# P.7 TERM ONE S.S.T NOTES

## LESSON 1

### WORLD CONTINENTS IN ORDER OF THEIR SIZES

1. The world is made of seven continents.

| **Continent** | **Size ($km^2$)** |
|---|---|
| Asia | 43,008,000 |
| Africa | 30,335,000 |
| North America | 25,349,000 |
| South America | 17,611,000 |
| Antarctica | 13,340,000 |
| Europe | 10,498,000 |
| Australia | 7,682,000 |

**Location of continents in the world .(MK BK 7 Pg vii)**

**POINTS TO NOTE**

1 Africa is regarded as a cradle land of man because the skull of Zinjanthropus was discovered there by Dr. LSB Leaky.

2 Africa was regarded as a dark continent because little was known about it by the outside world.

3. Antarctica continent is too cold to support human life.

4.Australia is the smallest continent while Asia is the largest continent.

5. Continents were formed by continental drifting.

**LESSON 2**

**AFRICA AS A CONTINENT**

a) A continent is a large mass of land surrounded by water bodies.

b) Africa is located in the central region on the world map.

c) It is the second largest continent.

d) **The location of Africa on the world map is determined by:**

i) Water bodies surrounding it

ii) Latitudes and longitudes

iii) Neighbouring continents

e) Africa is wide in the North and thinner in the South.

f) **Africa is surrounded by the following large water bodies.**

i)Mediterranean sea in the North.

ii)Atlantic Ocean in the West.

ii)Red Sea in the North East.

iv)Indian Ocean in the East.

**OTHER FEATURES ASSOCIATED WITH THE CONTINENT OF AFRICA**.

1**Cape-** A piece of land jutting out into the sea.

**Examples of capes in Africa:**

a) Cape Verde –to the West.

b) Cape Guardafui-to the East.

c) Cape Agulhas to the South.

d) Cape Ras ben to the North.

e) Cape of Good Hope to the South.

f) Cape Blanc to the Northern Africa.

**2.Gulf-**A large area of the sea partly enclosed by land.

**Examples of gulfs**:

a) Gulf of Aden

b) Gulf of Sirte

c) Gulf of Gabes

d) Gulf of Guinea

**3**. **A strait-** A narrow water passage between two land masses.

Eg The Strait of Gibraltar-which is the nearest point between Africa and Europe.

**4. Isthmus**-A narrow land connecting two land masses.

**5.Island-**A piece of land surrounded by a water body.

**Examples of island countries of Africa**

a) Madagascar (Indian Ocean) - the largest island in Africa

b) Seychelles(Indian Ocean) - smallest country in Africa

c) Mauritius(Indian Ocean)

d) Comoros(Indian Ocean)

e) Cape Verde(Atlantic Ocean)

f) Reunion(Indian Ocean)

**6. Peninsula**- A piece of land with three sides surrounded by water.

Or- A piece of land nearly surrounded by water with a section attached to the main land by an Isthmus.

**LESSON 3**

**LOCATION AND POSITION OF AFRICA USING LATITUDES AND LONGITUDES**

1. The method of locating places using latitudes and longitudes is called **Grid reference.**

2. Latitudes are imaginary lines drawn on the map from East to West.

3. Longitudes\ Meridians are imaginary lines drawn on the map from North to South.

4. Longitude is the distance East or West of the Prime Meridian.

5. Latitude is the distance North or South of the Equator.

6. Africa is located between latitudes $37^0$N – $35^o$S and longitudes $17^0$w – $52^0$E .

7.Africa is crossed by three major latitudes namely:

a Equator- 0

a) Tropic of cancer- 23 1/2 N.

b) Tropic of Capricorn-23 1/2S.

8**. Other major latitudes include:**

a Arctic circle- 66 ½ N

b Antarctic circle- 661/2S

9. The biggest part of Africa lies within the tropics.

10. The Equator is marked 0 degrees because it is the starting point of measuring latitudes.

11.Gabon, Congo Brazzaville, DRC, Uganda, Kenya and Somalia are crossed by the Equator.

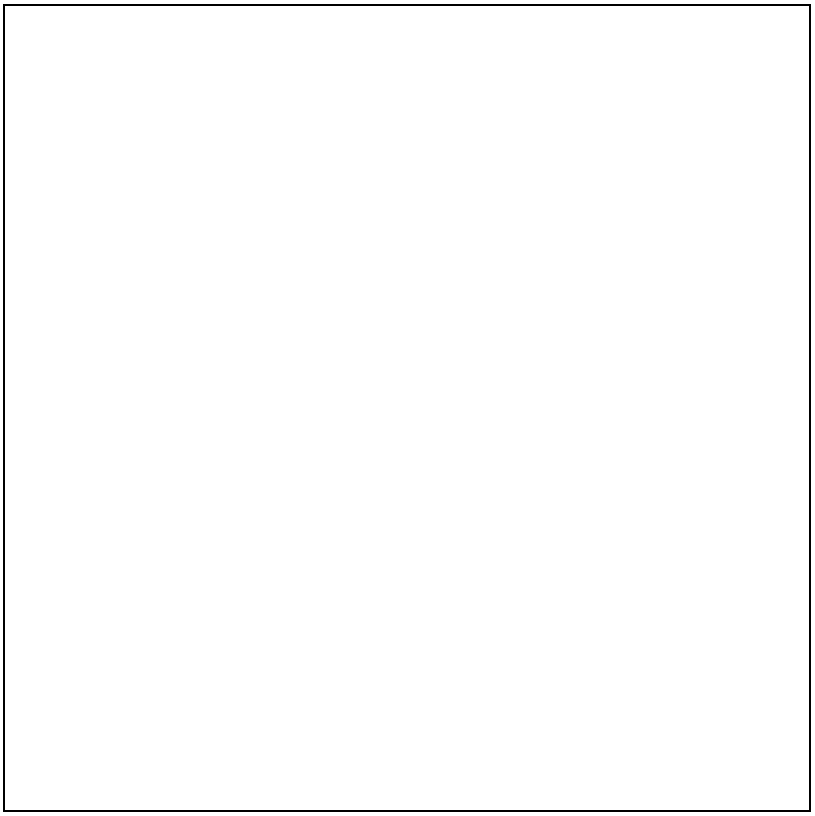
12. The Prime Meridian is the major line of longitude that crosses Africa.

13. Ghana, Burkina Faso, Mali and Algeria are crossed by the Greenwich.

14. The Greenwich is used to determine international time.

15. The international dateline is another major longitude (180) which separates one day from another or determines the date.

**MAP OF AFRICA SHOWING ITS LOCATION BY LONGITUDES AND LATITUDES**



**Activity**

1.On the map drawn, mark and name the following;

- Indian Ocean
- Atlantic Ocean
- Red sea
- Mediterranean sea
- Gulf of Guinea, Gabes
- Gulf of Aden, sirte

- Suez Canal
- Strait of Gibraltar
- All the capes
- Zanzibar and Pemba islands

2.**Calculating time**

a) It is 1:00pm at GMT. What is the time at town Y $30^0$ East?

b) It is 6:00pm at Mombasa $45^0$E. What is the time at Accra?

**LESSON 4**

**COUNTRIES IN EACH REGION OF AFRICA**

1.Africa is divided into regions;

a) Northern Africa

b) Central Africa

c) Southern Africa

d) East Africa

e) Horn of Africa.

**1. Countries in the Western region of Africa.**

| Country | Capital City | Country | Capital City |
|---|---|---|---|
| Ghana | Accra | Liberia | Monrovia |
| Burkina Faso | Ouagadougou | Mali | Bamako |
| Cape Verde | Cape Verde | Mauritania | Nouakhott |
| Ivory Coast(Cote d'Ivoire | Yamoussoukro | Niger | Niamey |
| Togo | Lome | Sierra Leone | Freetown |
| Guinea Bissau | Bissau | Nigeria | Abuja |
| Gambia | Banjul | Senegal | Dakar |
| Guinea | Conakry | Benin | Porto Novo |

**2.Countries in East Africa.**

| Country | Capital City | Country | Capital City |
|---|---|---|---|
| Uganda | Kampala | Tanzania | Dodoma |
| Kenya | Nairobi | | |

**3.Countries in central africa**

| Country | Capital City | Country | Capital City |
|---|---|---|---|
| Central African Rep | Bangui | Chad | N'Djamena |
| Congo Brazzaville | Brazzaville | DRC | Kinshasa |
| Equatorial Guinea | Malabo | Gabon | Libreville |
| SaoTome and Principe | SaoTome | Rwanda | Kigali |
| Burundi | Bujumbura | | |

**LESSON 5**

**4.Countries in Northern Africa**

| Country | Capital City | Country | Capital City |
|---|---|---|---|
| Algeria | Algiers | Libya | Tripoli |
| Morocco | Rabat | Tunisia | Tunis |
| Egypt | Cairo | Sudan | Khartoum |
| South Sudan | Juba | Western Sahara | El Aaiun |

**5.Countries in Southern Africa**

| Country | Capital City | Country | Capital City |
|---|---|---|---|
| South Africa | Pretoria | Angola | Luanda |
| Botswana | Gaborone | Swazi land | Mbabane |
| Lesotho | Maseru | Malawi | Lilongwe |
| Madagascar | Antananarivo | Mauritius | Port Louise |
| Seychelles | Victoria | Mozambique | Maputo |
| Zimbabwe | Harare | Zambia | Lusaka |
| Namibia | Windhoek | Comoros | Moroni |
| Reunion | Reunion | | |

**6. Horn of Africa**

| Country | Capital City | Country | Capital City |
|---|---|---|---|
| Ethiopia | Adis Ababa | Djibout | Djibout |
| Somalia | Mogadishu | Eritrea | Asmara |

**Land locked countries of Africa.**

- Uganda - Swaziland - Zimbabwe - Central African Republic
- South Sudan - Lesotho - Zambia - Burkina Faso
- Rwanda - Botswana - Chad - Niger

**Lesotho** is called an enclave country of Africa because it is located within another country-South Africa.

**LESSON 6**

**PHYSICAL FEATURES OF AFRICA**

1. Physical features are natural landforms that give the earth shape.

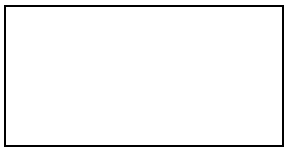
2. **Africa is made of the following physical features.**

- Lakes and rivers.
- Highland / mountains
- Rift valley
- Plateau
- Coastal plains
- Islands
- Basins

3. **Plateau**

- A plateau is a raised flat topped piece of land.
- A plateau is a table land.
- A plateau covers the largest part of Africa.

4. Draw a map symbol of a plateau.



**LESSON 7**

5. **Rocks which made the plateau.**

i) Sedimentary rocks.

ii) Metamorphic rocks.

iii) Igneous rocks.

6. **Examples of plateaus in Africa.**

- A haggar plateau in Algeria.
- Jos plateau inNigeria

- Funta Djalon/Guinea plateau in Guinea
- Bie plateau in Angola
- Nyikka plateau in Kenya
- Yatta plateau in Kenya

7. **Human activities on a plateau**.

- Farming
- Mining
- Tourism
- Nomadic pastoralism
- Settlement

**LESSON 8**

8. **Reasons why a plateau is good for human settlement.**

- It has fertile soils for farming.
- It has pasture for cattle keeping.
- It is easy to construct houses on a plateau.
- There is easy transport on plateau.

9.The Masai live in the Nyikka plateau of East Africa.

10.The word Nyikka means barren\ dry land.

11.**Pastoral tribes in Africa**.

- Fulani - Bahima - The Dodoth -The San.
- Karimajongs - Hausa - Sotho

**Highlands and Mountains**

-There are three types of mountains in Africa namely;

a) Fold mountains

b) Volcanic mountains

c) Block mountains

**LESSON 9**

**Fold Mountains**

- Fold mountains are found near the edges of continents.
- They were formed as a result of folding.
- This happened when two forces moving against each other made the young sedimentary rocks to fold upwards.
- The rocks that were very old would break
- The lifted parts are called **anticlines** and sunken parts are called **synclines**
- Forces that caused folding were compressional forces.

**Examples of fold mountains in Africa:**

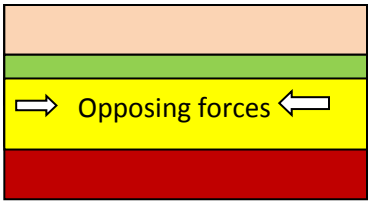
a)Atlas mountains in Morocco

b)Cape ranges in South Africa

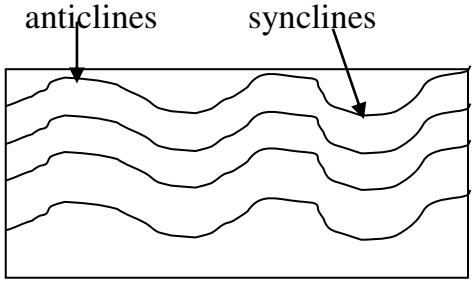
**Diagram showing the formation of fold mountains.**



Land before folds




Opposing forces meet




Upward movement forms fold mountains

**LESSON 10**

**Volcanic Mountains**

-Volcanic mountains were formed when molten rocks known as magma forced their way on the surface of the earth.

