CORNERSTONE JUNIOR SCHOOL - MUKONO



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P.4 SOCIAL STUDIES SELF - STUDY LESSONS SET 2

LESSON 1

TOPIC: PHYSICAL FEATURES IN OUR DISTRICT

SUB TOPIC: HILLS

LEARNING OUTCOMES:

By the end of this lesson, you should be able to:

- i) Define and give examples of hills
- ii) Give the importance of hills
- iii) State ways of caring for hills
- iv) Read, spell and Construct sentences using the following words.

- Terracing

- communication

- Inselbergs

- steep

- Muyenga

- soil erosion

- Nakasero

- Mulago

Hills

Hills are pieces of land higher than the surrounding land. However, their height is lower than that of the mountains. Their size is also smaller than that of the mountains.

Examples of hills in Mukono

- Hamu Mukasa hill
- Nabuti hill

Examples of hills in Kampala

- Nakasero hill
- Lubaga hill
- Mengo hill
- Mulago hill
- Muyenga hill

Importance of hills

- Hills help in rain formation
- Hills have pasture which animals feed on
- They provide fertile soils used for crop growing
- Communication companies put masts on hills to boost their network
- They attract tourists who bring income to the country
- Some hills have forests which provide firewood to the people

Problems faced by people in hilly areas

- Hills are obstacles to road construction which makes the transport network poor.
- Hills are steep and so are affected by soil erosion
- Too much rain received in hilly areas causes landslides which can lead to the death of people
- Hills are homes for some dangerous wild animals and these may attack people

Ways of caring for hills

Hills can be protected against destruction and this can be done using the practices below:

- By terracing the land to prevent soil erosion
- By contour ploughing
- By strip cropping
- By planting trees to hold the soil firm

- 1. Give any two crops grown in hilly areas
- 2. State two ways of controlling soil erosion in hilly areas.
- 3. How are hills useful in communication?
- 4. State two problems faced by people who live in hilly areas.
- 5. What is soil erosion?
- 6. How can the above problem be solved?

TOPIC: PHYSICAL FEATURES IN OUR DISTRICT

SUB TOPIC: PLATEAU

LEARNING OUTCOMES:

By the end of this lesson, you should be able to:

- i) Define a plateau
- ii) Give the activities carried out on a plateau
- iii) Read, spell and write the following words correctly:
 - Flat-topped
 - Plateau
 - Forest
 - Habitats

Plateau

This is a raised flat-topped piece of land. It is an area of flat land that is higher than the land around it.

Sometimes a plateau can be defined as a tableland.

Importance of a plateau

- They have fertile soils which support farming
- Plateaus provide space for the construction of industries.
- People build houses for settlement on plateaus
- They have rivers for fishing
- They are used for animal rearing
- They promote tourism which is a source of income

Economic activities done on a plateau

- Crop growing
- Cattle keeping
- Fishing
- Tourism

Difference between a plateau and a plain

- A plateau is raised flat-topped piece of land while a plain is flat land.

- 1. Why a plateau is also called a tableland?
- 2. Give two activities carried out on a plateau.
- 3. What are plains?
- 4. State two importance of forests to man.
- 5. How are forests important to herbal doctors?
- 6. State two economic activities carried out in forested areas.
- 7. State two reasons why people cut down trees.

- 8. Which type of rainfall is received near forested areas?
- 9. Give any two dangers of physical features to man.
- 10. State any two problems faced by physical features.

TOPIC : PHYSICAL FEATURES IN OUR DISTRICT

SUB TOPIC/ CONTENT: INFLUENCE OF PHYSICAL FEATURES ON CLIMATE

LEARNING OUTCOMES:

By the end of this lesson, you should be able to:

- i) Read, spell and write the following words correctly
 - Pyrethrum
 - Receive
 - Lee ward
 - Meet
 - Shadow

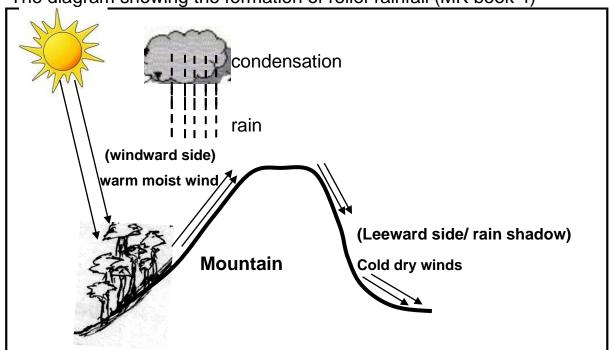
Influence of mountains on climate

- Mountains lead to the formation of relief rainfall on the windward side.
- Relief rainfall is also known as orographic rainfall
- It is formed when warm moist air rises after meeting a mountain.
- The moist air condenses and forms clouds which later drops down as rain.

