KOLFRAM EDUCATIONAL SERVICES

KAMPALA

LET'S DISCOVER OUR POTENTIALS

TEACHER'S LESSON NOTES 5

TERM ONE COURSE BOOK

SOCIAL STUDIES

NAME:.....

SCHOOL:.....

CLASS: .....

This book is designed for both the learners and the teachers in accordance to the bridged curriculum. Each particular child in a class at a specific school deserves a copy of this book.

STANDARD KOLFRAM IN USE

SOCIAL STUDIES

PUPILS BOOK



5

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Based on the new primary Five syllabus 2021

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- ✓ Similarly, we wish to express and convey our gratitude to all those who contributed to the production and reproduction of this book, materially, spiritually and professionally. Thank you very much.

- ✓ Lastly we do sincerely regret any error, mistakes or incorrect writing in a paragraph which may be found anywhere in this book ; it could have cropped up unknowingly and accidentally, not intended to be part of this book

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PREFACE

The Standard Kolfram In Use Social Studies, pupil's book 5 is purely based on the New revised Primary FIVE Syllabus 2021.
It is one of the 32 books in the same series set to solve the challenges in teaching and learning in primary schools. Other books in the series cover all the classes and other subjects which do exist in Uganda.

This book is simple and easy to use.
The book contains accurate, relevant and current information covering all topics in all terms of the year in their order. It is intended to guide both teachers and learners.

Topics and explanations have been simplified to suit the level and the age of the learners.

The topics and subtopics in the two subjects have ben logically and systematically arranged to guide learners in their own revision time.

The points have been shortened for easy revision too.

The book contains a number of assessment exercises and tests which guides both the teachers and the learners using the book in preparation for the examinations.

We hope the content in this book will not only amuse or attract the users, but also play a tremendous role in solving the teaching and learning problems in Literacy in both urban and rural private primary schools.

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TOPIC ONE: LOCATION OF UGANDA ON THE MAP OF EAST AFRICA.

LOCATION OF UGANDA

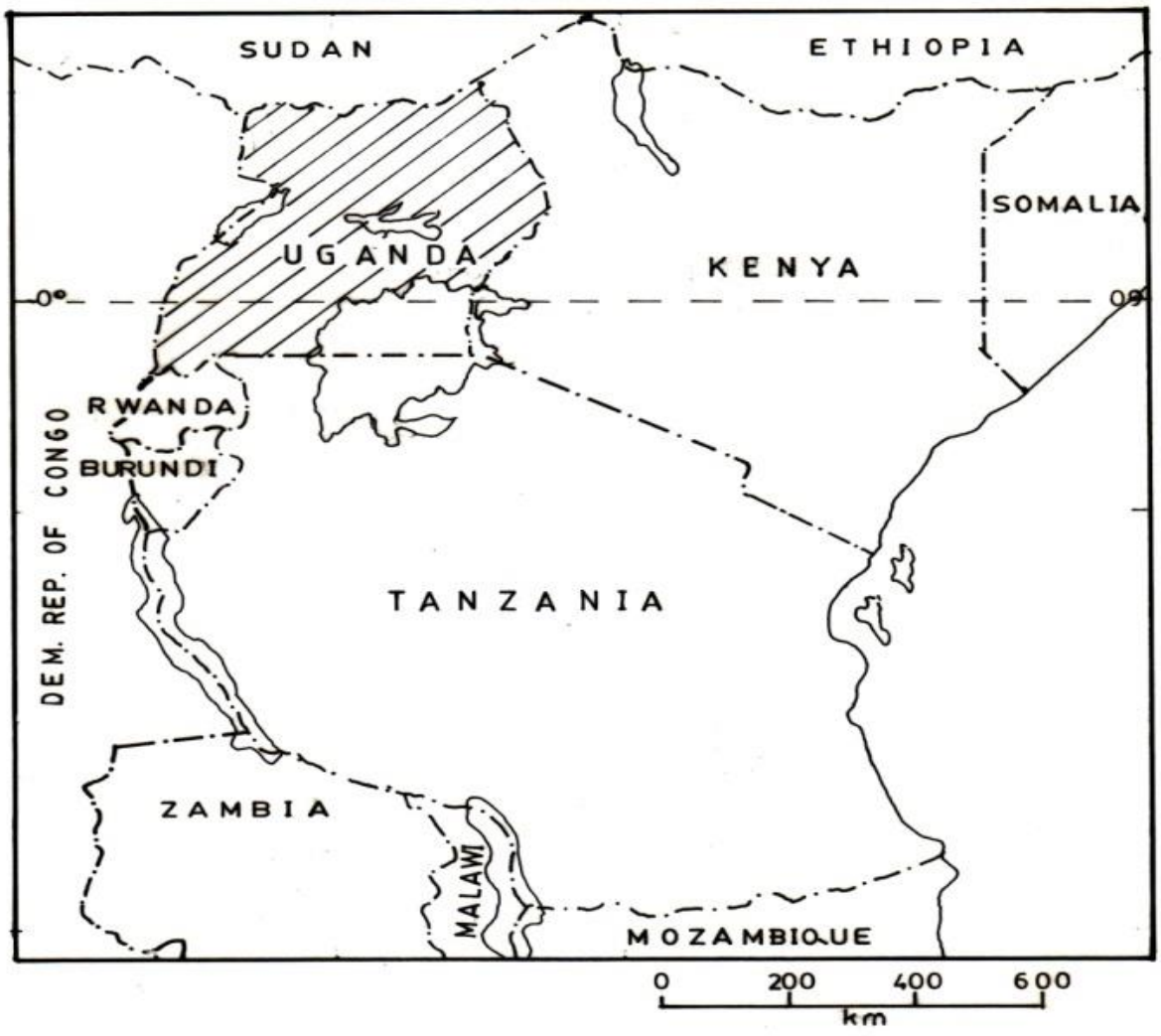
In Africa, Uganda is located in the East African region.
Uganda is one of the three countries is found in East Africa and the others are;

