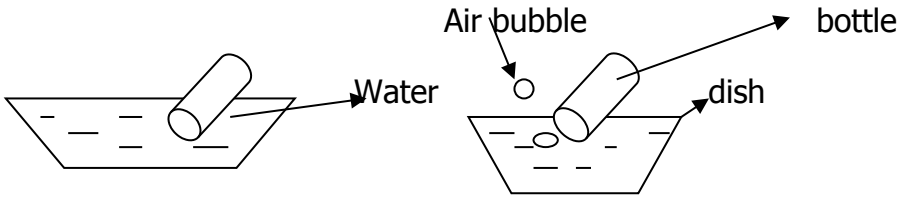
- Used in electrical bulbs.

Properties of air.

1. Air occupies space.
2. Air has weight
3. Air exerts pressure
4. Air can be compressed upside down

Experiment

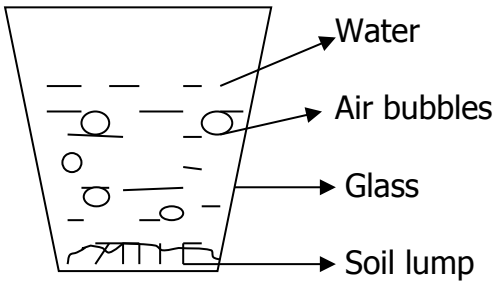
Put a bottle (glass) in a dish / basin full of water/ air in the bottle will escape in form of bubbles



Experiment 2

a) Get a glass , dry lump of soil , water.
b) Half fill the glass with water.
c) Drop the soil lump in the glass.

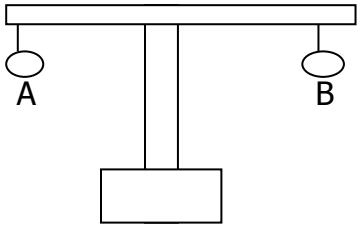
Observation : Air bubbles as seen escaping from the soil lump.



5. Air has weight

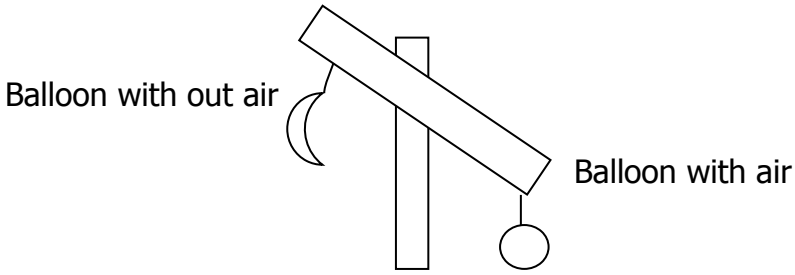
Experiment

The two balloons below are balancing because they have the same amount of air



Using a sharp pin, put a hole on balloon A.

- Air will move out.
- The ballons are now not balancing because they do not have the same weight.



6. Air exerts pressure .

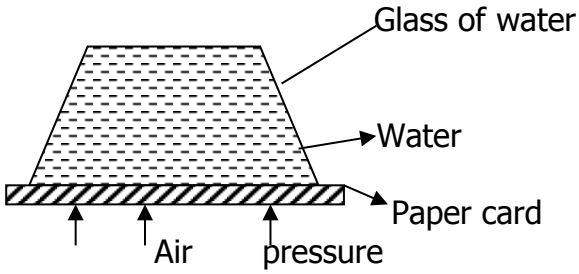
i) Apparatus glass , water , paper card.

a) Fill the glass with water.

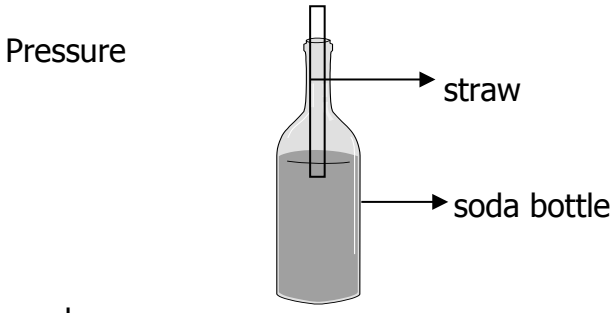
b) Press a paper card on top of the glass.

c) Turn the upside down.

Observation . the paper card does not fall off. Why? The air pressure pushes it up.



7. When taking a drink e.g. Soda using a straw. The pressure pushes the drink up the straw.

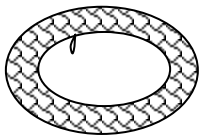


8. Air can be compressed.

a) Compressed are is used in the car tyres to support the weight of the car.

b) Compressed air is used n balls, balloons, floaters etc.

Ball



tyre tube

c) Compressed air is used in cylinder. E.g. Oxygen cylinder , carbon dioxide cylinder, sprays of fumes, insecticides.

Wind (moving air)

What is wind?

Wind is a moving/wind is air in motion

Effects of wind

Uses of wind (Importance)

- Wind cools our bodies.
- Wind moves things eg. Boats , kites.
- Moving air is used in winnowing .
- Moving air helps wind mills move.

Danger of wind.

- Strong wind destroys crops.
- Strong wind breaks tree branches.
- Wind spreads diseases like flu, cough etc.
- Wind rises dust.
- Strong wild destroys houses.
- Strong wind causes soil erosion

The sun

1. The sun is the main source of heat and light energy.
2. The sun is also the of solar energy.

Source of light

1. Natural sources of light are God made.

Examples of natural sources of light.

- Stars , glow warms, fireflies, sun
- Man – made sources of light are called Artificial.

sources of light.

Examples of artificial sources of light.

Torch, electricity , candle ,fire, mobile phone etc.

Effects of the sun

Uses of the sun to animals (Man)

- The sun helps us to see (light).
- The sun helps to tell direction
- Heat from the sun helps in the formation of rainfall.
- The sun is a source of solar energy.
- The sun helps to dry clothes.
- The sun dries fire wood.
- The sun provides man with vitamin D.

Uses of sun to plants.

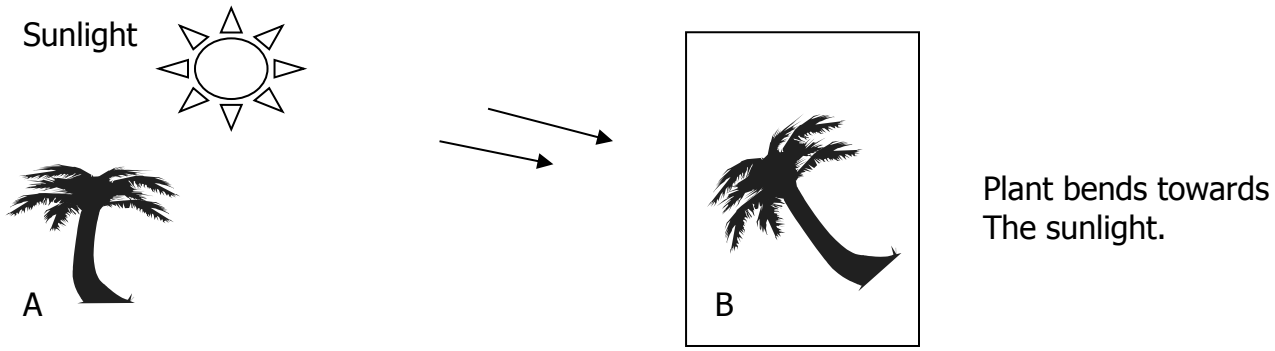
- The sun helps plants to make their own food.
- It helps plants to grow well.

Dangers of the sun.

1. Prolonged sunshine (dry season) causes drought.
2. The sun spoil eyes if we look at it directly.

3. Too much sunshine dries crops.

Experiment to show that plants need sunlight.
Plants need sunshine to grow well.



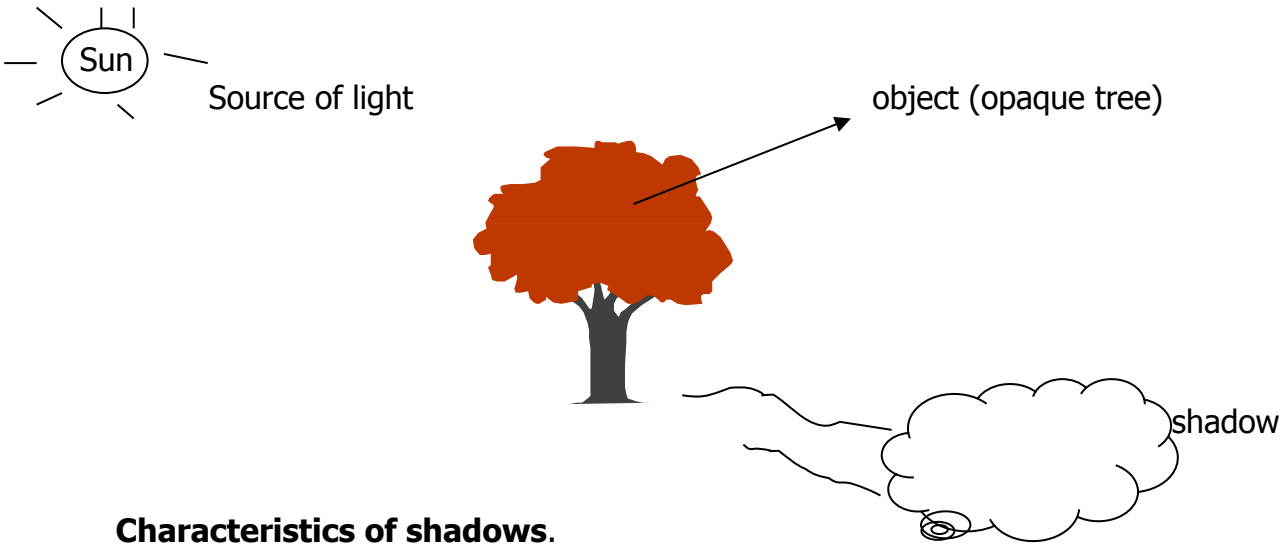
The plant in B bends to get enough light.

Shadows

Formation of shadows

How are shadow formed ?

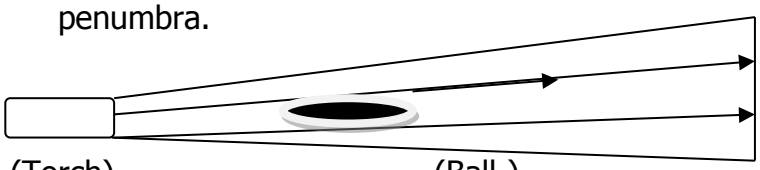
1. Shadows are formed when light falls on Opaque objects.
2. Opeque objects do not allow light to go through them. Eg walls, people , books. Etc.
3. Translucent objects allow some light to pass through them. Eg coloured polythene , toilet papers , tinted glasses.
4. Transparent objects allow light to go through them eg. Clear glass, colourless , polythene.



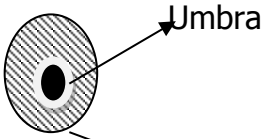
Characteristics of shadows.