- They were formed as a result of volcanic activities.
-A Vent is an opening / a feature through which hot molten rocks, water, steam or ash passes to reach the earth's surface.

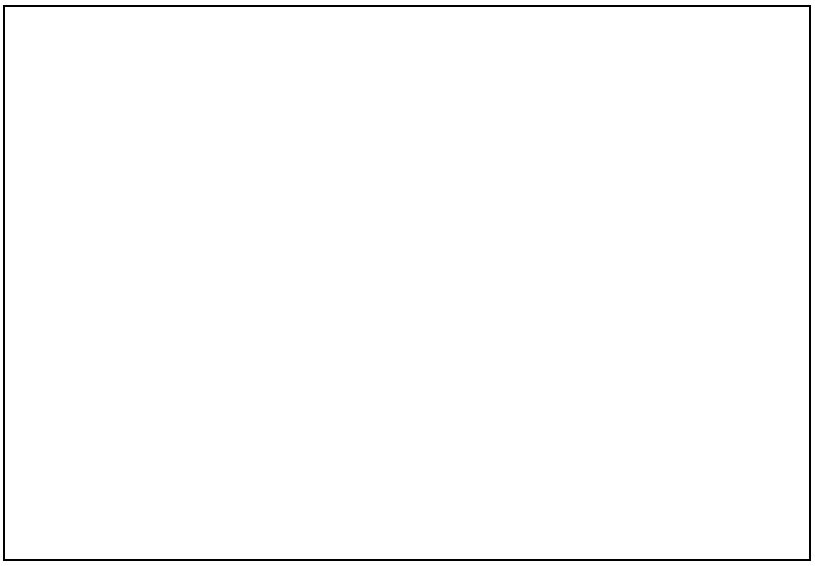
-Magma are molten rocks found under the surface of the earth.

-Lava is the solidified magma that has cooled and it is found on the earth's surface.

-Crater is a depression on a volcanic mountain.

- Lava may flow over a large area forming plateaus or cones(domes).

**Diagram showing volcanic mountain Sharing our world bk 7 pg.11.**



**Types of volcanic mountains.**

a) Active volcanoes.

b) Dormant volcanoes.

c)Extinct volcanoes.

**Active volcanoes:**

These are volcanoes that erupt frequently.

**LESSON 11**

**Dormant/sleepy volcanoes:**

These are volcanoes that are sleeping but are likely to erupt later.

**Extinct/dead volcanoes:**

These are volcanoes that are old and will not erupt again.

**Examples of volcanoes in Africa:**

| **Mountain** | **Country** |
|---|---|
| **Active Volcanoes** | |
| Mt. Nyiragongo | DRC |
| Mt. Nyamulagira | DRC |
| Mt. Oldonyo Lengai | Tanzania |
| Mt. Cameroon | Cameroon |
| Mt. Mufumbiro | Uganda |
| **Dormant Volcanoes** | |
| Mt. Longonot | Kenya |
| Mt. Muhavura | Uganda |
| Mt. Moroto | Uganda |
| **Extinct Volcanoes** | |
| Mt. Elgon | Uganda |
| Mt. Kenya | Kenya |
| Mt. Kilimanjaro | Tanzania |
| Ethiopian highlands | Ethiopia |
| Tibesti mountains | Chad |

**LESSON 12**

**Block Mountains**

-Block mountains were formed by faulting.

-These are formed when the block between faults is lifted up by forces coming from the centre

Of the earth.

-The middle block is forced to sink.

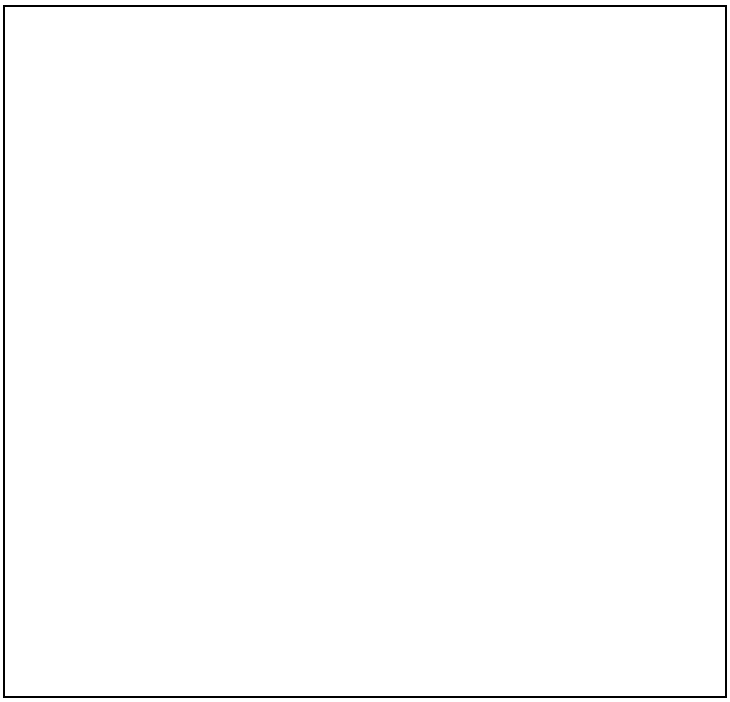
-The raised blocks are known as horst or block mountains.

**Examples of Block Mountains in Africa**

| **Mountain** | **Country** |
|---|---|
| Rwenzori | Uganda |
| Usambara | Tanzania |
| Pare | Tanzania |
| Danakil | Ethiopia |
| Great Karas mountains | Namibia |
| Uluguru | Tanzania |

**Diagram showing the formation of Block Mountains Comprehensive bk 6**

**Map of Africa showing mountains and highlands**



**LESSON 13**

## Basin

-This is a large low lying land found with in the earth's surface.

-It can be between a plateau and a plateau or a highland.

-Africa has the basins below;

a) Congo basin
b)Okavango basin
c)Nile basin
d) Limpopo basin
e) Zambezi basin
f)Chad basin
g)Niger basin
h)Orange basin
i)Victoria basin

**Human activities in basins**

- Farming
- Fishing
- Tourism
- sand mining
- Brick making

## THE GREAT RIFT VALLEY OF AFRICA

-The great rift valley of Africa starts from Jordan in the Middle East ends at Beira in Mozambique.

-The Rift Valley was formed by the process of faulting and by the help of either Tensional or compressional forces.

-The faults occurred as a result of disturbances in the earth's crust.

- The highest floor of the rift valley is found around L. Kivu and the lowest is around L. Tanganyika.

- Scarps/escarpments are steep sides of the rift valley.

- Scarps are a problem to people who live in a rift valley because they make it difficult to built roads.

**LESSON 14**

**The four arms of the great rift valley of Africa:**

a)**The Ethiopian Rift Valley**

-It enters Ethiopia from Red sea.

-It has L.Abaya and Danakil depression.

b)**The Western Rift Valley**

-It runs through Uganda, Rwanda, Burundi and Tanzania.

-It has lakes like; L. George, L.Albert, L. Edward, L.Kivu and L.Tanganyika.

c)**The Eastern Rift Valley**

-It runs through Kenya and Tanzania.

-It has lakes like, Turkana, Nakuru, Natron, Manyara, Magadi, Eyasi, e.t.c.

d)**The Malawian Rift Valley**

-It runs through Malawi to Mozambique.

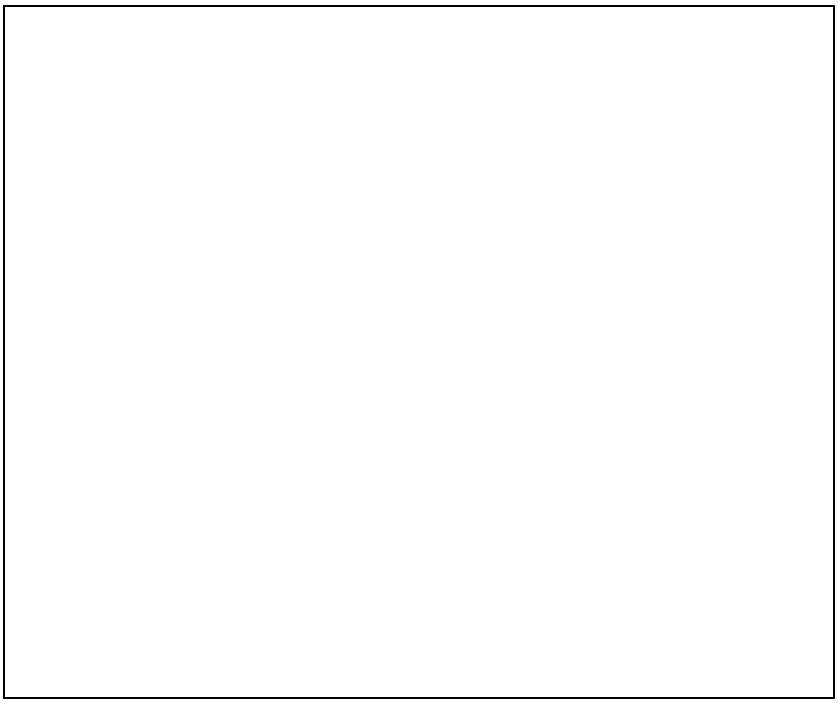
-The lake in this arm is L. Malawi.

**Human activities carried in the Rift valley:**

**-**Farming -Fishing -Tourism

**-**Mining

**MAP OF AFRICA SHOWING THE GREAT RIFT VALLEY**



**LESSON 15**

**THE COASTAL PLAIN**

- It is a low lying region near the coasts of Africa.
- The coast is a narrow strip of land between the or ocean and the land.
- Some parts of coastal plain have an altitude of 250m above the sea level.
- Some plains are wide especially in Eastern Africa and West Africa.
- The coastline of Africa is generally regular and narrow.
- The African coasts have few natural harbours because the land slopes up gently to the shore.
- Or because it is regular and narrow.
- Natural harbours occur in where there are inlets into the land which form bays.

-A bay is part of the sea partly surrounded by a curve of land.

- The West African coast has many lagoons because it is indented.

- A lagoon is a lake formed when sea water is separated by sand or mud.

- Cities like Lagos in Nigeria, Abidjan in Cote d'Ivoire and Durban in S. Africa were built on islands in lagoons.

-Lagoons are also found in the Nile delta

-The coasts of Africa have coral reefs.

-Coral reefs are rocks formed by remains of dead sea creatures found at the bottom of the sea.

-Coral reefs are used to make cement and attract tourists.

-They are dangerous to water transport because they damage ships

-They also make it difficult for ships to enter the harbour easily

**LESSON 16**

**The economic activities done in the coastal plains.**

-Farming-crops like cloves, oil palm, rubber, sugarcane, vines which produce grapes for making wine, etc. are grown.

-Mining- e.g. oil

-Fishing especially marine fish.

- Shipping services.

-Trade.

-Oil refining.

**THE DRAINAGE SYSTEM OF AFRICA**

-Drainage is the way in which rainfall drains away from the land back into lakes, seas and oceans.

-**The following are the main features of drainage features:**

i] Drainage basins iii] Lakes

ii] Rivers iv] Swamps

**RIVERS:**

**-A** river is a mass of flowing water

-Tributary is a small river that flows into the main river.

-Distributary is a small river that flows away from the main river.

-Source is where a river starts flowing.

-Mouth is where a river pours its water.

-Confluence is where two or more rivers meet.

-Course is the direction a river moves in.

-Watershed is a line of highland separating two streams which flow into different rivers.

-River bank is a side of a river.

-Estuary is where a river enters its mouth in one wide stream.

-Delta is where a river forms channels before it enters the sea.

**LESSON 17**

**Rivers of Africa:**

-Africa is drained by many rivers.

-The rivers are in two types.

a) Perennial or permanent rivers

b) Seasonal rivers

-**Perennial rivers:** are rivers that flow throughout the year.

-**Seasonal rivers**: are rivers that flow mainly during the rainy season.

**Examples of seasonal rivers:**

i) R. Agago – Uganda

ii) R. Turkwel – Kenya

**Major rivers in Africa:**

| **Rivers** | **Length** | **mouth** |
|---|---|---|
| R. Nile | 6500km | Mediterranean sea |
| Congo | 4800km | Atlantic Ocean |
| Niger | 4000km | Atlantic Ocean |
| Zambezi | 3000km | Indian Ocean |

| | | |
|---|---|---|
| Orange | 2100km | Atlantic Ocean |
| Lipompo | 1700km | Indian Ocean |
| Senegal | 1700km | Atlantic Ocean |
| Volta | 1100km | Atlantic Ocean |

**LESSON 18**

-**Rivers originate from the following features**;

i) Lakes ii) Highlands

iii) Melting snow / Glaciers iv) Springs

| River | Main tributaries | Source | Nature of mouth |
|---|---|---|---|
| Congo | Ubangi, Kasai, Lualaba, Lukaga, Luapula | L. Tanganyika and L. Mweru | Estuary |
| Niger | Benue | Fauta Djallon and Adamawa Mts. | Delta |
| Orange | Vaal | Drakensberg Mt | Estuary |
| R.Nile | Atbara, Blue Nile, White Nile, Kafu, Achwa | L. Victoria | Delta |
| Blue Nile | | L.Tana | |
| Zambezi | Kafue, Linyanti | Angola plateau | Delta |
| Lipompo | Suna, Krocodil Magalawena | High veld | Estuary |
| R. Volta | Otti, Tano | _____ | Estuary |

**Stages of a river:**

A river has three stages / courses

i) Upper course / Youth stage

ii) Middle course

iii) Lower course / old stage

**Characteristics of Upper course:**

-Waterfalls and rapids are formed.

