TERM TWO

WEEK 1[LUNCH HOUR]

1) Define the following terms

(a)Environment

(b)Soil

2) State any three components of the environment
3) As used in soil, define the following terms:

(i)soil texture

(ii)soil structure

(iii)soil tone

(iv)soil PH

(v)soil drainage

(vi)soil capillarity

(vii)soil profile

(viii)soil exhaustion

(ix)soil fertility

(x)soil leaching

(xi)soil erosion

4) Write down two methods of soil formation.
5) State any two types of weathering
6) Point out any two factors that cause weathering.
7) In which way does temperature cause weathering?
8) How are bacteria and fungi important during decomposition in the soil?
9) State the importance of weathering and decomposition in the environment.

WEEK 1 HOMEWORK

1.Name the uppermost layer of the soil
2.Why does subsoil tend to be rich in mineral salts?
3.Write down any two places where soil profile can be viewed.
4.Give any two types of soil.
5.Which type of soil is the best for agriculture?
6.Give a reason for your answer above.
7.Which type of soil has sticky and compact particles?
8.Why is clay soil said to be poorly aerated?
9.Point out any two examples of ceramics.
10.Identify any two examples of crops that grow well in swamps.
11Why are some plants unable to grow in waterlogged areas?
12.Which type of soil has **coarse**/rough texture?
13.Why is sand soil said to be well aerated?
14.Give any two uses of sand soil
15.During soil experiment in terms of capillarity,talk about sand soil.
16.Why does sand soil have the highest water drainage/permeability?
17.Why does clay soil possess the lowest permeability?
18.Outline any two elements of soil
19.Which soli component occupies the largest percentage?
20.Which soil component is formed by decomposition?
21.Give any one **organic component** of soil apart from **soil organisms.**
22.Identify any one inorganic component of the soil.
23.What scientific name do give to water that is useful to plants?
24.Give any two uses of water in the soil.
25.Exavier, P.5 guy got a lump of soil, placed in a glass of water and kept observing the change.

(a)Which observation do you guess he might have seen?
(b)What does the experiment above show about soil?

WEEK 2[LUNCH HOUR]

1. In which way is the heat source important during an experiment to show that soil contains humus?
2. What is meant by the term air?
3. State any two uses of air in the soil.
4. Mention two groups of living things that help in decomposition.
5. State any two functions of humus in the soil.
6. How does humus keep warmth in the soil?
7. What does smoke show when soil is heated strongly?
8. By which means do plant roots absorb water and mineral salts from the soil?
9. Which component of air is used by plants to make:

a) starch?
b) Proteins?

10. When soil was added in beaker of water, stirred and filtered to remove the residue then residue /filtrate boiled to dryness, Custs of salt are seen in a beaker.What do the custs of salt show about soil?
11. State any two living components of the soil.
12. When soapy water is poured on the garden soil, after few minutes,any earthworms present comes above the soil.What does that show about soil?
13. Give any one importance of living organisms in the soil.
14. 26.Why is sand soil not good for cultivation?

WEEK 2 HOMEWORK

1) How do soil living organisms aerate the soil?
2) How are putrefying bacteria important in the soil?
3) By which process are rocks in the soil formed?
4) What causes soil erosion?{give3}
5) Give any one cause of soil leaching.
6) Identify at least two agents of soil erosion.
7) How does deforestation lead to soil erosion?
8) Define the term deforestation.
9) Give any two reasons why people practice deforestation.
10) Mention any two effects of deforestation in the community.
11) Point out any two ways of controlling soil erosion the community.
12) How does tree planting help in controlling soil erosion?
13) In which way does terracing control soil erosion?
14) Identify any two types of soil erosion.
15) Which type of soil erosion occurs when top soil is uniformly removed by wind or flowing water?
16) Point out any three effects of soil erosion.
17) Define the term silting.
18) Outline any two dangers of silting.
19) Define the term soil conservation .
20) State any two ways of maintaining soil fertility.
21) What is mulching?
22) Give any two examples of mulches.
23) Why do farmers mulch their gardens?[give two]
24) How dangerous is mulching to crop growers?