1. Shadow appear shortest at noon or mid day.
2. Shadows appear longest in the early morning and late evening.

3. Shadows are always formed on the opposite of the source of light.
4. Shadows have two parts . a darker part known as **<u>umbra</u>** and a lighter one known as penumbra.



(Torch) (Ball)



Source of light. Opeque object shadow

Use of shadows

- Shadows tell time.
- Shadows show direction.
- Shadow give us shade.

Source of light

There are two sources of light

i) Natural source
ii) Artificial source

Natural sources of light.

Natural sources of lights were created by God.

Examples.

The sun, star , starfish etc.

Note : The moon is not a source of light.

Why? The moon reflects light from the sun.

Artificial sources of light.

- Artificial sources are sources of light made by man.

Examples.

- A candle , electrical bulb etc.

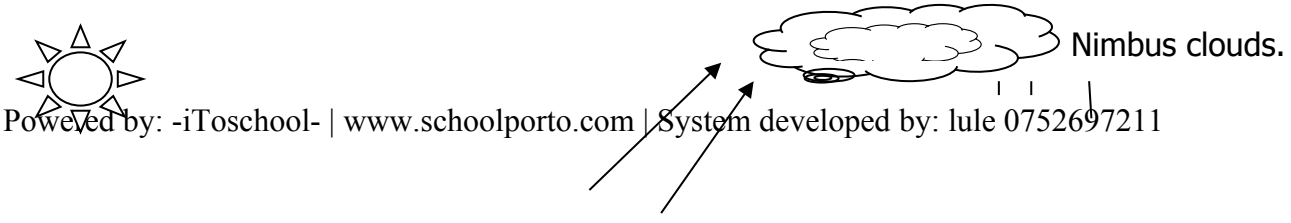
SUB THEME : Water

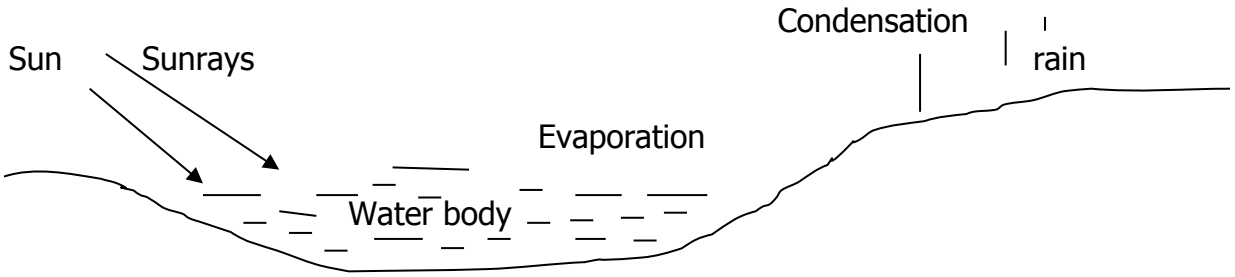
The water cycle / Rainfall formation .

This is the way rainfall is formed.

1. The sun heats the water body.
2. The water gets heated up and it starts evaporation. (raises up)
3. The vapour raises up and the condenses to form nimbus clouds.
4. The condensed vapour becomes heavy and then fall down as rain.

The diagram showing the water cycle.





An experiment to show how rainfall is formed.

Things to use.

- Stove
- Saucepans / kettle
- Water
- Bottle
- Match box.

Cold water

hand
Bottle

Heat

1. The source of heat (stove) represents the sun.
2. The water in the kettle represents the water vapour.
3. At P the process of evaporation takes place.

Evaporation is the changing of the water into a gas

4. The cold water condenses the vapour.
5. Condensation is the changing of vapour (steam) into water.
6. The water droplets represents the rain.

Vapour is water in gaseous form ice is the sold form of water.

SUB THEME : Water

Types of clouds

Clouds are big masses of water that form in the sky.
There are four types of clouds.

- Nimbus clouds
- Stratus clouds
- .
- Cumulus clouds
- Cirrus clouds

Nimbus clouds .
- Bring rain.
- They are the nearest to the earth.
- Dark grey in colour.

Stratus clouds.
- They spread in the sky with calm start layers
- They are a sign of fair weather .

Cirrus clouds.
- They are the furthest (highest in the sky)
- They resemble (look like) feathers.
  Cumulus clouds
- They arte white in colour and resemble cotton piles.

Uses of the clouds
i) Clouds help in the formation of rainfall.
ii) Clouds protect us from direct sunlight.
iii) Clouds make weather cool.

Monitoring weather changes.
1. Weather is the condition of the atmosphere at a given time.
2. Types of weather . (weather conditions)

- Windy weather.
- Rainy weather
- Sunny weather
- Cloudy weather .

Weather makers/elements
These are the factors or elements of weather .

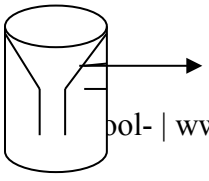
They are also called aspects of weather.
1. Rainfall .
2.
3. Wind blow.
4. Cloud cover
5. Sunshine.
6. Temperature
7. Humidity

The weather instruments

These instruments are used to measure or shows different weather conditions.

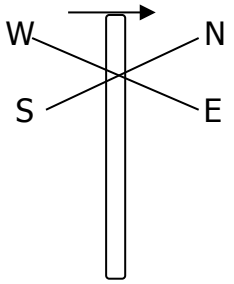
They are found at the weather station.

1. Rain gauge - Used to measure the amount of rainfall received.

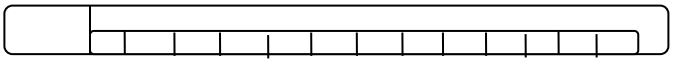


Measuring cylinder

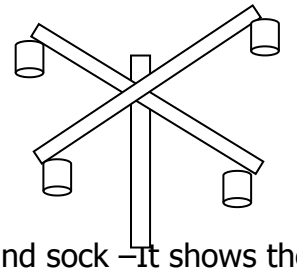
2. Wind vane – It shows the direction of wind.



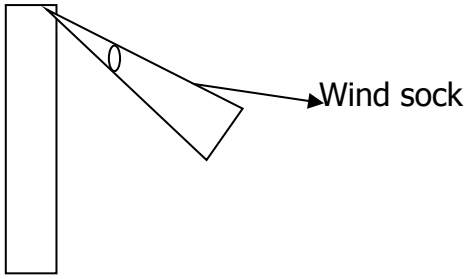
3. Thermometer. It measures temperature.



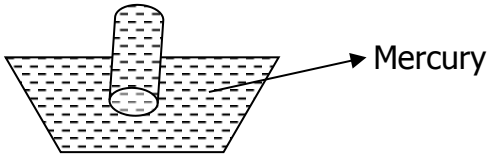
4. An Anemometer : It is measures speed of wild.



5. Wind sock –It shows the strength of wind.



6. Barometer.
   It measures the air pressure



Managing water.

- Sources of water: These are the places where we get water from.
- There are two sources of water.

Natural source of water. These are God made sources of water.

- Rain is the main source.

- Rivers
- Lakes
- Oceans.
- Swamps.
- Wells
- Streams.

Artificial sources of water. These are man made sources of water.

- Tanks
- Bore holes
- Dams
- Fountains
- Spring wells

Importance's of water

- For domestic use e.g. cooking , bathing.
- For transport.
- For swimming.
- For generating electricity.
- For cooling machines.
- For watering crops/irrigation.

Ways of maintaining or protecting water sources.

- By fencing water sources.
- By avoiding animals from drinking from water sources.
- Adding chlorine in water sources to kill germs.
- Planting grass around water sources.
- Putting laws. (rules).
- Proper disposal of waste products.

Water harvesting.

The way of collecting water.

Ways of collecting water,

- By using tanks.
- By using water dams.
- By using Jerrycans.
- Tapping from the roof.
- Tapping from the trees.

Sanitation.

Sanitation is the general cleanliness of a place to promote public health

Importance of sanitation.

- The spread of diseases and germs is reduced.
- Little money is spent on treating people.
- Vectors are controlled.
- People can live longer.
- It promotes public health.

Ways of promoting proper sanitation.

- Having a latrine or toilet.
- Having rubbish pits.
- Slashing around our homes.
- Draining way all stagnant water.
- Sweeping our compound.
- Having a clean plate stand.
- Living in a well ventilated house
- Keeping water sources clean.
- Building plate stands.

Things used to keep proper sanitation.

- Broom
- Soap
- Water
- Dustbin
- Hoes
- Brush
- Rag
- Rake
- Wheel barrows
- Spade

Qualities of a good house.

It should have.

- Windows.
- Door
- Strong roof
- Ventilators
- Verander.

Qualities of good home

It should have.

- Kitchen
- Bathroom
- Store
- Latrine / toilet
- Rubbish pit.
- A well ventilated house
- Plate stand.

Germs

Terms are living things which cause diseases

Types of germs.

- Bacteria
- Virus
- Protozoa
- Fungi.

PRIMARY 3
TERM I,

THEME : 3

THEME : OUR ENVIROMENT IN OUR SUB – COUNTY / DIVISION
EXPECTED LEARNING OUT COME: THE CHILD APPRECIATES ENVIRONMENTAL CHANGES AND APPLIES THE ACQIURED KNOWLEDGE AND SKILLS TO MANAGE THE ENVIROMENT.

WK	DAY	LESS	THEME	SUBTHEME	L.AREA	CONTENT	COMPETENCES	METHODS	ACITITIES	SKILLS(S) VALVES	INST. MATERIAL	REF	REM
				Soil	Lit I Lit II	-Composition of soil (water, air dead plants) -Experiments about components of soil.	-Describing composition of soil. -Carrying out exp't	-Experimentation . -Whole wood	-Asking and answering questions. -Saying poem -Recording observations of exp't.	-Recording -Observation -Appreciation -Sharing	-Soil lump -Beaker -Source of heat.	Curr. Pg 18	
					Lit I Lit II	-Types of soil (Clay , loam & Sand) -Characteristics each type. Expt (soil drainage)	-Describing soil types. -Naming types of soil -Reading sentences about soil.	-Discussion. -Whole word	-Reading sentences -Completing sentences	-Decision making -Problem solving -Appreciation care	Soil	Pg 17 Pri Curr	
					Lit I LIT II	-Soil formation -Weathering agents of weathering. -Soil profile	-Describing words such as weathering decomposition. -Define soil profile.	-Discussion -Whole sentence	-Describing weathering -Defining soil profile.	-Drawing -Critical thinking	A chart showing soil profile.	Mk Pg 18	
					LIT I LIT II	Use of soil -To Man _TO Plants -To Animals	-Naming uses of soil	-brain storming -Class discussion -Whole sentence .		-Critical thinking. -Problem solving. -Love Sharing			
				Natural causes of changes	LIT I	-Natural (God made) changes ie (examples)	-Describing changes in the environment	-Observation -Discussion	-Reciting poems -Naming &	-Observation -Critical thinking -Appreciation	The environment	Mk Pg 78	

