SCIENCE LESSON NOTES FOR P.3 TERM 3, 2013

THEME: HEALTH IN SUBCOUNTY/DIVISION.
SUB-THEME: DISEASE VECTORS.
CONTENT: VECTORS AND DISEASES.

Vectors: Vectors are living organisms that spread germs which cause diseases. Vectors are germ carriers. Vectors can be insects or animals.
Germs: Germs are small living organisms which cause diseases. Germs can not be seen with our naked ours.
Germs can be seen using a machine called a microscope
Examples of disease vectors/carriers;
Housefly mosquitoes mites cockroaches lice bedbugs
Tsetse fly ticks dogs fleas snails
Places where vectors can be found:

- ❖ Dirty places.
- ❖ Decayed things.
- ❖ Human faeces.

How vectors spread germs:
- They carry germs from dirty places then spread it to our food.
- Others spread through their bites e.g. dogs, mosquitoes, tsetse fly.

A house fly

House fly lives in dirty places or latrines/toilets.
Diseases spread by a house fly:
Cholera diarrhoea typhoid trachoma dysentery.
A house fly spreads germs by carrying them using their legs and body to the food.
-It under goes complete metamorphosis i.e. egg, larva, pupa and adult. (4 stages of development).
-The adult housefly is also called the Imago

The life cycle of a house fly.

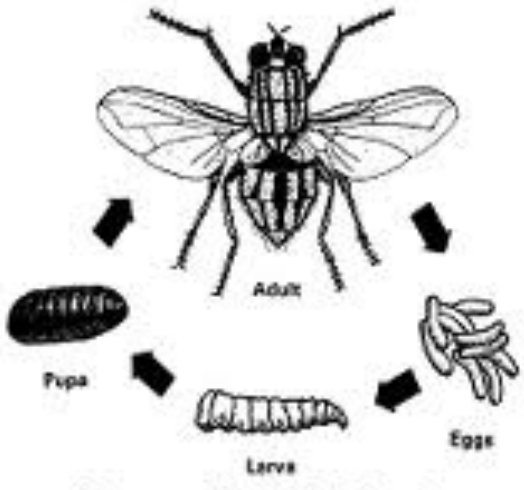
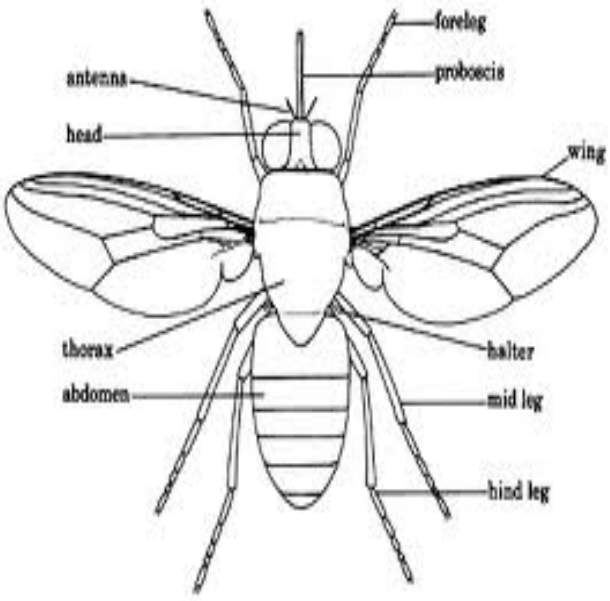


Diagram showing external parts of a house fly



Activity

1. What is a vector?
2. Give 4 examples of vectors.
3. Which machine do we use to see/detect germs?
4. How do house flies spread germs?
5. Identify any two diseases spread by a house fly.
6. Where does a house fly live/ stay?

REFERENCE

Comprehensive sci. Book pgs. 67-68
Mk. Pri. Sci. Bk3 pg. 102
Understanding Integrated science book 3 page 73

DISEASES SPREAD BY A HOUSE FLY:

1) Cholera
   -Cholera is caused by bacteria which can kill within six to twenty four hours.
   -The bacteria which causes cholera is known as vibrio cholera

Cholera spreads through the following ways:

-Through eating dirty food.
-Drinking dirty water.
-By using dirty containers to prepare food.
-Eating from dirty containers.
-Eating with dirty hands.

Signs of cholera

-Serious diarrhoea
-A lot of vomiting
-Dehydration of the body.
-Body weakness and collapse.