WEEK 3[LUNCH HOUR]

1) Define the term crop rotation.
2) Give any two factors considered when carrying out crop rotation?
3) Why do crop farmers carryout crop rotation?[Give two]
4) What term refers to the practice of leaving land to rest for sometime?
5) How is the practice you have given above important ?
6) Define the term fertilizers.
7) Give any two methods used by crop farmers to apply fertilizers.
8) Give two types of fertilizers.
9) Point out any two types of natural fertilizers.
10) Why is compost manure called inorganic fertilizer?
11) Identify any two materials from which Farmyard manure is made.
12) Which type of manure is got when crops and grass have decomposed?
13) Identify the two methods by which compost manure is made .
14) Why are faeces not always used as manure?
15) Point out at least two advantages of natural fertilizers.
16) Though advantageous on one side, give any one disadvantage of natural fertilizers.
17) What are artificial fertilizers?
18) Give the two types of inorganic fertilizers.
19) DSP is an example of straight fertilizers.Write it in full.
20) Write down any one compound fertilizers.
21) How is using artificial fertilizers advantageous over natural fertilizers?
22) Define the term agroforestry.
23) Give at least two advantages of agroforestry.

WEEK 3 HOMEWORK

1) Define soil pollution.
2) Point out any two soil pollutants.
3) State any two ways of polluting soil.
4) Give any one effect of harmful materials in the soil.
5) Identify any two ways of controlling soil pollution.
6) Of the 5R's,write any of the two words.
7) As in matter and energy, define the following terms:
   (i)cohesion
   (ii)adhesion
   (iii)viscosity
   (iv)matter
   (v)energy
8) State any three examples of matter.
9) Point out any two things that are not regarded as matter.
10) Give at least two properties of matter.
11) Why is air called matter?
12) What is matter made up of ?
13) What name is given to the smallest particles that make up matter?
14) State the three states of matter.
15) Which matter exists in all three states of matter?
16) In which state of matter are molecules farthest apart?
17) Which state of matter has the smallest density?
18) In which state of matter does sound travel slowest?
19) In which state of matter does heat travel slowest?
20) Point out any two examples of matter in gaseous state.
21) Why do liquids flow?

22) How does heat travel through liquids and gases?
23) Which physical process takes place when liquids turn into gases?
24) Point out any two examples of matter that are in liquid state.
25) Define the term viscous liquids.
26) Identify any two examples of viscous liquids.
27) In which state of matter are molecules are farther apart?
28) In which state of matter do the examples have shape?
29) By which form of heat transfer does heat travel through solids?
30) In which state of matter do we find the greatest density?

WEEK 4[LUNCH HOUR]

1) In which of matter does heat travel fastest?
2) By which physical process do solids turn into liquids?
3) When solids turn into gases directly without passing through liquid state,it is called sublimation.Which process is it when gases turn into solids directly?
4) What are physical changes?
5) Why are all changes in the states of matter called physical mchanges?
6) Identify any two examples of physical changes you know.
7) Which physical process is it when liquids turn into gases?
8) By which process is dew formed?
9) Which form of energy causes melting?
10) Why is dew formed at night?
11) State any two substances that can melt.
12) By which physical change does liquid change into solid?
13) Point out any two examples of sublimates.
14) By which process is snow formed?
15) Give any two physical processes caused by heat loss.
16) What a mixture?
17) State any example of mixture.
18) Give two types of mixtures.
19) Staten any two types of solutions.
20) Define then term solute
21) Give any two solute you know.
22) What are soluble substances?
23) Why does salt dissolve in water?
24) Define a solvent
25) Give any one solvent you know.

WEEK 4 HOMEWORK

1) What are insoluble substances?
2) Why is water called a universal solvent?
3) Give any two methods of separating mixtures.
4) What name is given to the following during filtration?
5) (i)solid particles:
6) (ii)clear liquid:
7) Why is water obtained by filtration not good for drinking?
8) How can decanted water be made safe for drinking?
9) What scientific name is given to the pure liquid obtained during fractional distillation?
10) State any one use of distilled water.
11) Give any one dander of distillation.
12) Identify any one physical process in distillation.
13) Why is the delivery tube always coiled in distillation process?
14) Which method can one use to separate solid substances where one sinks and another one floats on water?
15) Give any one example of such mixtures separated by flotation.
16) Which method can one use to separate iron bits from maize flour?
17) How can a crop farmer separate stones from rice?
18) How can we remove hulls from rice grains?
19) Mixtures of liquids can be separated by using two methods .Mention any one of them.