				in the environment	LIT II	-Effects of changes in the environment	-Naming examples of natural changes. -Identifying effects caused by natural changes		natural changes	-Sharing -Caring			
				-Do-	LIT I LIT II	-Soil erosion as a on affect -Agents of soil erosion -Causes of soil erosion.	-Defining soil erosion. -Identifying the agents and causes of soil erosion. -Reciting a poem about soil erosion.	-Observation -Discussion -Whole word -Method	-Reading words -Discussing the effects -Answering oral and with questions	Problem solving. -Copying with stress. -Responsibility	The environment	Mk BK 3 Pg 75 – 78.	
				Changes in the environment through human activities	LIT I LIT II	<u>Human activities</u> -Man made changes. Examples -Causes of man made changes.	-Describing man made changes -Naming example of man made changes. -Reciting changes about changes.	-Observation -Eclectic method -Discussion	-Naming -Reciting poems changes	-observation -Sharing	Local environment	Mk Bk 3 Pg 74	
					LIT I LIT II	-Possible ways of managing changes eg. Planting more trees -Preserving swamps. -Covering gullies	-Talking about ways of managing change. -Reading words eg. Afforestation, gullies. Etc -Describing ways of managing changes.	-Observation Discussion Whole wood method	-Reading -writing about changes -Answering questions	Observation -Creative thinking -Sharing -Appreciation	Local environment	Mk Bk Pg 74 Pri Cur Pg 20	
					LIT I LIT II	Simple project on tree planting. -Examples of trees -How to plant	-Observing trees in our school compound. -Reading names of trees.	-Observation -Discussion	-Reading -Writing Use of trees Answering questions	-Appreciation care Concern	Our school compound	Pri cur Pg 20	

						trees. -Reasons why people plant trees.	-Describing ways of looking after trees.						
				Air and sun	LIT I LIT II	Air -Definition -Components of air.							

TERM ONE

THEME 4 ENVIRONMENT AND WEATER IN OUR SUB –COUNTY / DIVISION

EXPECTED OUT COMES: THE CHILD APPRECIATES AND CONSERVES THE ENVIRONMENT

WK	DAY	LESSON	THEME	SUB THEME	L.AREA	CONTENT	COMPETENCES	METHODS	ACTIVITIES	SKILLS VALUES	INST. MATERIAL	REF	RM
				AIR AND SUN	LIT I LIT II	**AIR** -Definition -Components of air . -Percentages of components of air. -Use of different gasses in air.	-Starting Percentages of different gases. -Reading name of gasses . -writing	-Syllabic methods – Guided discovery. -Question and answer.	-Starting the percentages of air. -Answering questions.	-Listening -Effective communication -Appreciation	Local environment	Mk Bk 3 Pg 21 pri Cur Pg 22	
					LIT I LIT II	-Properties of air. Air has weight. Air occupies space. Air supports burning. -Experiment	Stating properties of air. Arranging sentences about properties of air	-Do-	-Arranging sentences about properties of air. -Carrying out	-Observation -Creative thinking -Critical thinking -Sharing.	-Balloons. -Candles -Water -Bottle Basins	-Do	

						about properties of air.	-Observe experiments.		experiment. - Observing				
					LIT I LIT II	Dangers of air (Wind) -Define wind. -Dangers of strong wind	-Reading dangers of air. -Observe dangers caused by air. -Write down sentences about dangers of wind	Discussion -Question -Question and answer. -Brain storming	-Reading - Observing -Writing down sentences	-Effective communication -Creative thinking. -Caring -Empathy	A Chart showing dangers of wind. Environment.	Mk BK 3 Pg 26 Pri Curr. P.22	
					LIT I LIT II	The sun Effects of the sun Uses -To plants (Photosynthesis) -To main / animal -Bad effect why plants need sun light.	-Stating the effects of the sun. -Mention the uses of the sun to animals and plants	-Word sentences -Brain storming	- Identifying the uses of the sun	Decision making. -Critical thinking. -Love appreciation.	The environment	Mk Pg 27	
					LIT I LIT II	Formation of shadows . -Parts of a shadow(Umbra Penumbra)	-Describe how shadows are formed. -Naming parts of a shadow.	-Word sentences -Brain storming. -Observation	- Describing the formation of shadows and naming parts of shadows.	-Self awareness -Observation -Critical thinking -Love -Appreciation	Chart showing how shadows are formed	Pri cur Pg 22	
					LIT I LIT	Uses of shadows -Tell time. -Tell direction etc. Sources of light	Identify the uses of shadows. Mention the	-Observation -Discussion -Brain storming	- identifying the uses of	-Critical thinking. -Decision making.	The environment	Mk Pg 27	

					II	-Natural sources eg sun, stars, lightening. -Artificial sources eg candles, lamps, torches.	natural and artificial sources of light		shadows. - Classifying the sources of the light as natural and artificial	-Love -sharing -Appreciation			
			Environment and weather in our sub – county	Water	LIT I LIT II	-The water cycle (Rainfall formation.) -The diagram showing the water cycle. -Importance of each during the rainfall formation.	-Describing the rain cycle. -Discussing how rain is formed. -Reading descriptive sentences. -Arranging picture of water cycle	-Observation -Discussion -Question and answer.	-reading and writing. -Drawing diagrams	-Decision making social awareness patience care.	A chart showing the rainfall cycle	Comp pri BK 3 Pg 24 MK int pri BK 3 PG 31 Pr curr 23	
					LIT I LIT II	-An Experiment to show how rainfall is formed. -Process involved in rainfall formation. -Define these terms Evaporation, Condensation , Ice, vapour (Steam)	-Carrying out an experiment. -Explaining the process involved in rainfall formation. -Listening an d retelling stories .	-Observations - Experimentation -discovery	Reading and writing carrying out an experiment	Problem solving awareness Care	-stove -Bottle -Match box -Ice -Source pan	-Do-	
					LIT I	Types of clouds -Characteristics of	-Identifying clouds in the	-Observation -Discussion	Moving around	-creative thinking	Atmosphere	Pri Curr	

					II	each type of cloud. -Uses of clouds in the environment.	sky. -Discussing the characteristics of the clouds. -Writing the uses / importance's of the clouds	Observation	observing the clouds -writing importance of clouds	-self awareness -Caring		P23 Mk BK 3 Comp Retentive science BK 3	
			Environment and weather in our sub county / division.	Water	LIT I LIT II	Monitoring weather changes. Weather: Definition -Elements of weather (Factors / weather makers / aspects) -Types of weather .	-Describing weather changes . -Discussing a weather chart. -reciting poem about weather.	-Discussion -Questions and answer Eclectic method.	-reading and writing aspects of weather. - Answering questions.	-creative thinking -Awareness concern	A weather chart.	Pri Curr Pg 23 24	
						Weathering instruments. Rain gauge , wind vane , thermometer an anemometer . Diagrams of each weather instrument.	-Drawing and naming weather instruments. -Matching the weather instrument to their uses .	Question and answer. Eclectic method -Discovery	Drawing and naming weather instruments.	-Effective communication care.	A chart choosing weather instructions	Pri Curr Pg23 – 24	
				How rain affects the environment	LIT I II	-Importances of rain on soil. -Importances of rain to animals. -Importances of rain to plant life. -Dangers of rain	-Discussing the importances of rain. -explain the dangers of rain.	-Observation question an d answer Eclectic method	Washing hands . Washing our utensils	-Critical thinking Co-operation -Discussion making	Water	-Do-	

						in the environment							

P.3 LITERACY 1 THEMATIC SCHEME FOR TERM II,

WK	DAY	LESSON	THEME	SUB THEME	CONTENT	COMPETENCES	METHODS	ACTIVTIES	SKILLS/VALUES	INSTRUCTIONAL MATERIALS	REF
			Living things (animals in our sub county)		• Definition of living things. • Characteristics of living things. • The two main groups of living things. • Plants • Animals • Examples of each group of living things above.	• Defining living things. • Naming types of living things. • Listening to and retelling characteristic of living things.	• Discussion • Observation • Question and answer whole sentences.	• Defining living things. • Naming • Listening • Retelling.	• Confidence • Articulation • Audibility	• Our environment • Models • Cut outs	Thematic primary school P.3 teachers guide 3 pg 86.
					• Definition of non living things. • Characteristics of non living things. • Examples of non living things. • Differences between living and non living things.	• Defining living things. • Listening and retelling • Characteristics of non living things. • Naming examples of non living things.	• Discussion • Observation • Question and answer • Whole word • sentence	• Defining • Naming • Listening • retelling	• Critical thinking • Articulation confidence.	• Classroom environment	Do
					• Characteristics of insects e.g. have three main body parts. • Characteristics of birds e.g. have feathers on their bodies. • Characteristics of fish e.g. breathes through gills, swim, live in water.	• Listening and retelling characteristics of insects, birds and fish. • Comparing the characteristics of each group of animals.	• Explanation • Observation • Discussion • Whole word and sentences.	• Story telling • Reciting the rhyme and riddles	• Critical thinking • Self evaluation.	• Real objects, insects. • A chart showing birds.	• Comprehensive pri science bk 3.
					• Domestic animals. • Definition of domestic animals. • Examples of domestic animals. • Uses/importance of domestic	• Drawing domestic animals and naming uses or	• Discovery • Observation • Discussion.	• Drawing • Naming • Listening and	• Confidence critical thinking audibility.	• A chart showing domestic animals.	• MK int. pri. Scie bk 3.

					animals.	importance of domestic animals.		retelling reciting a poem about domestic animals.			
1	3	1	Living things (animals in our sub county)	Types of living things.	• Rabbit keeping • Uses of rabbits • Housing of rabbits (types of hitches) • Qualities of a good hutch • Gestation period of a dove.	Explain uses of rabbits to people. Drawing the types of hutches. Listening and retelling qualities of a good hutch.	Question and answer whole word Observation.	Drawing Listening and retelling	Critical thinking Confidence Self evaluation	A chart showing types of hutches.	MK integrated pri. Scie bk 3 thematic pri scie bk 3.
					• Male rabbit – buck • Female rabbit – doe • Young rabbit – rack/burning • Group of rabbits • Meat of rabbit – litter • The producing of young rabbits by a doe- killing. • Diseases that attack rabbits – colds, sours, pneumonia etc.	• Naming the different types of rabbits. • Listening and retelling the diseases that attack rabbits.	• Discussion • explanation	• Answering oral and written questions. • Reciting a poem • Riddles about animals	• do	• A chart showing types of rabbits	• do
					• Definition of wild animals. • Examples of wild animals • Uses of wild animals • Dangers of wild animals	• Drawing different wild animals and naming them. • Listening to uses of wild animals and their dangers.	• Logical reasoning. • Limitation • Electric • discussion	• Logical reasoning • matching	• Patience • Responding to questions.	• A chart showing types of wild animals	Compre. Pr sci bk 3 page 29.
1	4	2	Living things (animals and our sub-county)	Animal habitants .	• Animals in a school compound • Examples of the school compound • Uses of some animals in the school compound • Animals in the forests or bushes	• Collecting and observing animals in the school compound. • Drawing and naming the animals collected from the school compound.	• Observation • Questions and answers • Look and say	•	• Logical thinking • Appreciation • audibility	• Insects to chart showing different animals	Thematic curriculum bk 3. Pag 46

						• Drawing and naming animals in the forest.					
					• Animals in the swamp • Definition of swamp • Animals found in the swamp • Uses of animals found in swamp	• Visiting the nearly swamp • Drawing and naming animals found in swamps. • Reciting a rhyme about a swamp.	• Observation • Questions and animals • Whole world	• Naming animals • Reciting a poem about animals.	• Responding to questions. • Accuracy • Fluency	• Our environment	Do
					Animals in water Examples of animals in water Uses of aquatic animals Definition of a pond Animals found in a pond.	Drawing and naming aquatic animals Identifying animals found in water. Naming animals found in a pond.	Whole sentence	Reading. Reciting Asking and answering	Responding to questions. Logical reasoning.	A chart showing aquatic animals.	MK pri Science bk 3 Thematic curr. Pag 50

P.3 LITERACY 1 LESSON NOTES

TERM II

THEME: LIVING THINGS, ANIMALS IN OUR SUB COUNTY

Living things are the things which have life

Characteristics:
Living things grow, breathe, feed, move, pass out wastes, respond to stimuli, reproduce.
The main groups of living things. Plants and animals
Examples of plants: mangoes, oranges, beans etc
Examples of animals: cows, goats,

Non living things: These are the things which do not have life.
- Non living things do not grow.
- Non living things do not feed
- Non living things do not breathe
- Non living things do not pass wastes
- Non living things do not move.

