CITY PARENTS' SCHOOL SINCE 1999

P.7 SCIENCE HOLIDAY WORK TERM II 2020

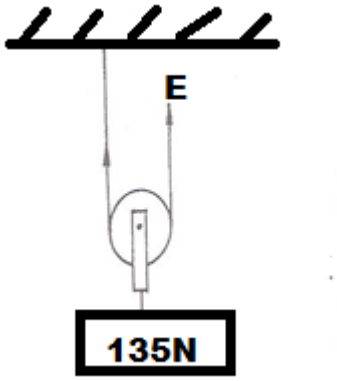
INSTRUCTIONS;

- ✓ Use an exercise book to answer the following questions.

THEME 1: MATTER AND ENERGY

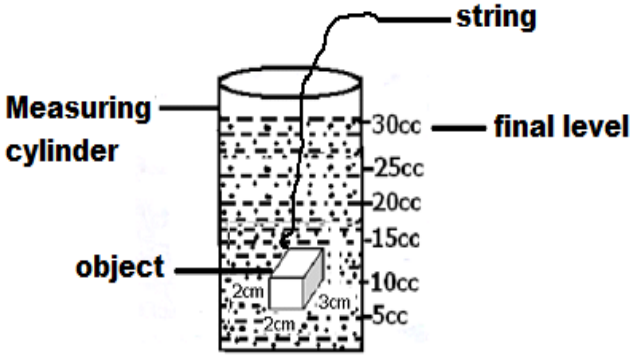
1. Name the force that enables magnets to attract other magnetic materials.
2. Why are products of crude petroleum separated using fractional distillation method?
3. Write any one fact in nature that proves that light travels faster than sound.
4. Why are devices that convert electricity to heat energy use only electricity not magnetism?
5. In which method of heat transfer does heat travel faster?
6. How is sound stored by solfa notation method reproduced?

Study the diagram below about a simple machine and use it to answer questions 7 and 8



7. Identify the simple machine shown above.
8. What effort is required to lift the above load?
9. How is the production of static electricity different from that of current electricity?
10. Why are solids made of closely packed particles?
11. State any one-way electricity promotes personal hygiene.
12. Give the energy change that occurs when wood burns to ashes.
13. In which way does the re-setting of a clinical thermometer and six's thermometer differ?
14. Why are shadows formed in the morning and evening hours longest?
15. Joan accidentally mixed iron filings with sand and salt. In four steps, describe how salt can be recovered from the mixture.

16. **The illustration below shows a method of finding the volume of objects. Study and use it to answer questions that follow.**



(a) Identify the method of finding the volume of objects shown.

(b) What was the volume of water in the measuring cylinder before immersion of the object? (2 marks)

(c) State the role of the string in the above experiment.

17. (a) Name the part of the eye that regulates the size of the pupil.

(b) How is the retina adapted to its functions of formation of images?

(c) In which way are the auditory nerves and optic nerves similar in function?

(d) Name the surfaces that are able to form regular reflection.

18. **The table shows devices that use electricity. Complete the table correctly.**

Device	**Changes electricity into**	**Use of the device**
Bulb	_____	Lighting rooms
Electric fan	Kinetic energy	_____
Electric kettle	_____	Boiling water
_____	Heat energy	Ironing clothes

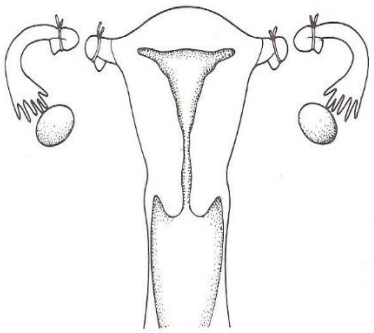
19. State one reason why air is regarded as matter.
20. How does mass differ from weight?
21. How is conduction useful in our daily life?
22. How does the double silvered walls of a vacuum flask control heat loss?
23. **In the space below draw an experiment formed to show lines of force of a magnet.**

24. Give one reason why cats are able to see clearly even at night.
25. State any three factors affecting the evaporation rate.
26. Why is the moon not regarded as a Natural source of light?
27. How is the iris of the human eye able to control the amount of light entering it?
28. How is the film of a camera similar to the retina of the human eye?
29. How does the function of the fuse differ from that of a switch?

