SCIENCE LESSON NOTES

TERM III

PRIMARY FOUR

HUMAN HEALTH

WEEK TWO
LEESON 1

Vocabulary
1. Communicable.
2. Intestinal
3. Disease
4. Worm
5. Infection
6. Faucal diseases
7. Diarrheal diseases
8. Sings
9. Symptom
10. Dehydration
11. Rehydration
12. Procedure
13. Precaution
14. Deworming

Communicable intestinal diseases and worm infections

Diarrheal or faucal diseases

Diarrhoea
i) Diarrhea is the frequent passing out of watery stool.
ii) It is also the passing out of watery stools many times a day.
iii) It is caused by bacteria and virus.

i) Ways how diarrhea is spread
ii) It is spread by houseflies.
iii) Through drinking contaminated water.
iv) Through eating contaminated food.
v) Cockroaches carrying germs onto the food.
vi) Through eating unwashed fruits.
vii) By use of contaminated utensils.

Signs of diarrhoea
i) Watery stools.

Symptoms of diarrhoea

i) Abdominal pain.
ii) Pain while releasing the stools.
iii) Body weakness.

Effects or dangers of diarrhoea

i) It causes dehydration.
ii) It can lead to emaciation.

Control of diarrhoea

i) Boiling water before drinking it.
ii) Killing houseflies by spraying.
iii) Washing hands before handling food.
iv) Proper disposal of human faeces.
v) Washing utensils before using them.

Diagram of a child and an adult showing sings of dehydration.
Ref; basic primary science and health page 11

ACTIVITY;

1. **Briefly explain the word diarrhoea**.
2. **Suggest any two ways how diarrhoea is spread.**
3. **State any one danger of diarrhoea.**
4. **How can p.4 pupil control diarrhoea? (Give any two reasons).**

LEESON 2

Dysentery

i) The frequent passing out of watery stool with blood stains.
ii) Amoebic dysentery is caused by amoeba.
iii) Bacillary dysentery is caused by bacteria.

How dysentery is spread

i) Drinking contaminated water.
ii) Eating contaminated food.
iii) Houseflies carry germs onto the food and hands.
iv) Use of contaminated utensils.
v) Handling food with unwashed hands.

Control of dysentery

i) Boiling water for drinking.
ii) Washing fruits before eating them.
iii) Spraying insecticides to kill houseflies.
iv) Washing hands before eating, or serving food.
v) Wash hands after visiting the toilet.
vi) Properly disposing human faeces.

Dangers of dysentery

i) It leads to dehydration which may result into death
ii) It leads to anaemia.
iii) It leads to liver abscess.

ACTIVITY 2;

1.Which word is used to describe frequent passing out of watery stool with blood stains?
2. Give any two ways how dysentery is transmitted.
3. How can we control the spread of dysentery I n our communities?
4. Suggest any one danger of dysentery.

LESSON 3

Cholera

i) Cholera is caused by bacteria.
ii) It is spread by houseflies.
iii) It is also spread by drinking contaminated water eating.
iv) Contaminated food.

Signs of cholera

i) Severe vomiting.
ii) Severe diarrhoea.

Symptoms of cholera

i) Pain around the abdomen.
ii) Body weakness.

Control of cholera

i) Boil water before drinking it.
ii) Kill houseflies by spraying with insecticides.
iii) Wash hand before eating, serving or handling food.
iv) Wash hands after visiting the latrine or toilet.
v) Cover cooked food to prevent houseflies from sitting on it.
vi) Properly dispose human faeces.

ACTIVITY

1. **How is cholera spread?**
2. **Suggest one effect of cholera on an individual.**
3. **Mention two ways of controlling the spread of cholera.**

LESSON 4;

Typhoid

i) It is caused by bacteria called salmonella typhus.

ii) It can be spread by houseflies and cockroaches.
iii) Typhoid can be spread by drinking contaminated water and eating dirty food.

Signs of typhoid

i) Diarrhoea

Symptoms of typhoid

i) Headache
ii) Fever

Prevention of typhoid

i) Boiling of water for drinking.
ii) Spraying with insecticides to kill houseflies.
iii) Washing hands before eating food.
iv) Washing hands after visiting the latrine.
v) Properly disposing off rubbish and faeces.

Effects of typhoid.

1. Kidney failure
2. internal bleeding
3. Extreme fatigue.
4. Headache.
5. Abdominal pain.
6. Inflammation and per formation of the intestines.

ACTIVITY

1. **How is typhoid spread?**
2. **Suggest one effect of typhoid on an individual.**
3. **Mention two ways of controlling the spread of typhoid.**

LESSON 5;

THE 4Fs

This is the cycle in the spread of germs.

i) Faeces
ii) Flies
iii) Fingers
iv) Food

Explanation

i) Houseflies carry germs from faeces onto our food making it contaminated.
ii) Germs can remain under our fingernails and we end up eating them.

Diagram showing the 4Fs

ACTIVITY

1. **Write 4Fs in full.**
2. **List down any two diseases spread through the 4Fs.**
3. **How can we control the spread of the diseases above.**

LESSON 6;

Dehydration

It is a condition when a person does not have enough water in the body.

Causes of dehydration

i) Severe vomiting.
ii) Severe diarrhoea.
iii) Over sweating.
iv) Severe burns.
v) Severe scalds.

Signs of dehydration

i) Sunken eyes.
ii) Passing out little or no urine.
iii) Dry lips/mouth.
iv) A pinch on the skin goes back slowly.
v) Sunken soft spots on a baby's head.

Symptoms of dehydration

i) General body weakness.
ii) A person feels thirsty all the time.

Effects of dehydration

i) It leads to loss of weight.
ii) It leads to death.

THE 3 Ds in full

i) Diarrhoea
ii) Dehydration
iii) Death

Explanation

Diarrhoea leads to **d**ehydration and when it is not treated it leads to **d**eath.

Rehydration

This is the replacing of lost water and mineral salts in the body.

Ways of rehydration

i) Drinking a lot of fluids e.g. passion fruit juice, water, any other juice.
ii) Drinking ORS.