A mountain has two sides namely:

- i) Wind ward side
- ii) Lee ward side (rain shadow side)
- The windward side receives rainfall while the leeward side receives little or no rainfall
- The Leeward side is also called the rain shadow

The diagram showing the formation of relief rainfall (MK book 4)



Districts which receive relief rainfall

- Mbale
- Kasese
- Kisoro
- Bududa
- Sironko
- Bushenyi

Crops grown on mountains

- Arabica coffee
- Bananas
- Sorghum
- Tea
- Irish potatoes
- Carrots
- Pyrethrum

- 1. What is relief rainfall
- 2. On which side of the mountain is rainfall received?
- 3. Name the side of a mountain which is not good for farming.
- 4. Why the leeward side is called the rain shadow side?
- 5. Mention any two crops grown on slopes of mountains.
- 6. How is the sun important in the formation of relief rainfall?
- 7. How is rainfall useful to farmers?
- 8. How are plateaus important to us?

TOPIC: PHYSICAL FEATURES IN OUR DISTRICT

SUB TOPIC: FORMATION OF CONVECTIONAL AND FRONTAL RAINFALL

LEARNING OUTCOMES

By the end of this lesson, you should be able to:

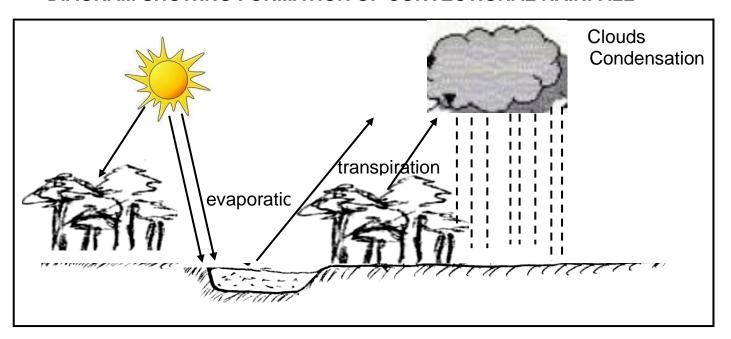
- (i) Read, spell and write the following words correctly
 - Convectional
 - Cyclonic
 - Vapour
- (ii) Describe the processes involved in the formation of convectional and frontal rainfall.
- (iii) Mention the areas where the above types of rainfall are received.

Formation of convectional rainfall

When the sun rays heat water bodies, the water rises in the form of water vapour

The water vapour cools and condenses to form heavy droplets which fall as rain

DIAGRAM SHOWING FORMATION OF CONVECTIONAL RAINFALL



Note:

Convectional rainfall is a type of rainfall received in areas near forests and water bodies e.g. lakes and rivers.

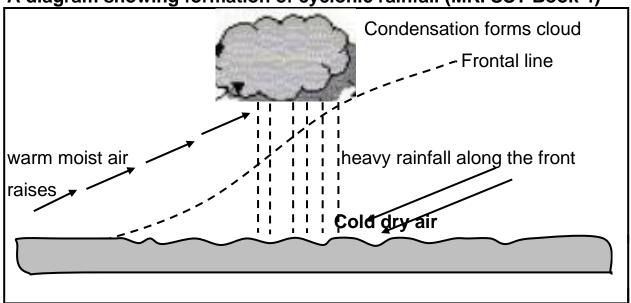
Examples of districts which receive convectional rainfall

- Mukono
- Mayuge
- Kamuli
- Hoima
- Kampala
- Kalangala
- Kamwenge
- Buvu

Formation of cyclonic rainfall or frontal rainfall

- Cyclonic rainfall is a type of rainfall received in flat areas.
- It is formed when two air masses meet at a frontline. The warm moist air rises and condenses and forms clouds which bring rainfall.