THEME 2: THE HUMAN BODY

1. Name the gas that reduces as blood leaves the lungs.
2. State the importance of the gas produced by the lungs to plants in the environment.
3. Give any one way mothers can control maternal anemia.
4. Write any one cause of peptic ulcers that affects the digestive system.
5. In which way are short bones useful to the circulatory system?
6. State any one importance of excretion to the human body.
7. Why do we urinate frequently on cold days than on hot days?
8. In which part of the male reproductive system are sperms stored?
9. State any one way of increasing blood volume in the human body.

The diagram below shows a birth control method. Study and use it to answer question 10 and 11



10. Identify the birth control method shown.
11. Give any one disadvantage of the shown birth control method to mothers.
12. Why are premolars and molars unable to tear food?
13. State the importance of dental flossing.
14. Why does the body of a person feel very cold immediately after death?
15. (a) What is puberty?
    (b) Write one characteristic of puberty in boys.
    (c) In which way are sperms and ova similar?
    (d) Which secondary sex characteristic in adolescents help in regulation of body temperature?
16. **The table below shows the composition of air breathed in and out.**

Type of air	**Inspired air**	**Expired air**
Oxygen	21%	16%
Carbon dioxide	0.03%	4%
Nitrogen	78%	78%

    (a) Why is there a reduction in expired oxygen compared to the inspired oxygen?

(b) Why does the amount of carbon dioxide expired more than the inspired carbon dioxide?

(c) Why does the amount of inspired and expired nitrogen remain constant?

(d) Give any one factor that increase the rate of breathing.

17. (a) Briefly explain the following terms

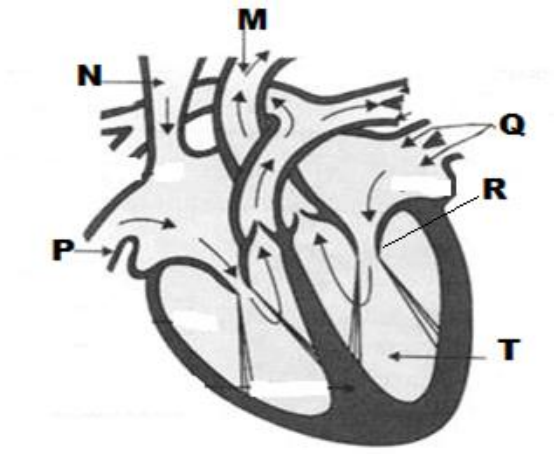
(i) egestion

(ii) ingestion

(b) Name any one enzyme that acts in acidic medium.

(c) State any one way of preventing constipation.

18. **The structure below is of a human heart. Study and use it to answer questions that follow.**



(a) Name the part marked **T.**

(b) State the role of part labelled **R**.

(c) How is the blood carried by blood vessel P similar to that carried by blood vessel **N**?

(d) Give any one characteristic of blood vessel marked **M**.

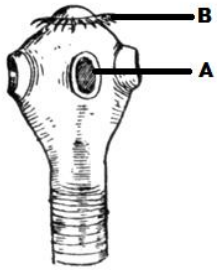
19. State any one property of water.
20. Give any one activity that can be done by the community to promote primary health care.
21. State one way members of the community get health education.
22. State one activity that can be done by the community to prevent diseases.
23. State any one health effect of staying in a dirty environment.
24. State any two indicators of poor sanitation in a home.
25. State one way of carrying out health surveys in your community.
26. Give one danger of buying drugs from local shops.
27. Why is it dangerous to use un prescribed drugs to treat patients?
28. Identify one requirement for a pregnant woman.
29. How is the skeletal system essential to the circulatory system?
30. How does use of condoms help as a family planning method to control population growth?
31. State any one requirement for pregnant mother.
32. How is the human skin similar to the human kidney?
33. How are canines adopted to their function?

