

## **P.3 LITERACY 1A LESSON NOTES FOR TERM I**

### **THEME: ENVIRONMENT IN OUR SUB – COUNTY**

- Definition of environment
- Components of the environment

#### **TOPIC 1: OUR SOIL**

- ✓ Definition of soil
- ✓ Components of soil and their uses.
- ✓ Experiments about soil components
- ✓ Types of soil
- ✓ Description of each type of soil
- ✓ The general importance of soil
- ✓ Soil profile
- ✓ Soil erosion
- ✓ Crop rotation
- ✓ Mulching

#### **TOPIC 2: Natural and people made changes in our environment**

- ✓ Definition of environment.
- ✓ Components of the environment.
- ✓ Changes in the environment ( n &m.m)
- ✓ Definition of each
- ✓ Examples of each
- ✓ Effects of each type of change.
- ✓ Controlling each type of change.

#### **Topic 3: Air**

- ✓ Definition of air
- ✓ Components of air.
- ✓ Percentage composition of each component.
- ✓ Uses of each component of air.
- ✓ Games played using air.
- ✓ Diseases which spread through air.
- ✓ Properties of air.
- ✓ Experiment for each property.
- ✓ Application of each property of air.

#### **Topic 4: weather changes in our environment**

- ✓ Definition of weather.

- ✓ Elements of weather.
- ✓ Types of weather
- ✓ The sun (sunshine)
  - i) Where it sets and rises.
  - ii) Forms of energy from the sun.
  - iii) Shadows
  - iv) Uses of the sun
  - v) Dangers of the sun
  - vi) Definition of drought
- ✓ Clouds
  - i) Types of clouds
  - ii) Uses of clouds
  - iii) Dangers of clouds
- ✓ Rain
  - i) Definition
  - ii) Rain formation(processes)
  - iii) Importance of rain
  - iv) Dangers of too much rain
  - v) Weather instruments
- ✓ Wind
  - i) Definition
  - ii) Uses of wind
  - iii) Dangers of wind
  - iv) Games played using wind
  - v) Wind instruments
- ✓ Seasons
  - i) Definition
  - ii) Types of seasons
  - iii) Activities done in each season.
  - iv) Materials in each season
  - v) Uses of each item.

### **Topic 5: Managing water**

- ✓ Sources of water i.e. natural and man made.
- ✓ Uses of water.
- ✓ How to protect water sources.
- ✓ Harvesting water
- ✓ Sanitation
- ✓ Definition

- ✓ Activities and items
- ✓ Components of a clean home.
- ✓ Uses of each component
- ✓ Importance of proper sanitation
- ✓ Germs

## LESSON 1

### CONTENT: ENVIRONMENT

- *Environment is the natural surrounding of an organism.*

#### Components of the environment

- *soil*
- *plants*
- *water*
- *animal*
- *air*

### CONTENT: SOIL

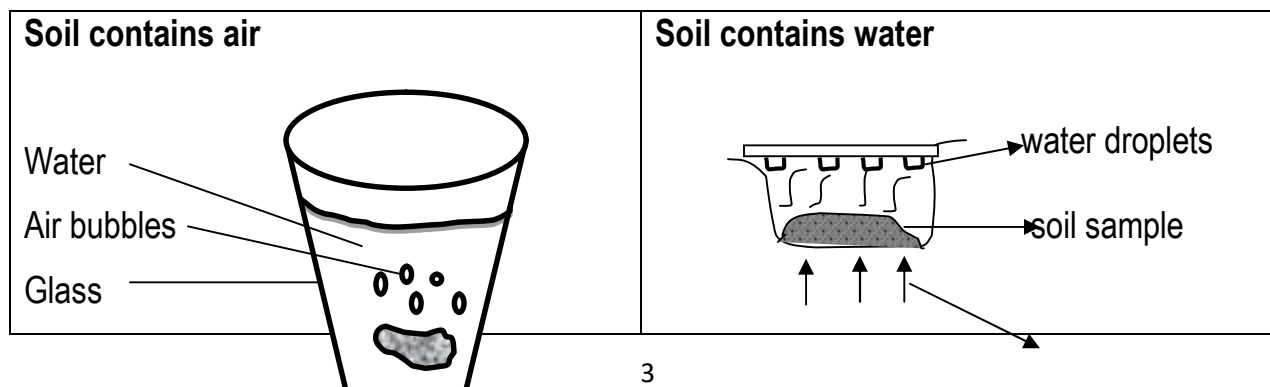
- Soil is the top most loose layer of the earth's surface.

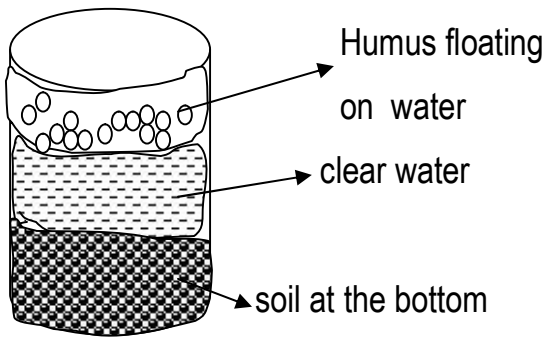
#### Components of soil

These are things which make up soil. They include

- Rock particles
- Air
- humus
- Water
- Bacteria and fungi (living organisms / component)
- *NB. Bacteria is a microorganism component of soil.*

#### ***Experiment to demonstrate the components of soil***



Lump of soil _____	heat source
<b>Soil contains Humus</b>  <p>The diagram shows a glass jar containing three distinct layers. The top layer consists of small circles representing humus floating on a liquid. The middle layer is a clear liquid representing water. The bottom layer is a dark, textured material representing soil. Arrows point from the text labels to their respective layers in the jar.</p> <p>Humus floating on water</p> <p>clear water</p> <p>soil at the bottom</p>	

### Exercise

1. What is soil?
2. Mention any one component of soil.
3. Identify any two processes that lead to soil formation.
4. How is humus formed?
5. Why is loam soil the best for crop growing?
6. Give the meaning of environment
7. Write down any two components of the environment

## LESSON 2

### CONTENT: SOIL FORMATION

- **Weathering:** This is the breakdown of rocks into smaller particles to form soil.
- **Decomposition:** This is when dead matter (dead plants and animals) decays or rot to form soil.

