#### P.3 LITERACYIA LESSON NOTES TERM II

#### Week I

#### LESSON 1

**CONTENT:** Living things

Living things are things which have life.

# **Examples of living things**

plantsbirdsfishmandogsgiraffes

- insects

# **Characteristics of living things**

- All living things feed
- All living things move
- All living things respire
- All living things grow
- They all reproduce
- They respond to stimuli

# **Groups of living things**

- animals
- plants

# **Mixed activity**

- 1. What are living things?
- 2. Identify any four examples of living things
- 3. Why are plants called living things?
- 4. State any four characteristics of living things
- 5. A part form plants, name any other group of living things

**CONTENT:** Uses of animals

- Some animals are eaten by people e.g. cows, goats, sheep, camel etc.
- Some animals are sold to get money.
- Cats eat rats and mice in our homes
- Some animals provide skin and hides e.g. cows, goats, sheep, camels etc.
- Some animals are used for transport e.g. donkey, horses, camels.
- Dogs provide security at home
- Sheep provide us with wool and mutton .
- Animal dung is used to make manure.
- Oxen are used for ploughing

# **Examples of animal products**

skins

-	dui	ng		-	1	fur		
-	urii	ne		-	ļ	milk		
-	blo	od		-		meat		
<u>T</u>	hing	gs made from skin and h	<u>ide</u>	<u>s</u>				
_	Dru	ums	-	Bags			-	Shoes
-	Ва	g wallets	-	Belts				
	Ex	<u>ercise</u>						
	1.	Mention any three things	ma	de out of wool.				
	2.	Why do we keep cats at h	nor	ne?				
	3.	Identify the domestic anir	nal	kept for security	y.			
	4.	Give any two aquatic anir	nals	3				
	5.	Give the habitats of follow	ving	animals				
		Lion		squirrels			zebra	a

- wool

# **CONTENT:** Caring for animals

- Feeding them
- Building shelter for animals
- Treating animals
- Putting wild animals in game parks.
- Spraying with chemicals.
- Avoid destroying swamps and forests.

# **Birds and insects**

# **Characteristics of birds**

- Birds lay eggs.
- Birds bodies are covered with feathers,
- Birds have wings
- They have beaks

- 1. How useful are feathers to birds?
- 2. How do the following animals move?

Frogs	
Fish	
Snakes	

- 3. What do birds use to breathe?
- 4. Identify any three ways how people can care for animals
- 5. In one sentence give the meaning of animal habitat.

**CONTENT:** Types of birds

- Domestic birds
- Wild birds

# **Domestic birds**

- Domestic birds are birds tamed by people .

# **Examples of domestic birds**

- Turkeys - Ducks

- Pigeons - Guinea fowls

- Chicken - Parrots

# Wild birds

Wild birds are birds that live in the bush or forest.

# **Examples of wild birds**

- Crested crane - sun birds

- Crows - eagles

- Ostrich - kites

- Vultures - penguin, kiwi, ostrich } flightless birds

- Weaver birds

Marabou stork

- 1. What is the difference between wild birds and domestic birds?
- 2. Why do people in your community keep birds like hens?
- 3. State any four examples of domestic birds
- 4. What are wild animals?
- 5. Identify any four examples of wild birds

#### Week 2 LESSON 1

**CONTENT:** Habitats of birds

- A habitat is a home of a living thing.
- Habitat of birds are homes of birds

#### **Examples of habitats for birds**

- Domestic birds live in cages while wild birds live in nests.

# Common places where birds are found

- swamps
- gardens
- sanctuaries
- water
- forests

#### **Uses of birds**

- Birds provide meat e.g. turkey, chicken, doves etc.
- Feathers are used for decoration e.g in suits, hats.
- Birds bones' are used for making glue.
- Birds are sold to get money.
- Some birds are used for paying bride price
- Birds provide us with eggs

# **Uses of feathers**

- For decoration
- For making pillows

- 1. State one use of birds to plants
- 2. Name three birds eaten by people.
- 3. How useful are birds to people?
- 4. How are feathers useful to people?
- 5. How can a P.3 boy protect water sources?