34. Besides producing ova, how else are the ovaries useful during reproduction?
35. Besides use of drugs, how else can we prevent the spread of malaria in our community?
36. How does the function of the ligament differ from that of a tendon?
37. How is the ileum able to carry out its function?
38. Identify any two causes of sickness in a home.
39. Identify any two activities carried out during a health parade.

THEME 3: HUMAN HEALTH

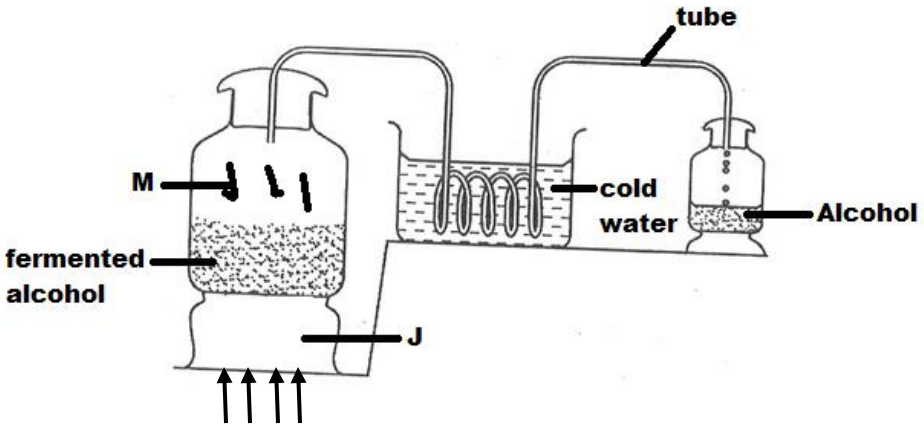
1. Which vector spreads typhus fever?
2. State any one use of a razor blade in promoting personal hygiene.
3. Which deficient disease is caused by lack of Vitamin B_3?
4. How can the breeding of housefly be controlled in our compound?

The diagram below shows a head of a tapeworm. Study it and answer questions 5 and 6.



5. Name the part marked A.
6. How useful is part B to the tapeworm?
7. State any one characteristic of essential drugs.
8. How does mouth to mouth breathing help a victim of near drowning?
9. Apart from eating a balanced diet, give any one other way of controlling common diseases at home.
10. Name one disease that affects lungs because of smoking.
11. Which vaccine is given to prevent three immunisable diseases?
12. State one way in which alcoholism affects the community.
13. Give any one way in which proper disposal of wastes is important to our school.
14. (a) In which one way is each of the following elements of PHC is important to the community?
    (i) Health education
    (ii) Maternal and child health
    (b) Give any two health care services which are provided through maternal and child health.

The diagram below shows one of the method of preparing alcohol, study it and use it to answer question 15.



15. (a) Name the method used in the diagram.
    (b) What do the arrows labelled **J** represent?
    (c) Why is the tube passed through cold water?
    (d) What process forms **M**?

16. **Match the following vaccines to the parts of the body where they are administered into the body.**

List A		**List B**
(i)	Measles vaccine	right upper arm
(ii)	DPT vaccine	mouth
(iii)	BCG vaccine	left upper
(iv)	OPV	left upper thigh

(i) Measles vaccine _____
(ii) DPT vaccine _____
(iii) BCG vaccine _____
(iv) OPV _____