Examples of non living things;
Stones, soil, water, timber etc

Differences between living and non living things.
- Living things grow but non living things do not grow.
- Living things feed but non living things do not feed.
- Living things move but non living things do not move.
- Living things pass out wastes but non living things do not pass out wastes.
- Living things breathe but non living things do not breathe.

Insects
- Insects have three main body parts; head, thorax, abdomen.
- Insects breathe through spiracles.
- Insects have antennae used for feeling and tasting food.
- Insects move by flying and some have no wings.
- Reproduce by laying eggs.

Birds
Characteristics
- Have feathers on their bodies.
- Move by flying.
- Have two legs
- Have beaks
- Reproduce by laying eggs
- Their legs are covered with scales

Fish

Characteristics

- Live in water
- Their bodies are covered with scales
- Move by swimming
- Breathe through gills
- They are cold blooded

Types of animals

- Domestic animals.
- These are animals which are kept in homes. Examples of domestic animals; cow, dogs, goats, sheep, rabbits, donkeys, oxen etc.

Uses (Importance) of domestic animals

- Some animals provide meat.
- Some animals provide milk.
- Animals provide horns and hoofs for making buttons.
- Some animals provide wool e.g. sheep.
- Animals provide manure.
- We sell animals and get money
- Some animals provide transport and work.
- Animals are used for prestige.
- Animals like bees are used for dowry.

Rabbit keeping (Rabbitary)

- The rearing of rabbits.

Uses of rabbits

- Rabbits provide meat, hair, manure
- For sell
- Rabbits are kept as pets.

Housing of rabbits

There are two types of hutches.

- Marrat hutches
- Caged hutches

Qualities of a good hutch

- It should be clean
- It should be ventilated.
- It should be big enough.
- It should be raised from the ground.
- It should have a strong roof.
- It should be strong

The female rabbit takes 1 month (30 days) to produce its young ones (gestation period)

- Buck – A male rabbit
- Doe – Female rabbit.
- Rack/Bunny – a young rabbit
- Litter – A group of young rabbits born at the same time by a doe.
- Kindling – The producing of young rabbits by a doe.

Diseases of rabbits

- Colds, scours, pneumonia, coccidiosis, snuffles, ear canker
- Cocodiosis attacks the birds also pneumonia can attack both rabbits and man..

Wild animals

- Wild animals are the animals which live in the bush.
- Examples of wild animals.
- Lions, foxes, elephants, zebras, antelopes, tigers, leopards, buffalos etc

Uses of wild animals

- Some wild animals provide meat, skins.
- Attract tourists.
- Some wild animals act as taboos for some dans.

Dangers of wild animals

- Some wild animals can eat people.
- Some wild animals destroy crops
- Some wild animals can also eat domestic animals.

Animals in a school compound.

- In the school compound, there are both domestic and wild animals.
- Wild animals e.g. snakes, lizards, snails

Uses of some animals

- Some animals provide skins, milk, manure

Animals in the forest or bushes.

- There are wild animals e.g. lions, zebras, elephants, snakes, hyena, giraffes.

Animals in a swamp

- A swamp is a wetland.
- Water logged area with plants growing.
- Animals in a swamp are some snakes, snails, slugs, crocodiles, tortoises, earth worms, monitor lizards, fish.

Uses of animals found in a swamp

- Some animals provide meat e.g. crocodiles.
- Some animals provide skins and hides.
- We get fish from the swamp
- Some animals act as tourist attraction.

Animals in water

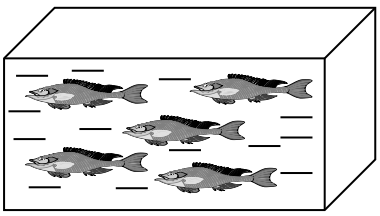
- These animals are also called aquatic animals.
- Examples of aquatic animals; fish, crocodiles, snails, slugs, some snakes, tortoises, frogs.

Animals in a pond

- A pond is a small pool of water.
- Some ponds are natural and others are man made.
- Animals in a pond are fish, frogs, snails, slugs etc

Aquarium

- An aquarium is a glass tank used for keeping fish.



Animal movements

Reasons why animals move from place to place.

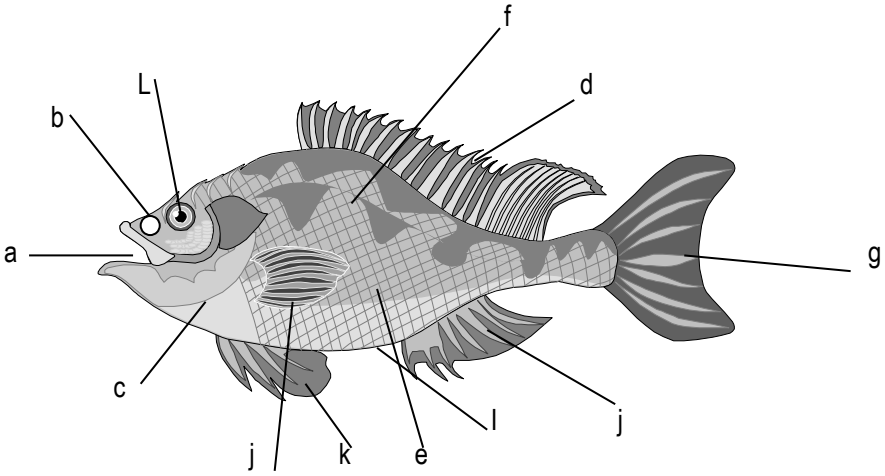
- To get food
- To get water
- To get protection
- To get shelter
- To look for their young ones
- To look for friendship
- To look for new homes

Ways in which animals move

- Some animals move by walking e.g. man, dogs, cows, goats, sheep, lions, elephants.
- Some animals move by running e.g. dogs.
- Some animals move by gliding e.g. snakes, snails (slithering)
- Some animals move by mingling, e.g. maggots, earthworms
- Some animals move by crawling e.g. chameleons, lizards, geckoes, monitor, lizards, tortoise, turtles.
- Some animals move by swimming e.g. fish.
- Some animals move by flying. Most of the birds and insects.
- Some animals move by jumping e.g. frogs & toads

THE FISH

- The external parts of a fish



a –	mouth	e – scales	l – anus
b -	nostril	f – Lateral line	j – pectoral fin
c-	gill cover	g – tail fin/caudal fin	k – pelvic fin
d-	dorsal fin	h – anal/ventral fin	l - eye

Uses of parts of a fish

Nostril – It is used for smelling food.
Mouth – Used for taking in water and food
Gills – used for breathing
Gill cover – it covers the gills
Dorsal fin – used for protection
Tail fin – Used to steer the fish and make corners
Scales – they cover the body of a fish

Lateral line – it senses or detects sound waves (danger) in water
Fins – for swimming and protection

Examples of fish common in Uganda.

- Tilapia (engegge)
- Nile perch (emputa)
- Cat fish
- Silver fish (mukene)
- Lung fish
- Mud fish
- Enkejje

Uses/importance of fish

- People eat fish to get proteins
- For selling
- Making medicine from fish bones (cold liver oil)
- Making animal feeds
- Scales are used to make bags and belts.
- People get jobs.

Fish preservation

Preservation is the way of keeping fish for a long time without going bad.

Methods or ways of preserving fish

- By smoking
- By salting fish
- By refrigeration
- By sun drying
- By frying
- Tinning/canning

Habitants of domestic animals;

Animal		**Habitant**
Pig	-	stylpen
Cattle	-	kraah
Dog	-	kennel
Rabbits	-	hutch
Cat	-	basket
Horse	-	stable
Goat	-	shed
Sheep	-	shed

THE BIRDS

The external/parts of a bird
Picture of a bird

Uses of parts of a bird

- Beak – It picks food from the ground
  - It is used for protection
  - It is used for making nests

- Nostril - Used for smelling food
- Eyes - used for seeing
- wings - used for flying
- claws/nails - For scratching the ground and protection
- Spur - Used for protection
- Feathers For flying
  - provide warmth
  - cover the body of birds
  - give birds colour
  - give birds shape
  - For making nests
  - For brooding

Characteristics of birds

- Most of the birds move by flying
- Reproduce by laying eggs
- Have feathers on their bodies
- Have beaks
- Some birds are flightless (do not fly) e.g emu, ostriches, kiwi, penguins
- swimming birds – These have webbed feet which help them to swim on water

Examples of swimming birds

- ducks
- geese
- swans

Domestic birds – These are the birds kept in our homes. They are also called poultry.

Examples of domestic birds

- ducks
- pigeons
- pea cocks
- chicken
- ginea fowls
- peacocks
- parrots
- Turkeys

Wild birds- These are birds that live in bushes

Examples of wild birds

- weaver birds - crested crane
- eagles – crows - kites
- sparrow

Habitats of birds – nests, trees, forests

Uses of birds to people

- provide meats, eggs, feathers
- For selling
- paying dowry
- kept as pets
- provide manure

Dangers of birds in the environment

- Birds destroy crops
- Some birds spread diseases e.g. bird flue.
- Some birds can dirt the compound

INSECTS

External parts of an insect

(picture of insect)

Uses of parts of an insect

- Feelers – used for feeling and smelling
- Proboscis – used for sucking food and water
- wing – for flying
- spiracles – for breathing

Characteristics of insects

- Most insects fly
- Have three main body parts
- Breathe through spiracles
- Have feelers or antennae
- Have compound eyes
- Have six joined legs (three pairs of legs)

Examples of insects: Houseflies, cockroaches, mosquitoes, bed bug etc

spiders, ticks and mites fleas are not regarded as insects because they have two main body parts and eight legs.