# **CONTENT:** Caring for birds

- Providing shelter
- Feeding birds
- Cleaning their habitats
- Treating birds

# **INSECTS**

# **Examples of insects**

- White ants
- Black ants
- Tsetse flies
- Wasps
- Houseflies
- Termites

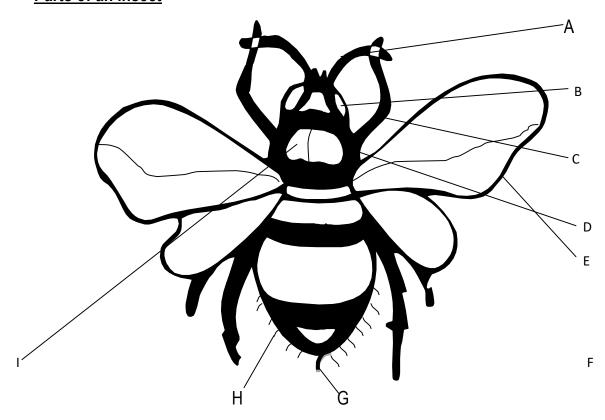
- Locusts
  - Butterflies

Bees

- Cockroaches

Mosquitoes

# Parts of an insect



- A. Feelers
- B. Compound eyes
- C. Legs
- D. Thorax
- E. Wings

- F. Spiracles
- G. Ovipositor
- H. Halteres

# Uses of parts of an insect

Feelers - used for feeling

**Spiracles** - used for breathing

Wings - used for flying

**Ovipositors** - used for laying eggs.

- Used for mating
- Used for protection in bees and wasps
- Halteres For balancing when flying

- 1. Write two examples of insects
- 2. Draw an insect and name the
  - a) Spiracles ovipositor
- 3. On which part of an insect are the legs attached?
- 4. How are the halters useful on an insect?
- 5. Why should we brush our teeth after every meal?
- 6. In one sentence give the meaning of soil profile.

#### **CONTENT:** Characteristics of insects

- An insect has three main body divisions i.e. head, thorax, abdomen.
- An insect uses spiracles for breathing.
- An insect has three pairs of legs or six legs.

# **Reproduction of insects**

#### **Insects reproduce by laying eggs**

#### **Harmful insects**

- Bees - Tsetse flies

- Mosquitoes - Butterflies

- Wasps - Moths

- Termites - houseflies

- Black ants -

#### **Useful insects**

- White ants
- Grasshopper
- Bees

# **Insects which have wings**

- locusts - bees

- cockroaches - houseflies

- butterflies - crickets

# **Insects without wings**

- Termites - Black ants - Red ants

# Qn: Why is a spider not grouped under insects

- It has two main body divisions i.e. cephalo thorax and abdomen while an insect has three main body divisions.
- It has eight legs while an insect has six legs
- It uses book lungs for breathing while an insect uses spiracles for breathing.

#### **Exercise**

- 1. Write two examples of insects which sting.
- 2. How many legs has an insect?
- 3. Give any two characteristics of insects.
- 4. Why is a spider not called an insect?
- 5. Name any four insects with wings
- 6. How do insects reproduce?

#### LESSON 4

**CONTENT:** Types of insects

- Social insects
- Solitary insects

# **Social insects**

These are insects which move, live and work together.

# **Examples of social insects**

- Honey bees - Red ants or safari ants

- Black ants - sugar ants

- Wasps - soldier ants

- Termites

# **Characteristics of social insects**

- They live together with others
- They move together with others
- They work together with others

# **Solitary insects**

Solitary insects are insects which live, move and work alone.

# **Examples of solitary insects**

Mosquitoes

- Tsetse flies

- Butter flies

Fleas

- Cockroaches

- Grasshoppers

Houseflies

- Crickets

- Bed bugs

# **Characteristics of solitary insects**

- They live alone
- They work alone
- They move alone

# **Exercise**

- 1. Why is a spider not called an insect?
- 2. Give two characteristics of solitary insects.
- 3. What is the difference between social and solitary insects?
- 4. State any four examples of solitary insects

# Week 3 LESSON 1

**CONTENT:** Uses of insect

- Some insects are eaten as food e.g. white ants, grasshoppers and locusts.
- Bees provide us with honey and wax.
- Some insects pollinate crops e.g. bees, moths and butterflies

# **Uses of honey**

- Honey sweetens bread.
- Honey is used as food.
- Honey is used as medicine

#### Things made out of bee wax

- Candle wax - Shoe Polish

- Cosmetics - Match sticks

#### **Dangers of insects**

- Many insects spread diseases e.g. house flies, mosquitoes, tsetse flies.