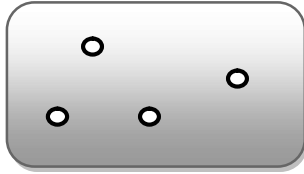
### Types of soil ( Text book teaching) / practical lesson on soil texture

- Loam soil
- Clay soil
- Sandy soil

**Loam soil** : It is made up of humus,clayand sand.

- It is the best soil for crop growing because it has a lot of **humus** or *it is more fertile*
- *It is also well gerated*
- Humus makes loam soil **fertile**.
- Humus is formed when dead plants and animals **decay** (rot)

### **Structure of loam soil**



### **Uses**

- For growing crops

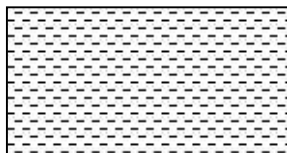
## **LESSON 3**

### **CONTENT: Clay soil**

- It has very fine powdery particles which dry
- It is sticky and heavy when wet.
- It holds water for a long time because it is smooth.

### **Uses of clay soil.**

- For making cups, plates and pots.
- For making bricks.
- **Source of clay**
- Swamps.
- **Structure of clay soil**



**Note: *Ceramics are burnt items made out of clay***

**e.g** pots, bricks, charcoal stoves, plates, cups,

**Note:** pots are used for storing water in a home.

### **Exercise**

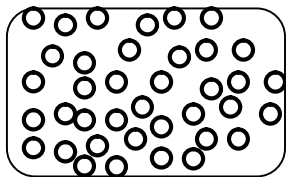
1. Who is a potter?

2. Why is clay soil not good for crop growing?
3. Identify any one material made from animal hides and skins.
4. Mention any two characteristics of living things.
5. *Identify the micro organism found in soil.*
6. *How is humus formed?*
7. *Give one component of humus*

## LESSON 4

### CONTENT: SANDY SOIL

- It is made up of rock particles.it has little humus.
- It dries up easily and quickly because it has large pores which drain water easily .
- **Uses of sand soil**
- For building houses
- For making glasses
- Washing saurce pans at home
- For filtering water
- **Structure of sand soil**



### General uses of soil

- a) *For crop growing*
- b) *For making bricks*
- c) *For construction*
- d) *For art work ie. Modeling / pottery*

### **Exercise**

1. What is a habitat?
2. Mention any three animals which live in soil.
3. Identify any one way of promoting personal hygiene.

4. Why do we bathe?
5. Name any one useful insect you know.
6. *State any two uses of sandy soil to people.*

## LESSON 4

### CONTENT: SOIL PROFILE

- Is the natural vertical arrangement of soil layers.

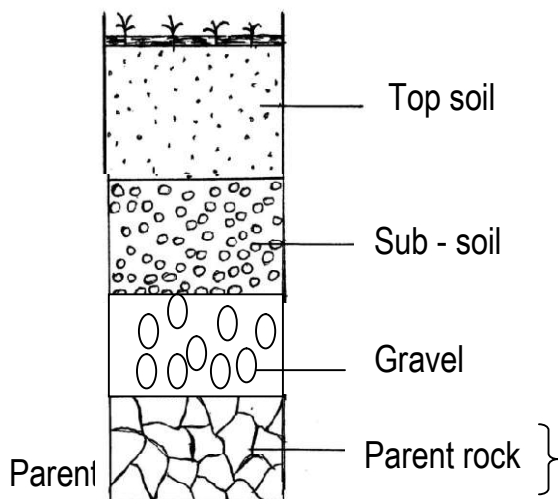
**Or**

- Soil profile is the natural arrangement of soil layers from top to bottom.

- **Layers of soil**

- |            |               |            |
|------------|---------------|------------|
| ▪ Top soil | ▪ Gravel      | } Bed rock |
| ▪ Sub soil | ▪ Parent rock |            |

- **Structure of the soil profile**



- **Places where the soil profile is seen**

- In the quarry
- In new dug pits

### **Mixed activity 3**

1. Which layer of the soil profile is good for crop growing?
2. Mention any one harmful insect.
3. How many main body divisions does an insect have?
4. Why do we boil drinking water?

5. State one layer of the soil profile which provides stones for building houses

### **Soil fertility**

*Soil fertility is a condition when soil has enough nutrients for plant growth.*

#### **Ways of improving soil fertility**

- i) Adding manure to soil*
- ii) Crop rotation*
- iii) Mulching*
- iv) Planting trees*

#### **Ways soil can lose its fertility.**

- i) Through soil erosion.*
- ii) Through poor methods of farming e.g Mono – cropping.*
- iii) Through over grazing*
- iv) Through over cultivation*

## **LESSON 6**

### **CONTENT: SOIL EROSION**

- Is the removal of top soil by its agents.

#### **Agents of soil erosion**

- Flowing water
- Strong wind
- Moving animals

#### **Types of soil erosion**

- Sheet erosion
- Gully erosion
- Rill erosion
- Rain drop erosion/ splash

#### **Causes of soil erosion**

- Bush burning
- Over grazing
- Deforestation
- Over cultivation  
or mono cropping

#### **Ways of controlling soil erosion in the garden**

- Mulching
- Strip cropping



- Cover cropping
- Bush fallowing
- Crop rotation

#### **Ways of controlling soil erosion in hilly areas**

- Contour ploughing
- Terracing

#### **How to control soil erosion in the compound**

- Paving the compound
- Planting grass in the compound

#### **Mixed activity**

1. What are domestic animals?
2. Why do chameleons change their color?
3. What is soil erosion?
4. Mention any one agent of soil erosion.
5. How is humus formed?
6. Name the layer of the soil profile which supports crop growth
7. *How can we control soil erosion at school*

## LESSON 7

### CONTENT: CROP ROTATION

- Is the growing of different types of crops on the same piece of land season after season.

#### ***Groups that be grown under crop rotation***

1 <sup>st</sup> season	2 <sup>nd</sup> season	3 <sup>rd</sup> season
millet	beans	tomatoes
cabbage	millet	beans
beans	cabbage	maize

- **Advantages of crop rotation**
- Crop rotation keeps the soil fertile.
- Crop rotation controls pests.
- Crop rotation controls soil erosion.

**NB.** *Crop rotation controls pests by breaking the life cycle of pests.*

#### **Mixed activity 7**

1. How does crop rotation help in the control of pests?
2. Mention two components of soil.
3. Which type of soil is used for making pots
4. In which one way can farmers control soil erosion in hilly areas?
5. Which soil type is used for making glasses?
6. How does crop rotation contribute to high yields.