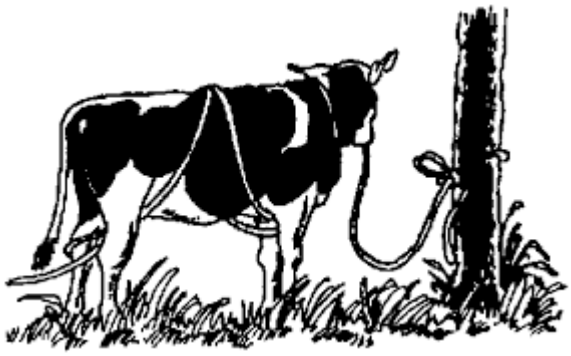
THEME 4 : SCIENCE IN HUMAN ACTIVITIES AND OCCUPATION

1. Name the type of cattle kept to provide labour on the farm.
2. Write down any one activity done to seedlings during hardening off.
3. What type of bee develops from unfertilized eggs in the bee hive?
4. Apart from white leghorn, name any other exotic breed of chicken kept for eggs.
5. Give the main product got from the type of cattle shown below.

6. Which breed of goats is kept for its fibre?

7. What name is given to the fibre obtained from the breed of goats named above?
8. How are crop pests and diseases dangerous in Agriculture?
9. What do we call the act of giving birth in pigs?
10. Name the garden tool that is used to prune excess branches from a plant.
11. How is water important to the circulatory system?
12. Why is a worker bee unable to reproduce?
13. Mention the farming practice which starves pests.

The method below shows one of the method of grazing cows in Uganda. Use it to answer question 14



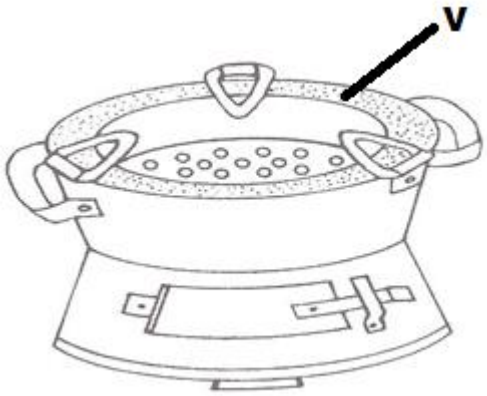
14. (a) Name the method of grazing cows shown in the diagram.
    (b) Give two advantages of the method shown in the diagram above.
    (c) Write down one disadvantage of using this method.
15. (a) State the method that can be used to separate;
    (i) fruit seeds in juice
    (ii) millet seeds mixed with its husks.
    (b) Give the importance of the following steps when cleaning clothes at home.
    (i) sorting
    (ii) soaking
16. (a) Name the two systems of keeping poultry that enable a farmer to keep large number of birds.
    (b) State any two viral diseases that can spread easily in the above systems of poultry keeping.
17. State any one value of a school garden to school children.
18. List down any one product from bees.
19. Identify any two animal fibres used in textile industry.
20. State one factor affecting livestock farmers in Uganda.
21. Give one reason why most farmers prefer keeping cross breeds to exotic breeds of cattle.
22. State the value of legumes to the soil.
23. State one way of caring for crops in the garden.
24. How does the paddock system help to control ticks on a farm?
25. Why do most farmers prefer keeping goats to cattle?

26. State any two values of keeping farm records.
27. State one value of a quarantine in case of a disease outbreak in an area.

THEME 5: ENVIRONMENT

1. Which component of soil is formed from decomposition of organic matter?
2. How are plants replaced as renewable resource?
3. What is the main source of energy in a food chain?
4. Give one example of a living resource in the environment.
5. State one example of plant fibre.
6. Why are alloys made by people?
7. State any one use of plants as a resource.

The diagram below is an energy serving charcoal stove. Use it to answer the questions 8 and 9.



8. Name the material used to make pat **V**
9. How does an energy saving charcoal stove conserve the environment?
10. Why are animals grouped under renewable resources?
11. Name the method of harvesting trees shown below.