ACTIVITY

1. **Briefly explain dehydration.**
2. **Mention any two signs of dehydration.**
3. **Write the 3Ds in full.**
4. **Why is O.R.S given to dehydrated person?**

LESSON 7;

ORS

This is a solution given to a person with diarrhoea, dysentery or a person who is vomiting.

i) ORS in full is
- Oral
- Rehydration
- Solution (Salts)

ii) S.S.S. in full is
- Sugar
- Salt
- Solution

N.B.: ORS is factory made while S.S.S. is home or locally made.

Importance of ORS / S.S.S.

i) To replace the lost water and mineral salts in the body.
ii) To provide energy to the body.
iii) It prevents a person from being dehydrated.

Requirements for making ORS

i) Sugar
ii) Salt
iii) Drinking water.
iv) Clean container

Procedure

i) Wash your hands with clean water and soap.
ii) Measure 1 liter of drinking water into a clean container.
iii) Measure 1 leveled teaspoonful of salt and 8 of sugar into the clean container.
iv) Stir until the salt and sugar dissolve.

N.B. The solution should not be too salty or too sugary.

Dosage of ORS

i) Babies - A quarter of a cup after every stool.
ii) Grown up children and adults - Half a cup after every stool.

Precaution

i) The solution should be preserved within 24 hours after which itgoes bad.
ii) It should be kept covered.

ACTIVITY

1. Write O.R.S in full.
2. Write s.s.s in full.
3. Why should you wash your hands before preparing s.s.s?

WEEK THREE
LEESON 1

TOPICAL QUESTIONS

1. Briefly explain the following terms:
   a) Diarrhoea _____
   _____
   b) Dysentery _____
   _____
   c) Dehydration _____
   _____
2. Why do we wash hands before mixing ORS?_____
   _____
3. Why should the solution be tasted first before giving it to the patient?_____
   _____
4. Write the following in full:
   a) ORS_____
   b) S.S.S._____
   c) 3Ds_____
   d) 4Fs_____
5. What are communicable diseases?_____
   _____

6. List down any four examples of communicable diseases?_____

_____

7. Write down any three signs of dehydration.

   i) _____

   ii) _____

   iii) _____

8. Why is ORS given to dehydration patients? _____

_____

9. In short sentences, write down four main steps used when preparing ORS.

   i) _____

   ii) _____

   iii) _____

   iv) _____

10. Mention any one mineral salt lost during diarrhoea. _____

_____

LEESON 2

WORM INFECTION

i) Worms are parasites which affect the intestines.
ii) Parasites are living things which depend on other living things for food causing harm to them.
iii) Some worms feed on digested food.
iv) Some worms feed on blood.

A host

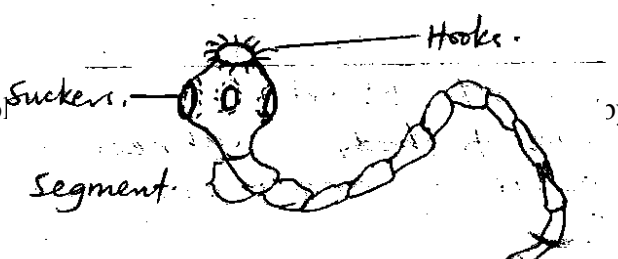
A host is a living thing on which a parasite depends.

Types of worms

i) Tape worms
ii) Round worms
iii) Thread worms
iv) Hook worms

Tape worm

i) Tape worms live in the intestines.
ii) Its body is divided into segments
iii) Tape worms are got through eating half cooked meet.
iv) A tape worm feeds on blood.



Signs of tape worms

i) Diarrhoea
ii) Itching on the skin.

Symptoms of tape worms

iii) Always feeling hungry.
iv) Stomach ache.
v) Loss of energy.

Effects of tape worm

i) Leads to stunted growth.
ii) Leads to body weakness.
iii) Leads to anaemia.

Prevention of tape worm infection

i) Eating well cooked meat.
ii) Regular deworming.
iii) Proper disposal of human faeces.

Activity.

1. **How do we get tape worm infections?**
2. **Suggest any one sign of tape worm infection.**
3. **Mention two ways of preventing tape worm infections.**

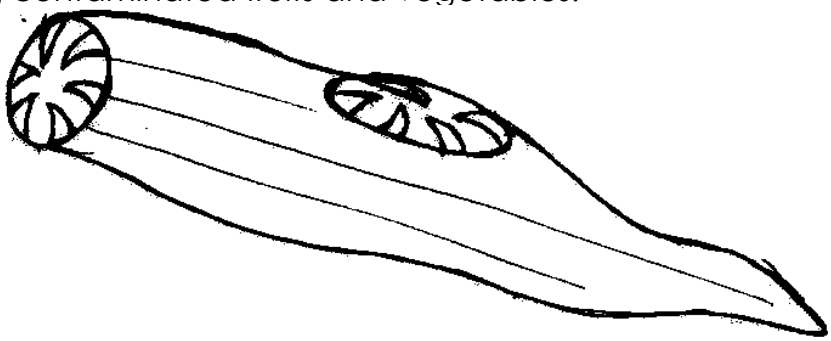
LESSON 3

Hook worms

i) They are tiny worms with hooks around their mouth.
ii) The hooks are used to suck blood from the host.
iii) They are 1cm long, red in colour and cannot be seen in faeces.

Spread of hook worms

i) Through the skin when we walk outside without shoes/sandals.
ii) Eating contaminated fruits and vegetables.



Signs of hook worm infection

i) Diarrhoea
ii) Loss of weight
iii) Coughing
iv) The skin itching at the site of penetration.

Symptoms

i) Abdominal pain

Effects of hookworm infection

i) They lead to loss of blood since they feed on blood.

Prevention of hook worm infection

i) Put on shoes when walking in a dirty place.
ii) Proper disposal of human faeces and urine.
iii) Eat well washed fruits and vegetables.
iv) Regular deworming.
v) Wash hands before eating and serving food.

Activity

1. **How do we get hook worm infections?**
2. **Suggest any one sign of hook worm infection.**
3. **Mention two ways of preventing hook worm infections.**

LESSON 4

Thread worms

i) They are wide threadlike worms.
ii) They live in the large intestine.
iii) They are about1 cm long.
iv) They are spread through fingers with faeces to the mouth.