## LESSON 8

### CONTENT: MULCHING - *out of class lesson*

- Is the covering of top soil with dry plant materials.
- **Examples of mulching materials (mulches)**
- Dry grass and leaves.
- Coffee husks
- Rice husks

- Saw dust (wood shavings)

- **Advantages of mulching**

- Mulching controls soil erosion
- Mulching keeps the soil fertile.
- Mulching controls weeds.
- Mulching keeps water in the soil

- **Disadvantages of mulches**

- Mulches can easily catch fire.
- Mulches can become weeds.
- Mulches keep pests

### **Mixed activity 8**

1. Mention any two garden tools you know.
2. Write down any one way of caring for garden tools.
3. State the importance of air in the soil
4. How is soil important to a rat?
5. Which type of soil friendly to potters?

## **LESSON 10**

### **TOPIC 2**

#### **CONTENT: CHANGES IN OUR ENVIRONMENT**

- **What is environment?**

- Is the natural surrounding of an organism.

- **Components of the environment**

- Plants
  - Animals
- } living components

- Air
  - Soil
  - Water
- } Non – living components

### **Changes in our environment**

- To change means to make something different from its original form.
- **Types of changes**
- Natural causes of changes
- *People made causes of changes*
- **Natural causes of changes**
- These are changes which take place in nature *or Natural changes that occur by nature*
- **Examples of natural causes of changes**
- floods
- storms
- drought
- hail stones
- lightning
- *land slides*
- earth quakes
- *volcanic eruption*

### **Mixed activity 8**

1. What are people made changes?
2. Mention any two components of soil
3. Name the component of soil which makes it fertile.
4. How does mulching control soil erosion.
5. Why should school have lightning arresters?
6. Give the meaning of crop rotation.

- **Effects of changes in the environment**
- They lead to soil erosion.
- They lead to diseases
- They lead to death of animals and plants
- They lead to famine.

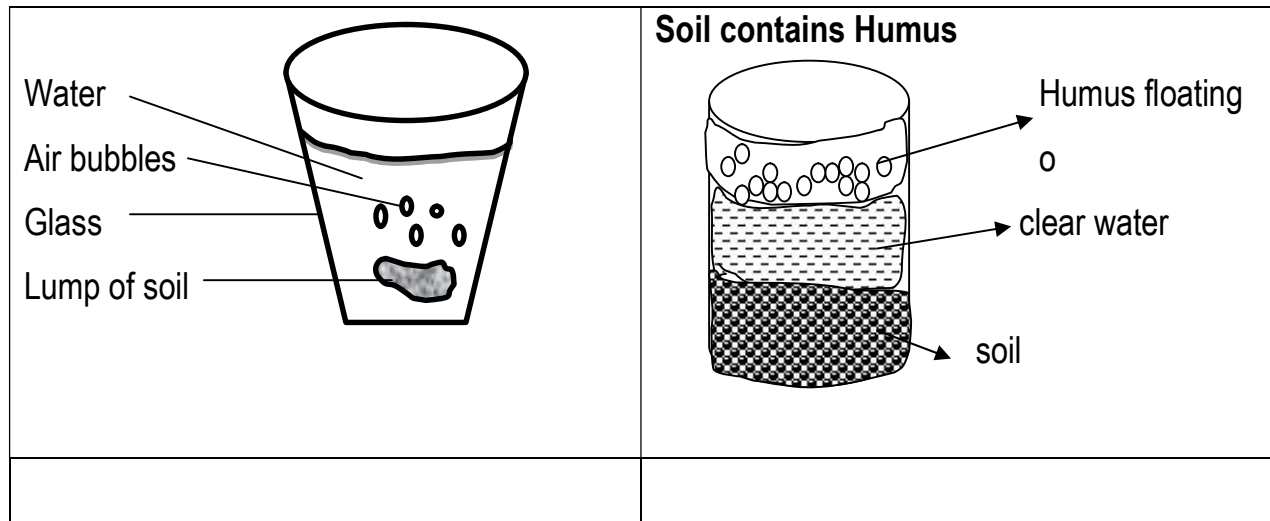
- *They lead to the destruction of people's property.*
- **People made causes of changes**
- *These are changes brought by human activities.*
- **Examples of human activities**
- *Making of bricks*
- *Grazing*
- *Charcoal burning*
- *Building of roads*
- *Cutting down of trees (deforestation) bush, burning, swamp, drainage*
- *Lumbering*
- *Road construction ( building of roads)*
- *Farming*
- **How to control changes /managing changes**
- *Planting more trees.*
- *Using lightning arresters to control lightning*
- *Avoid burning bushes*
- *Educating people about the about the dangers of cutting down trees*
- *Proper farming method. Ie. Mulching & crop rotation*
- *Preserving swamps*
- *Covering gullies with stones*

### **Topical test**

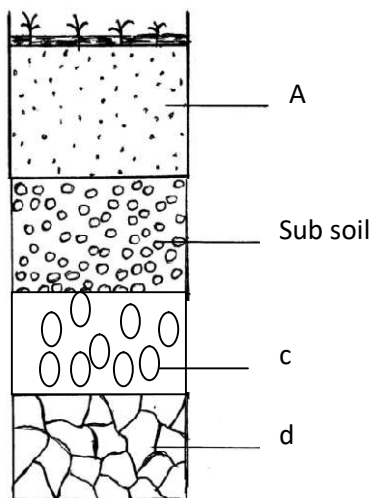
#### **Environment and Weather in Our Environment**

1. *What do we call the top most loose layer of the earth's surface?*
2. *Give any one type of soil.*
3. *Why is loam soil the best for crop growing?*
4. *How do earth worms benefit from the soil?*
5. *Identify any two processes that lead to soil formation*
6. *Why does sandy soil lose water quickly?*
7. *How do earth worms help in aeration of the soil?*

8. Draw and name any two ceramic materials
9. Name the living component of soil
10. Give the meaning of the term ceramics
11. What is humus?
12. Which component of soil improves on crop yields?
13. What do the experiment below show about soil



14. Use the diagram of soil profile below to answer the given questions correctly



- a) Name the layers labeled A, B & D
- b) Why is layer A suitable for crop growing?
- c) Which of the above layers give us stones for building?
- d) Where can a P.3 boy find the above layer?