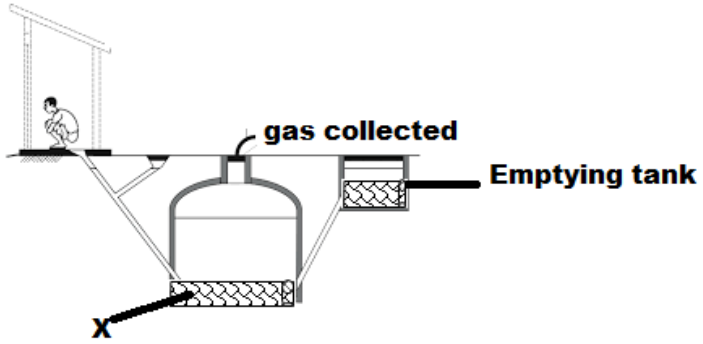
12. State one way of conserving renewable resources.
13. How does leaching reduce soil fertility?
14. State one use of wind as an energy resource.

Below is a food chain, use it to answer question 15 and 16

Beans ⟶ sheep ⟶ lion

15. Name the producer in the food chain shown.
16. How does a lion obtain energy from the beans?
17. How does deforestation lead to soil erosion?

18. Apart from plastics, give one other example of soil pollutant.
19. How are termites important to the soil?
20. Give one example of a non-renewable energy resource.
21. **The diagram below is of a biogas digester. Use it to answer questions that follow.**



(a) Give one material that is placed at part marked **X**.
(b) What process helps in the formation of biogas?
(c) How is bacteria important to part marked **X**?
(d) How is the use of biogas energy affect plants?

22. (a) State any two ways soil is formed.
(b) Give any two causes of weathering.
23. (a) State any two examples of non-renewable energy resources.
(b) State any two ways of conserving non-renewable energy resources.
24. **Match the following correctly.**

	A	**B**
(i)	sun	nuclear energy
(ii)	hot spring	solar energy
(iii)	Uranium	thermal energy
(iv)	crude oil	geothermal

(i) sun _____
(ii) hot spring _____
(iii) Uranium _____
(iv) crude oil _____

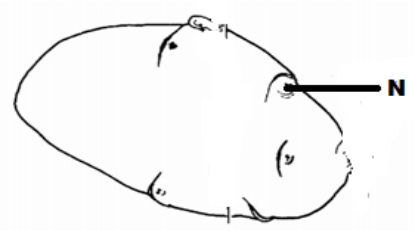
25. (a) Give any two examples of organic manure.
(b) State one advantage of using organic manure.
(c) Why is water added to compost manure during preparation?
26. State one factor necessary for speeding up decomposition of organic matter.
27. State the role of fungi and bacteria in a food chain.
28. Why are animals considered as energy resources?
29. State one advantage of using solar energy over thermal energy.
30. Identify one disadvantage of using wood fuel as a source of energy.
31. State one danger of having many anthills near crop gardens.
32. Why are honey bees regarded as social insects?

33. How does uncontrolled bush burning affect the environment?
34. Why is the dry season suitable for drying harvested crops?
35. How does cloud cover help to influence weather of a given place?
36. State one method used to harvest perennial crops.

THEME 6: THE WORLD OF LIVING THINGS

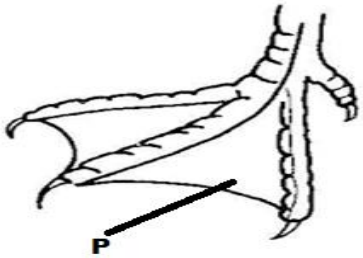
1. How is the respiration of tadpole similar to that of a fish?
2. Give one use of leaves to plants.
3. How are cocoa seeds dispersed?
4. Apart from bacteria, give one other organism that reproduce by cell division.
5. State the characteristic which is common to all insects.
6. To which group of invertebrates does a millipede belong?
7. Give one fungi that reproduce like mosses.
8. In which class of vertebrates do crocodiles and lizards belong?

The diagram below is an Irish potato. Use it to answer questions 9 and 10.