Signs of thread worm infection

i) Itching around the anus.
ii) Loss of weight.

Symptoms of thread worms

i) Stomach ache.
ii) Loss of appetite.
iii) Restlessness.

Thread worm

Prevention of thread worm

i) Wash hands after visiting the latrine.
ii) Keep finger nails short.
iii) Washing hands and bathing regularly.
iv) Wash under wear, night dresses and beddings regularly.
v) Proper disposal of faeces.

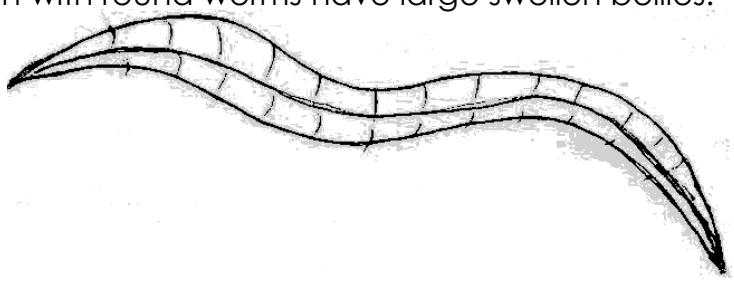
Activity

1. **How do we get thread worm infections?**
2. **Suggest any one sign of thread worm infection.**
3. **Mention two ways of preventing thread worm infections.**

LESSON 5

Round worms (Askers)

i) They live in the small intestine.
ii) They feed on blood and digested food.
iii) It is 20cm-30cm long.
iv) Children with round worms have large swollen bellies.



How round worms spread

i) Through eating unwashed fruits and raw vegetables.
ii) Eating food with dirty hands.
iii) Eating contaminated food.
iv) Children picking up things from the ground and putting them in the mouth.

Effects of round worm infection

i) They can lead to intestinal obstruction.
ii) When the patient vomits, the worms cause swelling in the voice box.
iii) It leads to general itching of the body.
iv) They lead to indigestion.

v) Round worms may cause malnutrition such as kwashiorkor.

Signs of round worm infection

i) Cough.
ii) Itching around the body.
iii) Swollen bellies.

Symptoms of round worm infection

i) Indigestion

Prevention of round worms

1. Regular deworming.
2. Use of drying racks for utensils.
3. Proper disposal of human faeces.
4. Wash hands before eating food.
5. Wash hands after visiting the latrine.
6. Protect food from houseflies by keeping it covered.
7. Wash fruits and vegetables before eating them.

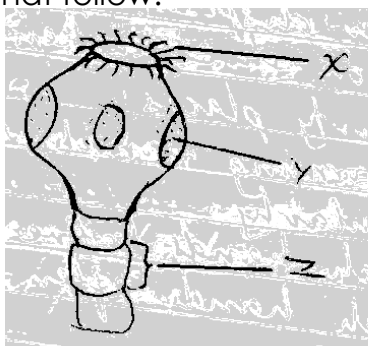
Activity

1. **How do we get round worm infections?**
2. **Suggest any one sign of round worm infection.**
3. **Mention two ways of preventing round worm infections**

LESSON 6

TOPICAL QUESTIONS

1. Briefly explain the following terms
   a) Parasites _____
   _____
   b) Host _____
2. Identify any food of worms in the intestine. _____
   _____
3. The diagram below shows the head of a certain intestinal worm. Study it and answer questions that follow.



   a) Name the parts marked:
      i) X _____
      ii) Y_____

iii) Z_____

b) Which type of worm has the head above? _____

4. List down any three examples of intestinal worms.
   i) _____
   ii) _____
   iii) _____
5. A primary four child has serious itching around the anus. Which worm infection could the child is having? _____
6. How does one get infected with the following worms?
   a) Hook worms _____
   b) Tape worms_____
7. Why should you put on shoes when walking in a dirty environment?
   _____
8. Why is it advisable to wash fruits before eating them? _____
   _____
9. Suggest any four ways of preventing intestinal worm infections.
   i) _____
   ii) _____
   iii) _____
10. Why should you wash your hands after visiting the latrine?
    _____

LESSON 7

Vectors and diseases

Vocabulary

Vectors
Germs
Life cycle
Pupa
Larva
Adult
Parasites

Meaning of vectors

- A vector is a living organism which spreads diseases.

Where some vectors are found

- In latrines
- In bushes
- Near water sources
- Vectors are found in decayed things like rotten food and human faeces.

Examples of disease vectors

Some vectors spread germs through bites on people. For example;

- Dogs
- Mosquitoes
- Tsetse flies

Most vectors are insects. For example;

- Mosquitoes
- Tsetse flies
- House fly
- Flea
- Bed bug
- Cockroach
- Biting
- Lice
- Ticks

Disease and their vectors

Vector	Disease carried
- Female anopheles mosquito - Culet mosquito - Aides / tiger mosquito - Housefly - Bed bug - Tsetse fly - Flea - Cockroach	- malaria - elephantiasis - yellow fever - diarrhoea,trachoma,dysentery,typhoid,cholera - Itches and sores on the body - Sleeping sickness - Plague - Diarrhea, cholera, dysentery - Relapsing fever - Typhus fever - Rabies Bubonic plague

- Louse - Ticks - Dogs - Rats fleas	

Activity

1. **Briefly explain the term vector.**
2. **List down any two examples of vectors common in our environment**
3. **Which disease is spread by a water snail**