Prevention of cholera

-Drink clean boiled water.
-Cover food to prevent house fly.
-Never eat cold food.
-Observe good personal hygiene.
-Wash hands before touching or eating food.
-Proper use of the toilet/ latrine.
-Give the infected person a lot of O.R.S.
-Take the infected person to hospital as soon as possible.

Activity

1. Name the bacteria that cause cholera.
2. In which 4 ways can cholera be spread?
3. Identify any two signs of cholera.
4. Give 4 ways a p.3 child can help his/her family to stay safe from cholera?

REFERENCE:
-Comprehensive science book3 page 69.

2) TYPHOID

Typhoid is caused by a bacteria called salmonella typhi.

Ways through which typhoid spread:

-Spread by a house fly from faeces and urine of infected people.
-Spread through eating food using dirty hand.
- It can also be spread by using dirty containers and stencils.
- Spread through drinking unboiled water.
-Spread by eating contaminated food.

Signs and symptoms of typhoid

-Constant fever with headache.
-Abdominal pain.
- Increased pain and diarrhoea.
- Dehydration.

Prevention and treatment/control of typhoid

-Observe good food hygiene.
-Wash hands with soap after visiting the toilet/latrine.
-Drink clean boiled water.
- Always use latrine or toilet to dispose off waste.
- Wash your hands before eating food.
- Use clean utensils and containers to prepare food.

Dehydration

Dehydration is a condition when the body does not have enough water in it.

Causes of dehydration

-Severe diarrhoea.
-Excessive vomiting.
-Excessive urinating.
-Excessive sweating.

Signs of dehydration

-Sunken eyes.
-Dry lips
-Little or no urine.
-The person feels sleepy.
-Soft spot on the head.
-Skin goes back slowly when pinched.

Treatment for dehydration

1. Give the person oral rehydration salt (O.R.S).
2. Give a patient a lot of juice /water.
3. Eat or feed on food.
4. In case of a baby, breast feed regularly.
5. Take the patient to the hospital as soon as possible.

Activity

1. Name the bacteria that cause Typhoid.
2. Mention three ways in which typhoid spreads.
3. Identify any three signs and symptoms of typhoid.
4. Suggest ways how we can prevent or treat typhoid.
5. Define the term dehydration.
6. State any two causes dehydration.
7. Outline any two signs of dehydration.
8. Jane's lips are very dry, what do you think she is suffering from?
9. John's body is dehydrated in which two ways can you help him?

Reference

-Comprehensive primary science book3 pages 71-72.
-Understanding Integrated science book3 page 76.
-Mk Integrated science book page 109.
-A new primary science for Uganda book3 60.

Diarrhoea

Diarrhoea is the frequent passing out of watery stool.
How does diarrhoea spread?
-By eating dirty/contaminated food.
-By eating food with dirty hands.
-By drinking dirty or unboiled water.
-By eating unwashed fruits.
-By eating much oily things.
-Diarrhoea is spread mostly through the 4F's .
- 4F's in full 1 Faeces 2. Flies 3 Food 4 Fingers in their order.



Signs and symptoms of diarrhoea

- Abdominal pain.
- Dehydration of the body.
- Frequent passing out of watery stool.

Prevention of diarrhoea

Cover the leftover food.
Wash your hands before handling food.
-Boil water for drinking.
-Always dispose wastes in toilet/latrine.
-Wash vegetables and fruits before eating them.
-Use a rubbish pit or dustbin to dispose off rubbish.
-Spray the houseflies with insecticides.
-Burry or burn the rubbish.
-Cover the pit latrine after use to avoid flies on food.
-Destroy breeding places for houseflies.

Activity

1. Define term the diarrhoea.
2. In which ways can diarrhoea be spread?
3. Write the 4F's in full in their correct order.
4. Identify the signs and symptoms of diarrhoea.
5. Suggest the ways of preventing diarrhoea among our families.

Reference:

- Comprehensive primary science book 3 pgs 71-72.
- Understanding Integrated science book3 page 76.
- Mk. Integrated science book3 page 109.

Dysentery

This is the passing out of watery stool with blood and mucus in it.
Dysentery is caused by either a bacteria or protozoa.

Types of dysentery

There are two types of dysentery:

a) Bacillary dysentery – caused by abacteria called shigella.
b) Amoebic dysentery- caused by an amoeba called entamoeba hyistolytica.

Ways through which dysentery spread:

-Infection through faeces of infected persons.
-Drinking unboiled water.
-Spread by a housefly from infected faeces and running water.