15. State the micro organism found in the soil

16. How best can a school control soil erosion in the school compound?

### TOPIC 3

### LESSON 11

#### CONTENT:

***A flood is the raising of water and its over flow on dry land***

***Effects of natural changes***

***Effects if floods***

- Destroy plants/ crops
  - They kill animals
  - They kill people
- } an excursion on effects of natural changes

***A storm: is a very strong wind***

***Effects of storm***

- They destroy houses
- Leads to .....
- They destroy crops
- They lead to water accidents
- They affect water, air and road accidents

***Earth quakes : is the shaking of the earth's surface.***

***Effects of earth quakes***

- Destroy buildings
- Destroy crops

***Land slides is the massive breaking down of soil from a mountain slope***

***Effects***

- They kill people
- They destroy house
- They destroy property
- They make transport difficult

***Lightening: A flash of light produced by the movement of clouds***

***Effects***

- Kill people
- Destroy plants
- Kill animals
- Destroy electrical equipmentse.gTvs.

**Drought:** Is the long period of sunshine without rain.

### **Effects**

- Loss of grass for animals
- Death of animals
- Lack of food.

## **TOPIC 3**

### **LESSON 11**

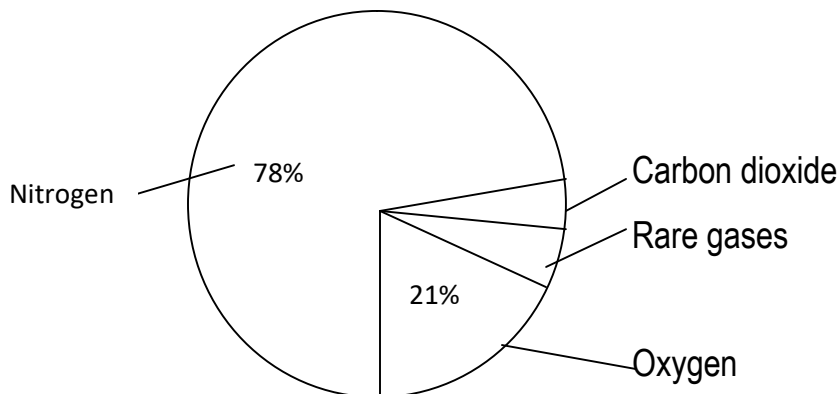
#### **CONTENT: AIR**

- Is the mixture of gases.

#### **Components of air**

- oxygen
- carbon – dioxide
- nitrogen
- rare – gases

- **Percentage composition of air**



- **Examples of rare gases**

- |          |           |
|----------|-----------|
| ▪ argon  | ▪ xenon   |
| ▪ neon   | ▪ krypton |
| ▪ helium |           |



**NB:** Argon is used in electric bulbs

### **Uses of each component**

- **Oxygen**

- Oxygen is used for respiration
- Oxygen supports burning
- Oxygen supports germination
- Oxygen supports rusting materials

- **Carbon – dioxide**

- It helps plants to make their own food.
- It is used to put out fire.
- It is used for preserving soft drinks.

- **Nitrogen**

- It is used in electric bulbs
- It improves soil fertility.
- It is used to make plant proteins

**Note:** Carbon dioxide is used in fire extinguishers because it does not support burning.

## **LESSON 112**

### **CONTENT: Games Played Using Air**

- Kites
- Balloons
- **Things that use moving air/ wind**
  - Yacht kites
  - Parachutes dhows
- **Diseases spread through breathing in contaminated air**
  - Fluenza
    - mumps
  - measles
    - tuberculosis
  - chicken pox

## Properties of air

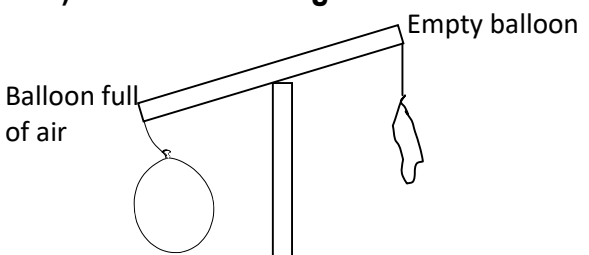
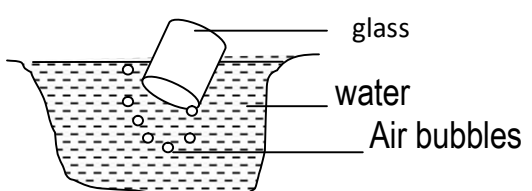
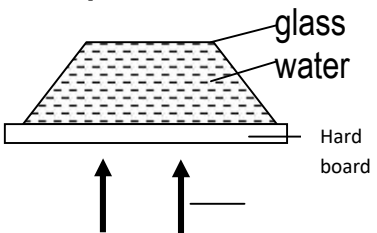
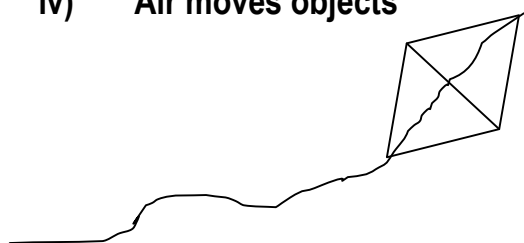
- Air has weight
- Air occupies space
- Air exerts pressure
- Air can be compressed
- *Air expands when heated*

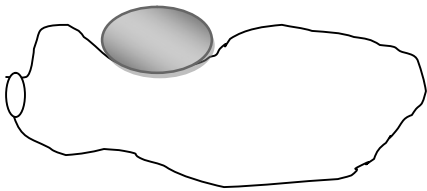
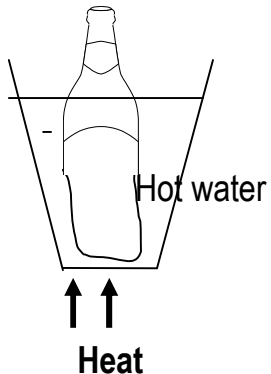
## Mixed activity 12

1. What is air
2. Identify any one game played using air
3. Why is carbondioxide used to put out fire?
4. Name any one rare gas used in electric bulbs?
5. Which gas occupies the highest percentage in the atmosphere?