-The river is narrow.

-The river is so destructive with gorges formed.

-The river forms steep slopes.

-The river erodes down wards.

-The river flows zig zag course.

**Characteristics of the middle course:** -

-The river is wide.

-It carries many objects.

-It erodes its sides.

-It begins to form meanders.

-It has large amount of water.

**Characteristics of the lower course:**

-Ox-bow lakes are formed.

-The rivers form deltas.

**Waterfalls:**

**-**Waterfall is where a river falls from high place.

-Waterfalls are formed when water flows over a cliff(steep slope) or hard rock.

**LESSON 19**

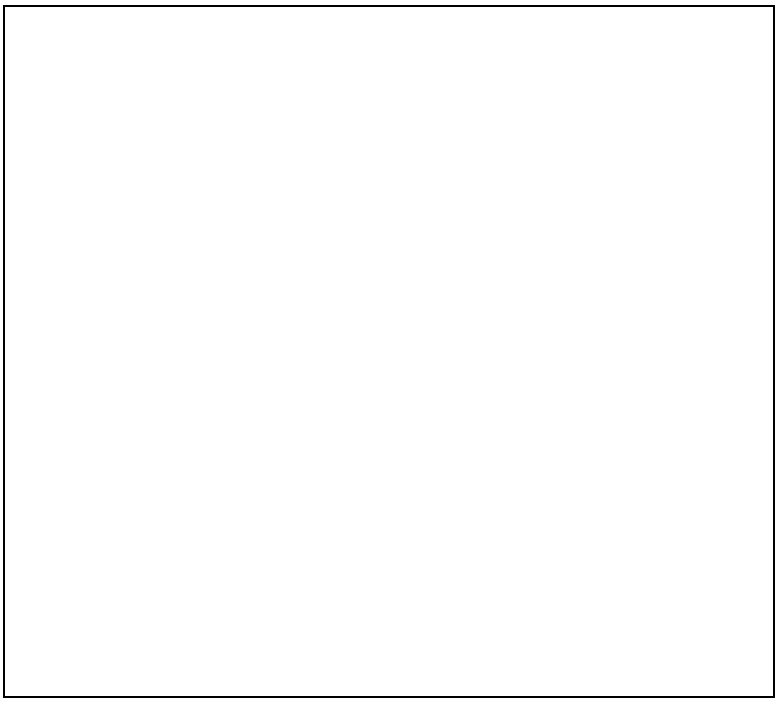
**Importance of waterfalls:**

-They are used to generate hydro electricity.

-They attract tourists who bring income

-They are used for rafting

**Diagram showing the course of a river(Sharing-bk7-pg-16)**



**Economic importance of rivers**

-They attract tourist for income.

-They help to generate hydro electricity power.

-They provide fish to people.

-They provide water for industrial use.

-They provide water for irrigation.

-Some rivers are used for transport.

**Other uses of rivers**

-They help in the formation of rainfall.

-They are used for recreation.

-They provide materials for craft work.

-They have fertile soils for farming.

-They provide water for domestic use.

**Questions:**

1. Why do many rivers in East Africa flow towards Indian Ocean?
2. Give two reasons why most rivers have their source in mountain areas.
3. In which way do rivers influence human settlement?
4. Give two reasons why R. Congo drains a lot of water into Atlantic Ocean.
5. In which way can rivers be a disadvantage to people?
6. Give three reasons why some rivers are not used for transport?
7. Give two reasons why it is believed that early civilization started along river valleys.
8. Mention three problems faced by rivers in Africa.
9. In which way do rivers influence the way of living of:

a) Animals

b) Plants

10. How do rivers promote industrial development?

**LESSON 20**

**MAP SHOWING MAJOR RIVERS OF AFRICA(GHC STD7-PG8)**



**DAMS IN AFRICA**

| **Country** | **River** | **Dams** |
|---|---|---|
| Uganda | R. Nile | Nalubaale dam, Kiira dam |
| Sudan | R. Nile | Sennar dam, Jabel Aulia dam |
| Egypt | R. Nile | Aswan High Dam |
| Zambia | R. Zambezi | Kariba dam, Kafue dam |
| Kenya | R. Tana | Seven folks dam |
| Ghana | R. Volta | Akasombo dam, Kpong dam |
| DRC | R. Congo | Inga dam, Nziro dam |
| South Africa | R. Orange | Henrik dam, Verwoerd dam |
| Nigeria | R. Niger | Kainji dam |
| Mozambique | R. Zambezi | Cabora bassa dam |

**LESSON 21**

**MULTIPURPOSE RIVER PROJECTS**

These are projects set up on a river to serve more than one purpose.

**Examples of multi purpose river projects in Africa**

| **Project** | **River** | **Country** |
|---|---|---|
| The volta River project | R. Volta | Ghana |
| Aswan High dam | R. Nile | Egypt |
| The Kainji project | R. Niger | Nigeria |
| Cabora Bassa / Kariba dam | R. Zambezi | Mozambique / Zambia |
| The Tana River development project | R. Tana | Kenya |

**Benefits from Multipurpose river projects.**

-Generation of Hydro electric power.

-Floods on rivers are controlled.

-A lake formed is used for fishing.

-A lake formed provides water for irrigation.

-The project attracts tourists.

- The lake is used for transport.

**Questions:(MK7-pg182)**

1.In which way are multipurpose river projects a disadvantage to people?

2.Give two advantages of having more than one dam in Africa.

3.State four factors considered before constructing a dam on a river.

4.What is rural electrification?

5.Give two advantages of rural electrification.

6.Where does Uganda export her electricity?

7.Why is electricity called an invisible export?

8.Why was the Owen falls dam constructed at Jinja?

9.What is a rive meander?

10.Name the longest river in the World.

11.Give one reason why the Europeans were interested in finding the source of River Nile.

12.Why is road and railway construction difficult in D.R.C?

13.How have the tributaries of R. Congo affected road and railway construction?

**LESSON 22**

**ASWAN HIGH DAM**

-Aswan high dam was constructed on R. Nile in Egypt.

-It is the largest dam along R. Nile.

**Contributions of Aswan high dam to the economy of Egypt:**

i)The dam generates Hydro Electric Power.

ii)It helps to provide water for irrigation.

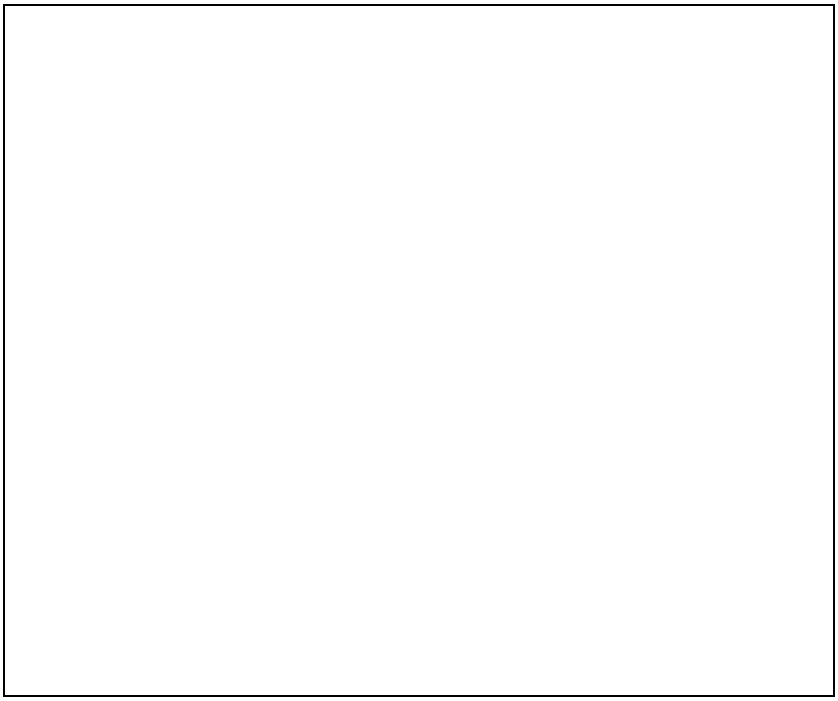
iii)It helps to control annual floods.

iv)A lake formed is used for transport and fishing.

v)People get water for domestic use.

vi) It creates employment.

**ASWAN HIGH DAM (Ref: Map Comprehensive Bk 7pg-151)**



**Factors to consider when setting up a dam**

1.Presence of hard rocks to build on the foundation.

2.Presence of constant fast running water.

3.Availability of ready market to consume the H.E.P.

4.Presence of capital.

**Questions:**

1.Why isn't there a man-made water reservoir behind Nalubaale dam?

2.How has the presence of Nalubaale dam helped the industrial sector of Kenya to develop?

3.Why do you think the people in rural areas will not benefit from the government policy of rural electrification?

4.What Ministry in Uganda is directly responsible for the production of Hydro Electric power?

**LESSON 23**

**LAKES IN AFRICA**

-Lakes are formed when very wide holes on the earth's surface are filled with water.

**Types of lakes**

-There are different or several types of lakes in Africa.

-These include;

i) Rift valley lakes

ii) Crater lakes

iii) Human made lakes

iv) Depression lakes

v) Volcanic lakes (Lava dammed lakes)

vi) Ox-bow lakes

vii) Lagoon lakes

**Rift valley lakes**

They are formed when water collects in faulted valley.

**Examples of rift valley lakes**

i) L. Albert ii) L. Tanganyika iii) L. Malawi

iv) L. Turkana v) L. Magadi

**Characteristics of rift valley lakes**

i)They are deep.

ii)They are narrow

iii)They have regular shapes.

iv) They have more inlets than outlets.

v)They have salty water.

vi)They are long.

**Points to note.**

1.Lakes get water from:

i) Rainfall

ii) Streams

iii) Rivers

**2.Rift valley lake have salty water because:**

i)They have more in-lets than outlets.

ii)They have salty basement rocks.

**Crater lakes**

-They are formed when water collects in craters of volcanoes.

-Crater lakes were formed by volcanicity.

**Examples of crater lakes**

- L. Nyungu
- L. Katwe
- L. Muhavura
- L. Nyakasura
- L. Nyamunuk
- L. Basumtwi in Ghana
- Panjam in Nigeria

**Volcanic lakes (Lava dammed lakes)**

-They are formed as a result of lava flowing blocking a river.

**Examples of volcanic lakes**

-L. Mutanda

-L. Edward

-L. Bunyonyi

-L. Kivu

- L. Tana

**Ox-bow lakes**

They are formed as a result of river meandering and deposition.

**Rivers with ox-bow lakes**

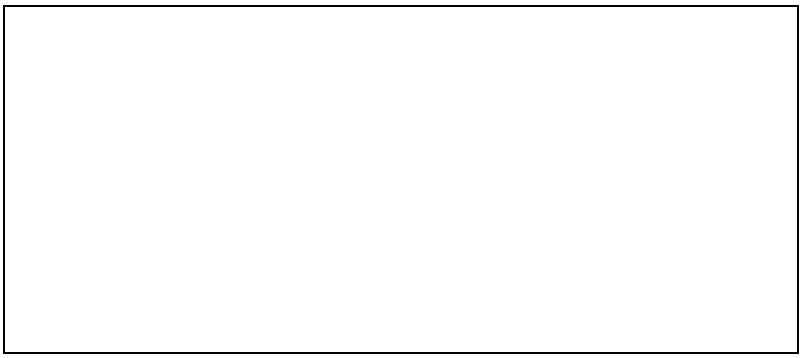
i)R. Semiliki –Uganda

ii)R. Ngando – Kenya

iii)R. Kilombero – Tanzania

iv)R. Nile – Egypt

**DIAGRAM SHOWING THE FORMATION OF OX-BOW LAKES**



**1. Ox-bow lake in Uganda.**

L. Ruizi L. Gambi on R.Tana

L. Utange on Rufigi L. Manzala on the Nile delta

L. Kanyaboli on R. Yala

**Down warped lakes (depression lakes)**

-Down warping lakes were formed by the earth's movement which resulted into the formation of depressions (basins) where water collected to form lakes.