Signs of dysentery

-Serious diarrhoea with fever.
-Dehydration of the body.
-Loss of appetite.
-Passing out of stool having blood and mucus.

Prevention of dysentery

1. Use toilet/latrine to dispose off waste.
2. Keep toilet or clean.
3. Wash hands after using the toilet/ larine.
4. Wash hands before handling/eating food.
5. Cover your food properly.
6. Wash all the fruits and vegetables before eating.
7. Take the sick person to hospital as soon as possible.

Activity

1. What do you understand by the term dysentery?
2. Point out the two types of dysentery.
3. Identify (2) ways through which dysentery is spread.
4. Mention the signs of dysentery at least two.
5. Suggest any three possible ways of preventing dysentery.

Reference

-Comprehensive primary science book 3 page 70.
-Mk Integrated science book3 page 109.
-Oxford primary science book3 page 59.

Trachoma

Trachoma is a disease caused by virus Chlamydia

Ways through which trachoma spreads:

-Trachoma is spread by a house fly but not through drinking dirty water or eating contaminated food or by the

Way of 4F'S.

- Trachoma is common where people live together in poor hygienic condition.
- It is spread through sharing of towels and handkerchiefs with infected people.
- Spread through sharing the same basin of water with an infected person.
- Spread through shaking hands with an infected person and then touch your eyes before washing hands.

Signs and symptoms trachoma

-Red eyes, itching a lot.
-Water comes out of the eyes all the time.
-Swollen eyelids.
-One feels a lot of pain when looking at the light.

-You get small pinkish grey swellings after some time.

Prevention or control of trachoma
-Observe good personal hygiene.
-Avoid sharing basins of water with a sick person.
-Avoid sharing towels and handkerchiefs with a sick person.
-Take the sick person to hospital as soon as possible.

Activity

1. Which vector spreads Trachoma?
2. What germ causes Trachoma?
3. Which part of the body is attacked by Trachoma?
4. Write the ways through which Trachoma spreads.
5. Mention any two signs of Trachoma disease.
6. How best can we prevent or control trachoma?

Reference:
-Oxford primary science book3 page 58.
-Fountain primary science book3 pages 103-107.
-Comprehensive primary science book3 pages 72-136.

Red eye

Signs and symptoms of Red eyes

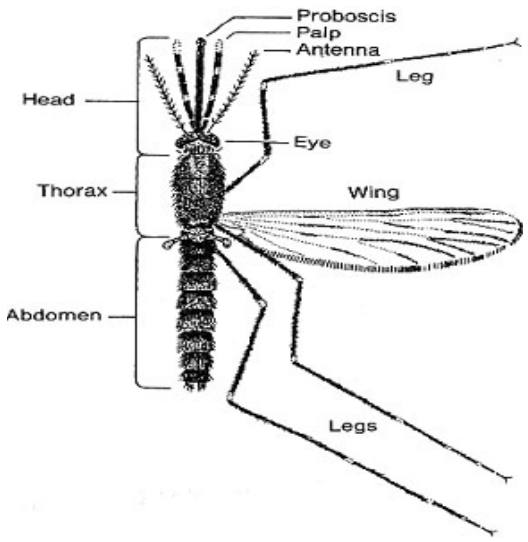
- Red eyes -Tears come out of eyes.
- Itching of the eye. –Severe pain when you look at the light.
- Headache -Sore eyes.
- Swollen eye lid. –Fever

Prevention of Red eyes

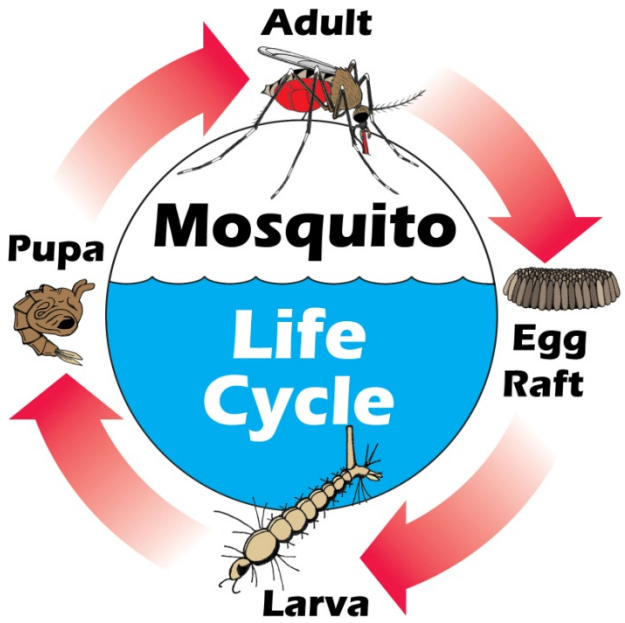
-Don’t shake hands with an infected person.
-Don’t share basins, towels and handkerchiefs with infected persons.
-Wash hands and face regularly.
-Treat with eye drop.