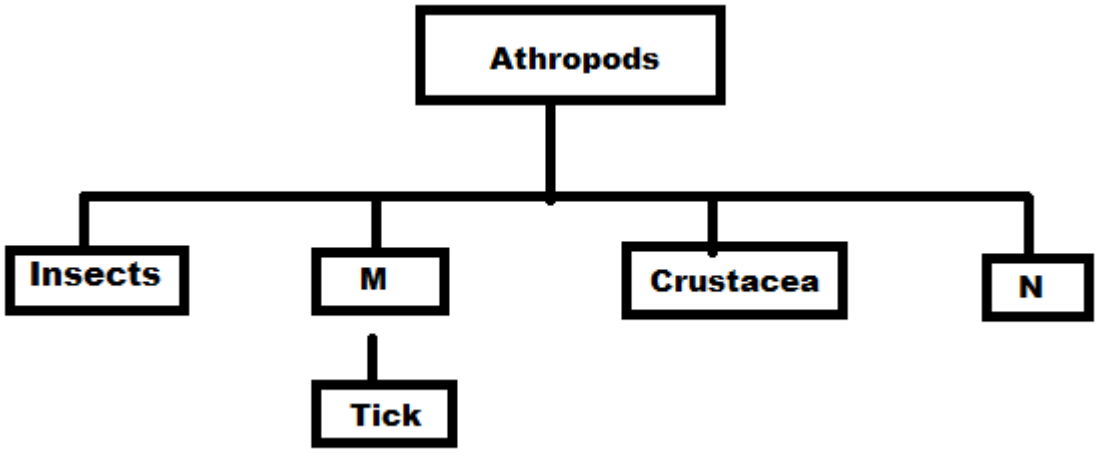
9. Name part marked N
10. How is part N important to an Irish potatoe?
11. Name the female reproductive cells in a flower.
12. How do animals benefit from photosynthesis?
13. Apart from having a backbone, state one characteristic common to all vertebrates.
14. How is yeast useful to people?
15. Which group of cold blooded vertebrates undergo external fertilization?

The diagram below is a foot of a bird. Use it to answer questions 16 and 17.



16. Name the part marked P
17. Which group of birds have the above kind of foot?
18. Name the part of a fish which has similar function like an antennae in insects.
19. Give one agent of pollination.
20. Give one artificial method of plant propagation.

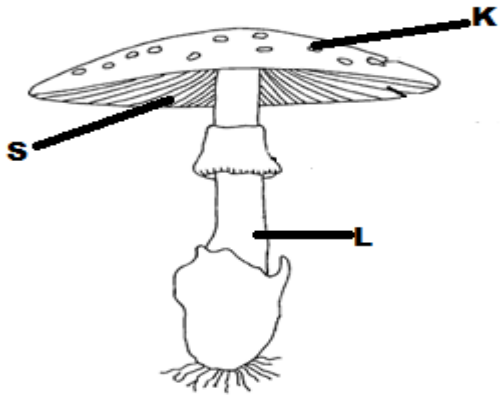
21. **The table below shows classification of a group of invertebrates. Use it to answer questions that follow.**



(a) Name the group of arthropods shown by the letter **M** and **N.**
(b) Give one example of a crustacean.
(c) How are insects different from arthropods in group M?

22. (a) Give any two examples of spore bearing non flowering plants.
(b) Which group of non flowering plants reproduce by means of seeds?
(c) What name is given to the plant response to light?

23. **The diagram below is of a mushroom. Use it to answer questions that follow.**



(a) Name the part marked **K**.
(b) How is part **L** important to a mushroom?
(c) Which part of a flowering plant has the similar function as part **S**?
(d) Why are mushrooms unable to make their own food?

24. (a) State two ways birds are similar to mammals.
(b) How is blubber important to sea mammals?
(c) How are pouched mammals different from other mammals?

25. (a) How are bacteria important to people?
(b) State two ways bacteria is harmful to people.
(c) Identify one respiratory bacterial disease.

26. Name any one part of a plant used as food to man.

27. How are the conifers similar to beans in terms of reproduction?

28. How does an Irish potato differ from a sweet potato in terms of propagation?
29. Why do most butterflies lay their eggs on leafy green plants?
30. How do antelopes differ from cats in terms of feeding?
31. How does a scorpion differ from a cockroach?
32. How do mosses plants obtain their food?
33. Identify any one danger of fungi to man.
34. How are marine mammals adopted to surviving in cold temperatures under the water?
35. Why do most animals move from one area to another?