## LESSON 13

### CONTENT: EXPERIMENTS TO SHOW THE PROPERTIES OF AIR (practical lesson)

<p><b>i) Air has weight</b></p> 	<p><b>ii) Air occupies space</b></p>  <p><b>Uses/ application</b></p> <ul style="list-style-type: none"><li>- Filling balls with air</li></ul>
<p><b>iii) Air exerts pressure</b></p>  <p>Air pressure Daily life application</p> <p><b>Uses/ application</b></p> <ul style="list-style-type: none"><li>- Pumping air into a bicycle tube.</li><li>- Pushing medicine into the patients body using a syringe.</li><li>- Drinking soda using a straw</li></ul>	<p><b>iv) Air moves objects</b></p>  <p><b>Air uses</b></p> <ul style="list-style-type: none"><li>- For flying kites</li><li>- For sailing a yacht</li><li>- Occupies space/ exerts pressure</li></ul>

<ul style="list-style-type: none"> <li>- <b>Bouncing castle</b> (Air can be compressed)</li> </ul>	<p>v) <b>Air can be compressed</b></p> 
<ul style="list-style-type: none"> <li>- Air expands when heated</li> </ul>	

### Topical test

1. Give the meaning of the term air
2. State any two parts of air
3. Which component of air
  - a) Occupies the highest percentage?
  - b) Occupies the least percentage?
4. Name the component of air needed for
  - a) Burning
  - b) Photosynthesis
  - c) Germination
5. Why is  $\text{CO}_2$  commonly used in fire extinguishers?
6. Identify any two common places where fire extinguishers can be found
7. Apart from stopping fire identify any other use of  $\text{CO}_2$  to people
8. In the space below draw a diagram to show that air exerts pressure
9. John pumped air in a ball and the ball became big which property of air did he experience?

- a) Enables man to drink soda using a straw
- b) A doctor to push medicine in a patient body
- 10. Mention any one game played using air.
- 11. Name the rare gas used in electric bulbs
- 12. Identify any three air borne diseases
- 13. Give the use of the following components of air to man
  - a) Oxygen
  - b) Carbon – dioxide
  - c) Nitrogen
- 14. Name any two rare gases
- 15. Which rare gas is used in electric bulbs?

## LESSON 14

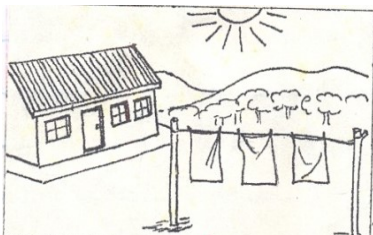
### CONTENT: WEATHER CHANGES IN OUR ENVIRONMENT

- Is the daily condition of the atmosphere recorded for a short period of time.
- **Elements of weather**
  - sunshine
  - cloud cover
  - rainfall
  - wind
  - humidity
  - air pressure
- **Types of weather**
  - Windy
  - Cloudy
  - Sunny
  - rain
- **Illustration for the types of weather**
  - Windy



- Sunny

rainy



### Activity

1. What is weather?
2. Mention any two elements of weather
3. Write down two conditions of weather

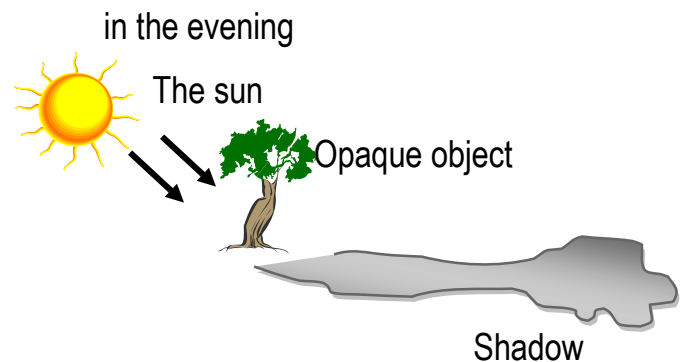
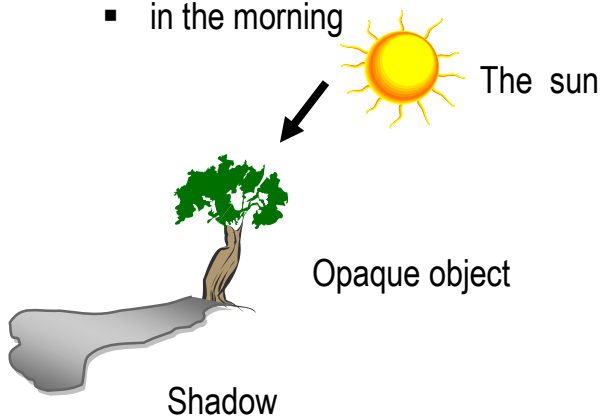
## LESSON 15

### CONTENT: THE SUN (SUNSHINE)

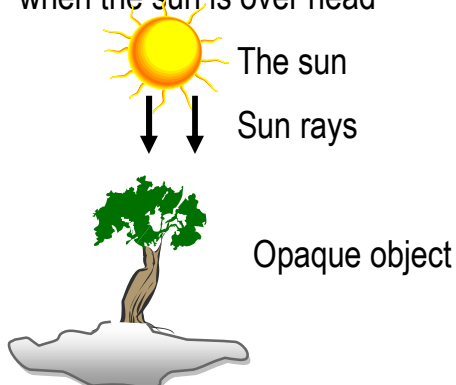
- The sun rises from the east and sets in the west.
- The sun provides heat and light energy.
- When light is blocked by an opaque object, a shadow is formed.
- Opaque objects are objects which do not allow light to pass through them.
- A shadow is longest in the morning and evening and shortest when the sun is over head(12:00- 2:00pm)

### Diagrams showing shadows of different objects

- in the morning



- when the sun is over head



## Shadow

### **CONTENT: USES OF THE SUN**

- Light from the sun helps us to see.
- The sun's heat helps in rain formation.
- The sun's light helps our skins to make vitamin D.
- The sun's heat dries harvested crops.
- The sun's heat dries washed clothes.
- The sun's heat provides warmth
- **Dangers of too much sunshine**
- Too much sunshine damages crops.
- Too much sunshine causes drought.
- The sun spoils our eyes when we look at it directly.
- The sun has dangerous rays which cause skin cancer.

**Note:** Drought is a long period of sunshine.

- Drought causes famine.

### **Uses of shadow**

- It tells time.
- It shows direction

### ***Other natural sources of light***

- *Star*
- *Fire flies*
- *Glow worms*
- *Lightning*

**N/B.** *The moon is not a natural source of light because it reflects light from the sun.*

## **LESSON 16**

### **Mixed activity**

1. Which vitamin do our skins make through the sun?
2. In which one way is too much sunshine dangerous to people?
3. Identify any one way of keeping our bodies clean.