WEEK 5[LUNCH HOUR]

1. What term refers to the process of making a concentrated solution weak?
2. Give any one example of dilution.
3. What is diffusion?
4. Give one example of diffusion.
5. What is energy?
6. What is the main source of energy in the environment?
7. Apart from the main source, give other two sources of energy.
8. Identify any two forms of energy.
9. Give the two types of energy
10. Which type of energy is possessed by sacks of charcoal parked in a moving lorry?
11. Which type of energy is possessed by a ball thrown in air?
12. Which form of energy increases the temperature of an object?
13. Name the instrument used to measure heat.
14. In which units is temperature measured?
15. Give two types of sources of heat stating one example in each case .[4mks]
16. How useful is heat in the environment?[give two]

WEEK 5 HOMEWORK

1. What do we mean when we say heat is a disinfectant?
2. Give any one danger of heat.
3. How does heat affect matter?
4. What happens to matter when it is heated?
5. What happens to a hot piece of metal is cooled?
6. What happens to matter's density when matter is heated?
7. What happens to mass when matter is heated ?
8. Why do gases experience the greatest expansion?
9. Give one way you can make use of expansion.
10. State any one danger of expansion.
11. Why are gaps always left in between the railway lines during construction?
12. During hot weather, electric wires are seen sagging.Why?
13. How can lumbermen prevent their timber from warping?
14. What happen to the gaps between the railway lines during sunny weather?
15. Why is there a space left on top of when filling soda bottles?
16. Andrew , a p.5 child entered a cold metallic ball through a ring easily.He later heated the ball and tried entering it through the ring again and it could not .Why couldn't the hot ball pass through the ring?
17. By what means does a heated alloy bend over the metal that expands slowly ?
18. What name is given to a device that turns on or off electric appliances due to temperature change?
19. Identify any two appliances that use thermostats.
20. What happen when an inflated balloon is placed under sunshine for some time?
21. Why did the balloon do so?
22. Which property of air is shown by an inflated balloon?
23. Why are wires seen very tight during cold days?
24. Why does a very hot glass break suddenly when put in cold water?

WEEK 6[LUNCH HOUR]

1. How do electric wires appear on cold days?
2. How do electric wires appear on hot days?
3. Why electric wires appear sagging on hot days?
4. Which type of weather makes electric wires appear tight?
5. Define heat insulators.
6. State any two examples of heat insulators you know.
7. Identify any one application of heat insulators in our daily life.
8. Why do clay charcoal stoves use less charcoal?
9. How do clay charcoal stoves reduce on deforestation?
10. Why are handles of kettles and iron boxes made of insulators?
11. Why are electric wires covered with insulators?
12. Why is wool regarded as a better insulator than cotton?
13. How do sweaters keep our body warm?
14. What are heat conductors?
15. Why do most welders use aluminium to make most of the utensils?
16. Where in our daily life can we apply good conductors of heat?[give one]
17. What are heat reflectors?
18. State any two examples of heat reflectors.
19. Give any one application of heat reflectors in our daily life.
20. Define the term heat absorbers.
21. State bone example of a heat absorber.
22. Give a reason why a person wearing a black shirt feels hot quicker than the one wearing a white shirt .
23. Which property of air enables clothes to dry?
24. State three methods of heat transfer.
25. Among the three methods given above, which one is not involved in matter?

WEEK 6[LUNCH HOUR]

1) How does heat move through vacuum?
2) Define the term vacuum .
3) Why doesn't vacuum allow heat transfer by conduction and convection?
4) Point out any two ways of managing heat in our daily life.
5) By which method of heat transfer does heat travel through fluids?
6) What currents enable us boil water?
7) What causes convectional currents?
8) When boiling water, how does heat reach water in the saucepan ?
9) Give any two importance of convection of heat in the environment.
10) What term refers to the continuous movement of air?
11) Identify any two components of ventilation on a house.
12) Why should a house be properly ventilated?
13) What role is played by windows and doors on a house?
14) Why are ventilators put above the doors and windows?
15) Give any one difference between fresh air and stale/used air.
16) How is the screen useful on a VIP latrine?
17) Why should there be a door on a latrine?
18) Which fuel is used in charcoal stove?
19) State what happens when wood is burnt under:

A. limited supply of Oxygen:
B. plenty of Oxygen:

WEEK 7 HOMEWORK

1. Identify any one advantage of using clay charcoal stove over metallic ones.
2. How has the government of Uganda helped to reduce deforestation for firewood?
3. Identify two types of breezes.