A diagram showing formation of cyclonic rainfall (MK. SST Book 4)



Examples of districts with cyclonic rainfall

- Moroto
- Kotido
- Nakapiripiriti
- Kabong
- Napak

Exercise

- 1. Why does Moroto district receive cyclonic rainfall?
- 2. Mention two process involved in the formation of convectional rainfall
- 3. What type of rainfall is received in Mukono District?
- 4. Identity two district which receive frontal rainfall.
- 5. How is frontal /cyclonic rainfall formed?
- 6. Give any one reason why the warm moist air is able to rise.

LESSON 5

TOPIC: PHYSICAL FEATURES IN OUR DISTRICT

SUB -TOPIC: END OF TOPIC TEST

LEARNING OUTCOMES

By the end of this lesson, you should be able to:

Attempt the questions below with the correct answers and spellings. Your answers must be underlined. Study the lesson notes given and your MK book 4 textbook to answer the topical questions below:

- 1. What are physical features?
- 2. Mention any three examples of physical features you know.
- 3. What are relief features?
- 4. Give any two examples of relief features.
- 5. Mention any two ways in which people in hilly areas control soil erosion.
- 6. Identify any two importances of mountains to people.
- 7. How are Sukulu hills useful to the people?
- 8. What are lakes?
- 9. Give three examples of lakes found in Uganda.
- 10. Identify any three examples of activities carried out on lakes and rivers.

- 11. What are wetlands?
- 12. What type of rainfall is received in our districts?
- 13. Give two districts which receive relief rainfall.
- 14. Which side of a mountain receives heavy rainfall?
- 15. Why do people in Kigezi terrace their land?
- 16. Describe how the following types of rainfall are formed:
 - a) Convectional rainfall
 - b) Relief rainfall

Read, spell and write the following words correctly.

Read, spell and write the following words correctly.						
- Features	- Moroto	- Sokdek				
- Landforms	- Mufumbiro	- Muhavura				
- Relief	 Construction 	- Wagagai				
- Drainage	- Difficult	- Margherita				
- Plateau	- Landslides	- Orographic				
- Mountains	 Volcanic 	- Rainfall				
- Elgon	eruptions	- Cyclonic				
- Rwenzori	 Limestone 	- Tourists				
 Convectional 	- Frontal	- Terracing				
- Recreation	- Attract	- Mining				
- Settlement	- Farming	- Tourism				
 Contour ploughing 	 Employment 	 Navigation 				
 Hydro Electric Power 	- Dangerous	- Aquatic				
(HEP)	- Swamps	- Plenty				
- Flooding	- Fishing	- Wetlands				
- Drainage	- Habitat	- Mud fish				
- Fertile	 Afforestation 	- Lee-ward				
- Industries	- Lumbering	 Re-afforestation 				
 Deforestation 	 Evaporation 	 Transpiration 				
 Agro-forestry 		 Precipitation 				
 Condensation 						

TOPIC: REVISION WORK ABOUT WEATHER

SUB TOPIC: WEATHER ELEMENTS, CONDITIONS AND INSTRUMENTS

LEARNING OUT OUTCOMES

By the end of this lesson, you should be able to:

- (i) State the elements and conditions of weather.
- (ii) Mention the weather instruments and state their importance.
- (iii) Give the importance of a weather station and weather forecasting.

DEFINITION OF TERMS

Weather is the state of the atmosphere recorded for a short period of time.

Meteorology is the scientific study of weather.

Meteorologists are the scientists who study and record weather changes.

Weather station is a place where weather conditions are studied and recorded.

Entebbe meteorological centre is the biggest weather station in Uganda. It is found in Wakiso district.