WEEK FOUR

LESSON 1 AND 2

Houseflies

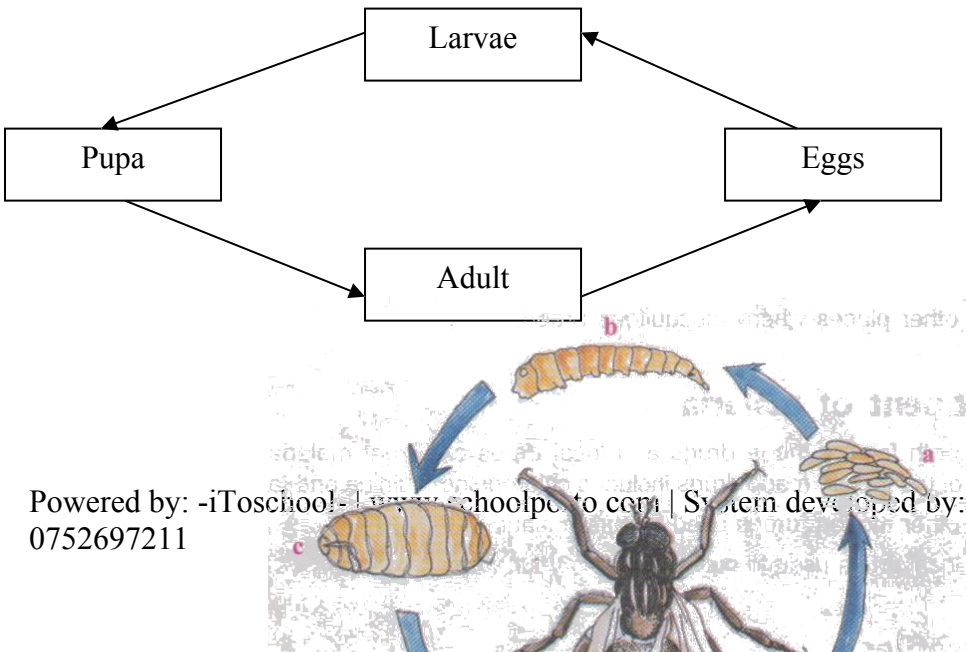
i) A housefly is an insect vector.
ii) Its body is covered with hair.
iii) Houseflies lay their eggs on faeces, decaying matter, dead animals, left over foods, etc.
iv) A housefly carries germs on its hairy body.

Diseases spread by houseflies

i) Trachoma
ii) Diarrhoea
iii) Cholera
iv) Dysentery
v) Typhoid

Lifecycle of a housefly

i) A housefly undergoes four stages of development.
ii) It has a complete lifecycle.



- The larvae stage of a housefly is called a maggot.
- A maggot is very active; it moves and feeds a lot.
- Maggots move by wriggling.
- The pupae stage does not feed. It is dormant.

Prevention of houseflies

i) Spraying using insecticides.
ii) Keep houses clean.
iii) Keep cooked food covered.
iv) Proper disposal of faeces.
v) Keep latrines properly covered.
vi) Proper disposal of rubbish.

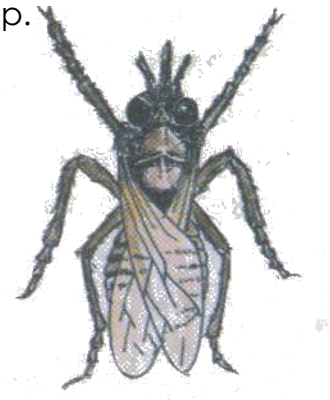
Activity

1. **How is a housefly able to spread more than one disease?**
2. **List down any two diseases spread by a housefly.**
3. **Where does a housefly lay its eggs?**

LESSON 3 AND 4

Tsetse flies

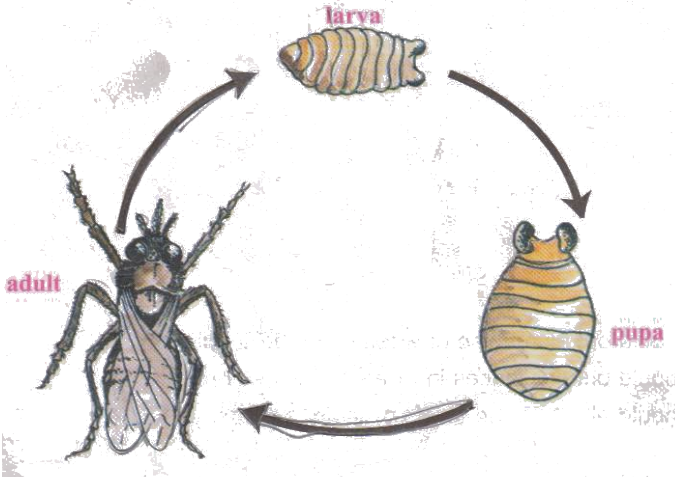
i) Tsetse flies feed on blood
ii) A tsetse fly crosses its wings when it is at rest
iii) Tsetse flies are found in bushy areas, forested areas and near water sources.
iv) A tsetse fly has a sharp proboscis which sucks blood.
v) Tsetse flies spread sleeping sickness in people and angina in animals like cows, goats and sheep.



Lifecycle of a tsetsefly

i) A tsetse fly undergoes a complete lifecycle
ii) Eggs of a tsetse fly hatch into maggots inside a female tsetse fly

iii) A female tsetse fly passes out maggots on the ground.
iv) Maggots make holes in the ground and change into pupae.
v) The pupae in turn develop into adult tsetse flies.



Sleeping sickness

i) Sleeping sickness is caused by parasites called trypanosomes
ii) It is spread by infected tsetse flies
iii) It is called sleeping sickness in people and angina in animals

Signs of sleeping sickness

i) Loss of weight
ii) A person fails to walk

Symptoms

i) Body weakness
ii) A person feels sleepy
iii) Loss of appetite
iv) Fever from time to time

Ways of controlling tsetse flies

i) Using tsetse fly traps
ii) Spraying with insecticides
iii) Clearing bushes near homes
iv) Avoid very early and late grazing of animals

N.B. Tsetse flies are very active when there is little sunshine.

ACTIVITY

1. **Mention a disease spread by tsetse fly to people.**
2. **How many stages of development does tsetse fly under go?**
3. **Suggest any one way of controlling the spread of sleeping sickness.**

LESSON 5

TYPES MOSQUITOES

There are two types of mosquitoes namely;

i. Culex mosquitoe
ii. Anopheles mosquitoes.

The culex mosquitoes are of two kind'si.e.

i. Tiger culex mosquito
ii. Aedes culex mosquito.

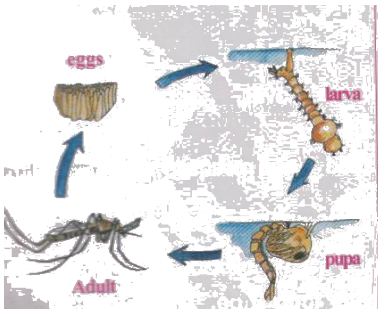
mosquito		**disease**	**Causative germ**
Female anopheles		malaria	plasmodium
culex	**a**)tiger culex	Elephantiasis	Filarial worm
	b) aedes	Yellow fever(dangue fever)	virus

Characteristics of mosquitoes.