Mosquitoes

Parts of a mosquito.



Life history of a mosquito



-Mosquitoes undergo complete metamorphosis.
-Mosquitoes lay eggs in stagnant water where they hatch from after 2-3 days.

-Mosquitoes take 2-3 weeks from eggs to a fully grown adult mosquito.

Types of mosquitoes

There are three types of mosquitoes:

1. Female Anopheles mosquito.
   -It spreads a parasite that causes malaria (plasmodium).
   -A male anopheles mosquito does not spread malaria.

-Male anopheles mosquito does not feed on blood but on juice from plants and nectar from flowers.

2. Aculex mosquito

-Aculex mosquito spreads a worm that causes **elephantiasis.**

-Elephantiasis makes the legs grow big and look like those of an elephant.

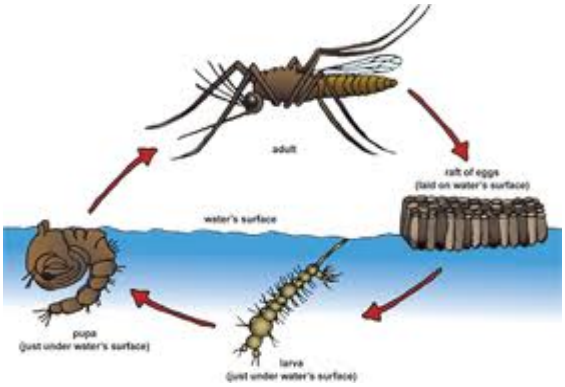
-The germ that causes Elephantiasis is called **filaria.**

3. Aedes/Tiger mosquito

A tiger/Aedes mosquito spreads a virus that causes either Yellow fever or dengue fever.

Activity

1. Draw a mosquito and name its parts.
2. How is the mouth part of a mosquito called?
3. Name the stages of development in the life cycle of a mosquito below:



4. List down the three types of mosquitoes.

5. Which disease is spread by the following mosquitoes(match) correctly:

-Female anopheles mosquito elephantiasis
-Aedes mosquito malaria
-Culex mosquito dengue fever

7. Why can't a male anopheles mosquito spread malaria?

8. What do male anopheles mosquitoes feed on?

Reference:

-Oxford primary science book 3

-Mk Integrated science book pages 73-74.

-Comprehensive primary science book 3 page 73-75.

MALARIA

Malaria is spread by a female anopheles mosquito.

Malaria is caused by a **parasite** called **plasmodium**

Signs and symptoms of malaria

-Pain in the joints. –diarrhoea

-Stomach ache (abdominal pain) -vomiting

-A person feels tiredness or body weakness.

-Shivering and chattering of the teeth. –Serious sweating.

-High body temperature (fever). –headache.

-High heart beat (rapid breath).

Prevention and control of malaria

1. Drain away all the stagnant water from the compound.

2. Spray mosquitoes with insecticides or mosquito coil.

3. Use smoke to chase away mosquitoes (fumigation).

4. Oil stagnant water to kill mosquito eggs and larvae.

5. Always sleep under mosquito nets.

6. Clear all the bushes around your home.

7. Keep the house clean and allow enough light into the house.

8. Remove all broken bottles,empty tins and shopping bags (buvera).

Dangers of malaria

Malaria can lead to miscarriage in pregnant women**.**

Malaria leads to anaemia if not treated early.

Malaria kills people.

Treatment of malaria

-Malaria can be treated using local medicine e.g mululuza, aloevera et c.

-Malaria can also be treated using factory made medicine e.g chloroquine,fansider,quinine, commaquin, antenum, coeterm.

Activity

1. What causes malaria?

2. Which disease vector spreads malaria?

3. Identify any five signs and symptoms of malaria.

4. In which five ways can we prevent or control the spread of malaria?

5. Suggest the possible treatment for a person suffering from malaria.

6. How is malaria dangerous to pregnant women?

Reference:

-Comprehensive primary science book 3 page 73-74.