**Examples of these lakes are:**

i) L. Kyoga

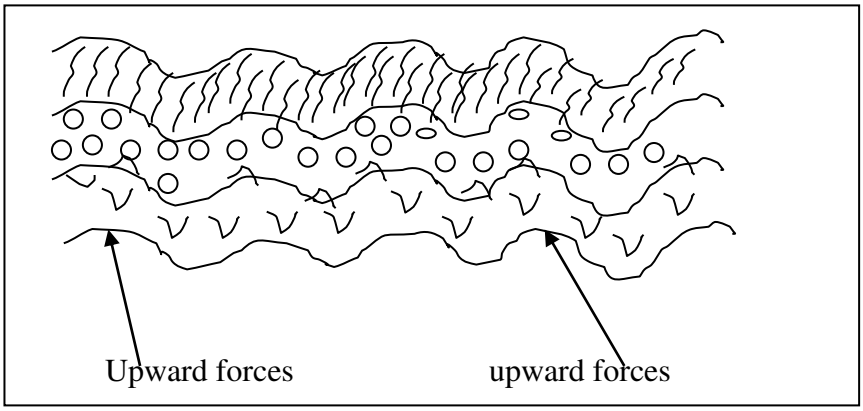
ii) L. Victoria

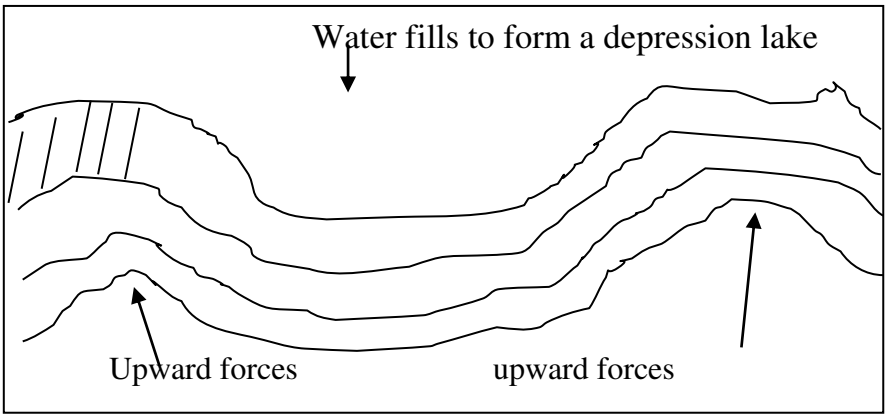
iii) L. Wamala

iv) L. Opeta

v) L. Kwania.

**Formation of down warping lakes**



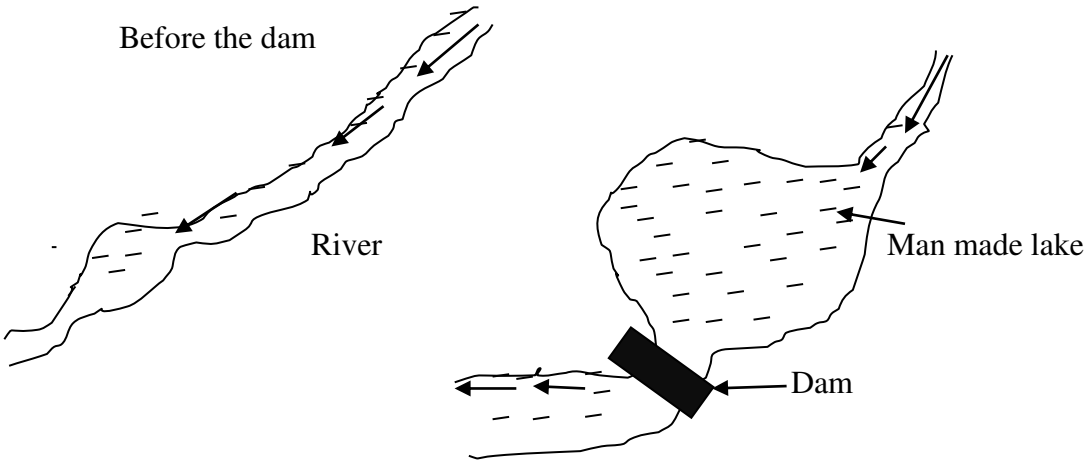

**Characteristics of depressional lakes**

- They have fresh water.
- They have both in-lets and outlets.
- They have irregular shape.
- They are shallow.

**LESSON 24**

**Human made lakes**

These are lakes formed as a result of human activities e.g pottery, dam construction, etc.




**Examples of man made lakes**

- Lake Kariba on R. Zambezi
- L. Volta on R. Volta – Ghana
- L. Nasser on R. Nile – Egypt.
- L. Kainji on R. Niger – Nigeria
- Kabaka's lake - Uganda

**NB:**The largest man-made lake is L. Kariba on R. Zambezi in Zambia.

**LAGOON LAKES**

1. A lagoon lake is a lake of sea water separated from the major sea by sand or mud.

2. Most lagoon lakes are found at the West African coast.

3. This is because West Africa has an indented coastline yet East Africa has a smooth coastline.

4. The largest lagoon is Keta in Ghana.

5. There are many lagoon lakes at the coast of Ghana mainly because it is indented.

6. **Examples of a lagoon lakes**:

-Lagos lagoon

-Nokeu in Benin

Koule in Ghana

Igele in Gabon

**Problems facing lakes in Africa.**

i)The water weed.

ii)Water pollution - dumping of wastes.

iii)Drought

**Sources of fish(Fishing grounds)**

| | | | | | |
|---|---|---|---|---|---|
| i) | Lakes | ii) | Swamps | iii) | Oceans |
| iv) | Rivers | v) | ponds | vi) | Seas |

**Methods used to catch fish**

i)Using baskets

ii)Using hooks

iii)Using fishing nets (Gill net method)

iv)Using spears

**Problems facing the fishing industry**

i)Fish poisoning

ii)Poor storage facilities

iii)Poor transport

iv)The water weed

**LESSON 25**

**Problems faced by fishermen in Uganda**

i) Dangerous marine animals.

ii) Drowning

iii) Fish poisoning

iv) Over fishing

v) Poor storage facilities

vi) Pirates

**Methods of preserving fish**

i) Smoking ii) Tinning'

iii) Salting iv) Sun drying

**QN.** Why isn't there fish and any other living organisms in L. Katwe?

**The presence of salty water which does not favour the life of fish and other living organisms.**

**IRRIGATION SCHEME**

1. An irrigation scheme is an area where crops are grown under the artificial supply of water from a natural source.

2. Irrigation is the artificial supply of water from a water body to a garden.

3. **What are the reasons for irrigation?**

i)To increase production of crops.

ii)To prevent crops from drying.

iii)To grow crops throughout the year.

iv)To put the would be useless land to use.

v)To increase crop yields.

4. **What are methods of irrigation?**

i)Canal method / Gravity irrigation.

ii)Over flow method (sprinkler)

iii)Using a watering can.

5. **Advantages of irrigation farming.**

i) Crops are grown throughout the year.

ii)Crops give high yields.

iii)Dry land is put to use.

**Examples of irrigation schemes of Africa**

| Irrigation scheme | Country | Source of water | Crops grown |
|---|---|---|---|
| Gezira scheme | Sudan | Blue Nile | Cotton |
| Richard Toll | Senegal | River Senegal | Groundnuts |
| Awash valley | Ethiopia | River Awash | Rice |
| Mwea Tebere | Kenya | River Thiba, Nyamindi | Rice |
| Kilombero valley | Tanzania | River Kilombero | Sugarcane |
| Doho | Uganda | River Manafa | Rice |
| Mubuko | Uganda | River Mubuku | Cotton |
| Shabelle | Somalia | River Shabelle | Bananas |
| Voal | S. Africa | River Vaal | Groundnuts |
| Lake chad | Chad | River Chad | oats |

**LESSON 26**

**GEZIRA IRRIGATION SCHEME**

**Gezira irrigation scheme is located** in Sudan between Blue Nile and White Nile.

-Gezira scheme was started in 1925 by the British.

-It is the largest irrigation scheme in Africa. Its size is 80,000 hectares.

-Gezira is managed by the Sudan Gezira Board**.**

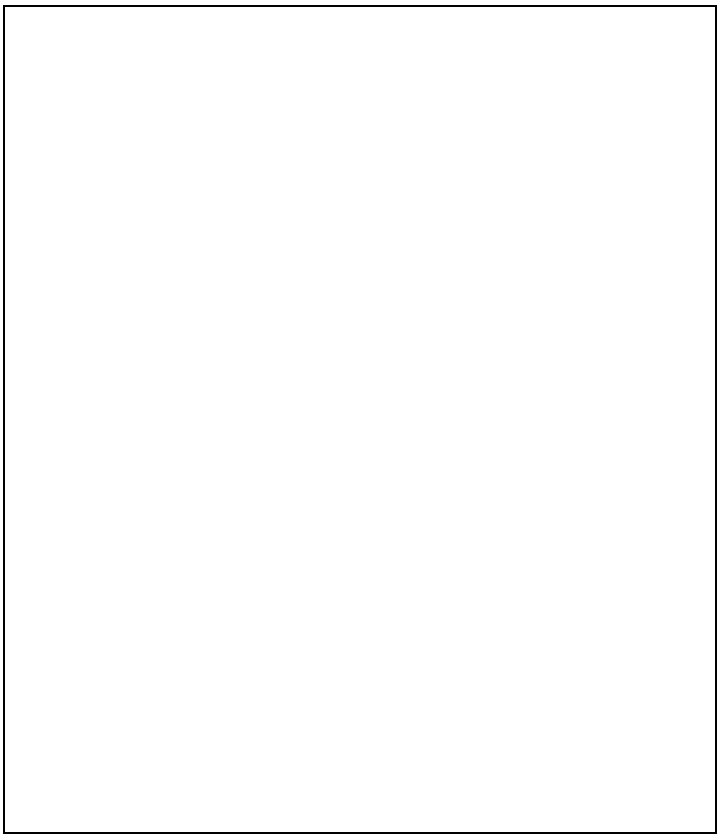
-The farmers in Gezira are called Tenants.

-Sennar dam on Blue Nile helps to provide water for irrigation by raising the level of water to the canal level.

-Canal method is the common method of irrigation in Gezira.

-Another method of irrigation is sprinkler.

**THE GEZIRA IRRIGATION SCHEME (FUNCTIONAL pg160)**



**Key**

XXXX – Gezira irrigation scheme.

N - Sennar dam.

SS - water suds

A - Aswan high dam

X - Jabel Aulia dam

K - Kenana iriigation scheme for sugarcane.

**Reasons why Gezira was established in that area**

-Presence of water from Blue Nile.

-The area was fertile for farming.

-The area was gently sloppy / flat.

-The area was a desert.

-It was sparsely populated.

**Crops grown in Gezira irrigation scheme**

- Cotton – The major cash crop.
- Groundnuts
- Maize
- Millet
- Beans
- Wheat
- Sorghum

**Functions of Sudan Gezira Board**

-It provides seeds to tenants.

-Provides fertilizers to tenants.

-Provides machinery to tenants.

-Gives technical advice.

**How does Gezira irrigation scheme benefit the people of Sudan**

-It is a source of employment.

-It is a source of food.

-It is a source of foreign income from cotton export.

-The scheme helps to provide social services to people.

-The scheme provide farmers with clean water.

-It helps to conserve the environment.

**Problems faced by Gezira irrigation scheme**

-Pests that attack crops.

-Canal silting.

-Diseases like Bilhazia.

-Price fluctuation of cotton in the world market.

-Dangerous weed.

**Solutions for the above problems**

-Spraying to control pests.

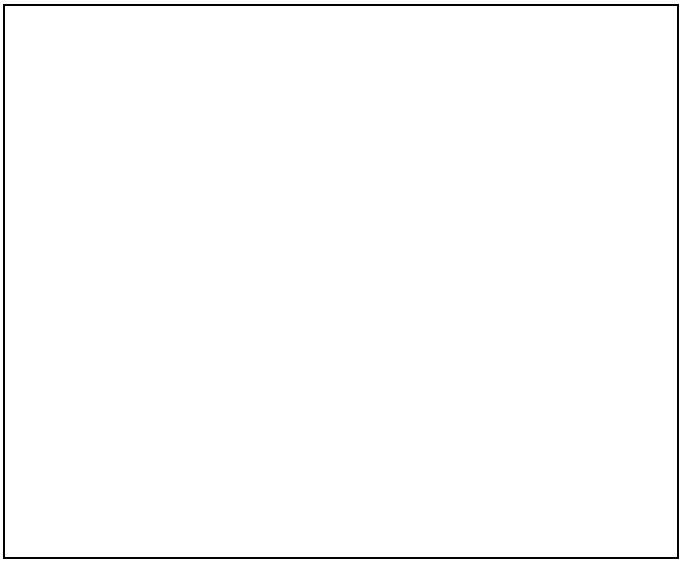
-By dredging the silted canals.

-By spraying molluscimesicides.

-By diversification.

-By spraying herbicides.

**MAP OF THE NILE VALLEY(Sharing-pg-22)**



**Questions :( Functional pg-160)**

1.a)Name the extension of Gezira irrigation scheme.

b)Mention the cash crop grown in the Gezira extension.