1. They have the proboscis for biting and sucking.
2. They lay eggs in stagnant water.
3.

Lifecycle of a culex mosquito

i) A mosquito undergoes four stages of development, that is, complete metamorphosis.
ii) A female mosquito lays eggs which hatch into larvae. The larvae stay in stagnant water until they grow into pupae.
iii) At the pupae stage, the insect does not feed but move in water. The movement of pupae in water is called wriggling.
iv) The pupae then grow into an adult mosquito.

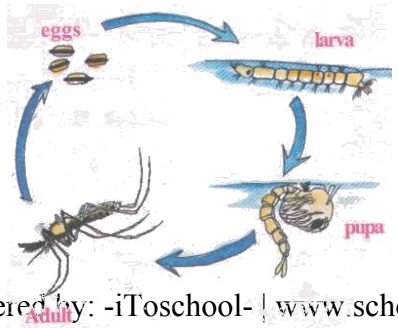


ACTIVITY;

1. **Name types of mosquitoes.**
2. **Which disease is spread by tiger culex mosquitoes?**
3. **How can we control the spread of malaria?**

LESSON 6

Lifecycle of an anopheles mosquito



N.B. Do you notice the difference in the eggs, larvae and adult stages in the two types of mosquitoes?

Control of mosquitoes.

1. Draining stagnant water with in the compound.
2. Spraying to kill mosquitoes.
3. Slashing tall grass around the compounds.
4. Oiling stagnant water in the compound.
5. Removing broken bottles and empty tins in the compound
6. Spraying to kill adult mosquitoes.

Feeding habits of mosquitoes.

Female anopheles mosquito feeds on blood from animals.
The male anopheles mosquito feeds on juice from plants.
Female culex mosquitoes feed on blood.
The male culex mosquitoes feed on juice from flowers.
NB: All female mosquitoes are able to spread diseases to human beings because they feed on blood.

Activity:

4. Name the disease spread by a female anopheles mosquito.
5. How can you control the spread of mosquitoes in your area?
6. Why is doesn't a male anopheles mosquito spread malaria?

LESSON 7

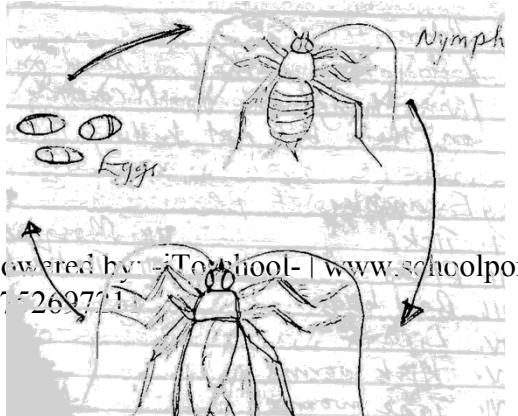
Cockroaches

They live in dark places in houses, cupboards, cracks in walls and in clothes.

Life history of cockroaches

It undergoes an incomplete metamorphosis.

The lifecycle of a cockroach



Diseases spread by cockroaches

i) Diarrhoea
ii) Typhoid
iii) Dysentery
iv) Cholera
v) Polio

Controlling of cockroaches

i) Spraying with insecticides to kill cockroaches.
ii) Maintain proper sanitation.

Parasites

Living things that depend on other living things for food causing harm on them.

Examples of parasites

i) Ticks
ii) Fleas
iii) Bed bugs
iv) Lice
v) Hook worms
vi) Tape worms

Ticks

i) They suck blood from bodies of animals.
ii) They live on bodies of animals like cows, sheep, cats, etc.
iii) Ticks spread East Coast fever to animals.

Why ticks are not regarded as insects

i) They have two main body parts while insects have 3 main body parts.
ii) They have 8legs (4 pairs) of legs while insects have 6legs (3 pairs).
iii) They breathe through booklungs while insects breathe through spiracles.

Control of ticks

i) Spraying with insecticides to kill ticks.
ii) Dip animals to kill ticks.
iii) Graze animals in paddocks.
iv) Hand picking.

Bed bugs

i) They live in dark place, cracks of beds, in mattresses blankets, etc.
ii) They feed of blood of people.
iii) They spread typhus fever to people.

Control of bed bugs

i) Spraying with insecticides to kill bed bugs.
ii) Practicing proper sanitation.
iii) Washing and ironing beddings before use.

Lice

i) They feed on blood of people.
ii) They spread typhus fever to people.

Control of lice

i) Practice proper personal hygiene.
ii) Avoid sharing clothes with people who have lice.
iii) Trim and comb hair.

Fleas

i) They suck blood from bodies of animals.
ii) They cause itching of the body.
iii) They live on clothes or animal fur.
iv) They spread plague to people.
v) Plague is caused by bacteria.

Symptoms of plague

i) Fever
ii) Headache
iii) Chest pains
iv) Muscle pains

Prevention of plague

i) Spray with insecticides to kill fleas.
ii) Maintain proper sanitation.

Itch mites

i) They have eight legs so they are not insects.
ii) They spread scabies to people.
iii) They make a person scratch the skin every time.
iv) Scabies affect the skin especially between the fingers and toes.

Spread of scabies

i) Direct body contact with infected people.
ii) Sharing clothes, basins, bathing sponges with infected people.
iii) Sharing beddings with infected people.

Prevention of scabies

i) Iron clothes before wearing them.

ii) Wash clothes and keep them clean.
iii) Avoid sharing clothes, towels, beddings with infected people.

Prevention and control of diseases transmitted by the vectors

i) Drain stagnant water around the home to control malaria.
ii) Spraying insecticides in our rooms kills most insect vectors.
iii) Use mosquito coils and sleep under mosquito nets.
iv) Keeping food covered to prevent houseflies and cockroaches from sitting on it.
v) Proper disposal of faeces in latrines.
vi) Clear bushes near homes.
vii) Use rat traps and rat poison to kill rats in order to control rat plague.
viii) Cut hair short and keep it clean, wash clothes and iron them to control lice.
ix) Treat/vaccinate dogs and avoid disturbing dogs to control dog bites.