- Some insects destroy crops e.g. termites, grasshoppers and locusts.
- Some insects destroy furniture and house hold property e.g. cockroaches, wood lice
- Some insects destroy animal habitats e.g. red ants, black ants

#### **Exercise**

- 1. Write two insects eaten by people
- 2. Identify two products got from bees.
- 3. How does a wasp protect itself?
- 4. How is honey useful to people?
- 5. Identify any two products got from bee wax
- 6. State any two dangers of insects to people

# LESSON 2

**CONTENT:** Insect habitat

- Insect habitats are homes of insects

# **Examples of insect habitats**

- Anti hills - Leaves

- Water - Hives

# **Insect which live in (anti- hills)**

- White ants

- Termites

#### insects which live on leaves

Butterflies

Tsetse flies

Mosquitoes

#### **Hives**

Bees

# **NB: Examples of bees**

- Queen bees female bees in the hive They lay eggs
- Worker bees female sterile bees in the hive Collect nectar
  - Clean the hive
  - Feed the queen bee
  - Protect the hive
- Drone bees male bees in the hive mates with the queen bee

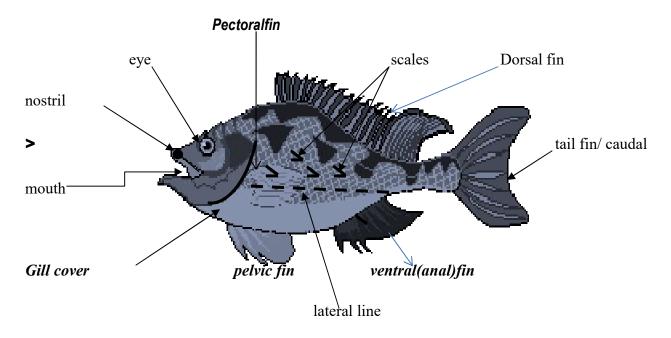
# **Exercise**

- 1. What are insect habitats?
- 2. Name any three insect habitat
- 3. Identify any two insects which live on leaves
- 4. State any two types of bees
- 5. Underline the odd man out

locust termite fleas wasps

floods thunder brick making lightening

# LESSON 3 CONTENT: Parts of a fish



Mouth: For picking in food and water

Nostril: For tasting food

For smelling food

- Eye: for seeing

- Gill cover : protects gills

- Gills: for breathing

- Lateral line : for sensing sound waves in water

- Tail fin: for moving forward and changing direction

- Dorsal: - For protection.

- For rolling in water

- Ventral fins: - For protection.

- Pectoral fin - For stopping movement

- Pelvic fins: For up ward movement in water

- Scales – protects the body from injury.

#### **Exercise**

- 1. Which part of a fish is used for swimming backwards?
- 2. What is the function of gills to a fish?
- 3. How do we call a glass container used to keep fish and other aquatic animals.

#### **LESSON 4**

#### **CONTENT:** Characteristics of fish

- Fish use gills for breathing
- Fish produce by laying eggs.
- They have fins

# Uses of fish to man

- Fish is used as food by man (source of protein)
- Bones of fish are used for making glue.
- Fish is sold to get money.
- Fish control malaria by eating mosquito larvae in ponds

# **Examples of common fish**

- silver cyprinid - cat fish

- mud fish - Nile perch

- tilapia - lung fish

- salmon

# **Mixed activity**

- 1. How do fish reproduce?
- 2. Name any one common type of fish caught in your community.
- 3. Which food value do we get from eating fish?
- 4. Identify any four examples of fish caught in Uganda
- 5. How is fish useful to people?
- 6. Draw one item used to clean our body.

# Week 4 LESSON 1

**CONTENT:** Fish habitat

- Fish live in water
- We can keep fish in ponds and aquariums.