2.Mention the cash crop grown in Kenana irrigation scheme.

3.Which dam helps to supply water to Gezira irrigation scheme?

**LESSON 27**

**THE CLIMATE OF AFRICA**

1.**Climate** is the average weather condition of a place recorded for a long period of time.

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

3.**The difference between climate and weather is that:**

Climate is the average weather condition of a place recorded for a long period of time while weather is the state of the atmosphere of a place recorded for a short time.

**Or** Weather is recorded for a short time while climate is recorded for a long time.

4**. Conditions of weather**.

| | | | | | |
|---|---|---|---|---|---|
| i) | Sunny | ii) | Cloudy | iii) | Misty |
| iv) | Rainy | v) | Windy | vi) | Foggy |
| vii) | Hot or cold weather. | | | | |

5.**Elements of weather / climate**

| | | | |
|---|---|---|---|
| i) | Rainfall | v) | Sunshine |
| ii) | Temperature | vi) | Fog |
| iii) | Air pressure | vii) | Cloud cover |
| iv) | Wind | viii) | Mist |

6**.Factors of climate**

| | | | |
|---|---|---|---|
| i) | Temperature | v) | Air pressure |
| ii) | Rainfall | vi) | Cloud cover |
| iii) | Mist | vii) | Sunshine |
| iv) | fog | viii) | Wind |

7. **Terms associated with weather.**

i. **Isohyets:** These are lines drawn on a map to show places with the same rainfall.

ii) **Isobars:** These are line drawn on a map to show places with the same air pressure.

iii) **Isotherms:** These are lines drawn on a map to show places with the same temperature.

iv) **Isohels:** These are lines drawn on a map to show places with the same sunshine.

v) **Contour lines:** These are lines drawn on a map to show places with the same altitude.

8. **What is weather forecasting?**

This is the prediction of future weather changes.

9. How is weather forecast important to;

a) **Farmers:**

i) Helps farmers to know when to plant their crops.

ii) Helps farmers to know when to harvest their crops.

b) **Sailor:** Helps them to know the right weather for sailing.

c) **Pilots:** To know the right weather to fly a plane.

10. **Influence of weather to people during,**

i)**Wet or rainy days**

-People plant their crops.

-People put on heavy clothes.

-They weed their garden.

-They spray the crops.

ii)**Dry / sunny season**

-They harvest their crops.

-They dry their harvests.

-They put on light clothes.

-They prepare land for farming.

-They irrigate their crops.

iii)**Windy weather**

-Farmers winnow their seeds.

-People sail.

-People are helped to run the wind mills.

**Weather disasters and their effects to people.**

**Flood** is a large amount of water covering an area which is usually dry**.**

i)**Causes of floods:**

-It is caused by heavy rainfall.

-It is caused by poor drainage system.

-People have settled in swampy areas.

-It is caused by silting of swamps and rivers.

a)**Effects of floods to people**

-People's property are destroyed.

-Leads to famine by destroying crops.

-Leads to loss of lives,

-Kills domestic animals.

-Leads to spread of diseases.

-Destroys the bridges.

-They cut off road networks.

b)**Ways of helping flood victims**

-By giving flood victims food.

-By giving flood victims clothes.

-Resettling flood victims.

-By providing medicine to flood victims.

**C) Ways in which floods can be controlled in Uganda.**

-By conserving swamps.

- Constructing drainage channels.

ii)**Drought** is a long period of sunshine**.**

a)**Causes of drought:**

-High rate of deforestation.

-Swamp drainage.

-Bush burning

b)**Effects of drought**

-Famine

-Shortage of water.

-Shortage of pasture for animals.

-Death of animals

c)**Solutions for drought / drought effects**

-Practicing irrigation farming.

-Afforestation.

-Avoid swamp drainage

-Constructing valley dams and boreholes.

-By carrying out agro-forestry.

iii)**Landslide/mudslide** is a mass of soil or rock that falls down the slope of a mountain.

a)**Causes landslides:**

-Heavy rainfall

-Over cultivation on mountain slopes.

-Deforestation on mountain slopes.

b)**Effects of landslides**

-Loss of lives.

-Displacement of people.

-Destruction of property.

-Famine.

c)**Solutions to the above problems.**

-Avoid over cultivation on mountain slope.

-Avoid deforestation on mountain slope.

-Avoid settling on mountain slopes.

iv)**Hailstone** is a small ball of ice which falls like rain.

v)**Hailstorm** is a storm during which hailstones fall from the sky.

-It is caused by heavy rainfall.

b)**Effects of hailstones**

-Destroys crops.

-Kills animals.

-Leads to soil erosion.

c)**Solutions to effects of hailstones**

-Stay indoors.

**LESSON 28**

**CLIMATIC REGIONS OF AFRICA**

-Africa has the following climatic regions.

a)Equatorial climate.

b)Tropical climate

c)Desert climate.

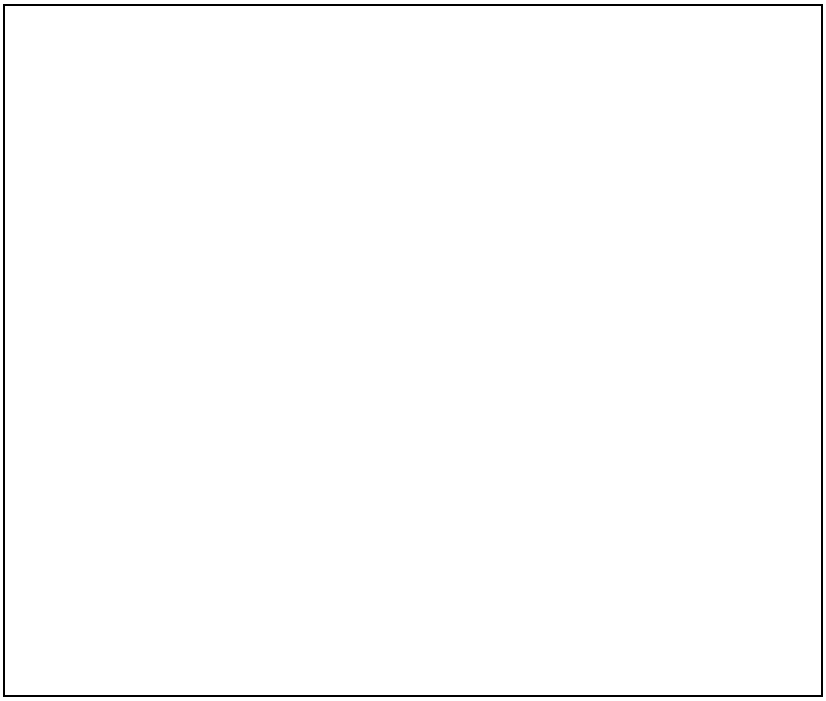
d)Mediterranean.

e)Temperate

f)Montane climate / Mountain climate.

g)Semi-desert climate.

**CLIMATIC REGIONS OF AFRICA**



**Equatorial climate**

- Equatorial climate is described as Hot and Wet

- It occurs between $5^0N - 5^0S$ of the equator.

- It receives rainfall throughout the year. The rainfall ranges from 1500mm-2500mm.

- There is no complete dry month.

- It has double maxima (two periods of high rainfall.)

- Much rainfall is received during equinox.

- The type of rainfall in Equatorial is Convectional.

- It has a high temperature of $24^0C - 27^0C$.

**Questions:**

1. Mention the countries in Africa with Equatorial climate.

2. Give the characteristics of convectional rainfall.

3. Mention two areas in Uganda with Equatorial climate?

**Economic activities in Equatorial regions**

- Farming - Tourism

- Lumbering - Mining

- Latex tapping. - Fishing

**Crops grown in Equatorial regions**

- Oil palm - Cocoa -Bananas

- Rubber -Coffee

**Temperature and rainfall from Equatorial region**

| Months | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Temp. $_0C$ | 23 | 23 | 23 | 22 | 22 | 22 | 21 | 22 | 22 | 22 | 22 | 24 |
| R/fall mm | 40 | 10 | 150 | 230 | 205 | 115 | 65 | 80 | 195 | 225 | 150 | 50 |

1. How many heavy seasons of rainfall are shown in the table above?

2. Calculate the rainfall range as shown in the table above.

3. Mention one country in Africa where the climate above was recorded.

4. Mention the three crops suitable for the above climate.

5. In which month was the highest rainfall received?

6. Suggest any one area in East Africa which has the climate shown in the table above.

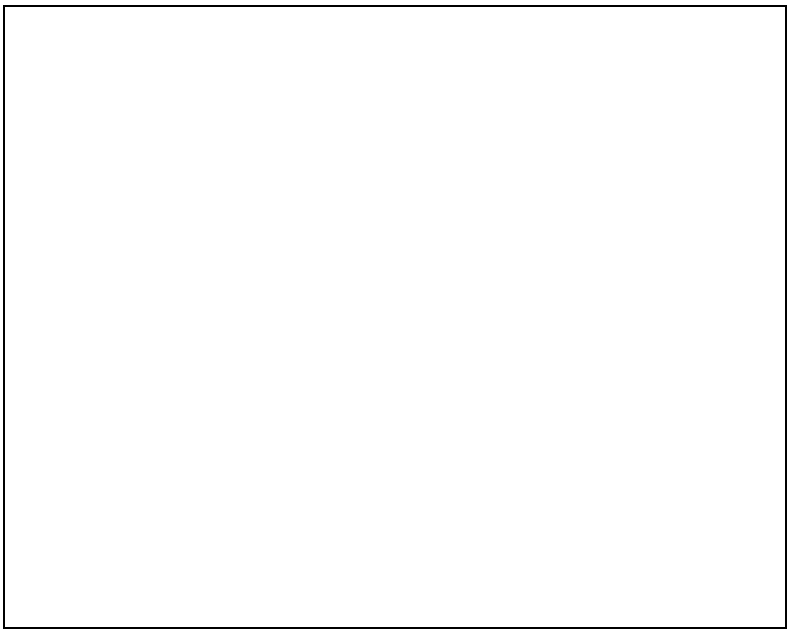
**7.** How does Equatorial climate affect people's way of living?

a) Dressing

b) Housing

c) Crops grown.

**Graph showing equatorial climate region** (Sharing pg-44)



**Questions?**

1. Which month was the average rainfall highest?

2. What was the lowest average temperature recorded?

3. What is relationship do you notice between average rainfall and average temperature?

4. Describe the above climate.

5. How many rainy seasons are shown on the graph?

6. What measures can the government put in a place to maintain the above climate?

7. Write down the economic activities in the equatorial climatic region.

8. Mention any four countries in Africa with equatorial climate

**LESSON 29**

**TROPICAL CLIMATIC REGION**

-Tropical climate is described as wet and dry.

- This region lies between $5^0 – 15^0$N and $5^0 – 15^0$S of the equator.

- It mainly receives convectional rainfall but some mountainous areas receive relief rainfall.

- The region has two dry and two wet seasons.

- The amount of rainfall decreases with the distance from the Equator.

- The period of the year when the sun overhead the Equator is called Equinox

($21^{st}$ March, $23^{rd}$ September)

- Tropical climate covers the largest part of Africa.

- It has two parts (the wet and the dry areas)

- The wet area is near equatorial climate while the dry is near desert climate.

- The rainfall ranges between 750mm – 1500mm annually.

**Characteristics of tropical climate**

- It has two wet and dry seasons. (two marked seasons)

- It has high temperature between $21^0$C – $32^0$C.

**Questions:**

1.a) Describe the tropical region of Africa.

b) Use the table below to answer the questions.

| Month | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Temp. $_0$C | 25 | 27 | 35 | 32 | 35 | 33 | 28 | 27 | 27 | 26 | 26 | 25 |
| R/fall mm | 125 | 110 | 110 | 20 | 19 | - | - | - | 10 | 15 | 80 | 125 |

a) State the climate described by the table above.

b) Which cash crop is favoured by the above climate?

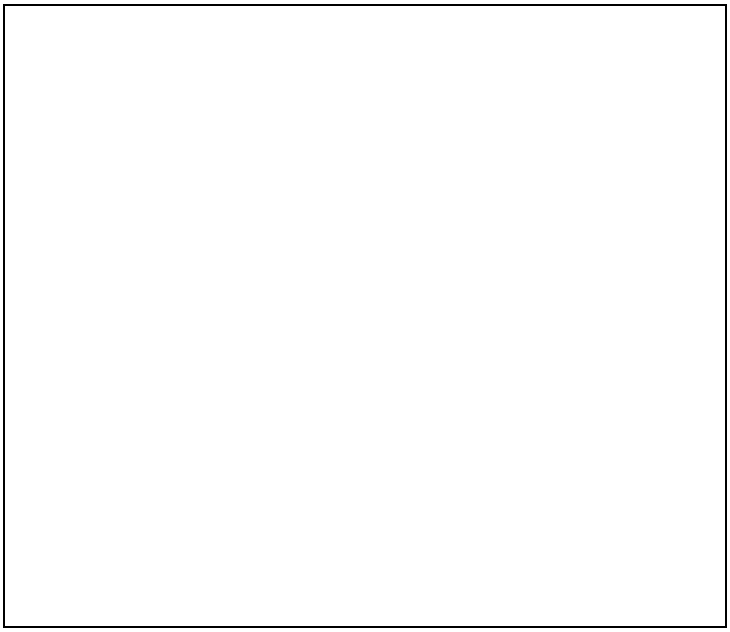
2. Which activities can be done by a farmer in the month of June, July and August?