4. Why do we boil drinking water?
5. State any two forms of energy we get from the sun.

## **LESSON 17 – out of class lesson**

### **CONTENT: Clouds**

- Are condensed water vapour in the atmosphere.

- **Types of clouds**

- Nimbus clouds
- Cirrus clouds
- Stratus clouds
- Cumulus clouds

- **Nimbus clouds**

- They are dark
- They are nearest to the earth
- They bring rain

- **Cumulus clouds**

- They are white in colour like cotton wool
- They can develop into thunder.

- **Importance of clouds**

- Clouds bring rain.
- Clouds cool the temperature
- Clouds protect people from direct sun's heat

### ***Dangers of clouds***

- *Too much clouds cause aeroplane crash*
- *It causes to much coldness*

### **Stratus clouds**

- They show fair weather
- They are nearer to the earth

### **Cirrus clouds**

- They are furthest from the earth

## LESSON 18 – text book teaching

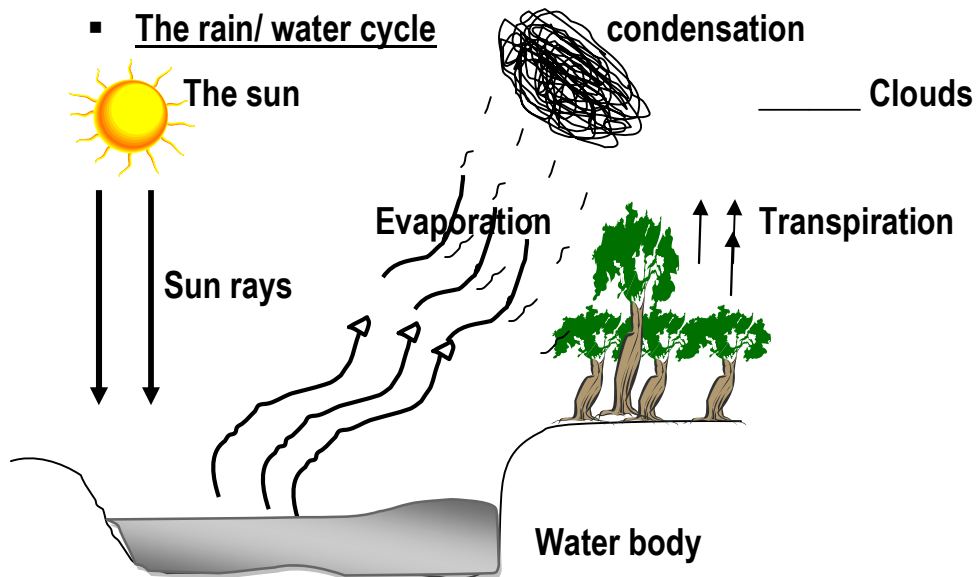
### CONTENT: Rain

- Aredroplets of water falling from the clouds.

- Processes that lead to rain formation

- Evaporation
- Condensation
- Transpiration

- The rain/ water cycle

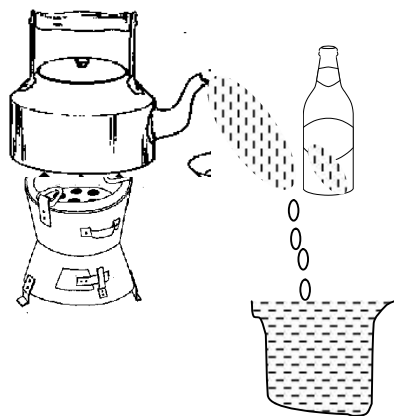


### Experiment to demonstrate the rain cycle

kettle with boiling water

Charcoal stove

With burning  
charcoal



Bottle with cold water

Water collected

### Note:

1. The kettle with boiling water represents the water body



2. The bottle with cold water represents the cold water
3. The charcoal stove represents the sun.
4. The water droplets represents the rain

▪ **Uses of rain**

- Rain provides water for plants to grow.
- Rain provides water for drinking
- Rain water makes the soil soft for easy digging.
- Rain cools our environment.

## LESSON 19

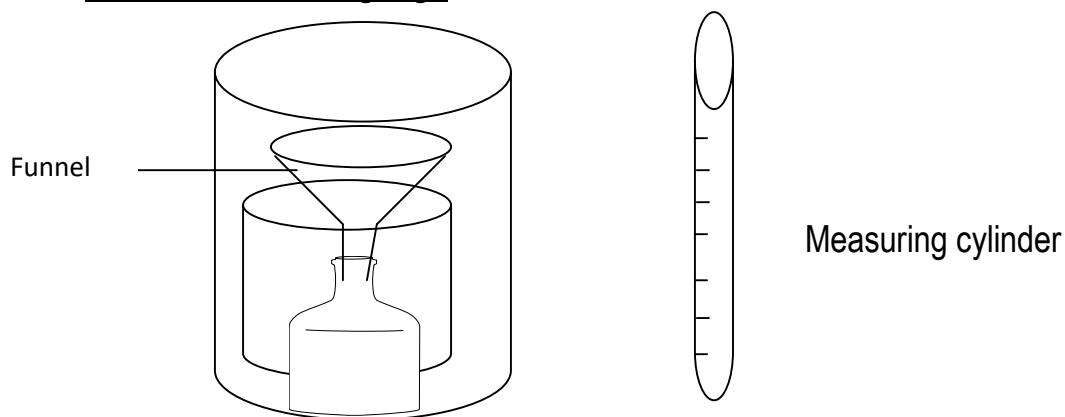
**CONTENT: Dangers of too much rain**

- Too much rain leads floods.
- Too much rain damages roads and bridges.
- Rain water carries a way the top soil.
- Too much rain damages crops.

▪ **Measurement of rainfall**

- We use rain gauge to measure the amount of rain received in an area.