**NB:** A pond is a man made pool of water.

An aquarium is a glass container where fish and other aquatic animals are kept

# **Examples of animals found in ponds**

- fish - crocodile

- frogs - turtles

- crabs

**NB:** A young fish is called a fry

# **Care for fish**

- Provide food for fish

- Protect their eggs from animals and birds
- Feeding the fries in pond.
- Cleaning water sources by removing water weeds and hyacinth

# **Exercise**

- 1. What name is given to young fish?
- 2. Give the meaning of the word "pond"
- 3. How can we care for fish?
- 4. State any three examples of animals found in ponds

# Living things (animals )

#### Word bank

stimuli	flightless	divisions
reproduce	habitat	medicine
manure	sanctuaries	cosmetics
chemicals	ovipositor	spread
tamed	antenna	diseases

sterite	nostril	aquatic
nectar	injury	aquarium

**CONTENT:** Examples of plants

- maize plant - sugar plant

- bean plant - egg plant

- rice plant - ferns

- mosses plant - lichens

# **Groups of plants**

- Non – flowering plants

Flowering plants

# Non – flowering plants

These are plants which do not bear flowers

# **Examples of non – flowering plants**

- algae - ferns

- liver worts - pines

- mosses - cedar soft wood trees/conifers

- lichens - cypress

**NB:** They reproduce by means of spores

Conifers reproduce by means of seeds

- 1. Mention any two examples of plants you know.
- 2. What are non flowering plants?
- 3. How do most non flowering plants reproduce?
- 4. state one importance of conifers to people
- 5. How do conifers reproduce?

# **CONTENT:** Flowering plants

- Flowering plants are plants that bear flowers

**NB:** They reproduce by means of seeds.

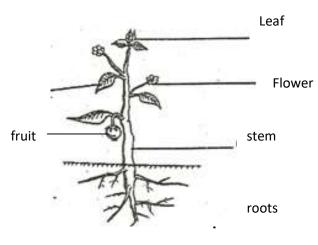
- Root cap protects the growing tip of a root from damage.
- Root hairs absorb water and mineral salts form the soil.

# **Examples of flowering plants**

- bean plant
- ground nut plant
- mango plant
- coconut plant

- maize plant
- rice plant
- coffee plant
- orange plant

# Parts of a flowering plant



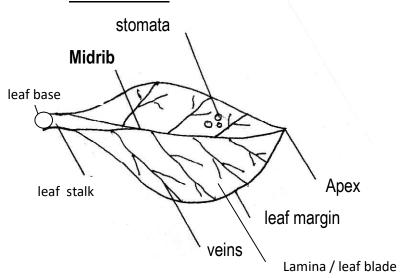
- Tap root
- 1. Make their own food.
- 2. Have chlorophyll

# **LESSON 4**

#### **CONTENT:** Leaves

- Leaves grow from stems of a plant
- Leaves are supported by a leaf stalk on a plant

#### Parts of a leaf



#### Note:

stomata: Many

stoma - one

#### Uses of each part of a leaf

- Stomata: used for breathing

- Leaf stalk : Holds a leaf on a plant stem

- Vein: Transports water and mineral salts in all parts of a leaf.

- Midrib: Transports water and mineral salts from the stem to the veins.

- 1. How important are stomata to a plant?
- 2. Name the green colouring pigment found in plants
- 3. State the use of the above mentioned pigment to plants
- 4. Give one main use of leaves to plants.
- 5. Write down three uses of leaves to people

#### **CONTENT:** Uses of leaves to people

- Many leaves are eaten as food e.g. cabbages, lettuce, pig weeds (dodo), spinach.
- Some leaves are used as herbal medicine e.g. Mululuza malaria.
- Some leaves are used for thatching houses e.g. spear grass and papyrus

# **Uses of leaves to plants**

- Leaves make food for plants (main use)
- Some leaves store food for plants e.g. Lettuce, cabbage, sukuma wiki.
- Leaves have stomata's used for breathing
- Leaves carry out transpiration.

**NB:** The main use of leaves to plants is to make food for plants.

#### LESSON 2

#### **CONTENT: PHOTOSYNTHESIS**

- Photosynthesis is a process by which plants make their own food.
- **Photo** light
- **Synthesis** –manufacture

\_

# Raw materials for photosynthesis

- Carbon dioxide

# **Conditions for photosynthesis**

- Chlorophyll for trapping sunlight
- Sun light energy provide heat energy

# **Product of photosynthesis**

- Starch (food)
- Oxygen ( waste product / by product )

# Gas given out by plants at night

Carbon dioxide

# Gas taken in by plants at night

- Oxygen

# Food made during photosynthesis

- Starch

# **Exercise**

#### LESSON 3

**CONTENT: STEMS** 

# Types of stems

- Upright stems
- Under ground stems (storage stems)
- Climbing stems
- Creeping stem/ runners

# **Examples of plants that store food in stems**

- White yams
- Irish potatoes

# **Uses of stems to plants**

- Stems transport water and mineral salts from roots to leaves.
- Some stems store food for plants e.g. Irish potatoes, white yams.(stem tubers)
- Stems transport food made by leaves to roots.