-Mk integrated primary science book3 73-74.

Tsetse flies

-Tsetse flies spreads germs which cause **sleeping sickness** to people and **nagana** to animals.

-The germ is called **trypanosomiasis** in a protozoa group.

-Tsetse fly undergoes complete metamorphosis (4) stages of growth i.e egg____ larva_____pupa_____ adult.

-The eggs develop from it's abdomen and it lays the larva.

-Tsetse fly feeds on blood.

-They are found in bushy areas or forest and near water sources.

Signs of sleeping sickness

-Fever from time to time.

-Loss of body weight.

-Dullness, weakness, laziness and sleepy.

-A person does not want eat (loss of appetite).

Prevention and control of sleeping sickness

-Spray with insecticide to kill adult tsetse flies.

-Use tsetse fly traps.

-Clear bushes near home.

-Avoid early or late grazing of animals.

Treat the sick person in the hospital.

Activity

1) Which vector spreads sleeping sickness to people?

2) Name the germ that causes sleeping sickness or nagana.

3) What does a tsetse fly use to suck blood?

4) Name any two places where tsetse flies can be found.

5) Mention two signs of sleeping sickness.

6) Identify three ways you can prevent and control tsetse flies.

Reference:

-Mk primary science book3 page 111.

-Comprehensive primary science book3 76.

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-Mk integrated primary science book3 73-74.

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-Tsetse fly feeds on blood.

-They are found in bushy areas or forest and near water source

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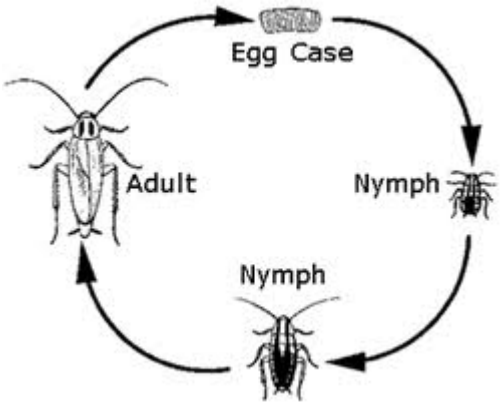
Cockroaches

A cockroach is a flat brown insect.

A cockroach has three main body division/parts i.e head, thorax and abdomen.

A cockroach under goes incomplete metamorphosis (three stages) of development i.e eggs_____ nymph_____ adult.

Life cycle of a cockroach



-The female cockroach lays eggs in egg case. It each egg case contains 16 eggs.

- Eggs hatch into **Nymphs** that looks like adult but without wings.

-Nymphs grow into adult.

-Cockroaches hide in dark places i.e in cupboards, old cookers, boxes, latrine, refrigeration, ward rop.

-They move at night looking for food and water.

-They move in dirty places so they carry a lot of germs that cause many diseases like polio, typhoid, leprosy, amoebic dysentery and food poisoning.

Prevention/control of cockroaches

1. Spray the house, toilet and rubbish pits with insecticides.

2. Allow as much as light as possible into the house.

3. Observe good sanitation and hygiene.

4. Use insecticide chalk to kill cockroaches.

5. Clear away all breeding places for the cockroaches.

Activity

a) Name the second stage of development of a cockroach.

b) Draw and name the life cycle of a cockroach.

c) Where do we mostly find cockroaches?

d) Write down any diseases associated with cockroaches.

e) Why do cockroaches move at night?

f) Suggest 3 ways of preventing cockroaches.

Reference:

-Comprehensive primary science book page 77.

OTHER VECTORS

Black fly

Spreads worm which causes river blindness.

Signs of river blindness

-Bumps on the hips/legs. –Itching skin rashes.

-Severe skin itching.

Prevention of river blindness

-Use insecticides to kill adult black flies.

-Treat the sick ones.

Ticks

-Stay or found on the bodies of wild and domestic animals.

-They cause **typhus fever.**

-Spray using insecticides to kill ticks.

-Dip the animals.

-NB: The germ that causes typhus fever is called **rickettsia**.

Lice

They spread diseases called typhus and relapsing fever. There are 3 types of lice; head lice, body lice and crab lice.

Prevention

- Observe good personal hygiene.
- Comb the hair to remove dead lice and eggs.
- Treat people infected with typhus and relapsing fever.
- Cut the hair short when infected.

Fleas

Live on rats commonly called rat fleas.

They spread bacteria called Yersinia pestis which causes bubonic plague.