- ✓ Kenya
- ✓ Tanzania

Rwanda and Burundi, South Sudan and Democratic Republic of Congo are not part of East African region.
However, they are members of East African community which is a ***regional market***.

i.) Uganda is the smallest East African country, with an area of 241038 Sq. kilometers.
ii.) Uganda was called **"the pearl of Africa" by Sir Winston Churchill**, because of Uganda's beautiful sceneries.
iii.) Uganda is a landlocked country, because it doesn't have its own Seaport or a coastline.

Location of Uganda on the map of East Africa.



DISTRICTS THAT FORM UGANDA.

- ✓ A district is an administrative area at the level of Local Council Five (LC V)
- ✓ Uganda is divided into **many** districts mainly **for easy** administration.
- ✓ Chairperson LC V is the political head of a district.
- ✓ Districts in Uganda are grouped into regions, and each region is divided into subregions according to the customs of the people in that area.

Regions that form Uganda.

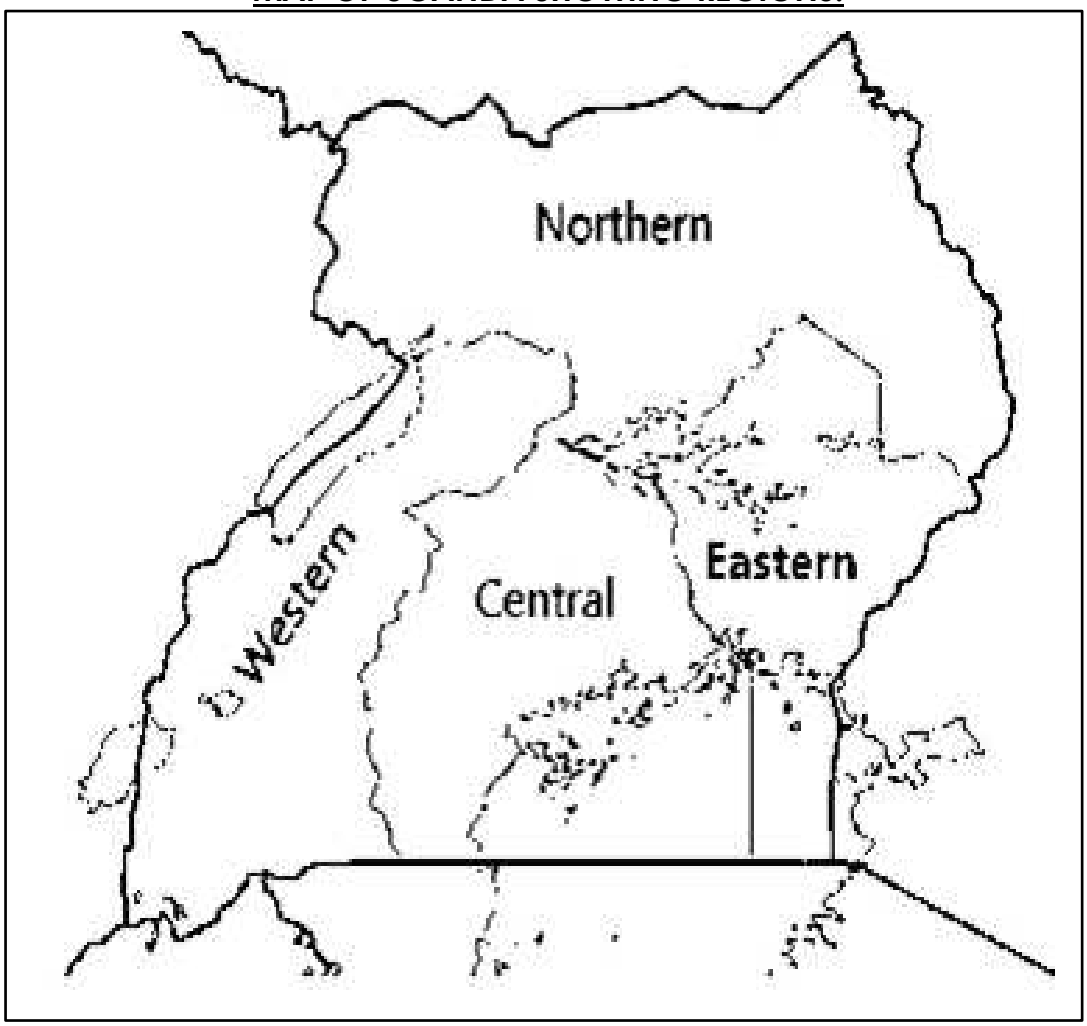
- ✓ Central region.
- ✓ Northern region
- ✓ Western region
- ✓ Eastern region