TOPICAL QUESTIONS

1. Briefly explain the term sanitation.

_____

2. How are vectors dangerous to human beings?

3. Why is it important to keep our houses clean?

4. What name is given to the second stage of a cockroach?

5. How important is proper sanitation in our homes?

6. How are germs different from vectors?

7. What causes malaria?

8. Why are ticks not insects?

9. Of what value is sanitation to our school?

10. Match the diseases and their causes.

A	**B**
I) Plague	Itch mites
ii) Scabies	Virus
iii) Athletes foot	Bacteria
iv) Polio	Fungi

11. Suggest one way in which malaria is spread from one person to another.

12. How is the spread of malaria controlled?

13. How does a mosquito net prevent the spread of malaria?

14. What are parasites?

Accidents, poisoning and first aid

An accident is a sudden happening that causes harm to the body.

Dangers or effects of accidents to the body

i) It leads to pain.
ii) It can lead to death.

iii) Accidents can damage some body organs, e.g. skin, brain, e.g.

Examples of common accidents

i) Cuts
ii) Burns
iii) Scalds
iv) Bruises
v) Strains
vi) Sprains
vii) Animal bites
viii) Fractures
ix) Drowning / near drowning.
x) Poisoning

Common accidents at home and schools

i) Fractures
ii) Scalds
iii) Strains
iv) Sprains
v) Burns
vi) Cuts
vii) Animal bites
viii) Bruises

Road accidents

i) Being knocked by cars, bicycles, motorcycles.
ii) Head on collision by two cars.
iii) Overturning of speeding cars.

Causes of road accidents

i) Over speeding.
ii) Over loading.
iii) Driving cars in Dangerous Mechanical Conditions (DMC).
iv) Careless driving.
v) Children playing on roads.
vi) Roads in poor conditions.
vii) Overtaking around sharp corners.
viii) Driving under the influence of alcohol.
ix) Carelessness as people cross the road.

How to control road accidents

i) Avoid over speeding.
ii) Avoid over loading.
iii) Avoid overtaking in sharp corners.
iv) Follow road signs
v) Cross a busy road at a zebra crossing.
vi) Avoid driving cars in dangerous mechanical conditions.
vii) Children should not play on roads.

Poisoning

Poisoning is the taking in of substances that can be harmful to the body.

Poison

A poison is any substance that can cause harm when taken into the body.

Examples of poisons

Corrosive poisons:

i) Petrol
ii) Paraffin
iii) Jim
iv) Acid

Non corrosive poisons:

i) Rat poison
ii) Insecticides
iii) Over dose of medical drugs
iv) DDT

Causes of poisoning

i) Keeping poison under the reach of children.
ii) Keeping poison in soda or juice bottles.

First aid for corrosive poisons e.g. paraffin and jib

i) Give the person plenty of milk, water or juice to dilute the concentration of the poison.
ii) Do not make a person who has taken corrosive person to vomit. This is because it could damage the lungs and throat.

First aid for non-corrosive poison e.g. overdose

i) Make the person vomit.
ii) Let the person drink a lot of milk, water with soap or salt in it to induce vomiting.

Prevention of poisoning

i) Keep all poisons out of the reach of children.
ii) Do not keep poisons in soft drink bottles.

First aid

i) First aid is the first help given to a casualty before being taken to the hospital.
ii) The first help given to an injured person before being taken to the hospital.

N.B. A casualty is a person who has been injured in an accident.
A first aider is a person who gives first aid to a casualty.

Qualities of a good first aider

i) Should be kind.

ii) Should be confident.
iii) Should be sympathetic.
iv) Should be empathetic.
v) Should be knowledgeable.
vi) Should be clean.
vii) Should have common sense.
viii) Should be tactful.
ix) Should be quick.

Reasons for giving first aid

i) To save life or to sustain life.
ii) To reduce pain.
iii) To promote quick recovery.
iv) To prevent further injuries.

A first aid box

It is a container in which items used for giving first aid are kept.

Items found in a first aid box

i) Bandage
ii) Razor blade
iii) Pain killers
iv) Cotton wool
v) Safety pins
vi) Pair of scissors
vii) Plaster
viii) Thermometer
ix) Gauze
x) Spirit / iodine solution

N.B. A first aid kit is a set of items used to give first aid.

Uses of the components of a first aid kit:

i) **Bandage** is used for tying the injured part.
ii) **Cotton wool** is used for cleaning cuts and wounds.
iii) **Plaster** is used for covering open cuts.
iv) **Spirit/iodine solution** is used for killing germs on an open cut.
v) **Pain killers** are used to reduce pain.
vi) **Razor blade** is used for cutting gauze, plaster, e.g.
vii) **Safety pins** are used for keeping the bandage in one position.

Fracture

A fracture is a broken or cracked bone in the body.

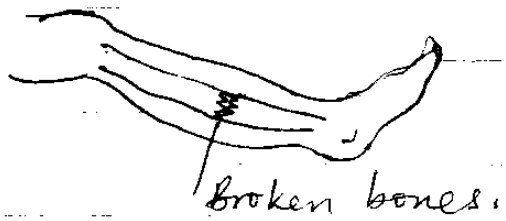
Types of fractures

i) Simple fracture (closed fracture).
ii) Compound fracture (open fracture).
iii) Green stick fracture.
iv) Comminuted fracture.

Simple fracture (closed fracture)
It is when the broken bone remains inside the skin.

Signs of a simple fracture
i) The broken bone remains inside the skin.
ii) Swelling of the injured part.

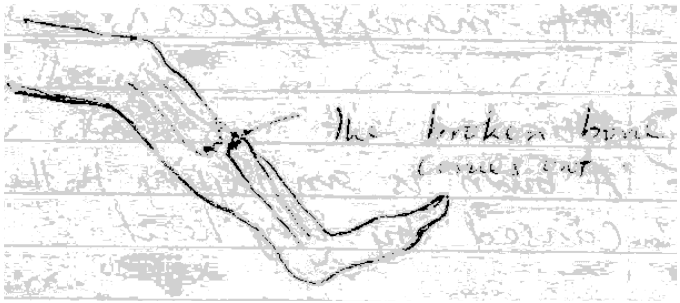
Symptoms of a simple fracture
i) Pain while moving.
ii) Failure to walk or move the affected limb.