3.a) Which month is suitable for planting crops or trees?

b) Give one reason for your answer above.

4. How many rainy seasons are indicated on the table?

**Graph showing tropical climate**



**Questions?**

1. Which month was the average rainfall highest?

2. In which month was their no rainfall?

3. What was the lowest average temperature recorded?

4. What relationship do you notice between average rainfall and average temperature?

5. Describe the above climate.

6. How many rainy seasons are shown on the graph?

7. What measures can the government put in a place to modify the above climate?

8. Write down the economic activities in the tropical region.

9. Mention any four countries in Africa with tropical climate.

**LESSON 30**

**MEDITERRANEAN CLIMATE ZONE**

- This region has four seasons spring, summer, autumn and winter.

- The summers are hot and dry.

- The winters are warm and wet.

- This region is found along Northern tip of the continent. (Africa)

- It also covers the south Western tip of the continent (Africa).

**NB:** Mediterranean climate is also called warm temperate western margin.

**Countries covered by this climate**

-Northern Morocco.

- Algeria

- South Africa (Cape province)

- Tunisia

**Main economic activities carried out**

- Agriculture (growing of citrus fruits)

- Tourism

- Mining

**Characteristics of Mediterranean climate**

- Hot and dry summers.

- Warm and wet winters.

- There is moderate rainfall, mainly in winter season.

- This rainfall is brought by westerly winds.

**Questions:**

1. Describe the following seasons experienced in the Mediterranean climate.

a) Summer: The warmest season of the year between spring and autumn

b) Winter: The coldest season of the year between autumn and spring

c) Spring: The season between winter and summer when plants begin to grow .

d) Autumn: The season of the year between summer and winter when the weather becomes

colder.

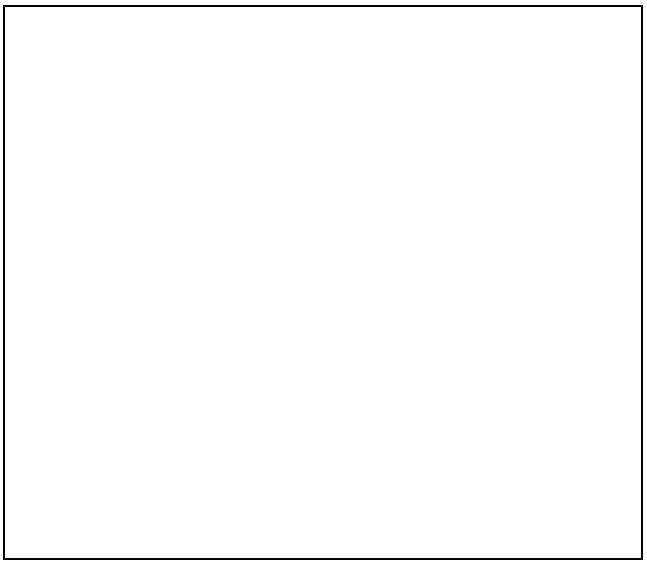
**Questions:**

1. In which season does Mediterranean region receive rainfall?

2. Mention the fruits grown in the Mediterranean climate.

3. Describe Mediterranean climate.

**Graph showing Mediterranean climate(Sharing bk7 pg 46)**



1. In which African country was the above climate recorded?

2. State the type of climate shown in the graph above.

3. Apart from Algeria, mention other three countries with the above type of climate.

4. In which month was the highest temperature recorded?

5. In which way is the rainfall related to temperature according to the graph?

6. State the highest temperature recorded at Algiers.

**LESSON 31**

**TEMPERATE CLIMATIC ZONE**

- The climate in this zone is experienced in areas of high altitude between latitudes $20^0$ and $30^0$.

-This region covers the Eastern part of South Africa to the East of the Drakensberg range

-These parts are referred to as the <u>velds</u>.

-They include;

-Transvaal
-Natal
-Orange free state
} provinces

- The temperature ranges between $10^0$C – $21^0$C.

- Rainfall range is 500mm – 760mm.

**Characteristics:**

- Temperate climatic region has warm – wet summers and cool dry winters.

- This climatic region receives moderate rainfall.

- The temperatures decrease with altitude.

**Economic activities carried out**

- Farming (crop farming and animal rearing) e.g Merino sheep for wool, Afrikander sheep for meat (mutton), Angola goats for mohair.

- Mining

- Tourism

- Lumbering

| Month | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Temp. $_0$C | 20 | 30 | 18 | 16 | 13 | 10 | 10 | 13 | 16 | 18 | 18 | 19 |
| R/fall mm | 112 | 97 | 75 | 61 | 22 | 9 | 8 | 5 | 35 | 69 | 115 | 111 |

**Question:**

1.In which way is rainfall related to temperature according to the table above?

2. State the month with the highest rainfall.

3. What type of climate is described on the table above?

4. In which African country do we find the above climate?

**Graph showing temperate climate:**



1. What type of climate is described on the graph above?

2. Which African country has the above climate?

3. Mention two economic activities carried out in the above region.

**LESSON 32**

**SEMI DESERT / DESERT CLIMATE**

1. **Types of deserts in Africa:**

i) Marine desert.

ii) Continental desert.

2.Examples of the above desert.

a) **Marine:** - Namib desert in Namibia.

b) **continental:** -Kalahari desert in Botswana.

-Sahara desert in North Africa.

3. Sahara and Kalahari deserts are called continental deserts because they lie inside the continent.

4.The temperature range of desert climate is between $35^0$C – $50^0$C.

5. Deserts are very cold at night because there are no clouds to hold the warmth.

6. Deserts are caused by dry winds and cold ocean currents

- Hammartan winds and North east winds caused the Sahara desert.
- Cold Canary current caused Sahara desert while Benguella currents caused Namib and Kalahari deserts.

-Ocean currents are caused by the earth's rotation and winds.

**THE MONTHLY RAINFALL AND TEMPERATURE FROM NAMIB DESERT**

| Months | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Temp. $_0$C | 18.5 | 19 | 19 | 18 | 17 | 16 | 16 | 14 | 15 | 14 | 18 | 17 |
| R/fall mm | 3 | 3 | 7.7 | 3 | 3 | - | - | - | - | - | - | - |

**Questions:**

1. Which months received the same amount of rainfall?

2. What is the total amount of rainfall received in the above area?

3. Give one reason why Namib desert has low temperature.

4. Mention the tourist attractions found in deserts.

5. In which way are oases important to people in desert regions?

6. What enables a camel to be used for transport in deserts?

7. Give two characteristics of desert climate.

8. Describe desert climate.

9. Mention the economic activities carried out in desert regions.

**LESSON 33**

**MOUNTAIN / MONTANE CLIMATIC ZONE**

-This climatic zone is experienced in high altitude areas.

-The temperature here reduces with increase in altitude making the higher slopes to experience cool temperature throughout the year.

**Montane climate is experienced in the areas below:**

- Drakensburg mountains.

- Ethiopian highlands.

- Mt. Kilimanjaro.

- Mt. Rwenzori

- Mt. Kenya

**Qn: Write three mountains in Africa which are snowcapped.**

i) Mt. Rwenzori

ii) Mt. Kenya

iii) Mt. Kilimajaro

**Factors influencing or affecting the climate of Africa**

-Altitude

-Ocean currents

-Prevailing winds

-Latitude

-Human activities

-Distance from large water bodies

-Vegetation.

**Altitude**

-This is the height of land above sea level.

-Altitude affects climate by changing the temperature.

-Areas on a higher altitude are cooler than areas on a lower altitude.

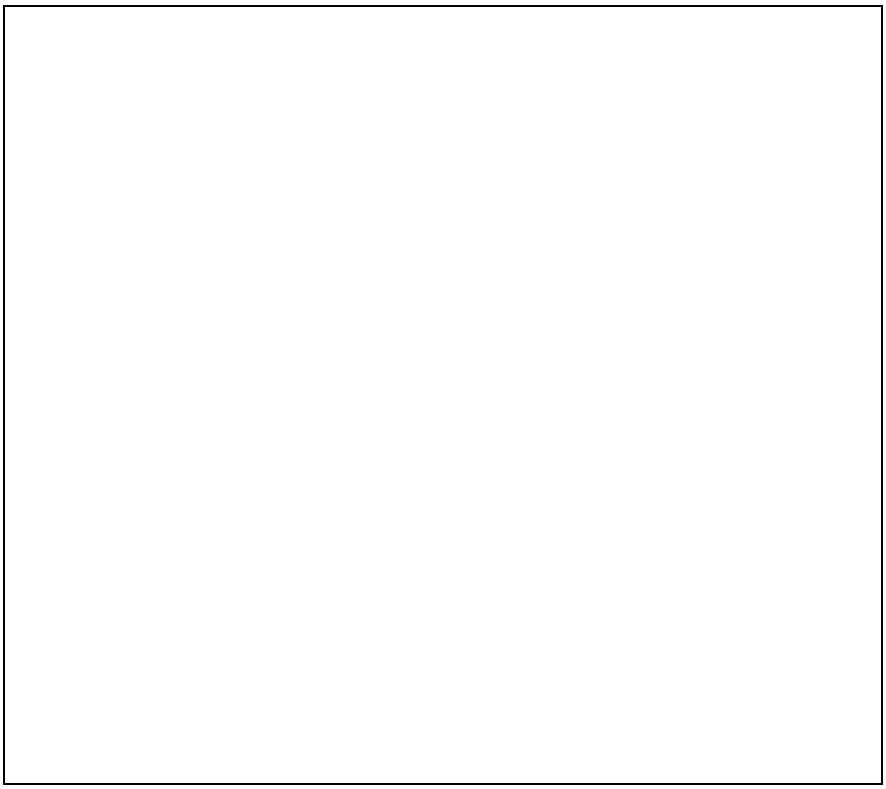
-The temperature decreases by $2^0$C for every 300 hundred metres (300m)

**Question:**

1.How does altitude influence climate?

Areas on a higher altitude are cooler than areas on a lower altitude.

**THE DIAGRAM SHOWING THE EFFECT OF ALTITUDE ON TEMPERATURE FUNCTIONAL PG 31)**



**LESSON 34**

**Ocean currents**

-Ocean currents are caused by the movement of wind over a mass of water flowing in aparticular direction.

-Ocean currents can also be caused by the earth's rotation.

-Ocean currents are either warm or cold depending on their origin.

-If a current flows from a warm area, it is warm and if it flows from a cool area it is cold.

-Warm currents help to form **rainfall** because they have moisture while cold currents do not form **rainfall** because they are dry.

**Examples of warm currents that bring rainfall to Africa are:**

i)Mozambique(Agulhas) current. ii)Guinea current. iii)Somali current

**Examples of cold currents that bring rainfall to Africa are:**

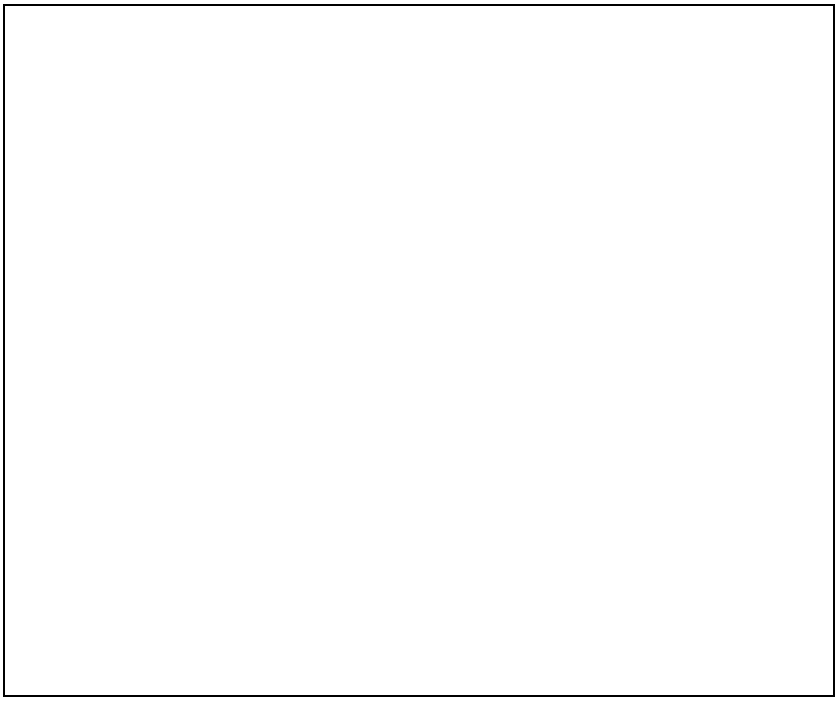
i)Canary current.

ii)Benguela current.