Elements of weather

- Sunshine
- Rainfall
- Cloud cover
- Wind
- Humidity
- Air pressure
- Atmospheric temperature

- 1. Write down two delicate instruments kept in a Stevenson screen.
- 2. Why the Stevenson screen is painted white?
- 3. Give the importance of a weather station to P.4 pupils.
- 4. State the reason why a rain gauge is placed 30cm above the ground.
- 5. In which district is Entebbe weather station found?
- 6. What is the use of a windsock at a weather station?
 - a) Name the instrument used to measure the intensity of sunshine at the weather station.
 - b) State two dangers of sunshine to man.
- 7. In which one way is the sun important in rain formation?
- 8. a) Apart from Rainy weather, give two examples of weather conditions.
 - b) Which type of clouds brings us rainfall?
 - c) How is rainfall important to farmers in our district?
 - d) Give one danger of too much rainfall on the environment.
- 9. State the uses of the following weather instruments
 - (a) Hygrometer (b) Anemometer

TOPIC: VEGETATION OF OUR DISTRICT SUB –TOPIC: CLASSES OF VEGETATION

CONTENT: COMPONENTS OF VEGETATION / EXAMPLES OF VEGETATION

LESSON OUTCOMES:

By the end of this lesson, you should be able to:

- (i) Tell the meaning of the term vegetation
- (ii) Give examples of vegetation
- (iii) State the types of natural vegetation
- (iv) Mention examples of natural forests and tree spices found in natural vegetation.

Introduction

When you look outside in the environment you can see trees, plants, crops and grass. The common name given to all the above is vegetation. We, therefore, define vegetation as the general plant cover in an area. However, there are two types of vegetation and these are:

Natural and planted vegetation

Natural vegetation is the plant cover that grows on its own by the help of nature while planted vegetation is the plant cover that is grown by man.

Components/examples of vegetation

Vegetation includes:

- Trees crops
- Grass forests.

Types of natural vegetation

- Equatorial vegetation
- Montane vegetation (mountain)
- Savanna vegetation (Tropic savanna)
- Wetland vegetation

Forests

A forest is a collection of trees.

Types of forests

- Natural forest Is a group of trees growing together with the help of nature.
- Plantation forests-these are forests planted by man.

Examples of natural forests in Uganda

- Mabira forest
- Maramagambo forest
- Budongo forest
- Marabigambo forest
- Bwindi impenetrable forest
- Zoka forest
- Ssese forest

Examples of trees in natural forests

Natural forests have got trees that are so different from those planted by man. These trees are strong, very tall and they take a long time to mature. They include:

- Mahogany.
- Mvule (Troko)
- Teak
- African walnut
- Rosewood
- Sepele
- Greenheart

- 1. What is vegetation
- Write two types of vegetation
- 3. Give two components of vegetation.
- 4. What is natural vegetation?
- 5. State two types of natural vegetation in Uganda.
- 6. What is a forest?
- 7. Write two examples of trees in natural forests.
- 8. State any two natural forests in Uganda.
- 9. Identify the largest natural forest in Uganda.
- 10. Why are people encouraged to plant more trees today?
- 11. How are natural forests different from planted forests?

TOPIC: VEGETATION OF OUR DISTRICT SUB -TOPIC: PLANTATIONAL FORESTS

LEARNING OUTCOMES:

By the end of this lesson, you should be able to:

- (i) Give examples of planted forests in Uganda.
- (ii) State the difference between planted and natural forests.
- (iii) Mention examples of tree spices grown in planted forests.
- (iv) Read and spell the following words properly:
 - Eucalyptus
 - Conifer
 - Spruce
 - Plywood

Planted forests

These are forests planted by man.

This is a group of trees growing together with the help of man.

Examples of plantation forests in Uganda

- Lendu
- Zoka
- Magamaga
- Itwara

Examples of trees in plantation forests

eucalyptus coniferspine trees pruce

fine cedar fruit trees

Difference between natural forests and plantation forests

- Natural forests grow on their own while plantation forests are planted by man.
- Natural forests have hardwood while plantation forests provide softwood.

Uses of forests to man

- Natural forests provide us with hardwood.
- Plantation forests provide us with softwood timber.
- Forests help in the formation of rainfall.
- Forests attract tourists who bring in foreign exchange
- They purify the air.
- They contribute to the natural beauty of the area.
- They act as windbreaks.

Types of wood

Hardwood: is wood got from natural forests Softwood: is wood got from planted forests

Uses of hardwood

- It is used to make chairs
- It is used to make tables.
- It is used to make cupboards

Products from hardwood

These are the things we get from the wood we get from natural forests

Tables

- Cupboards
- Chairs
- Beds
- Beats
- Ships

Uses of softwood

- To make plywood
- To make musical instruments
- To make pencils and rulers

Products from softwood

- rulers plywood
- pencil paper

Exercise

- 1. What are plantation forests?
- 2. State two examples of plantation forests.
- 3. Give two examples of trees in plantation forests.
- 4. State the difference between plantation forests and natural forest.
- 5. Write two products got from softwood.
- 6. Which types of forests give us softwood?
- 7. Mention four products got from hardwood.
- 8. Give any one way people get money from soft word?