Some insects without wings do not fly e.g

- black ants, red ants, termites, scorpions

Social insects – These are the insects which live, move and work together

Examples of social insects

Bees, termites, white ants, wasps, red ants, black ants

Harmful or dangerous insects

some of these insects bit people others spread germs that cause diseases and some spoil crops

Examples of dangerous insects (harmful)

- termites - wasps - houseflies
- cockroaches - mosquitoes - tsetse flies
- lice - fleas - bed bugs
- weevils - thrips

Useful insects

- Some insects are edible e.g white ants, grasshoppers, young bees
- Bees provide honey and bee wax
- Bees also pollinate flowers

Insect habitants (homes)

- insects that live in soil
- - termites - white ants - red ants -

(b) Insects that live on plants

- Butterflies or caterpillars

(c) Insects in anthills (mounds)

- termites, white ants

Other insect habitats

- bees – Bee hive
- spider – web

Care for bees

- There are three types of bees in a hive

1. worker bees
2. Drone bees
3. The queen

A group of bees is called a swarm

Uses of bees to man

- Bees provide honey
- Bees provide bee wax
- young bees are eaten

Importances of honey

- Honey is used as medicine
- Honey is used to make some foods sweet
- People sell honey and get money

Products from bee wax

- candles
- shoe polish
- some cosmetics
- after shave

Ways of caring for bees

- By planting flowers near the bee hive.
- Bees visit flowers to get nectar
- Nectar is the sweet juice found in flowers
- Providing water to bees
- providing a hive
- slashing grass near the hive

Ways of caring for birds

- Treating birds
- Keeping birds' records
- Providing food to birds
- cleaning birds houses
- building birds houses

Signs of a sick bird

- It is sleepy
- It has dull feathers
- It does not want to eat food
- It gives out watery stool.

Caring for wild birds

- Avoid bush burning
- Avoid cutting down trees
- Avoid poaching – Hunting wild animals with out permission
- Treating sick birds in the wild life centres
- Providing food to birds

THEME: LIVING THINGS [PLANTS]

A Plant is anything that grows on the earth's surface.

Groups of plants

(a) Flowering plants

There are plants which bear flowers e.g maize, beans, grass, tomatoes, peas, etc

(b) Non – flowering plants

There are plants which do not bear flowers e.g ferns, conifers, mosses, liverworts etc

Characteristic of plants

They grow, reproduce, feed, breath, excrete

Plant habitats

A plant habitat is a place where plants grow or are found

N.B: A habitat is a home of living things

1. **Plants in school compound**
   paw- paw, avocadoes, mangoes, palms, flowers etc

2. **Plants in swamps**
   papyrus, yams, rice, sugar canes, etc

3. **plants in water bodies**
   water hyacinths, water lilies, water cabbage etc

4. Plants in deserts / dry areas
sisal, cactus, cavanina, liver worts

5. plants that grow on rocks
lichens, liverworts, ferns, conifers

6. School garden
All growable plants e.g maize, beans, bananas, etc

Importance of a school garden

- Children learn about crops i.e for study purposes
- Children get food from the grown crops
- The surplus is sold and generates income to the school
- Children learn to dig.

Nursery bed

Nursery bed is a small piece of land where seedlings are raised before taking them to the main garden .

Importance of a nursery bed

- Seeds are protected from sunshine, strong wind and heavy rains
- It is easy to care for the seedlings
- seedlings grow long stems
- The shelter prevents water from evaporating
- It is easy to select seedlings.

Examples of crops grown in a nursery bed

- Tomatoes
- onions
- egg plants
- cabbage
- oranges
- green pepper
- loofah plants
- spinanch
- trees
- passion fruits

Caring for crops in a nursery bed

(a) **Watering / irrigation**

It is providing water to plants mainly in dry seasons

(b) **Weeding.**

This is the removal of unwanted plants from the garden.

- A weed is unwanted plant in the garden.

Examples of common weeds.

- black jack	- couch grass	- spear grass
- Sodom apple	- wild/finger millet	
- goat grass	- wondering jaw	- oxalis
- elephant grass	- nut grass	

(c) Spraying

This is the application of chemicals on seedlings to control pests, diseases, and weeds.

(d) **Thinning**

Is the removal of excess crops from the garden to create space.

(e) **Hardening**

This is the making of seedling get used to harsh conditions

(f) **Transplanting**

Is the transfer of seedlings from the nursery bed to the main garden.

(g) **Mulching**

Is the covering of top soil with dry grass

(h) Fencing

(i) Providing shade (shelter)

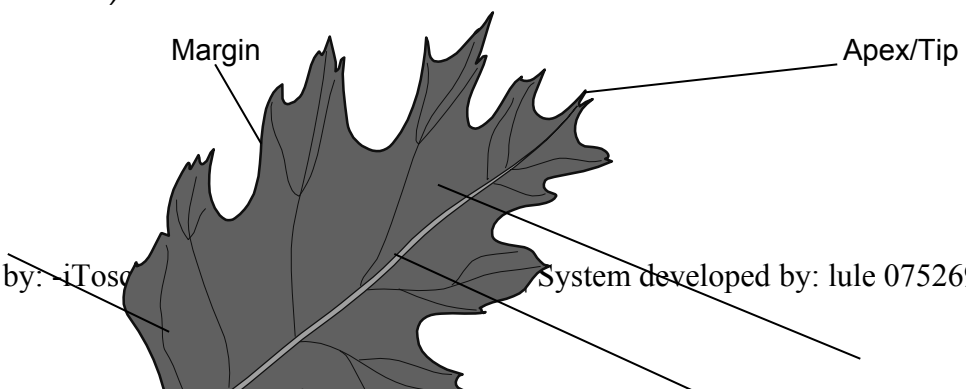
Diagram of a flowering plant

Parts of a flowering plant

- It has three major parts namely: leaves, stem, roots

THE LEAF

(diagram of a leaf)



<u>Uses of leaves to plants</u>

- They make food for the plants
- Some leaves store food
- They help plants during transpiration
- They are used for breathing

Photosynthesis

- It is the process by which green plants make food in the presence of sunlight and cabondioxide

Conditions necessary for photosynthesis

- Chlorophyll (Green colouring matter that trap sunlight)
- carbondioxide
- Water
- sunlight (provides energy to plants)

<u>N.B:</u> Transpiration is the process by which green plants lose excess water to the atmosphere through the leaves.

Uses of leaves to animals

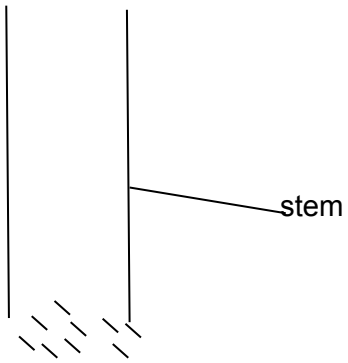
- Leaves are eaten as food
- Leaves are used as herbal medicine
- Some plants have leaves used for thatching houses / shelter
- They are used for decoration.
- People sell leaves and get money.

THE STEM

TYPES OF STEM

1. <u>Up right stem/ erect stems</u>

diagram of a erect stem)



These types of stems are found in woody plants like

- mahogany
- mutuba tree
- eucalyptus
- mango tree
- mvule

2. Climbing stems

There are also called weak/clasping stems

Examples of plants with climbing stems .

- passion fruits
- vanilla
- some bean plants
- loofah plants
- water melon
- pumpkins
- some yams
- cucumber

How climbing plants climb others

- By twinning / clasping
- By using hooks
- By using tendrils

(a) Plants using tendrils (b) plants using hooks (c) Plants which twin/clasp

(picture) *(picture)* *(picture)*

3. **Underground stems**

These are stems found below the ground. Examples of plants with underground stems.

- spear grass
- couch grass
- ginger

Uses of stems

A. To plants

- Stems store food for plants
- Transport water and food
- Support branches and leaves
- Stems make plants to stand upright

B. To animals

- stems are eaten as food
- Provide animals with medicine.
- Provide building materials
- We get timber / poles from woody plants.

ROOTS

It is part of the flowering plant found under the ground

Types of roots

(a) Tap roots

(diagram)

N.B: Root cap protects the growing tip of a root .

- Root hairs absorb water from the soil.

Examples of plants with tap root system: legumes (beans, peas, soya, ground nuts, simsim] woody plants

(b) Fibrous roots

They are common in cereals / grains e.g sorghum

(diagram)

Examples of plants with fibrous roots

, maize, sorghum, wheat, millet, rice, barley, oats, and some grasses.

(c) Prop roots

They develop from the stem of the plant

(diagram)

- Plants like maize, sorghum, millet and some grasses develop such types of roots.
  N.B: prop roots provide extra support to the plants.

(d) Adventitious roots

- These also develop from the stems of the plants.
- They are common in plants like onions, some yams,

Uses of roots to plants

- Hold the plants firmly in the soil.
- Absorb water and mineral salts from the soil.
- Stores food for the plants.

Uses of roots to animals

- It is a source of food to animals.
- It is used as herbal medicine.
- Controls soil erosion like the buttress roots.
- Some people sell roots and get money.

THE FLOWER

- The flower is the reproductive part of a plant.

Uses of flowers to animals

- They are used for decoration
- Bees and some birds get nectar from flowers.
- They are used for making perfumes.
- Some flowers are eaten as food.
- They are used in making colours.
- They are used as herbal medicine.

Uses of flowers to plants

- They help plants to reproduce

SEEDS

Uses of seeds to plants

- It is apart grown in the soil.

Uses of seeds to animal

- Seeds are eaten as food.
- They are used for planting.
- They are sold.
- They are used as medicine.
- They are used in making crafts.
- Some seeds are sued for making vegetable oil.

Dangers of plants.

- Some plants are poisonous e.g Sodom apple to cattle
- Some are thorny and therefore damage the skins of animals
- Some plants harbour/hide dangerous animals and pests.
- Plants can be weeds hence complete for nutrients with crops.
- Some water weeds cause suffocation of fish in the water.

CLEARING OF LAND

Steps of clearing land

- Slashing – shortening of grasses or some bushes using a slasher.
- Digging / ploughing – breaking up of soil in preparation for planting
- Planting – It is putting a planting material in the soil.
- Seeds are selected for planting.
- Afterwards seedlings are cared for

Methods of planting

- Broadcasting method – Is the planting of seeds by scattering them at random on land.
- Ro-planting – Is the growing of plant materials in lines.

Caring for crops

1. Weeding – Is the removal of unwanted plants from the garden
2. Staking – Is the giving of extra support to plants with weak stems.
3. Pruning – Is the removal of excess branches from the plant.
4. Thinning - Is the removal of excess plants from the garden to create space.
5. Mulching - Is the covering of top soil with plant materials.
6. Crop rotation - Is the growing of different crops on the same piece of land seasonally.
7. Spraying - Application of chemicals on plants to control pests and diseases
8. Harvesting - Is the removal of ready crops from the garden during dry season.
9. Drying harvested crops

Storing harvesting crops

Granaries Silos

Marketing

- It is the selling of crops

Places of marketing

- markets

- shops
- vending

Pests and diseases

- A pest is an animal which destroys farmers crops.
- Examples include;
- monkeys - rats - weevils
- goats - cows - birds
- Thrips - Nematodes - Eel worms

Pests control measures

- Weeding - crop rotation - use of scare screws
- spraying using pesticides - Row planting - early planting
- removing infected parts from the plants
- Uproot the plants which are severely attached.