4. Which type of breeze occurs at night?
5. Why does land breeze occur at night?
6. Which reason could you give to support the statement that **the sea is cool during day time?**
7. By which method does heat travel through solids?
8. Identify any one material one needs to carry out an experiment to show that heat travel through solid by conduction .
9. How does heat travel from one point to another point in a metallic iron bar?
10. State any one application of conduction of heat in our daily life.
11. Why is the glass chimney of the lantern lamp made transparent?
12. State the role of the lever on a lantern lamp.
13. How does paraffin move up the wick in a lantern lamp?
14. Why is petrol not used in lantern lamps?
15. Which heat transfer method does not need any medium?
16. How important is radiation in our daily life?[give two]
17. How does heat from the sun reach the earth to dry wet clothes?
18. State the use of the thermos flask in our homes.
19. State the use of the cork/stopper on a thermos flask.
20. Identify any two materials used in making cork.
21. Why don't most homes use thermos flasks?

WEEK 7 HOMEWORK

1) What is temperature?
2) Which instrument is used to measure temperature?
3) Point out any two units for measuring temperature.
4) Identify two types of temperature scales you know.
5) Define the term fixed point.
6) Name any two fixed points on temperature scales.
7) Point out any two types of thermometers .
8) What name is given to the type of thermometer that measures the human body temperature without direct contact?
9) Give any one adaptation of the clinical thermometer to work .
10) Why does the temperature scale of a clinical thermometer start from 35 °C?
11) Why does the temperature scale of a clinical thermometer end from 42 °C?
12) Why is a clinical thermometer not disinfected using boiling water?
13) Which liquid is used to sterilize the clinical thermometer?
14) Why should a clinical thermometer be sterilized before use?
15) Why do doctors give jerks to the clinical thermometer before use?

WEEK 8[LUNCH HOUR]

1) How can a clinical thermometer be reset?
2) Which part of the clinical thermometer prevents the back flow of mercury?
3) Apart from mercury, which other liquid can be used in a clinical thermometer?
4) Why is the bore of the clinical thermometer narrow?

5) How is the bulb important on a clinical thermometer?
6) Name any three human body parts where a clinical thermometer can be placed.
7) Give one reason why doctors put the clinical thermometer in the above certain parts .
8) Why is the clinical thermometer put under the tongue but not in the mouth?
9) State any one reason why most doctors use mercury in clinical thermometers.
10) State any one reason why most doctors ignore the use of alcohol in clinical thermometers.
11) Point out any one thermometer that uses both mercury and alcohol.
12) Identify any one disadvantage of using mercury in clinical thermometers.
13) What are thermometric liquids?
14) State one disadvantage of using water in thermometers.
15) How is the six's thermometer reset?
16) Write the formula used to convert the temperature from:

a) degrees Fahrenheit:
b) degrees Celsius:

17) Which standard formula could use to change from either scale of temperature?

WEEK 8[LUNCH HOUR]

1) Change the following scales as required.[8mks]
   (i) 0°C
2) (ii)100°C
3) (iii)32°F
4) (iv)212°F
5) Why is combustion called a chemical change?
6) Name the two forms of energy released during burning of wood.
7) Point out any other condition needed for burning to occur besides oxygen.
8) What are combustible substances?
9) Point out any two classes/groups of fuels.
10) Give any one example of liquid fuel.
11) State any two examples of solid fuels.
12) Point out any one example of gaseous fuel.
13) What are inflammable/flammable gases?
14) Give any one example of a flammable gas.
15) Identify any two regions of flame of fire.
16) Give any two gases that do not burn.
17) Which component of air is necessary when:

a) burning a candle?
b) putting out fire using a fire extinguisher?

18) Apart from using a fire extinguisher ,give one other way you can put out fire.
19) Why is it not advisable to use water when putting out petrol fire?