**Qn:** How do ocean currents affect the climate of Africa?

-Warm currents help to form rainfall while cold currents bring drought.

**MAP SHOWING OCEAN CURRENTS:(comprehensive pg 17)**



**Prevailing winds**

-Winds also influence the climate of Africa.

-The North-East trade winds which blow from Arabia are dry.

-They do not bring rainfall.

-The Harmaton winds also do not bring rainfall because they are dry.

-The South-East trade winds, the south west trade winds and the Westerly winds bring rainfall because they are warm and moist.

3.Winds that blow across a water body bring rainfall in an area because they pick moisture from the water body.

**LESSON 35**

**VEGETATION**

- Places with thick vegetation receive rainfall unlike places with no vegetation.

- Vegetation forms rainfall due to transpiration.

**Human activities:**

-There are human activities that can modify climate**.**

**These include:-**

-Afforestation

- Agro-forestry

- Preserving swamps

- By bush fallowing

-**Human activities which lead to drought are:-**

- Deforestation

- Swamp drainage

- Bush burning

- overgrazing

**Qn:** How do human activities influence the climate of an area?

Human activities that conserve the vegetation of an area encourage rain formation while those that destroy the vegetation discourage rain formation.

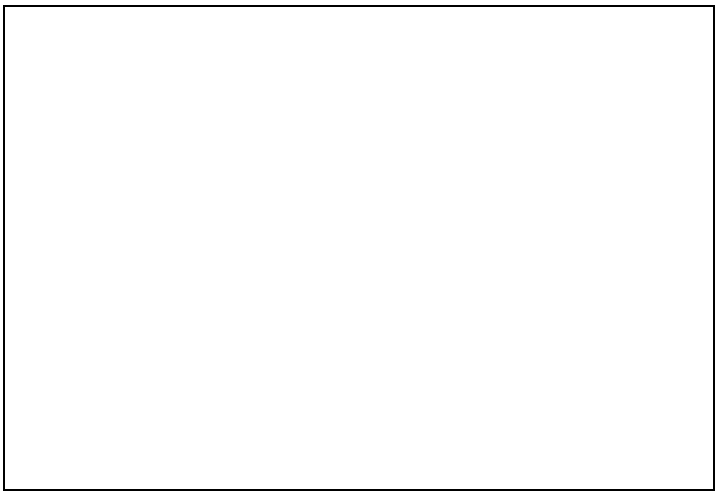
**Latitude**

- Areas along the equator are hotter that areas far away from the equator.

- This is because the sun overheads the equator twice a year.

- Also areas along the equator receive more rainfall than other areas. This is caused by high temperature in the region.

**Diagram showing how latitude affects climate :(MK pg 46)**



**Influence of climate on human activities**

| **Climate** | **Human activities** |
|---|---|
| Equatorial | - People carryout farming, lumbering, latex tapping.<br>- People put on heavy / thick clothes.<br>- People build houses with slanting roots to allow water run-off. |
| Tropical | - People practice farming, pastoralism, and tourism.<br>- Livestock farming e.g ranching and dairy farming.<br>- People put on light clothes. |
| Temperate | - People practice sheep rearing for wool.<br>- Ranching for beef.<br>- Growing of maize and barley. |
| Mediterranean | - Growing of citrus fruits e.g oranges, grapes, lemon, etc |
| Desert / semi desert | - People carryout irrigation farming.<br>- Nomadic pastoralism by Fulani, masai, Tuerag, Hausa, etc.<br>- People build flat houses to control heat from the sun.<br>- People wear light clothes with turbines. |

**Influence of human activities on climate:**

-Human activities like swamp drainage, deforestation lead to drought.

-Afforestation, reafforestation lead to good climate.

**Summary**

| **Climate** | **Rainfall** | **Temperature** | **Description** |
|---|---|---|---|
| Desert | Less than 250mm | $35^0C – 50^0C$ | Hot and dry |
| Tropical | 1000mm – 1500mm | $21^0C - 32^0C$ | Wet and dry |
| Equatorial | 2000mm – 2500mm | $21^0C - 27^0C$ | Hot and wet |
| Mediterranean | 500mm – 750mm | $10^0C - 21^0C$ winter<br>$21^0C - 27^0C$ summer | Hot, dry summers and warm winters. |
| Temperate | 400mm – 1200 mm summer | $10^0C - 20^0C$ | Hot and wet summers and dry cool winters. |

**Questions**

1. How does climate influence the following?

a) Wildlife

b) Vegetation

c) People's way of dressing.

2. Explain briefly how water bodies help in the influence of climate.

**LESSON 36**

**VEGETATION OF AFRICA**

-It is the Plant cover of an area.

**There are mainly two types of vegetation namely;**

-Natural vegetation

-Planted vegetation

**Difference between Natural and planted forest:**

- Natural forests produces hard wood while planted forests produce soft wood.
- Natural forests have a variety of tree species while planted forests have one tree species
- Natural forests have thick under growth while planted forests do not have thick under growth.
- Natural forests take long to mature while planted forests take short time to mature.
- Natural forests do not grow in rows while planted forests grow in rows.

-NB. Natural forests produce hard wood because they take long to mature.

**Why do they take long to mature?**

- They compete for nutrients.
- They lack conditions for maturing faster

**Examples of tree species in planted forests.**

- Eucalyptus

-Conifers( Pines, Cedar, Cypress, Fir)

**Natural vegetation:** is the plant cover of the area that grows on its own.

**Planted vegetation** :is the plant cover of an area planted by people.

**Vegetation zones in Africa:**

- Equatorial / tropical rain forests
- Savanna
- Mediterranean
- Temperate
- Semi desert
- Desert
- Mangrove
- Swamps / swampy vegetation.

**ELEMENTS OF VEGETATION**

- Trees - Flowers

-Crops - Grass

**Examples of trees in natural forests:**

- African walnut -Mahogany - Ebony -Rose wood - Mvule

**LESSON 37**

**EQUATORIAL VEGETATION**

- This type of vegetation grows in areas that experience high rainfall throughout the year.

- Equatorial rainforests are found along the coast of West Africa in Nigeria, Gabon, Ghana, Democratic Republic of Congo and around the shores of L. Victoria in Uganda.

**Examples of trees in Equatorial rain forests:**

-Mahogany -Greenheart -Mvule - Ebony -Rosewood

**Characteristics of Equatorial rain forests:**

- The areas have hardwood.

- The trees have broad leaves.

- The trees have buttress roots, standing above the ground.

- The trees are very tall.

- The forests form a canopy.

- They have a thick under growth.

- They are ever green.

**ECONOMIC ACTIVITIES IN EQUATORIAL RAINFORESTS**

i)Lumbering iii)Tourism

ii)Latex tapping iv)Farming

**Advantages of living near thick forests**

i) A lot of rainfall is received in the area.

ii) People can access herbs.

iii) The soil is fertile for farming.

iv) People can get wild meat (hunting).

v) People can easily access timber.

vi) People can easily access wood fuel.

**Disadvantages of forests to people**

-Forests are breeding places for diseases vectors.

-They promote insecurity in an area since wrong doers hide there.

-Forests keep animals that destroy crops and lives.

**Questions**

1.Name the Equatorial forests in Uganda.

2.Give one reason why trees in Equatorial forests grow very tall.

**LESSON 38**

**GRASSLANDS**

There are two types of grasslands in Africa namely:

-Savanna grasslands.

-Temperate grasslands

**Savanna grasslands:**

-Savanna grassland covers the largest part of Africa.

-Savanna vegetation is basically grassland

- **There are two types of savanna vegetation namely;**

a) Wet Savanna

b) Savanna woodland/dry Savanna.

**Savanna grasslands:**

-They are located in tropical regions.

- Savanna grasslands have plenty of grass.

-This explains why most game parks are located there.

**Wet Savanna**

**-**It is the most wide spread in Africa.

-It covers places like Senegal, Nigeria, South Sudan, East Africa, Zambia, Angola and South of DRC.

**Characteristics of Wet Savanna vegetation**

- It has tall and scattered or a few trees.

- The grass is short in areas that receive little rainfall and tall grass in areas that receive a lot of rainfall.

- The trees shed their leaves during dry season.

-The grass leaves go brown and dry in the dry season.

**Savanna woodlands/dry savanna:**

-The Miombo in Central Tanzania, Zambia, Malawi, Mozambique, South Eastern DRC and Western Madagascar are examples of Savanna woodland.

- The Miombo woods are sparsely populated due to the presence of tsetse flies.

**Characteristics of Savanna woodland**

- Most trees in the savanna are deciduous i. e they shed their leaves during the dry season to reduce the rate of transpiration.

-Woodland Savanna has tall thorny trees

-It has short grass.

- The trees have long roots which they use to tap underground waters.

- The woodlands have thorny thickets.

**Trees found in savanna vegetation**

- Acacia - Baobab - Euphobia

**Questions:**

1.Suggest any three ways in which tsetse flies can be controlled.

2.Give two reasons why cattle keeping is carried out on a large scale in Savanna grassland.

3.Identify the area in East Africa which has a lot of tsetse flies.

4.In which way do tsetse flies affect the people in Central Tanzania?

5.Why do you think savanna vegetation covers the largest part of Africa?

**LESSON 39**

**TEMPERATE GRASSLANDS**

-The temperate grasslands are found in the temperate regions.

-They are located in Southern Africa.

-The temperate grasslands of South Africa are called the High velds.

-They cover areas of Orange Free State, Transvaal and Natal.

**Characteristics of temperate grasslands**

-It has short grass in the drier region.

-It has few scattered trees and shrubs.

-The grass has short roots.

-They have long and narrow leaves.

-The leaves have hairy covering.

-These conditions help then to survive in the dry seasons (reduce the rate of transpiration)

**Economic activities**

-Sheep rearing – Merino  for wool.

-Goat rearing – Angora goats for mohair.

-Growing of oak trees.

-Crop growing e.g. citrus fruits, vegetables, maize, sugarcane and wheat.

**MEDITERRANEAN VEGETATION**

-The Mediterranean vegetation is found in the North extreme.

-It is found along the coast of Morocco, Algeria, Tunisia and Libya and

South West tip of Africa (at Cape province)

**Examples of trees found in the Mediterranean vegetation**

-conifers e.g. pines, cedar, cypress and fir.

-Olives -Oak

**Characteristics of Mediterranean vegetation**

-The trees develop thick bark.

- The trees have long roots to tap water from deep the ground.

-The leaves are wax covered, shiny and hairy to reduce the loss of water (transpiration)

-The roots are widely spread.

-The vegetation consists of short thin stemmed trees .

**Economic activities**

-Growing of citrus fruits e.g. oranges, lemon, tangerines, limes, vines, grapes, etc.

-Sheep and cattle rearing.

-Other crops: wheat, maize. Barley and vegetables.

**Questions**

1. How does the Mediterranean vegetation contribute to the wine making industry?

2. Identify any three products that can be made from the wood got in Mediterranean vegetation.

3. Of what value are citrus fruits to a school child?

**LESSON 40**

**SEMI DESERT VEGETATION**

-It is found in areas which receive little rainfall.

-It is found near Sahara and Kalahari- Namib deserts, in Karamoja, North eastern part of Kenya and South Sudan.

-The common tree species is cactus.

**Characteristics of Semi- desert climate:**

- It consists of short scrub, bushes and thorny trees.

-It has rough scattered grass.

-It has few trees because of little rainfall received.

-The plants have deep roots tap water from deep the ground.

-The plants have small leaves to reduce transpiration.

**DESERT VEGETATION**

**-**It is found in Kalahari, Sahara and Namib deserts.

**Characteristics Desert vegetation:**

-The ground has bare rock and sand heaps (sand dunes)

-Few trees grow in desert regions

-Trees have very long roots

-Trees have thick bark and thin leaves to reduce transpiration.

**Examples of trees in the desert**

- Baobab
- Cactus
- poppies
- thorny bushes

**Economic activities in desert vegetation.**

-Oil mining e.g. in Libya

-Nomadic pastoralism

-Irrigation farming

-Tourism

**MOUNTAIN VEGETATION:**

-It is found in Drakensberg mountains, mount Kilimanjaro, Kenya, Elgon, Rwenzori and Ethiopian highlands.

-Mountain vegetation is also called Montane vegetation.

-It changes with the difference in altitude.

-At the foot of the mountain, there is Savanna grassland / Tropical grassland.

-From 1500m to about 3000m there are Equatorial forests / tropical Rain forests.