Sub-regions found in each region of Uganda.

Region of Uganda	***Sub-region***	***Districts***
Central region	South Buganda sub-region	Lwengo, Lyantonde, Kyotera, Kalungu, Bukomansimbi, Masaka, Kalangala, Rakai Sembabule
	North Buganda sub-region	Nakasongola, Luwero, Nakasongola
	East Buganda sub-region	Kayunga, Mukono, Buikwe, Buvuma
	West Buganda sub-region	Kyankwanzi, Kiboga, Mityana, Mubende, Kassanda,
	Central Buganda sub-region	Mpigi , Wakiso, Butambala, Gomba, Kampala
Northern region	Acholi sub-region	Gulu, Kitgum, Kitgum, Lamwo, Amuru, Agago, Pader , Omoro, Nwoya
	Karamoja subregion	Kotido, Abim, Moroto, Kaabong, Nakapiripirit, Karenga, Napak, Nabilatuk, Amudat
	Lango sub-region	Lira, Apac, Oyam, Dokolo, Kole, Amolatar, Kwania, Alebtong, Otuke
	West Nile subregion	Arua, Nebbi, Zombo, Moyo, Terego , Maracha, Obongi, Yumbe, Adjumani Koboko
Western region	Bunyoro sub-region	Hoima, Buliisa, Kagadi, Kakumiro, Kikuube, Kibaale, Masindi , Kiryandongo
	Tooro sub-region	Kabarole, Kamwenge,Kyegegwa, Bunyangabu, Kyenjojo, kitagwenda
	Rwenzori sub-region	Kasese, Bundibugyo, Ntoroko
	Kigezi sub-region	Kabale, Kisoro, Kanungu, Rukungiri Rubanda, Rukiga

	Ankole sub-region	Mbarara, Ibanda, Kiruhura, Isingiro, Kazo, Ntungamo, Mitooma, Sheema, Bushenyi, Rubirizi, Buhweju,
Eastern region	Busoga sub-region	Jinja, Iganga, Mayuge, Kaliro, Mutumba, BUgiri, Bugweri, Namayingo, Kamuli, Luuka, Buyende
	Teso sub-region	Kapelebyong, Kalaki, Katakwi, Ngora, Bukedea, Soroti, Serere, Kumi, Amuria
	Bugisu sub-region	Mbale, Sironko, Bududa, Bulambuli, Manafwa, Namishindwa
	Sebei sub-region	Kapchorwa, Bukwo, Kween
	Bukedi sub-region	Pallisa, Kibuku, Budaka, Butebo, Butaleja, Tororo, Busia

MAP OF UGANDA SHOWING REGIONS.



Reasons why Uganda is divided into districts.