Signs of bubonic plague

Swelling in the neck, armpits and groin

Prevention

Kill the rats.

Spray with insecticide to kill fleas.

Take an ant plague vaccination in case of an outbreak.

Itch mites.

- They spread a worm which live and multiply inside the skin.
- It spreads through body to body contact.
- The worms cause a disease called scabies.
- Scabies cause a lot of itching and scratching.

Dogs

Infected dogs spread rabies to people through their bites.
Rabies is caused by a virus.
Infected foxes and cats can also spread rabies.

Prevention

- Vaccinate dogs.
- Kill mad dogs.
- Take the person bitten by the untreated dogs to the hospital.

Activity.

1. Match the vectors and diseases.

Black fly	rabies
Ticks	bubonic plague
Lice	relapsing fever
Fleas	river blindness
Dogs	typhus fever

2. Name the three types of lice.
3. Give one sign of rabies in people/ animals.

Reference:
Compr.prim.sci book 3 pg 85- 92.

Lesson 18

THEME: HEALTH IN OUR SUBCOUNTY/DIVISION

SUB-THEME: Disease vectors.

Water snails

-They are vectors because the worm which causes **bilharzia** develops in them.

-The **worm** that causes bilharzias is called **schistosoma/blood fluke**.

- They live in the veins around the bladder, large or small intestine.

Signs of bilharzia

- Blood in the urine.
- Blood in the stool.
- The liver and spleen become big.

Prevention of Bilharzia

Donot walk, wash, bathe, swim in streams, river or ponds.

- Wear shoes or gum boots when standing in streams.
- Boil drinking water.
- Remove water plants from water sources.
- Remove water snails from water sources.
- Use latrines for urinating and defecating.

Note: The eggs of the worm leave the sick person's body through urine or faeces and reach water in ponds, wells, streams and rivers when they hatch out into small larvae.

Blood flukes Egg Larvae

Activity.

1. Name the disease spread by water snails.
2. Name the habitat of a water snail.
3. Where do the worms develop in the body?
4. Give any two signs of the disease spread by water snail.
5. State any two ways you can use to prevent the disease spread by water snail.

LESSON 19.

HIV/AIDS

AIDS – Acquired Immune Deficiency Syndrome.

HIV - Human Immunodeficiency Virus.

AIDS is the Acquired Immune Deficiency Syndrome.

- This means that the body is in a condition where it has lost the ability to defend itself.
- It is brought about by a virus (HIV)
- The virus destroys the white blood cells.

Causes and spread of AIDS

- Through sexual contact with an infected person.
- An infected mother to the born baby during birth.
- Using contaminated sharp instruments.
- Blood transfusion.
- Through accidents when people are hurt.
- Using unsterilized items.
- Inheritance.
- Tattooing.

Activity

1. Write the following in full.
   a) AIDS b) HIV
2. Name the virus that causes AIDS.

3. Which cells in our body are destroyed by (HIV) virus?

4.Mention any three ways in which AIDS can spread.

Reference:

Fountain integrated primary.sci bk 6 pg 150.

Trs' own collection

LESSON 20:

Effects of HIV/AIDS

- It leads to death.
- Poverty in the family.
- Leads to child negligence.
- Pain and suffering
- It can lead to orphange of children.
- It may be difficult for a woman to keep the pregancy.

Ways of caring for HIV/AIDS patients

i. Avoid sharing sharp objects,use gloves when helping HIV/AIDS patients.
ii. Advising/reminding them to take their medicine.
iii. Guiding and counselling them.
iv. Feed them well with a balanced diet.
v. Take them out to recreational centres to reduce stress.

Activity.

1. Mention any three effects of HIV/AIDS.

2. Suggest four ways of caring for a person suffering from HIV/AIDS.

Reference:

Fountain interegrated prim.sci book 6 pg 150.

LESSON 21:

Control measures of HIV/AIDS.

a. Blood test.
b. taking medicine.
c. Feeding on a well balanced diet.
d. Sleeping under a mosquito net.

Prevention of AIDS.

a. Abstinence from sex.

b. Testing blood before marriage.

c. Being faithful to your partner.

d. Covering wounds and cuts.

e. Not sharing sharp objects.

f. Test blood before transfusion takes place.

g. Use sterilized objects.

h. Use PIASCY messages.

HIV cannot be spread by;

i. Hugging your friends.

ii. Shaking hands.

iii. Sharing toilets.

iv. Eating together in the same plate.