▪ **Structure of a rain gauge**



**Note:** A rain guage is one of the weather instruments found at the weather station.

A weather station is a place where weather forecasting takes place

### Activity

1. Mention two processof involved in rain formation.
2. State one process that leads to soil formation

3. How important is the sun in the rain cycle?
4. Mention two agents of soil erosion
5. How does deforestation lead to soil erosion?
6. Mention one natural change you know

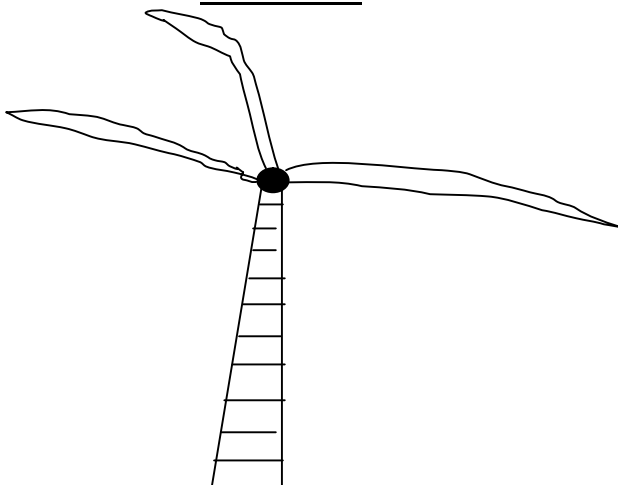
## LESSON 20

### CONTENT: WIND

- Wind is moving air. or
- Wind is air in motion.
- **Advantages of wind.**
- Wind is used for winnowing seeds.
- Wind is used for sailing boats.
- Wind helps to fly our kites.
- Helps to dry washed clothes.
- Wind helps to turn wind mills.
- **Disadvantages of wind**
- Strong wind blow off house roofs.
- Strong wind damages crops.
- Strong wind breaks trees.
- Wind spreads diseases.
- 

**Note:** A wind mill is used for producing electricity.

- It is also used to turn grinding – machine
- **A wind mill**



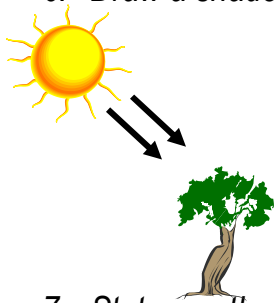


## Topical test

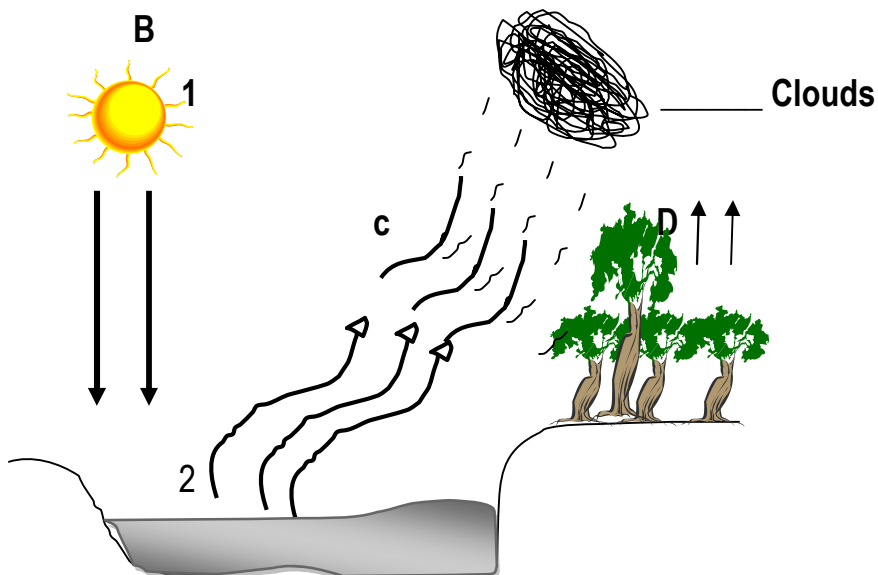
1. What is weather?
2. Mention any three factors of weather
3. Draw the following conditions of weather

Sunny weather	Cloudy weather

4. Where does the sun set?
5. What is formed when light is blocked by an opaque object?
6. Draw a shadow for the following object



7. State any three uses of the sun to man.
8. Which vitamin does skin make from the sun?
9. Why is too much sunshine dangerous to man?
10. State one effect of drought to the environment
11. Which type of clouds
  - a) gives us rain
  - b) is the highest
12. write any two importance to answer the given questions
13. use the water cycle below to answer the given question



14. Name the process marked B, C, D

15. How useful is the sun in the above process
16. Give two uses of rain in our environment
17. Write any two dangers of too much rain.
18. What name is given to the instrument used to measure the amount of rainfall received in an area

## LESSON 21

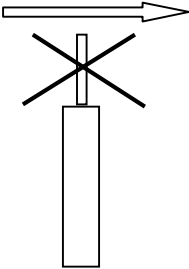
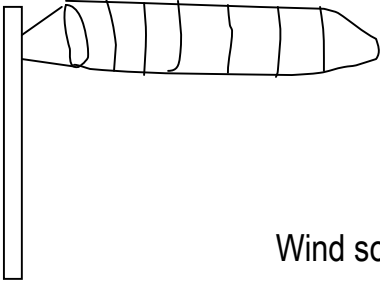
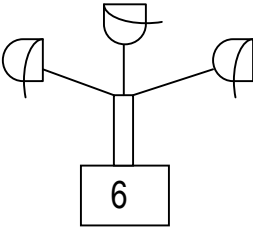
### CONTENT: Weather instruments

These are instruments used to record weather elements.

#### Examples of weather instruments

- Wind vane
- Wind sock
- Hydrometer
- Anemometer
- Sunshine recorder
- Wind/ weather cock
- Rain guage
- Thermometer

**Note:** weather instruments are found at the weather station.

Diagram	Function
 <p>wind vane</p>	To show the direction of wind
 <p>Wind sock</p>	To show the strength of wind
	For measuring the speed of wind

anemometer	
------------	--

## Activity

1. What is wind?
2. Mention any one importance of wind to farmers
3. Name any two instruments used to record wind
4. Why is strong wind dangerous in the environment?
5. What is soil erosion
6. In which way do people in hilly areas control soil erosion?
7. State the importance of trees in the environment

## OTHER WEATHER INSTRUMENTS

- **Barometer:** for measuring air pressure
- **Thermometer:** for measuring temperature
- **Hygrometer:** for measuring humidity

## LESSON 22

### CONTENT: Seasons

- is a period when an area receives the same weather conditions for a long time.

### Types of season

- wet season
- dry season

### Activities carried out during the dry season

- Clearing the land. Pruning
- Harvesting crops.
- Selecting seeds
- Drying harvested crops

### Items used during the dry season

- Umbrella – protects us from direct sunshine
- Sun glasses – protects the eyes from direct sunshine
- Light/clothes – protect us from too much heat.