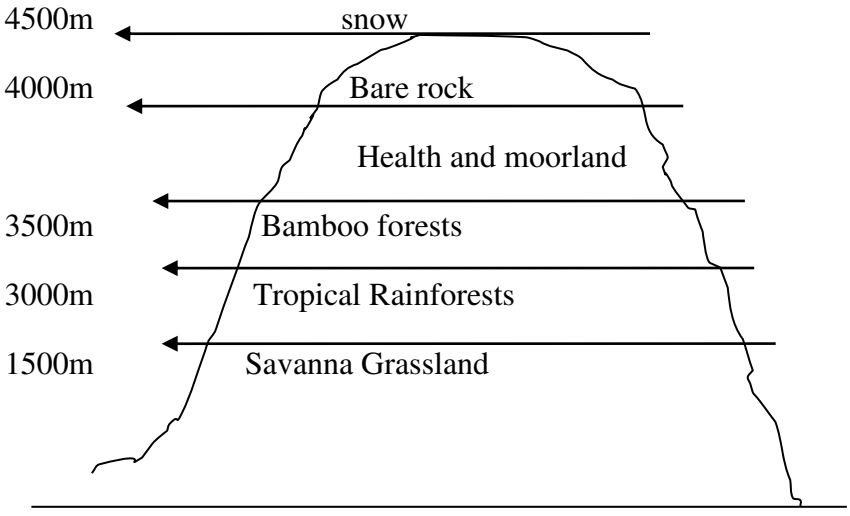
-Above 3000 – 3500m there are Bamboo forests.

-From 3500m – 4000m there is health and moorland.

-From 4000m – 4500m there are bare rocks.

-Above 4500m there is a snow line.

**Diagram showing types of mountain vegetation:**



**LESSON 41**

**MANGROVE FORESTS**

-Mangrove forests grow in coastal waters.

-They are found along the East coast of Africa, the Western part of Madagascar and Western coast of Africa.

-The forests have hard wood used in boat and ship building.

-This wood is suitable for ship building because it is water proof.

**MAP SHOWING VEGETATION OF AFRICA (Functional Bk 7 pg53)**

**Factors that influence vegetation distribution**

-There are a number of factors namely;

-climate (rainfall and temperature)

-Soils

-Altitude

-Human activities

-Latitude

**Importance of vegetation to people and animals**

-It helps in the formation of rainfall.

-It is a habitat for wild animals.

-It is a source of pasture for animals.

-It is a source of building materials

-It is a source of wood fuel.

-It creates employment for the people e. g herbalist and carpenters.

-It is a tourist attraction which generates reserve to the country.

**Economic / commercial importance of forests / vegetation**

-They provide timber for people.

-They attract tourists for income.

-They provide wood fuel.

-Source of building materials like poles and grass.

-It is used for grazing animals.

**Reasons why animals live in different vegetation zones.**

**-**Its due to different types of food found in different vegetation zones.

-Its due to the difference in shelter in different vegetation zones.

-Its due to the difference in climate in different vegetation zones.

**Questions**

1.Suggest ways in which natural vegetation can be conserved.

2.Mention the products got from planted forests.

3.Give the effect of destroying the natural vegetation.

4.State the influence of vegetation to people.

5.How does vegetation influence the life of animals?

6.In which way do the following influence vegetation?

a) Altitude

b) Latitude

c) Climate

d) Temperature

e) Nature of soils

f) human activities

7. Give the importance of grass to people.

8. What is the greatest cause of environmental degradation in most parts of Africa?

9. How does vegetation influence population distribution?

**LESSON 42**

**TOURISM IN AFRICA**

-Tourism is a business of providing services like accommodation, transport, entertainment to tourists.

**Tourist:** He / she is a person who visits a place of interest for pleasure or study purposes.

**NB:**There are two types of tourism. There is domestic and International tourism

**Tourism is regarded as an industry because:**

**-** It earns income to the government.

**-** It creates employment.

**It is regarded as an invisible export because**:

-It does not involve physical exchange of goods but income is earned.

**Examples of invisible exports**

- Electricity
- Tourism
- Skilled labour

**Factors which promote tourism in Africa**

-Political stability

-Good transport.

-Good accommodation facilities

-Availability of tourist attraction.

-Good publicity.

-Good government policies on Tourism.

**Factors that hinder the development of tourism industry in Africa**

-Political instability

-Lack of publicity.

-Poor transport

-Lack of tourist attraction

-Shortage of funds

-Poor management

-Poor accommodation

**Game parks and Game reserves in Africa:**

**Game park**: It is a large area of land set aside by government to preserve wildlife.

**Game reserves:** Are areas of land set aside by government for future development into a game park.

**Difference between Game park and Game reserve.**

-In a game reserve, hunting can be done on permission but in game parks, hunting is not allowed.

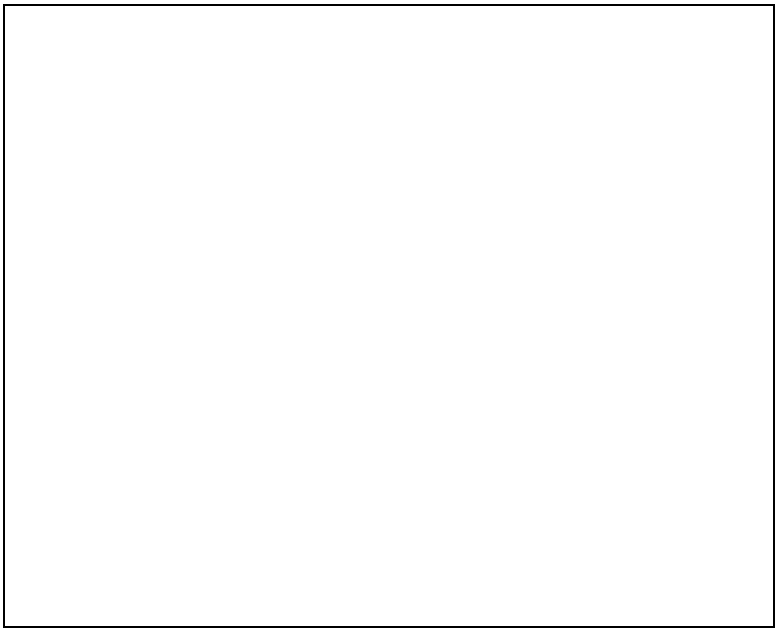
**Game rangers:**

They are armed people who are employed in game parks to provide security to the wild animals against poachers.

**Game wardens**

**-**People who take care of wild animals in a game park.

**Map of Africa showing major National Game Parks in Africa:(MK BK 7 PG 32)**



**Importance of Game Parks in Africa**

-They preserve wildlife for future generation.

-They attract tourists who pay foreign exchange to the country.

-They are sources of Educational information (study purpose).

-They provide employment to people.

-It facilitates the development of transport system e.g. Air transport.

**LESSON 43**

**Problems facing Game Parks in Africa**

-poaching

-Insecurity

-Wild bush fires

-Animal vectors and diseases.

-Drought

-Deforestation (land encroachment)

-Poor management

**Solutions to the above problems**

-Enforce laws against poaching.

-Ensuring total security to the African countries.

-There should be fighting equipments.

-Employing more veterinary personal.

-Discourage deforestation and encourage afforestation.

-Resettling people far away from game parks.

-Improving on management.

**Classification of animals in game parks**

| | | |
|---|---|---|
| 1. | Herbivores | Buffaloes, antelopes, zebras, kobs, girrafes |
| 2. | Carnivores | Lions, Leopards, Hyenas, Foxes |
| 3. | Omnivores | Wild pigs |
| 4. | Scavengers | Vultures, Maraboo strokes |
| 5. | Birds | Ostriches, flamingo birds |

**Ways of caring for wild animals:**

**-**By feeding

-By treating

-By providing security

-By preserving their habitat.

**Animals found in different vegetation zones:**

**i) Equatorial zone:**

**-**Climbing and fruit eating animals mainly dominate the equatorial vegetation.

-They include: monkeys, gorillas, chimpanzees, baboons, apes.

-Others include: elephants, lions and giraffes.

**ii) Savanna vegetation:**

**-** Grass eating animals /Herbivores, which include: Buffaloes, gazelles, zebras, kobs, rabbits, hare, etc.

-Flesh eating animals/ Carnivores, which include: Lions, Leopards, Hyenas, Foxes, etc.

**iii) Swamp vegetation:**

-Animals adapted to water/Aquatic animals stay in swampy areas.

They include: crocodiles, hippopotamus, frogs, toads, tortoise, etc.

**iv)Semi deserts and desert vegetation:**

-Animals that need little water and vegetation to feed on.

-They include: snakes, newts, ostriches, squirrels, rats, etc

**V) Temperate grasslands:**

**-**Animals adapted to dry and windy conditions:

-They include: wild cats, dogs, wolves, Jaguar, Fox, Jackals, Rhinoceros

**Population distribution in relation to vegetation:**

**-In areas with desert and semi desert vegetation there is low population because:**

i) There is shortage of water

ii) There is little vegetation to provide shade, fuel and building materials.

iii) It is difficult to grow crops.

**-In areas with Savanna vegetation there is high population because:**

i) It is easy to keep animals.

ii) It is easy to grow crops.

iii) It is easy to build transport routes(roads, railway lines)

-**In areas with Equatorial rainforests there is a low population because:**

i) It is difficult to build roads and railway lines

ii) They are hot and humid

iii) There are dangerous wild animals and insects (mosquitoes, tsetse flies).

**-In areas with Mediterranean vegetation there is high population because:**

i) The vegetation is sparse.

ii) It favours the growing of crops.

**-In areas with Mountain vegetation there is high population because:**

i) It receives reliable rainfall.

ii) It has fertile soils.

**Effects of population on vegetation**

**a)Big/high/dense population:**

The increasing population of Africa has led to the destruction of vegetation through:

-Deforestation -Swamp drainage

-Overgrazing -Industrialization

-Bush burning

-Over cultivation

**Massive destruction of vegetation has led to:**

-Soil erosion.

-Desertification.

-Soil exhaustion.

-Destruction of animal habitat.

**b) Small population**

Small population promotes the conservation of vegetation in Africa.

**Way of conserving vegetation in Africa:**

-Through afforestation.

-Through reafforestation.

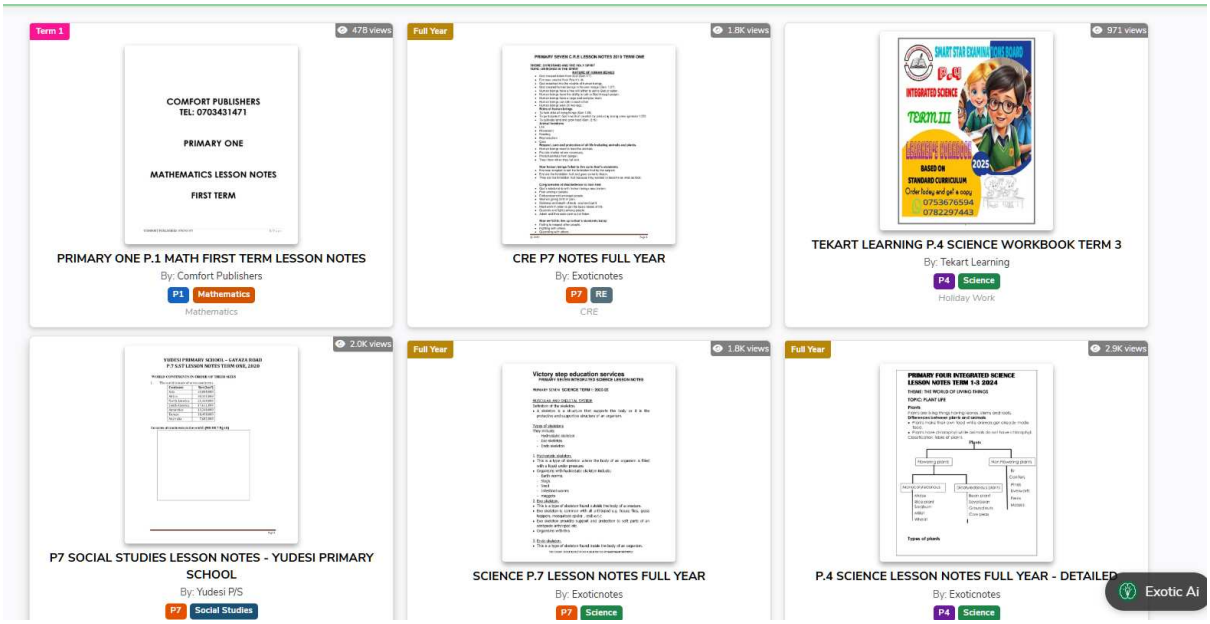
-Through agro forestry.

-Through rotational grazing.

-Through environmental education.

-Through making forest reserves

This document was downloaded from https://exoticnotes.com




**Do you need more LESSON NOTES for Primary (All classes)?**

**Click**
**https://exoticnotes.com/notes/primary/**

**If you need LESSON NOTES for SCIENCE (P.1 – P.7)**
**Click**
**https://exoticnotes.com/notes/primary/science/**

**If you need LESSON NOTES for English (P.1 – P.7)**
**Click**
**https://exoticnotes.com/notes/primary/english/**

**If you need LESSON NOTES for Mathematics (P.1 – P.7)**
**Click**
**https://exoticnotes.com/notes/primary/mathematics/**