Crop diseases

- Mosaic, potato blight, blast, rust, blast, panama, smut, end rot.

Effects of diseases to plants.

- They cause the crops to root.
- Crops whither
- Crops dry out before time
- Fruits ripe prematurely
- leaves fall off or become pale
- roots dry

Disease control measures in crops

- Practice crop rotation
- weeding
- Early planting
- Prune/ remove the diseased parts
- uproot the infected crops and burn them
- spray crops with medicine to control the diseases.

GARDEN TOOLS

TOOL	USE	CARE
Hoe	- for digging - for weeding	- keeping tools in a dry place - By cleaning - By painting the tools
Panga	- for cutting down small trees - for harvesting ready crops	- By oiling garden tools - by greasing the tools - cleaning
Sickle	- for cutting grass	-
Watering can	- watering crops	-
Slasher	- for slashing grass	- By cleaning and keeping it in a dry place.
Prunner	- used for pruning	-
Rake	- for collecting or gathering rubbish	-

Trowel	- for transplanting seedlings	-
Spade	- For carrying soil from one place to another.	-
Forked hoe	- For digging hard soil and story areas.	-
Garden fork	- For turning manure	-

wheel barrow	- For carrying soil - For carrying and transporting tools and harvested crops.	-

SEED GERMINATION

Seed germination – is the process by which a seed develops into young plant.

A young plant is known as a seedling.

Conditions necessary for germination

- Water [moisture]
- air [oxygen]
- temperature [warmth]

Types of germination

- Epigeal germination
- Hypogeal germination

1. Hypogeal germination – Is where the cotyledon remains under the ground/ or in the soil.

- It is common in cereals or monocots e.g maize. millet, sorghum, rice, wheat, barley, etc

Diagrams to show hypogeal

2. Epigeal germination – Is the type of germination where the cotyledon comes out of the ground.

- It is common in dicots e.g legumes [beans, groundnuts, etc

Diagrams to show epigeal

- Germination, burning, rusting and breathing all use a common gas called Oxygen.

An experiment to show the conditions needed for germination

- Things needed

1. 3 tins (2) cotton wool (3) seeds (beans) (4) ice (5)oil

- In tin A, the seeds will not germinate because there is no warmth.
- In tin B, the seeds will not germinate because there is no air. The oil prevents air from entering to reach the seeds.
- In tin C, the seeds will not germinate because these is no water (moisture)
- In tin D, the seeds will germinate because there is air, water and warmth.

The cotton provides warmth

P.3 LITERACY 1 LESSON NOTES – BREAK DOWN

TERM II –

THEME	BREAKDOWN

Living things in our Sub – country	- Definition
	- Characteristics of living things
	- Types of living things
	  ➢ plants
	  ➢ animals
	- Characteristics of each type
	- uses of animals
	- domestic and wild animals

	Rabbits - uses of rabbits - housing in rabbits - gestation period - group of young ones

	- male, female, and young one of rabbits - diseases - caring for rabbits

	- **<u>Animals habitats</u>**
	  - School compound
	  - garden
	  - forests
	  - swamps
	  - water bodies
	  - ponds
	- Animals movements
	- Reasons why animals move
	-

	- **<u>The fish</u>** - External parts - common types of fish caught in Uganda - Uses of fish - Fish preservation - Reasons for preservation -
	- **<u>Birds</u>** - External parts - Characteristics of birds - Types of birds [domestic and wild - Examples of each type - Habitats of birds - Uses of birds.
	- **<u>Insects</u>** - Parts of an insect - Examples of insects. - Characteristics of insects. N.B: spiders, ticks are not insects - Harmful and useful insects - Edible and inedible insects - Insect habitats.
	- Care for insects (bees) - Care for birds - Care for animals
Plants in our sub country	**<u>Groups of plants</u>** - flowering and non- flowering plants - Definition - Characteristics of plants - Examples of flowering and non-flowering plants - parts of flowering plant - functions of parts of a flowering plant
	<u>Plants and their habitats</u> - School compound - School garden - Importance of school garden

	- swamps - water bodies - rocks - deserts / dry areas
	Nursery - Definition - Uses of nursery bed - Examples of crops grown in a nursery bed - Reasons why some crops are first grown - Reasons why some crops are first grown in a nursery bed.
	Caring for crops in a nursery bed. - watering - weeding - spraying - thinning - hardening off - transplanting - fencing

	Parts of flowering plants
	
	- Diagram of a flowering plant
	- Name the parts of a flowering plant
	- Leaves
	  o Name the parts
	  o Give uses of parts to the plant
	  o Give uses of the parts to animals

	Stems
	
	- Types of stems
	  o upright stems
	  o climbing stems
	  o under ground stems
	- Examples of plants with the above stems
	- Uses of stems to plants
	- Uses of stems to animals.

	- **Roots** - Definition - Types of rots - Examples of crops with the above root types - Uses of roots to plants - Uses of roots to animals.
	- **Flowers** - Definition - Categories of flowers - Diagram of flower

	- Examples of crops (plants) with in each category - Uses of flowers to plants. - Uses of flowers to animals (bees) -
	- **Seeds** - Definition - Examples of plants that produce seeds - Uses of seeds.
	- **Dangers of plants** - Poisonous plants - Examples of poisonous plants - Thorny - weeds - Habitat for dangerous animals - Completion for oxygen (water hyacinth)
	- **Crop growing practices** - Clearing land - ways of clearing land - slashing - digging/ ploughing

	- **Planting**
	- seed selection
	- methods of planting
	  o row planting
	  o Broad casting
	  o Transplanting

	- **Caring for crops**
	- weeding
	- staking
	- pruning
	- Thinning
	- mulching
	- spraying
	- crop rotation
	- harvesting
	- drying harvested crops
	- storing harvested crops
	  o granaries
	  o stores
	  o silos

	- **Marketing** - Definition - Ways of marketing - Problems we face in marketing
	- **Pests** - Definition - Examples of pests - Control of pests
	- **Diseases** - Examples of diseases - Effects of diseases - Control of diseases

	- **Garden tools** - Definition - Examples of garden tools - Uses of garden tools (tabulate) -
	- **Experimentation** - Seed germination - Definition - conditions necessary for germination **Observation** - Hypogeal - Epigeal **Interrelate** - germination - burning - breathing - and rusting

-

TERM III

VECTORS

Are animals that spread disease causing germs

common vectors are;

- mosquitoes
- house flies
- black flies
- cockroaches
- itch mites
- lice
- mad dogs
- tsetse flies
- ticks
- bed bugs
- fleas

Characteristics

- Some feed on blood from other animals
- They live in dirty places
- Some have hairy bodies

Mosquitoes

Types of mosquitoes and diseases spread

Mosquito	**Diseases**
Infected Female Anopheles mosquito	Malaria
Culex mosquito	Elephantiasis
Aedes tiger mosquito	Dengue / yellow fever

NOTE: Mosquitoes lay their eggs on stagnant water.

Control of mosquitoes

- Clearing bushes around homes
- Draining stagnant water
- pouring oil on stagnant water
- spraying using insecticides
- using treated mosquito nets
- Fumigation

a. eggs

b. larva (wriggler)

c. pupa

Life cycle of mosquitoes

Anopheles mosquito

(diagram of the life cycle)

Life cycle of a culex mosquito

(diagram of Life cycle of a culex mosquito)

a. eggs

a. eggs

b. larva (wriggler)

c. pupa

House flies

These are small insects with hairy bodies usually found in homes and dirty places

Diagram of a housefly

Features of a housefly

- If has three main body parts
  ie. – Head
  - Thorax
  - Abdomen
  -
- It has a hairy body that makes. It easy to carry on germs from one place to another.

Diseases spread by housefly

- cholera
- typhoid
- diarrhoea
- trachoma
- dysentery

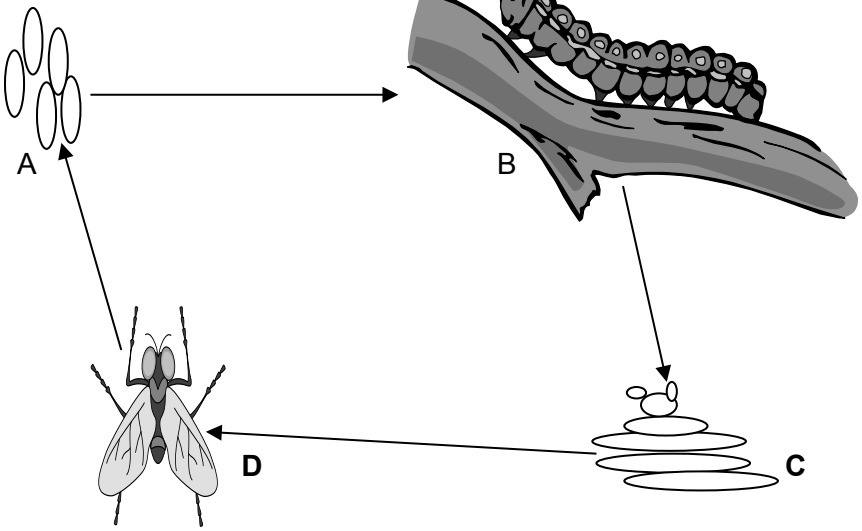
Control of diseases spread by a housefly

- covering food
- drink boiled water

- keep the utensils clean
- avoid sharing towels and basins with people suffering from trachoma.
- burn rubbish in the rubbish pits
- Keep the pit latrines covered.
- Do not throw wastes everywhere
- Wash fruits before eating
- Eat warm food

Life cycle of a house fly

(Diagram)



Name the life cycle stages

a. Eggs

b. larva (maggot)

c. pupa

Note: Stages **a** and **c** are silent (dormant) stages

Stage **b** active and helps to decompose feaces in the latrine.

- State **c** is active and carries disease causing germs from dirty places to uncovered food.

The life cycle of a housefly has four stages this complete metamorphosis.

Cockroach

It's a brown winged insect with a flat abdomen usually found in dirty places.

It feeds on faeces and uncovered foods in houses

Places where cockroaches live

- Pit latrines

- cracks on walls
- dirty stores
- untidy book shelves and drawers
- dark corners
- In beds

Diseases spread by cockroaches

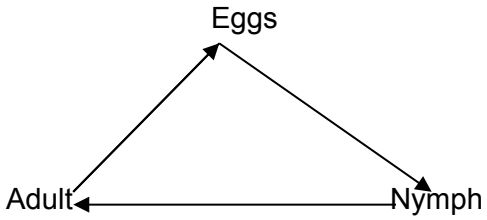
- cholera
- diarrhoea
- dysentery
- typhoid

Control of diseases

- spray cockroaches using insecticides
- practice proper hygiene
- provide enough light in rooms
- Cover food that has remained
- warm leftovers before eating

Life cycle of a cockroach

Diagram



a. eggs b. nymph c. adult

A cockroach undergoes three stages of life cycle also known as incomplete metamorphosis.