- Hat – protects our heads from direct sunshine
- Sandles – protect our feet from heat

### **Reasons for drying seeds**

- To avoid rotting
- To avoid germinating when in stores

### **Activities done during the wet season**

- Planting crops
- Weeding
- Pruning
- Thinning
- Mulching

**Weeding:** is the removal of unwanted plants from the garden

Weeds unwanted plants in the garden

### **Examples of weeds**

Star grass

Spear grass

Pigweed

Milk weeds

Couch grass

### **Methods of weeding**

- i) Digging
- ii) Spraying using herbicides
- iii) Uprooting
- iv) Slashing
- v) Mulching
- vi) Crop rotation

### **Items we use during the wet season.**

- Gumboots: to protect the feet from mud.
- Umbrella: to protect us from rain.
- Rain coats: to protect us from rain.

Woolen jacket: to keep us warm.

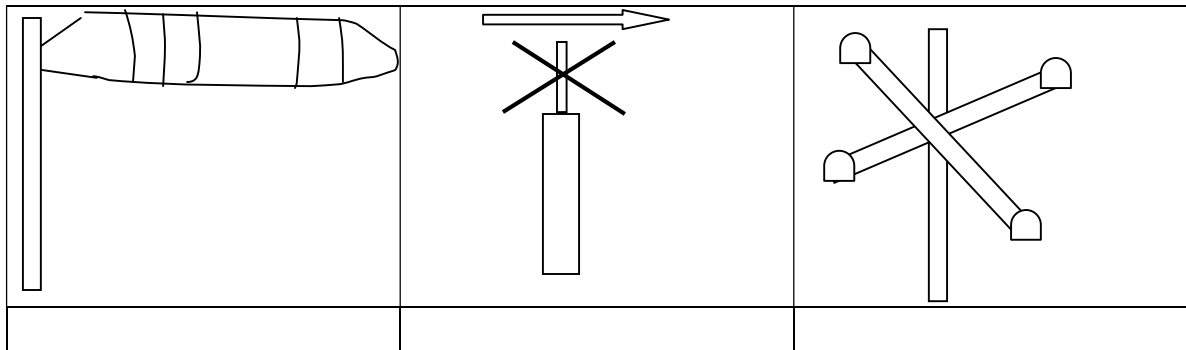
## Activity

1. Mention two activities done in the wet season.
2. Why is harvesting done in the dry season?
3. How important is an umbrella to man?
4. Give the meaning of weather
5. Apart from rainfall, name any other two factors of weather .
6. Why do farmers select seeds before planting?

## Topical test

### Wind & Weather

1. *Differentiate between wind and air.*
2. *Name the weather instruments below*



3. *Match correctly*

<i>Wind vane</i>	<i>measure amount of rainfall</i>
<i>Wind sock</i>	<i>measures humidity</i>
<i>Thermometer</i>	<i>measures air pressure</i>
<i>Rain guage</i>	<i>measures body temperature</i>
<i>Barometer</i>	<i>shows direction of wind</i>
<i>Hygrometer</i>	<i>measures strength of wind</i>
4. *Name any one season you know*
5. *Write any two activities done in a dry season to improve on crop yields*
6. *Mention any two activities done during a wet season*
7. *Write any three items used during a dry season*
8. *Why do farmers dry their seeds*
9. *Give the meaning of the following terms*
  - a) *weeding*
  - b) *mulching*

- c) *pruning*
- d) *thinning*
- 10. *Mention any three examples of weeds*
- 11. *Identify any two one crop harvested by*
  - a) *Uprooting*
  - b) *Handpicking*
  - c) *Digging*
  - d) *Cutting*
- 12.

## LESSON 23

**CONTENT: harvesting**

- Is the removal of ready crops from the garden.
- Harvesting is also done during the dry season because **there is enough sunshine to dry the harvested crops.**

### **Methods of harvesting crops**

- **Uprooting** : cassava , potatoes, legumes, carrots
- **Digging out roots**: Cassava, carrots, yams, potatoes
- **Hand picking** : cotton, coffee, tea, mangoes, oranges, pawpaws
- **Cutting using knives and sickles**: rice, millet, sorghum, bananas

## LESSON 24

**CONTENT: Water**

### **Sources of water**

- These are places where water is found.
- There are two kinds of water sources. They include: natural and people – made source

#### **1. Natural source of water**

- Natural source of water are those which occur naturally.

i.e. Rain (main natural source)

Oceans

Swamps

Rivers



Lakes

Seas

### **Sources of safe drinking water**

Boreholes

Springs

rain

### **Uses of water at home**

- For washing utensils
- For washing clothes.
- For cooking food.
- For drinking
- For cooling engines
- For bathing

### **2. People – made source of water**

- These are sources of water made by people.

### **Examples**

- Ponds
- Boreholes (safe water)
- Streams
- Springs (safe water)

## **LESSON 25**

**CONTENT: Protecting our water source**

### **Ways water gets contaminated at the source and home**

- Bathing in water sources
- Dumping rubbish in water sources
- Defecating in water sources
- Urinating in water sources
- Swimming in water sources
- Allowing animals to drink directly in water sources
- Drawing water using dirty containers

### **Ways water get contaminated at home**

- Storing water in dirty containers
- Using dirty utensils for getting drinking water
- Keeping water in a dirty place

### **Mention atleast three ways of protecting our water sources.**

- Avoid throwing rubbish in water sources.
- Avoid urinating in water sources.
- Avoid building latrines near water sources.
- Fencing water sources.
- Slashing around water sources.

### **Ways of making water safer for drinking**

- Boiling
- Treating with chemicals like chlorine fluoride, water guard

### **How to make water clean for home use**

- Filtering
- Decanting

### **Harvesting water**

- This is the way of collecting and storing water for use. They include
- Using pots
- Using tanks
- Using jerry cans.

### **Activity**

1. What are man made sources of water?
2. Mention any two man made of sources of water in your community.
3. How important is water in a school
4. In which two ways does water get contaminated at home
5. State one way people in a village can protect water sources.
6. Name the main natural sources of water in a community

**Topical test**

1. *Name any two people made source of water*
2. *Name the main natural source of water*
3. *Write any four uses of water at home*
4. *How can water be contaminated at the source?*
5. *Why do we boil drinking water*
6. *How does the boiling of water make it safe for drinking?*
7. *Write two items used to harvest water at home*
8. *Why is it advisable for us to build a toilet 30 m away from the water source?*
9. *Mention three ways of protecting water sources.*
10. *What are natural water sources?*