Compound fracture (Open fracture)
It is when the broken bone comes out of the skin.

Signs of a compound fracture
i) The broken bone comes out of the skin.
ii) Bleeding of the wound.
iii) Swelling of the limb.
iv) Damaged tissues around the injured part.

Symptoms of compound fracture
i) Pain around the injured part.
ii) Failure to walk or move the limb.



First aid of simple and compound fracture
i) Tie splints around the injured part.
ii) Take the casualty to the nearest health centre.

N.B. Splints keep the broken bones in one position and prevent further injuries.

Green stick fractures
i) It is when a bone bends or gets a crack in children.

Comminuted fracture
This is when the bone breaks into many pieces.

Burns
A burn is an injury on the body caused by dry heat.

Examples of dry heat
i) Hot metals.
ii) A hot piece of charcoal.
iii) A fire flame.

First aid for burns
i) Put the burn in clean cold water
ii) Pour clean cold water on the injured part

Scalds
A scald is an injury to the body caused by wet heat

Examples of wet heat
i) Hot porridge
ii) Hot milk
iii) Hot water
iv) Steam

First aid for scalds
i) Put the burn in clean cold water
ii) Pour clean cold water on the injured part

Bruises
A bruise is an injury on the skin which leads to the bleeding of blood cells/capillaries below the skin.

Minor cuts
i) Wash the cut with clean water and soap.
ii) Apply a plaster

Sprains
i) The tearing of a ligament in the body.
ii) It is the over stretching of ligaments

Sign of a sprain
i) Swelling of the injured part.

Symptom of sprains
i) Pain while walking.

First aid of sprains
i) Wrap a piece of ice around the injured part
ii) Tie the injured part with a firm bandage

Strains

It is the overstretching of a muscle or tearing of a muscle or a tendon.

First aid of strains

i) Wrap a piece of ice around the injured part.
ii) Tie the injured part with a firm bandage
iii) Rub the injured part with liniment.

TOPICAL QUESTIONS

1. Why is it important to give first aid to a casualty?

   _____

   _____

2. Briefly explain the first aid for the following injuries:

   i) Minor cuts_____

   _____

   ii) Sprains _____

   _____

   iii) Simple fracture _____

   _____

   iv) Burn _____

   _____

3. Why should a broken bone be pushed back?

   _____

   _____

4. Briefly explain the meaning of the following terms:

   i) First aid_____

   _____

   ii) An accident_____

   _____

   iii) A first aider_____

   _____

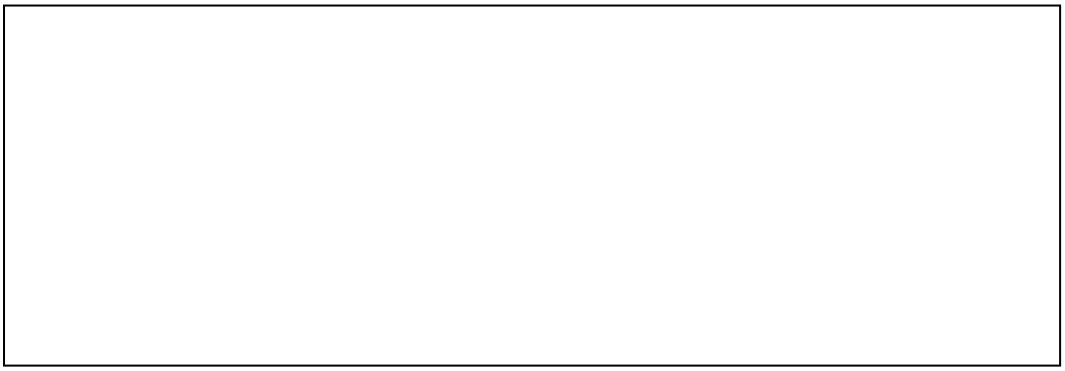
   iv) A scald _____

   _____

5. In the space below, draw:

   A simple fracture

A compound fracture



6. How is a stretcher useful in first aid?

_____

_____

7. State any two things found in a first aid box and give the importance of each.

ITEM	**USE**
1. _____	1. _____ _____
2. _____	2. _____ _____

8. Mention any two types of fractures.

_____

_____

9. List down any four accidents common at home and school.

I) _____ iii) _____

ii) _____ iv) _____

10. Suggest any two effects of accidents to an individual.

I)

_____

ii) _____

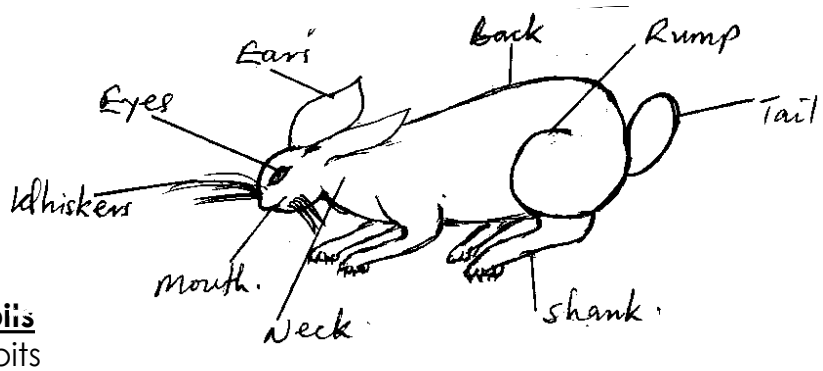
== THE END ==

WORLD OF LIVING THINGS

Animal life

Rabbit keeping

External parts of a rabbit



Types of rabbits

i) Local rabbits
ii) Exotic rabbits

Breeds of rabbits

A breed of animals is a group of animals sharing the same characteristics.