LESSON 9

VEGETATION

TOPIC: DANGERS OF FORESTS TO MAN

LEARNING OUTCOMES

By the end of this lesson, you should be able to:

- Define the following terms related to forestry
 - Deforestation
 - Afforestation
 - Re-afforestation
 - Agroforestry
- State the dangers caused by forests in an area (ii)
- (iii) Give ways in which man destroys forests
- Describe ways of conserving forests and state reasons for (iv) conserving forests.

DEFINITION OF TERMS

Deforestation: This is the massive cutting down of trees without replacement.

Afforestation: This is the practice of growing trees in an area where they have never been.

Re-afforestation: This is the practice of growing trees in an area where they have been cut.

Agro-forestry: This is a type of farming where a farmer grows crops and productive trees on the same piece of land.

Dangers caused by forests in an area

- They keep wild animals which are dangerous to man
- They are breeding places for some vectors
- They can be homes for criminals

Ways man destroys forests

- By deforestation
- By bush burning

Dangers of destroying forests

- It leads to drought
- It leads a to desertification
- It leads to soil erosion
- It destroys animal homes

Ways of conserving forests

- By practising afforestation
- By practising re-afforestation
- By avoiding bush burning

Importance of conserving forests

- Forests help in the formation of rainfall
- Forests control soil erosion
- Forests attract tourist
- Forests give us food.

- 1. Give any two dangers of forests to man.
- 2. What is deforestation?
- 3. Why should the government encourage people to conserve forests?
- 4. Why do people carry out deforestation? (Give two reasons)
- 5. How does deforestation affect animals?
- 6. What is forestry
- 7. Why are people encouraged to plant trees?
- 8. How do forests help to conserve the environment?

TOPIC: VEGETATION

SUB-TOPIC: SWAMP VEGETATION

LEARNING OUTCOMES

By the end of this lesson, you should be able to:

- (i) Give the importance of swamp vegetation
- (ii) State the economic activities carried out in swampy areas
- (iii) Mention the crops that grow well in swampy areas
- (iv) State ways in which people destroy swamps and its dangers
- (v) Read, spell and pronounce the following words correctly
 - Wetland
 - Waterlogged
 - Papyrus
 - Economic activities

SWAMPS / WETLANDS

A swamp is a vegetated waterlogged area

Swamps are also called wetlands because they are waterlogged areas. Some swamps have trees while others have papyrus.

Importance of swamps

- They help to modify the climate through rain formation.
- They are homes of water animals.
- They provide raw-materials for crafts.
- They can be used to grow crops.
- They attract tourists who bring in foreign exchange
- They provide us with fish.
- They help to control floods. The clay soil in the swamps helps to retain water for long.

Economic activities carried out in swamps

- Sand mining
- farming
- tourism

Examples of crops grown in swamps

- yams
- rice
- sugarcane
- cabbage

Examples of raw- materials got from swamps

- papyrus: used to make carpets
- timber: is used to make furniture
- clay: used to make pots, flower vases, modelling sculptures etc
- sand: used for building

Dangers of swamps to man

- They harbour disease vectors
- They keep wild animals which are dangerous to man
- They lead to flooding

Ways man destroys the swamps

- By polluting them with waste materials
- By practising swamp drainage

Dangers of destroying swamps

- It leads to desertification
- The aquatic life in swamps is disturbed
- It leads to flooding

- 1. What are swamps?
- 2. Outline any two materials got from swamps.
- 3. Give any three dangers of swamps to man.
- 4. State two ways man destroys swamps.
- 5. Give four dangers of destroying swamps.
- 6. In which way are swamps promoting industrial growth?
- 7. What type of fish is common in swampy areas?
- 8. State two ways man destroys forests
- 9. Give any two reasons why swamps should be preserved?
- 10. Why are swamps good for growing plants like yams and sugarcane?
- 11. What is the main importance of sand mining to people?