WEEK 9[LUNCH HOUR]

1. Why is Carbon dioxide used in fire extinguishers?
2. Give a reason why fire extinguishers are painted with bright colours?
3. Write the first and the last steps taken when using a fire extinguisher.
4. Which type of change is rusting?
5. Why have you given such a type of change above?
6. State two conditions necessary for rusting to occur.
7. What is the role of moisture during rusting?
8. How is rusting important to the soil?
9. Give any two disadvantages of rusting.
10. Point out any two ways of preventing rusting and corrosion.
11. How does painting prevent rusting?
12. Why can't an oiled hoe easily get rust when left outside bat night?

GROWING TUBER CROPS

13. Define tuber crops.
14. State two groups of tuber crops.
15. What are root tubers?
16. State any three examples of root tubers.
17. State the way we can propagate the following crops:

a) carrots:
b) cassava:
c) (c)sweet potatoes:

18. What term refers to the swollen underground stems with stored food?
19. Identify any two examples of stem tubers.
20. How are yams propagated?
21. Point out two methods of sowing crops.
22. Give any two pests that can attack tuber crops.

WEEK 9[LUNCH HOUR]

1. Mention any one disease that attacks tuber crops.
2. Give two ways tuber crop farmers can control their crops against pests.
3. Identify any one method crop farmers may use to harvest tuber crops.
4. Give any one example of science oriented club in your school.
5. How can a certain science oriented club be important to you as a member?{give one}

6. What name is given to a large group of bacteria?
7. Point out any two characteristics of bacteria.
8. Why are bacteria called single celled organisms?
9. What helps a doctor to magnify the bacteria so that he/she is able to see them well?
10. Which structure enable the bacteria to move ?
11. Identify any one condition needed for bacteria to reproduce?
12. How do bacteria multiply?
13. Apart from bacteria,give any other two organisms that reproduce in the same way as the bacteria.
14. How are bacteria named?
15. State any two types of bacteria.
16. What name is given to the bacteria that do not need oxygen for respiration?
17. Give any one way bacteria can enter in our bodies.

WEEK 10[LUNCH HOUR]

1. Which bacteria fix Nitrogen in the soil?
2. Bacteria help in production of vinegar.How in vinegar useful to a person who sells meat?
3. How are maggots important in our latrines?
4. Point out any one process that needs bacteria to take place .
5. What are harmful bacteria?
6. In which one way can bacteria be nuisance in the environment.
7. What name is given to the hormone responsible for ripening of mature fruits?
8. Identify any one diseases spread by bacteria to people.
9. Define the term pathogens.
10. State any one way bacteria can be of great use to medical doctors.
11. Identify any one example of useful bacteria.
12. Give one way we can prevent the dangers caused by harmful bacteria?
13. What are antiseptics?
14. Why do most people put iodine on the cuts?
15. Define the term antibiotics?
16. Give any one example of an antibiotic drug.
17. What are disinfectants?
18. State any one example of a disinfectant you use at your home.
19. To which kingdom do the fungi belong?
20. Why are fungi unable to make their own food?
21. How do fungi feed ?
22. Which type of nutrition do fungi possess?

WEEK 10[LUNCH HOUR]

1. Sate the mode of multiplication among the following given organisms:
a) fungi:
b) yeast:
2. Point out any one characteristic of fungi.
3. Identify any one condition necessary for fungi to grow.
4. List down any two examples of fungi.
5. What does someone mean when he/she says 'some mushrooms are edible'?
6. Which part on a mushroom produces and stores spores?
7. What name is given to the structures that help to absorb food from dead decaying matter for mushroom?
8. Which fungi helps in fermentation of alcohol?
9. Give any one example of a mould.
10. Which example of fungi is used in laboratories to make penicillin?
11. Identify any one use of fungi to an individual.
12. Point out any one way how fungi can be a nuisance to people.
13. Outline any one fungal disease in people.
14. List down any one way we can control and prevent fungal diseases amongst ourselves.
15. Give any two similarities between fungi and bacteria.
16. Identify any one difference between fungi and bacteria.
17. Write down any one great scientist you know giving what he/she did .

By tr.**NKURUNUNGI ALEXANDER**[Kyakabale]

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