The adult cockroach is more active compared to the nymph.

It carries germs from dirty places on its hairy body to stuffs in houses.

<u>Tsetse fly</u>

It's a black hairy insect with abroad abdomen slightly larger than that of a house fly.

Its found in bushes and produces its larva near water bodies.

Mature tsetse flies spread Nagana to cattle and they also spread sleeping sickness to man.

Control of tsetse flies

- Spraying using insecticides
- using traps
- cleaning infested bush

Life cycle of a tsetse fly

A tsetse fly under goes four life stages

i.e eggs, larva, pupa and adult

It also is called a complete metamorphosis

NOTE: Eggs of a tsetse fly hutch into larva while inside the Adult tsetse fly.

Other vector diseases they spread and control.

Measures on table

Vector	Disease	Control
Rat fleas	Bubonic plague	Spray using insecticides
Lice	Typhus fever	Observe personal hygiene
Bed bug	Typhus fever	Spray using insecticides
Itch mites	Scabies	Observe personal hygiene
Mad dogs (rabid dog)	Rabies	Vaccinate dogs regularly

DISEASES SPREAD BY VECTORS

MALARIA:

it spread by an infected female anopheles mosquito.

Malaria is caused by plasmodia germs which are passed on to the body while it is sucking blood from its host.

Signs and symptoms

- High body temperature
- vomiting
- General body weakness
- fever etc
- diarrhea
- stomachache
- headache
- Loss of appetite

Control and treatment

- sleep under treated mosquito net
- Drain stagnant water from the compound
- Slash the bushes around homes / houses
- Oil the water sources near our homes.
- Spray using insecticides
- Use medicines to treat malaria e.g Quinine, chloroquine, coartem etc

CHOLERA

Cholera is caused by a Bacterium called vibrio cholerae germs.

Its also spread through contaminated water with faeces.

Cholera can also be spread by houseflies from a patient to a healthy person.

Signs and symptoms

- General body weakness
- Diarrhea
- Loss of weight
- Abdominal pain
- Severe vomiting
- dehydration

Control and treatment

- Dispose wastes in latrines
- Keep the toilets and latrines clean
- Keep cooked food covered
- Warm leftovers before eating
- Boil drinking water
- Treat sick people early
- Burn rubbish that attracts flies.
- Avoid eating half cooked food.

TYPHOID

Typhoid is caused by bacterium called salmonella typhi germs

It's spread through contaminated water and food.

Signs and symptoms of typhoid

- General body weakness
- Abdominal pain
- Loss of weight
- Diarrhea with blood
- Dehydration

Control and treatment

- Boil drinking water to kill germs
- Keep water sources clean
- Keep toilets and latrines clean
- Isolate and treat sick people early enough
- Spray using insecticides to kill common houseflies.

DIARRHOEA

Is the continuous / frequent pass out of watery stool.

It's caused by a bacterium which affects the digestive system.

Signs and symptoms

- Sunken eyes
- A prick on a skin takes long time to return
- General body weakness
- pale skin
- growing thin due to dehydration
- Headache
- stomach pain

Control and treatment

- Keep utensils clean
- Eat hot food
- Warm leftovers before eating
- Cover food after cooking
- Spray house flies using insecticides
- Keep the latrines dry and clean.
- Boil drinking water
- Give oral rehydration solution to the sick.

DYSENTERY

Dysentery is caused by a bacterium called shigella.

Its also caused by a protozoa called Entamoeba histohytica.

Signs and symptoms

- Continuous severe diarrhea
- Dehydration
- Stomach pain
- Headache
- Growing thin due to dehydration
- General body weakness
- Joint pains

Control and treatment

- Boil drinking water
- Observe home hygiene
- Keep water source clean
- Treat sick ones using antibiotics

TRACHOMA

It's a disease caused by a virus called clamydia.

It affects the eyes of a person

Trachoma can also be spread by houseflies from one person to another.

Signs and symptoms

- Itching eyes
- Eyes become red
- Eyes pain a lot
- Tears roll out of the eyes
- Difficulty in looking at light
- Headache

Control and treatment

- Observe personal hygiene
- Spray house flies using insecticides
- Treat the eyes so early with eye drops
- Don't share basins, towels with sick people.

- Avoid shaking hands with sick people.

YELLOW FEVER

It a disease caused by yellow fever virus.

Its spread by Aedes / Tiger mosquito from person to person.

Signs and symptoms

- Yellowish eyes
- Passing out yellowish urine
- Itching skin
- General joint pains
- Feeling sleepy

Control and treatment

- Using insecticides to spray aedes mosquito
- Drain all stagnant water
- Use treated mosquito nets
- Treat the disease so early
- Carry on fumigation

SLEEPING SICKNESS (Trypanasomiasis)

This is caused by trypanosome germ which is spread by a tsetse fly to people.

Trypanosome germ spread to animals causes Nagana.

Signs and symptoms

- sleeping all time
- General body weakness
- Joint pains
- Dizziness
- inching eyes

Control and symptoms

- Use traps to kill tsetse flies
- Use insecticides to kill them
- Clear bushes around homes
- Drain all stagnant water

Table showing diseases with causing germs

Disease	Causing germs
Malaria	Plasmodium
Dengue fever	Dengue fever virus
Cholera	Vibro cholerae
Typhoid	Salmonella typhi
Trachoma	Clamydia
Elephantiasis	Flaria worm
Bubonic plague	

WAYS IN WHICH VECTORS SPREAD DISEASES

Through the 4Fs chain

- Faeces
- flies
- food
- fingers

Diseases spread through 4Fs

These are also called diarrhaoeal diseases

- Diarrhoea
- Dysentery
- Cholera
- Typhoid

Through bites

- rabies
- malaria
- yellow fever
- elephantiasis
- typhus
- relapsing fever
- sleeping sickness
- Nagana

DEHYDRATION

Is the condition when the body lacks enough water.

Causes of dehydration

- Severe vomiting

- severe diarrhoea
- Excessive sweating (High fever)

Signs and symptoms

- pale skin
- growing thin
- a soft pinch takes long to return
- General body weakness
- Joint pains
- Sunken eyes

Treatment of a dehydrated person

- Provide a lot of juice (drinks)
- Give oral Rehydration solution (ORS)

Preparation of Oral Rehydration solutions

- Wash your hands with clean water and soap.
- Measure 8 tea spoonful of sugar and 1 tea spoonful of salt.
- Measure 2 mugs of cold, lean boiled water (1 litre)
- Mix the measured salt, sugar and water until the sugar and salts dissolve completely
- Taste the solution and then give the patient.

Terms used in making oral rehydration solution

Solvent – Anything that dissolves other substances

Solute – Anything that can be dissolved by a solvent

Solution – Something got when a solute is dissolved in a solvent

Solvent - water

solute - sugar, salt etc

Solution - sugar solution, slat solution and sugar, salt solution (S.S.S)

Preventing and controlling vectors

- Sweeping compounds
- Slashing tall grasses around homes
- spraying insecticides
- Draining stagnant water
- Oiling stagnant water
- Burning rubbish in pits
- Keeping toilets and latrines clean
- Using sprays to kill some insect vectors

- Vaccinating and animals
- Keeping personal hygiene etc
- Proper ventilation

HIV / AIDS

- HIV / AIDS is a common and deadly sexually transmitted disease in Uganda today.
- It is caused by a virus called HIV
- HIV stands for Human Immuno Deficiency Virus

N.B: AIDS – Acquired Immune Deficiency Syndrome

Spread of HIV/ AIDS

- Through unprotected sex with an infected person.
- Through sharing un-sterilized sharp objects with a victim
- Through blood transfusion
- At birth i.e mother to newly born baby.
- Cultural practices like circumcision and genital mutilation.

Signs and symptoms of HIV/ AIDS

A person having HIV/AIDS may show the following signs

- Loss of weight
- Persistent diarrhoea
- Persistent dry cough
- Loss of appetite
- skin rash
- Herpes zoster (kissipi)
- Night sweating

Prevention and control

- Be faithful to your partner
- Abstain from sex
- Use condoms or have protected sex
- P.M.T.C in pregnant women (Prevention of Mother to Child Transmission.

Effects of HIV/AIDS

(i) On an individual

- It causes death to an individual
- The individual is isolated
- He/She becomes desperate
- The person is psychologically tortured
- It leads to poverty.

(ii) On the family

- Grief by the family members
- Loss of income during treatment
- The family loses the individual more so when he is the bread winner.

(iii) Caring for HIV/AIDS patients

- He needs guidance and counselling
- Should not be isolated
- Feed the patient on a balanced diet
- Maintain proper hygiene / sanitation

Protective measures during caring

- Do not share un- sterilized instrument like razor blade
- Use gloves

PIASCY

PIASCY

- Presidential
- Initiative on
- AIDS
- Strategy for
- Communication to the
- Youths

PIACY messages

- Say no to bad touches
- Say no to gifts for sex
- Avoid staying in risky areas
- Abstain

SOURCES OF ENERGY

1. Energy is the ability to do work.
2. There are two sources of energy. These are;
   (i) Natural sources

   (ii) Artificial sources (man- made sources)

3. Natural sources of energy

Natural sources are sources of energy made by God.

Examples

(i) Wind

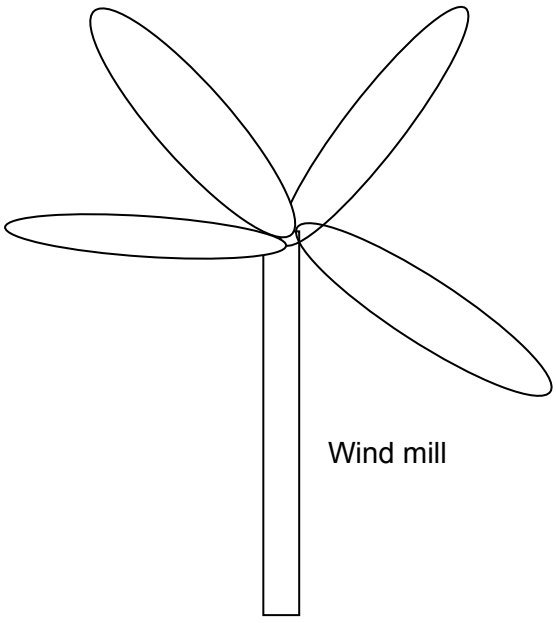
(ii) Water

(iii) The sun

Wind as a source of energy

- Wind drives/ moves wind mills.
- Wind pushes ships, boats

(diagrams)



Wind mill

- wind vanes, kites, paracutes, balloons, etc

Water as a source of energy

- Water runs machines to form electricity.

The sun as a source of energy

The sun provides us the following energies

(i) Heat energy

(ii) Light energy

(iii) Solar energy

Uses of the energies from the sun

- The heat energy helps in the formation of rain fall.
- Light energy helps us to see.
- Light energy helps plants to make their own food. (photosynthesis)
- Heat energy helps man to dry; seeds, clothes etc.
- Solar energy gives us electricity.
- Solar energy helps to run electrical appliances e.g radio, TV, bulbs, flat irons etc.