Activity.

1. List down any two control measures of AIDS.

2. How can AIDS be prevented in our community.

3.Identify any four ways through which HIV can't be spread.

4.Why cant a mosquito spread AIDS?

5.What is PIASCY in full?

Reference:

Thematic curriculum bk 3 pg 49

THEME: ENERGY IN OUR SUB-COUNTY/DIVISON.

SUB-THEME: SOURCES OF ENERGY.

Energy; Energy is the ability to do work.

It is the power got from physical/ chemical resources to provide light or heat.

Types of Energy.

a. Kinetic energy- is the type of energy possessed by moving object e.g when one

rolls something down the valley.

b. Potential energy- is the type of energy possessed by an object at rest e.g when a stone falls on the ground.

Examples of natural sources of energy

water, sun and wind.

<u>Uses of each source of energy.</u>

Wind - runs machines.

- sails boats.

-drives wind mills

-flies aeroplanes

- blows away bad air/smell

-supports burning

- helps in winnowing

Water - generates hydro-electricity power(HEP)

-used for transport

- used in factories as a raw-material

-used for domestic purposes

Sun- provides solar energy

helps to dry seeds and clothes

provides light

provides our body with heat to make vitamin D

Dangers of natural energy

-It causes death e.g wind capsizes boats.

- Too much sunshine can cause drought.

- Too much sunshine spoils our eyes.

- Too much sunshine dries crops in the gardens.

- Too much water brings about floods.

- Strong wind destroys crops and breaks buildings.

Activity

1.Define the term energy.

2.Identify the two types of energy you know.

3.What is the natural source of heat and light?

4.Give three examples of natural source of energy.

5.Mention atleast two uses for each of the following sources of energy.

a. sun

b. water

c. wind

6.Write down two dangers of natural sources of energy to people and animals.

Reference:

M.K intergrated sci.book 2 pg 56- 59.

LESSON 25.

Artificial sources of energy

-Fuel e.g diesel, petrol, wood, paraffin**.**

-**Electricity** in homes, battery, factory, school.

Uses of diesel /petrol

For running vehicles.

For running generators.

Machines like slashing, grinding mills and other machines.

Uses of paraffin

-For lighting at schools, factories homes.

-For cooking in homes, schools.

-For mixing detergents/chemicals in factories.

Uses of wood/charcoal

-For cooking.

-For ironing.

-We can sell and earn money (a living**).**

USES OF ELECTRICITY

-Gives us heat for cooking**.**

-For lighting

-Give us heat for ironing.

-For running machines e.g shaving, grinding.

Dangers of fuels

-They can cause accidents e.g shocks, poisoning.

-They can cause death.

-Too much of fuel can cause breakage of machines.

-Smoke from fuel can cause lung cancer.

-Fuel like petrol can catch fire and burn things.

Activity

1.Identify two examples of artificial sources of energy.

2.Mention atleast three uses of the following fuels:

a. diesel/petrol
b. paraffin
c. wood and charcoal
d. electricity.
e. In which two ways are the fuels dangerous to man?

Reference:

Thematic curriculum book3 page 55.

Ways of saving energy

-Using energy saving stoves or bulbs**.**

-Switching off electricity appliances when not in use e.g bulbs, cookers.

-Putting out fire after use.

-Avoid cooking everytime without stopping.

-Planting trees.

-Proper use of energy.

Importance of saving energy

-To avoid wastage. - Develop saving culture.

-To minimise the cost. -Saving resources for future.

-Saving resources for the generations to come.

Dangers of energy

1. Live wires can cause electric shock, death.

2. Fire out break.

3. Strong wind destroys property.

4. Storms capsize boats.

5. Drought may cause famine.

6. Accidents may be caused as result strong winds.

Solutions

- planting trees to brake strong winds.

-Avoid playing with fire.

- Wear shoes/ sandals when cooking using electric cooker

-Always be careful while using electric appliances.

-Live wires should be covered with non-electric conductors

Activity.

1. Identify four ways of saving energy in our homes.

2. Give four importance's of saving energy.

3. State three dangers of energy.

4. In which ways can people avoid the dangers of energy?

References:

Thematic curriculum bk 3 pg 56-57

CHANGES IN OUR ENVIRONMENT

Environment- It means man and his surroundings.

Things around man include,houses,trees, water bodies, bridges,forests,mountains e.t.c

Types of changes

Natural and man-made changes

1. Natural changes.

These are changes that occur in our environment by themselves. They are determined by God and man has no control over them. Examples of natural changes ;

- Changes in season e.g dry and wet seasons.