# Uses of stems to people

- Some stems are used as food e.g. sugar canes.
- Some stems are used as local medicine.
- Some stems are used as fire wood.
- Hard woody stems are used as timber.
- Soft woody stems are used for making ply wood and paper.

- Some stems are used for building houses.

#### **LESSON 4**

**CONTENT: ROOTS** 

- A root is part of a plant which grow in the soil.

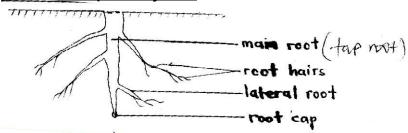
# Types of root system

- Tap root system
- Fibrous root system

# Tap root system

Tap root system is the system of roots with the main root growing.

# Parts of a tap root system



# NB: Examples of plants with tap roots

- Beans
- Mangoes
- Soya beans
- Jack fruits

# Fibrous roots

Fibrous root system is where many roots grow of almost the same size grow without the main roots.

# Parts of a fibrous root system



#### **Examples of plants with fibrous roots**

- maize
- sorghum
- sugar cane
- millet
- rice

#### **Exercise**

#### LESSON 2

#### **CONTENT:** Uses of roots to plants

- Roots hold plants firmly in the soil.
- Roots absorb water and mineral salts from the soil.
- Some roots store food for plants e.g. cassava, sweet potatoes, carrots.

#### Uses of roots to people

- Some roots are eaten as food e.g. cassava, sweet potatoes, carrots.
- Some roots are used as local medicine
- Some roots are used as firewood.

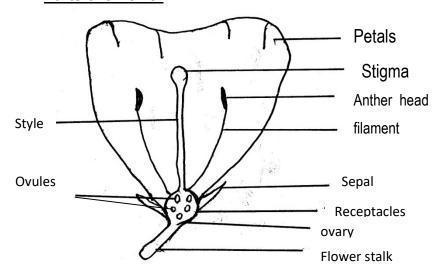
# Examples of plants whose roots are eaten /root tubers

- Cassava plants
- Sweet potatoes plants
- Carrot plants
- Root turnips

**CONTENT: FLOWERS** 

A flower is a reproductive part of a plant

# Parts of a flower



Note: A group of petals is called corolla

- A group of sepals is called calyx
- A female part of a flower is called pistil
- A male part of a flower is called a stamen

# Parts of a pistil Stigma Style Ovary

# Exercise LESSON 3

#### **CONTENT:** Uses of parts of a flower

- Petals protects the inner parts of a flower
- Sepals to protect the flower when it is still in a bud stage.
- Ovules develop into seeds after fertilization
- Ovary protects ovules
- Anther to produce and store pollen grains
- Stigma receives pollen grains
- Style Holds the stigma upright
- Filament holds anthers in position
- Flower stalk holds a flower in a right position

# **NB: Why insects visit flowers**

- To get nectar (main reason)
- To get pollen
- To get water

# **Insects that visit flowers**

- Bees
- Butterfly
- moth (at night)

1.	How useful are the following parts to a flower?
	Ovary
	Anther
	Stigma

- 2. State one use of flowers to people.
- 3. Why should we wash hands with soap after visiting latrines?
- 4. Why do bees visit flowers?

# **CONTENT:** Uses of flowers to people

- Flowers are given as gifts
- Flowers are given to people to show respect and welcome
- Flowers are used for decoration.
- Some flowers are eaten as food e.g. cauliflower, pumpkin flowers.
- Some flowers are used for making perfumes
- Flowers are sold to get money

# **Uses of flowers to plants**

Flowers are used for reproduction

# **Uses of flowers to people**

- For decoration
- They are used for social functions as gifts.
- They are sold for money.
- Some flowers are eaten as food. Pumpkin, spider sunflower.

# **Mixed activity**

- 1. How useful are flowers to people?
- 2. List any two functions where flowers are used for decorations.