THEME 7: SCIENCE AT HOME AND IN OUR COMMUNITY

1. Give any one method of making water safe for washing clothes.
2. Why would you prefer a filtrate to a distillate?
3. Give any one use of a distillate in our community.
4. Why is it advisable to construct a latrine downhill a water source?
5. State the importance of fencing water sources.
6. Apart from potassium permanganate, name one other chemical used to treat water for drinking.
7. Write any one example of a water impurity.
8. Name the method of obtaining local salt from ash.
9. In which way is washing cars near water sources dangerous?
10. State any one factor considered when sorting clothes for washing.
11. Give the difference between hard water and soft water.
12. What is mean by safe water?
13. State one disadvantage of boiling as a method of making water safe for drinking.
14. Give any one property of pure water.
15. Below are steps involved in washing and cleaning clothes.

Step	**Importance of the step**
Wringing	To remove stains and reuse washing.
Sorting	Helps to remove soapy water from clothes.
Soaking	Prevent fading clothes from staining unfading clothes.
Rinsing	Helps to remove water from clothes for easy drying.

Write the importance of each step of washing clothes correctly in the spaces below.

(i) wringing: _____

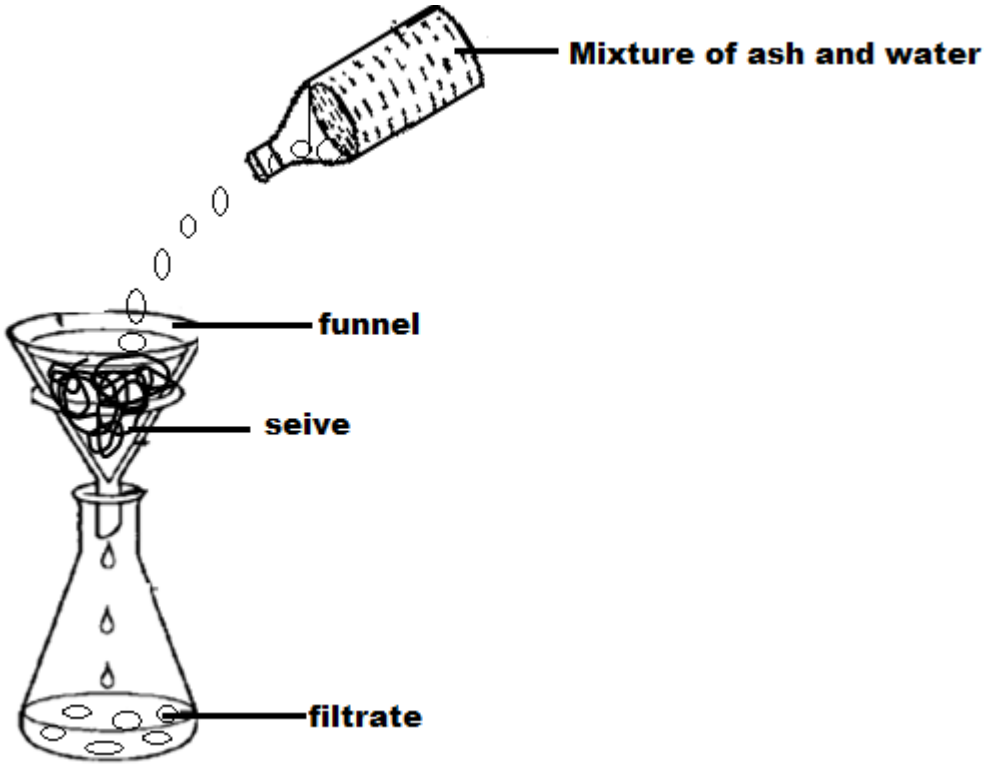
(ii) sorting: _____

(iii) soaking: _____

(iv) rinsing : _____

16. (a) Write any one example of hard water.
    (b) Give any two disadvantages of hard water.
    (c) State any one way of reducing hardness in water.