- Drought - floods - hailstones - earthquakes - landslides.

2. Man- made changes.

These are changes that happen as a result of man's activity. Examples of man-made changes;

- Road construction/ building. - Afforestation

- Deforestation - crop growing

- swamp reclamation (clearing swamps)

- Construction of bridges - construction of dams

- changing villages into towns.

Bad effects of natural and man- made changes.

- Famine

- Death

-soil erosion

-diseases

-drought

- Shortage of land

Good effects

- Easy transport

- Improvement on infrastructure (good roads and houses)

- Improvement on welfare

Activity.

1. Define Environment.

2. Give two types of changes in our environment

3. State the meaning of each type of change mentioned above.

4. Write down any four examples of man- made changes

5. Write down any four physical things around man.

6. What is meant by natural changes?

7. Write two examples of natural changes

8. Define;

- Afforestation

- Deforestation

- Reforestation

Sound

-Sound is a form of energy that leads to hearing in some animals through waves.

-Sound is produced when objects **vibrate**

How sound travels

i. Through solids e.g strings, metal bars, wood, banging metals, throwing stones

ii. Through gases e.g air.

- When calling one on phone

- Warning sound from cars

Sound also travels in water

N.B: when sound hits a wall it is back as an echo

Making a string telephone

Materials needed include;

nails, tins, string

Steps

- make small holes at the bottom of the two tins.
- fix a string through the hole and tie the knot.
- let your friend take one tin and move a distance till the string is straight.
- one should hold the tin against the ear and the other one makes the sound.

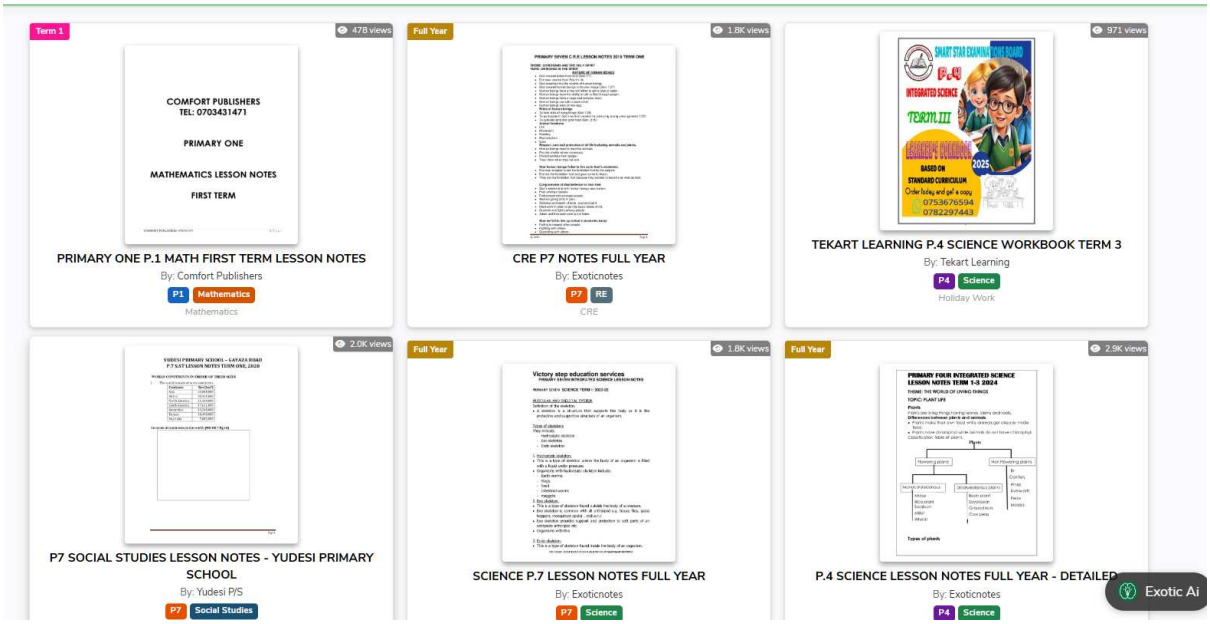
Activity

1. _____is a form of energy that leads to hearing in some animals.
2. How is sound produced?
3. Identify three ways in which sound travels.
4. What name is given to a reflected sound?

Reference:

Thematic curriculum bk 3 pg 56-57

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