4. Artificial sources of energy

Artificial sources are sources of energy made by man.

Examples include

(i) Fuel

Fuel is a materials that can be burned to produce heat energy.

Examples

- diesel
- petrol
- wood
- charcoal
- coal etc
- paraffin

Uses of fuels

- Diesel and petrol runs vehicles, generators
- Paraffin helps to support fire (cooking, lighting)
- We use wood to set up fire.
- Charcoal helps to light the charcoal stove

(ii) Electricity

Uses of Electricity

- For running machines
- For cooking
- For producing light
- For producing heat
- For ironing clothes
- Uses for scanning in hospitals etc

5. Experiments to show that air moves things.

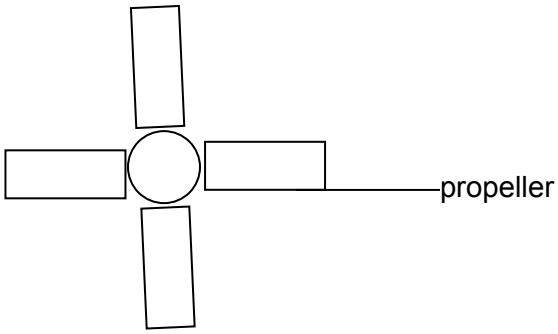
Things to use

tins, plastic, bottles, nails, leaves, knife, razor blade, sticks

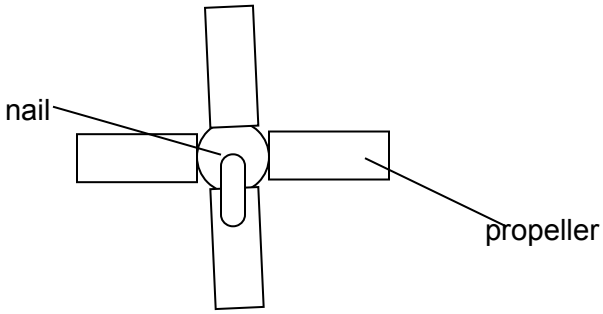
Steps taken (procedure)

(i) Use a knife to cut parts of the tin/ bottle

(ii) Spread the cut tin on a soft ground.



(iii) Use a nail and the stone to make a hole in the cut tin. (propeller)



(iv) Insert the stick in the propeller then run.

Observation

The propeller moves

Conclusion

Air moves things.

EXPERIMENT 2

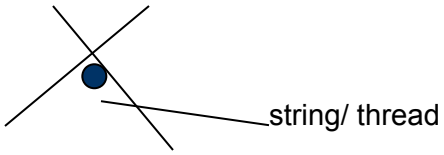
Making a kite

Things to use

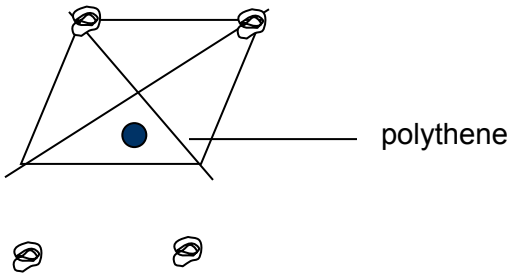
polythene, sticks, strings,threads, knife

Steps taken (procedures)

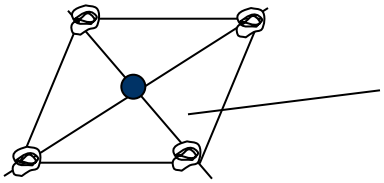
1. Cut two light sticks.
2. Cross the two stick and tie them.

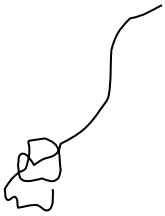


3. Fix the polythene onto the sticks.



4. Tie a long thread on the longer part of the kite. Then throw it high up.





hand

Observation

The kite moves on it's own

Conclusion

Air moves things

Ways of saving energy. (energy conservation)

(i) Using energy saving bulbs, stoves etc

(ii) Switching off electrical appliances when not in use.

(iii) Put out fire when not in use.

(iv) Planting trees

(v) Following instructions on proper use of energy resources.

Importance of saving energy

We save or we need to save energy to:

- Avoid wastage
- Minimise costs
- For future use.

Dangers of energy and ways of avoiding them

Danger	Control
1. Live electrical wires	- Using insulators to cover them
2. Fire out break	- Proper use of fire - Using fire extinguishers to stop fire
3. Strong wind	- Plants trees. (wind breaks) - Constructing strong buildings
4. Storms	- Constructing wide channels - Planting more trees.
5. Drought	- planting trees - irrigating the land

ACCIDENTS AND FIRST AID

An accident is a sudden happening on the body.

An accident is an unexpected injury on the body.

Accidents at the road.

Road traffic accidents are caused by the following

- Carelessness
- poor roads
- over speeding
- over taking in corners
- Driving while drunk
- Driving vehicles in poor mechanical injuries
- Overloading the vehicles
- Playing on the road

Road users

There are four road users

- pedestrians
- cyclists
- drivers
- animals

Ways of controlling road traffic accidents

- Avoid over-speeding
- Following traffic rules.
- Avoid over taking in corners.
- Do not drive while drunk
- Repairing the roads.

Accidents at home

Common accidents at home

- cuts
- burns
- scales
- Bruises
- drowning
- fractures
- bites (insect/ Animal bites)
-
- poisoning
- Electric shocks
- Food choking

Things that can cause accidents in a home

1. sharp objects e.g. knives, razor blades
   - broken bottles, nails, pins
2. Water bodies
3. poison
4. Electricity
5. Over dozes
6. Playing with hot liquids

Causes of accidents in a home

I. carelessness
II. climbing trees
III. playing with sharp objects
IV. Over running
V. Playing near fire
VI. Playing near water bodies,
VII. Playing with electric wires.
VIII. Taking over doze

Ways of controlling accidents at home.

- Avoid over running
- avoid playing near fire.
- Avoid climbing trees
- Avoid playing near water bodies.
- Follow the instructions always
- Avoid playing with electric appliances and wires.

Accidents at schools

Causes of accidents

- over running
- fighting
- climbing trees
- playing rough games
- playing with sharp objects
- playing near water bodies

Examples of accidents at school

- cuts
- burns
- scalds
- eclectic shocks
- drowning
- bruises
- fractures
- snake bites

Ways of preventing accidents at home

- Avoid playing with sharp objects
- Avoid playing with hot liquids
- Avoid over running
- Avoid playing rough games
- Follow rules and regulations

FIRST AID

First Aid is the First help given to an injured person before taken to the nearest health centre

Aims or importance of First Aid

- It saves life
- It reduces pain
- To stop further injuries
- To promote quick recovery
- To stop bleeding in case

First Aider: This is a person who gives first aid to a casualty

Casualty is an injured person.

Qualities of a First Aider

- A good first aider should be clean
- A good first aider should be fast. (quick)
- A good first aider should be knowledgeable
- A good first aider should be humble
- A good first aider should be polite
- A good first aider should be sympathetic

The first Aid Box

This is a box where first aid items are kept.

It is also called a first aid kit

Things (items) found in a first Aid box

- bandages
- iodine
- spirit
- gauze
- plaster
- pain killer
- plaster
- razor blades
- scissors
- cotton wool

Uses / importances of some items to a first aider

- Bandages – uses to tie broken bones
- Iodine/spirit – used to wash and kill germs on wounds and cuts
- cotton wool - used to wash cuts
- plaster – used to cover the cuts and wounds
- Razor blade – used to cut plasters and bandages
- pain killers – used to reduce pain

First Aid for simple Accidents

1. Burns – pour cold water on the burnt part
2. Cuts – wash the cut with clean cold water
3. Scalds – Pour cold water on the burnt part
4. Fractures – A fracture is a broken bone
   Tie the broken bones with a bandage and splints

5. Nose bleeding
   Pinch the nose and bend forward

6. Drowning – Remove the casualty from the water, let them lie on his or her back, start month to month breathing

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P.3 LITERACY ONE

TERM III - BREAKDOWN

Health in our sub – county / Division	**10.1 Disease vectors** - Definition of vectors. - Common vectors and their characteristics e.g mosquitoes - Types of mosquitoes. - Diseases spread by each type - Control of the diseases - Life cycle of an anopheles mosquito - Life cycle of a culex mosquito Housefly - Diseases spread - Control of the diseases - Life cycle of housefly. Cockroach - Diseases spread - Control of diseases - Life cycle of cockroaches Tsetse fly - Disease spread - control of diseases - Life cycle of tsetse fly Rat fleas - Disease - Control Lice

	- Diseases - control Bed – bug - Disease - control
	10.2 Diseases spread by vectors **Malaria** - cause - signs and symptoms - control and treatment **Cholera** - cause - signs and symptoms - control and treatment **Typhoid** - cause - signs and symptoms - control and treatment **Yellow fever** - cause - signs and symptoms - control and treatment - **Plague** - cause - signs and symptoms - control and treatment **Diarrhoea** - cause - signs and symptoms - control and treatment **Dysentery** - cause - signs and symptoms - control and treatment **Trachoma** - cause - signs and symptoms - control and treatment **Sleeping sickness** - cause - signs and symptoms - control and treatment

	Ways in which vectors spread diseases - The 4 Fs chain. [Faeces, flies, food, fingers] - Biting
	HIV/AIDS Concepts of HIV/AIDS in full HIV AIDS Causes of HIV/AIDS How HIV/AIDS is spread Control of HIV/AIDS Effects of HIV/AIDS (i) To an individual (ii) To the family (iii) To the community - Caring for HIV/AIDS patients - Protective measures during caring - PIASCY in full - PIASCY messages
ENERGY IN OUR SUB – DIVISION	Sources of Energy - Definition of energy - Sources of energy 1. Natural sources (a) wind and its uses (b) Water and its uses (c) The sun/ uses 2. Artificial sources of energy (a) Fuel (diesel, petrol, wood, charcoal, paraffin) (b) Electricity and its uses - Experiments to show that air moves things i.e making kites, propellers
ENERGY IN OUR SUB COUNTY/ DIVISION	**12.2 ways of saving energy** - Using energy – saving stoves / bulbs - switching off electrical appliances when not in use. - Putting out fires when not in use. - Planting trees - Following instructions on proper use of energy **Importance of saving energy**

	- Avoid waste - Minimise costs - Future use -
	12.3: Dangers of energy and ways of avoiding them **Dangers** - Live wires / control - fire / control - strong wind / control - storms / control - drought control **Accidents** - Definition - Road traffic accidents o causes o control - Accidents at schools o causes o control - Accidents at home o causes o control **Giving First Aid** - Definition of First Aid - Reasons for giving First Aid - Qualities of a good First Aider - First Aid for simple accidents - Burns - scalds - fractures **The First Aid Box** - Definition of a First Aid Box - The content of a First Aid Box - Importance of each of the items in a First Aid Box - Places where First Aid Kits are found.