# **LESSON 1**

# **CONTENT: CROP GROWING PRACTICES**

- Clearing land
- Planting
- Weeding
- Mulching
- Thinning
- Pruning

#### **Clearing land**

# Through

- Slashing using a slasher
- Ploughing using oxen
- Gathering using a rake, hoe and pick axe
- Digging up soil
- Leveling the soil
- Burning of the rubbish/ bush

# **Planting**

It involves selecting seeds and transplanting.

**Transplanting** is the transfer of seedlings from the nursery bed to the well prepared garden.

# **Methods of planting crops**

- a) Row planting ( planting in lines)
- b) Broadcasting (scattering seeds using hands) e.g millet, sorghum

# **Caring for crops**

- Weeding - Mulching - Spraying with chemicals

- Pruning - Stalking

- Thinning - Watering

- 1. How can a farmer care for his maize in the garden?
- 2. Mention one activity carried out during land preparation
- 3. What is a nursery bed?
- 4. Mention at least two methods of planting crops.

**CONTENT:** Types of crops

- Vegetable crops
- Cereal crops
- Legumes
- tuber crops
- Fruit crops

#### **Vegetable crops**

e.g. cabbages, pig weed, onions, lettuce, spinach

# **Cereal crops**

These are crops which produce grains e.g. (grains are seeds which provide flour) e.g. millet, maize, sorghum, wheat, barley, rice

#### <u>Legumes</u>

These are crops whose roots have nodules e.g. beans, ground nuts, soya beans, green peas, cow peas, Bambara nuts.

# Fruit crops

These are crops that provide fruits e.g. oranges, pineapples, passion fruits, mangoes

# **Tuber crops**

These are crops that store food in their underground parts e.g. cassava, sweet potatoes, white yams carrots and inch.

# **Tuber crops**

- 1. Stem tubers e.g irish potatoes, white yams
- 2. Root tubers eg cassava, sweet potatoes, carrots

# **CONTENT:** Garden tools and their uses

Name	Diagram	Use
Trowel		- For transplanting seedlings
Panga		- For cutting down small trees
Watering can		- For watering crops
Hoe		- For digging
		- For weeding
Spade		- Removing manure
		- Removing loose soil
Slasher		- For slashing
		- For cleaning land before digging
Axe		- Cutting big trees

Knapsack sprayer	- For spraying
Secateur	- For pruning

# **CONTENT:** Caring for garden tools

- Keep garden tools in a cool dry place.
- Cleaning garden tools after using
- Sharpen garden tools used for cutting
- Paint metallic tools to avoid rusting

# Reasons for caring for garden tools

- To prevent metallic tools from rusting
- To keep tools for a long time.

# Prevention of garden tools from rusting

- By oiling
- By painting
- By keeping metals in a clean dry place
- By cleaning and drying them after use

**CONTENT: GERMINATION** 

Is the development of a seed into a seedling.

- A seedling is a young plant

# **Conditions needed for germination**

- Oxygen
- Moisture / water
- Optimum temperature

# **Uses of each condition**

Oxygen: for respiration

Water: dissolves food for the embryo.

Moisture: makes the testa a soft

#### **Exercise**

- 1. How do we call the development of a seed into a seedling?
- 2. Why is oxygen needed for germination to take place?

# **LESSON 2**

**CONTENT: CROP PESTS** 

Crop pests are organisms which destroy crops

# **Examples of crop pests**

rats
 locusts
 caterpillars
 monkeys
 termites
 squirrels
 birds

- crickets - been weevils

# **Dangers of crop pests**

- Pests destroy crops
- Pests lead to low yields

- They eat up plant leaves
- Destroying of fruits

# How to control pests and diseases

- Spraying with pesticides
- By weeding
- Trapping pests
- Using scare crows
- Cats can be used to control pests like rats in granary
- Uproot and burn infected crops
- Practice crop rotation
- by chasing the pests

# Signs of pest damage on crop

- Holes on leaves
- Yellowish leaves
- Holes in fruits
- Wilting of crops, drying of the crops

#### **Exercise**

# Living things (plants) Word bank

corolla cerals bear calyx legumes spores rusting stomata pistil optimum oloevera stamen photosynthesis fertilization pesticides carbon dioxide pollen grains moisture

chlorophyll staking