17. (a) What are water impurities?
    (b) State any two ways water gets polluted.
    (c) In which way is polluted water dangerous to human health?
18. **The diagram below shows a method of obtaining local salt from ash. Study and use it to answer questions that follow.**

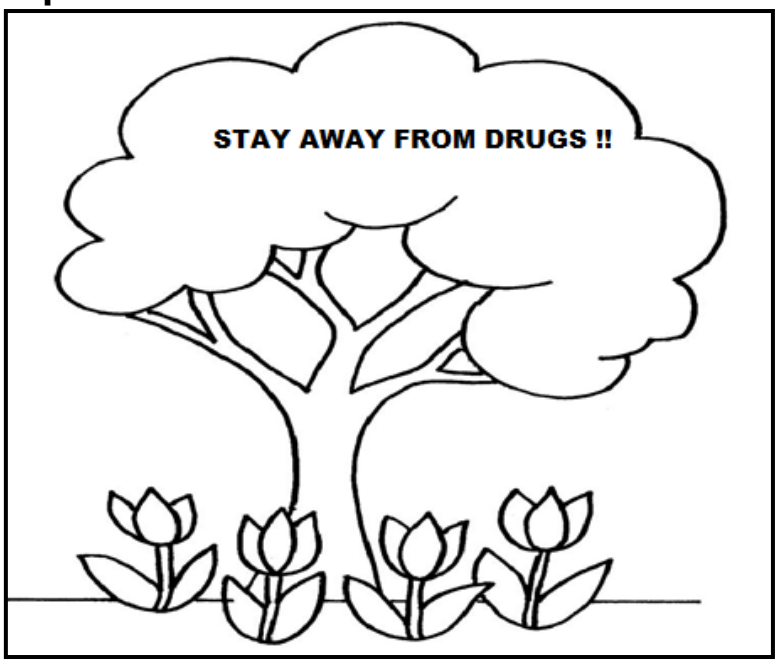


    (a) What is the role of water which is poured into the plant ash?
    (b) Why does the filtrate tastesour?
    (c) Give any two uses of the filtrate obtained in the above method.

THEME 8: THE COMMUNITY, POPULATION AND FAMILY LIFE

1. Name one type of a germ with a cell.
2. Why is lung cancer classified as a self-inflicted disease?
3. State any one cause of poor water supply in the community.
4. How does drought cause inadequate food supply in the community?
5. State any one service provided under maternal and child health.
6. Write any one danger of teenage pregnancy on school pupils.
7. Mention any one example of a social problem in the community.
8. How are child health cards useful to doctors?
9. Apart from germs, write one other cause of common sickness in a home.
10. Name any one mineral salt deficiency disease.
11. In which way is the cause of obesity different from that of diabetes?
12. Mention any one requirement of a good dwelling house.
13. State the causative difference between polio and rickets.
14. Why is it dangerous to swim or walk in contaminated water?
15. How does an HIV positive person differ from an AIDS patient?

16. How are health centres in our communities useful to the community?
17. **Below is a sign post in a school compound. Study and use it to answer question 15**



(a) Which element of PHC is promoted by the message in the sign post?
(b) State any one importance of such a message to adolescents.
(c) Give any two examples of drugs adolescents should avoid.

18. (a) What are anti-social behaviours?
(b) State any two causes of anti-social behaviours.
(c) Give one way of avoiding antisocial behaviours.

19. (a) Apart from diarrhoeal diseases, mention two diseases spread through poor sanitation.
(b) State any one way of controlling such diseases mentioned in (a) above.
(c) Give any one other danger of poor sanitation besides the spread of diseases.

20. (a) Briefly explain the following terms.
(i) Demography
(ii) Health surveys
(b) State one importance of demography.
(c) Write any one activity of a health club in a school.

THE END