Examples of exotic breeds of rabbits

i) New Zealand white
ii) Chinchilla
iii) Angora
iv) Californian
v) Ear lop
vi) Rex

Difference between local and exotic breeds of rabbits

LOCAL BREEDS		EXOTIC BREEDS	
i)	More resistant to diseases	i)	less resistant to diseases
ii)	Small in size	ii)	big in size
iii)	Grow slowly	iii)	grow faster
iv)	Have different colour	iv)	have specific colours

Characteristics of exotic breeds

Chinchilla rabbit

i) it has good fur

ii) it is kept for meat
iii) it is grey in colour

Angora rabbit

i) It is white in colour
ii) it has fine fur
iii) It is kept for meat
iv) It also provides good skin

California rabbits

i) They are white in colour.
ii) They have a black nose and ears.
iii) They are kept for meat.

New Zealand white

i) It has short legs.
ii) Its body is white all over.
iii) It has pink eyes.
iv) It grows very fast.

Earlap

i) It is kept for meat.
ii) It is bigger than all other breeds.
iii) Its ears drop at the sides of the head.

Characteristics of local breeds

i) Most of them live in the bush.
ii) They are more resistant to diseases.
iii) They are strong and run faster.
iv) Local breeds are also called indigenous breeds.

Why people keep rabbits

i) They are kept for meat.
ii) Their droppings can be used as manure.
iii) They are sold to get money.
iv) They are kept as pets.
v) For their skin which can be used to make handbags and shoes.
vi) They are kept at school for study purposes.

Why farmers prefer keeping rabbits to other animals

i) They have a high breeding rate compared to other animals.
ii) Feeding rabbits is not as costly as other animals like cows.
iii) They grow and mature faster than other animals.
iv) They occupy a smaller space compared to animals like cows.

Rabbit feeds

i) Sweet potato leaves.
ii) Banana peelings.
iii) Green vegetables.
iv) Maize and milk.

v) Weeds, e.g. amaranths.
vi) Carrots.
vii) Small blocks of salt in water.
viii) Pellets (manufactured animal feeds).

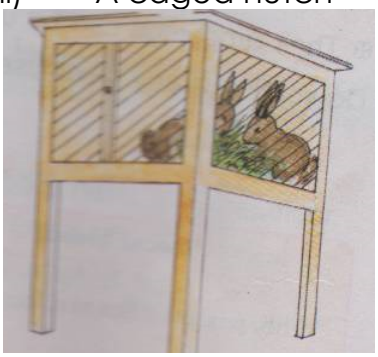
Common terms used in rabbit keeping

i) **Doe**: Female rabbit.
ii) **Buck:** Male rabbit.
iii) **Litter:** Group of young rabbits.
iv) **Bunny**: A young rabbit.
v) **Hutch**: House of domestic rabbits.
vi) **Burrow**: Habitat of wild rabbits.
vii) **Kindling**: Giving birth to young rabbits by a doe.
viii) **Weaning**: Stopping of young rabbits from suckling their mothers.

Types of hutches

i) A mordant hutch

ii) A caged hutch



i) A hutch should be strong enough to protect rabbits from dogs and other wild animals.
ii) It should not have a leaking roof.
iii) It should have enough ventilation.
iv) It should be kept clean and dry.

How to care for rabbits

i) Provide good housing
ii) Proper feeding of rabbits
iii) Early treatment of sick rabbits
iv) Vaccinating rabbits
v) Isolating sick ones from the normal ones

Rabbit diseases

i) Pneumonia
ii) Colds
iii) Coccidiosis
iv) Snuffles
v) Ear canker
vi) Weepy eyes

Coccidiosis

Coccidiosis affects the liver and intestines of rabbits.

A rabbit with coccidiosis has;

i) A swollen abdomen
ii) Rough fur
iii) Diarrhoea
iv) Loss of weight
v) Dies suddenly

N.B. Coccidiosis affects both rabbits and birds.

Snuffles

i) It attacks rabbits at any age.
ii) Rabbits start sneezing at late hours and discharging mucus from the nose.
iii) Rabbits with snuffles suddenly die.

Ear canker (mange)

i) It affects the ears of rabbits.
ii) Rabbits feel itching ears and later wounds develop in the ears.
iii) The ears of rabbits will be bent downwards.
iv) It attacks rabbits at any age.

Pneumonia

i) It affects the lungs.
ii) Rabbits get pneumonia when the environment they live in is wet and cold.
iii) A rabbit with pneumonia shivers.
iv) Rabbits have difficulty in breathing.
v) A rabbit does not eat
vi) Rabbits develop high body temperature

Colds

i) Rabbits with colds always sneeze
ii) Rabbits develop a running nose

Weepy eyes

i) Rabbits with weepy eyes have tears or watery substances coming out of their eyes all the time.

Prevention and control of rabbit diseases

i) Proper feeding of rabbits with plenty of green vegetables
ii) Always keep the hutches clean and dry
iii) Avoid overcrowding rabbits in a hutch
iv) Vaccinate rabbits
v) Early treatment of sick rabbits before the disease spreads
vi) Kill rabbits with snuffles to stop the disease from spreading

Records kept in rabbit farming

i) Number of young ones produced by each doe.
ii) Production records in terms of meat in kilograms.
iii) Dates of kindling by the doe.
iv) Profits and losses made after selling.
v) Vaccination records.
vi) Types of feeds given to rabbits.

TOPICAL QUESTIONS

1. Give two reasons why farmers keep rabbits.

   i) _____

   ii) _____

2. List down any four rabbit diseases.

   i) _____

   ii) _____

   iii) _____

   iv) _____

2. Why do farmers prefer keeping rabbits to other animals like goats?

   _____

3. State any one type of rabbit._____

4. Write down any three examples of exotic breeds of rabbits.

   i) _____

   ii) _____

   iii) _____

5. Name the rabbit disease which affects domestic fowls.

   _____

6. How can you control the spread of rabbit diseases in your farm?

_____

7. Mention any two ways of caring for domestic rabbits.

   i) _____

   ii) _____

8. Briefly explain the following terms as used in rabbit keeping.

   a) litter _____

   b) buck _____

   c) doe _____

9. How can you differentiate local rabbits from exotic rabbits?

10. Give any two rabbit feeds.

    i) _____
    ii) _____

11. List down any two records kept in rabbit farm.

    i) _____
    ii) _____