- To ease administration.
- To extend social services nearer to people.
- To create more job opportunities to people.

Disadvantages of creating more new districts.

- It leads to separation of communities/ tribes.
- It leads to high administrative costs.
- It makes equal distribution of resources difficult.

HIGHLAND DISTRICTS

These are districts which are located in areas of high altitude.
Altitude is the height above the sea level.
Such districts usually have many hills and mountains.

Examples of highland districts.

- Mbale
- Kapchorwa
- Kabale
- Kisoro

Bundibugyo
Kasese
Moroto
Rukungiri

Economic activities that are commonly carried out in highland districts.

- ✓ Tourism
- ✓ Mining
- ✓ Crop growing

Problems faced by people living in highland districts.

- ✓ Landslides
- ✓ Poor transport network
- ✓ Severe soil erosion
- ✓ Difficulty in agricultural mechanization.

Possible solutions to the problems facing people living in highland districts.

- ✓ By rearing donkeys to use them as means of transport.
- ✓ By constructing winding roads.
- ✓ By practicing afforestation and reafforestation to control landslides.
- ✓ By terracing, contour ploughing and strip cropping to reduce soil erosion.

Note:

Heavy rainfall is the major cause of landslides in highland areas.

Landslides can be controlled in highland areas by planting more trees.

Ground transport is very poor in highland areas because it is very difficult and expensive to construct roads in highland areas.

Agricultural mechanization is so poor in highland areas because the steep slopes make the use of tractors difficult.

Road transport can be improved in highland areas by constructing winding roads.

People living in Kapchorwa district rear donkeys mainly to use them as means of transport.

ISLAND DISTRICTS.

An island is an area of land which is completely surrounded by a water body.
The island districts in Uganda are all found in Lake Victoria.

Examples of Islands districts.

- ✓ Kalangala
- ✓ Buvuma

Economic activities that are commonly carried out in Island districts.

- ✓ Fishing.
- ✓ Crop cultivation (oil palm growing, maize, banana, potatoes)
- ✓ Lumbering

- ✓ Trading.
- ✓ Tourism due to presence of Ssese forest, Ngamba island which is famous for Chimpanzees

Benefits enjoyed by Island districts.

- ➢ They get easy access to water.
- ➢ They have fertile soils.
- ➢ They have favorable climate
- ➢ They receive plenty of rainfall.

Problems facing people living in Island districts.

(i) Poor road transport.
(ii) Attacks from aquatic animals e.g. crocodiles.
(iii) Lack of hydro electricity
(iv) Floods
(v) Poor social service delivery.

Note*: -There is no hydro electricity in Kalangala and because it is very expensive to fix electric poles in water of Lake Victoria to these districts.*

Possible solutions to the problems facing Island districts of Uganda.

(i) By using other sources of energy e.g. solar energy
(ii) By employing more social service providers.
(iii) By providing better means of water transport.
(iv) By building better social service centres in island districts.
(v) By paying attractive salaries to people who provide social services in island districts.

A MAP AND A PICTURE

What is a map?

Is a representation of an object drawn as seen from above.
OR
Is a drawing of an object as seen from above.

What is a picture?

Is a representative of an object drawn as seen from aside.
OR
Is a drawing of an object as seen from a side.

How is a picture different from a map?

A picture is a representation of an object drawn as seen from aside while a map is the representation of an object drawn as seen from above.
OR
A picture is a drawing of an object as seen from aside while a map is the drawing of an object as seen from above.
A picture is more real and accurate than a map
A picture is more detailed than a map

How is a Map similar to a Picture?

Both are representations of objects.

Types of maps.

(i) Political maps. These maps show boundaries of villages, counties, districts and countries.

(ii) Topographic maps. These maps show physical features/ landforms of a given area e.g. mountains etc.

(iii) Flow-line maps. These show movement of people, goods, animals etc.

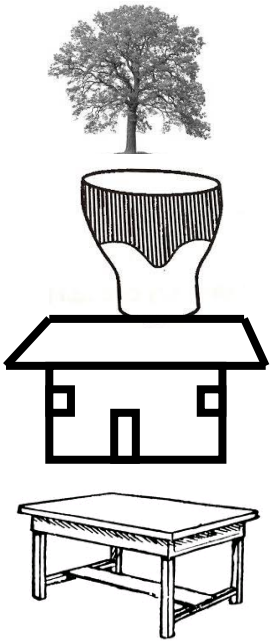
(iv) Thematic maps. These show various social and economic themes e.g. trade, energy.

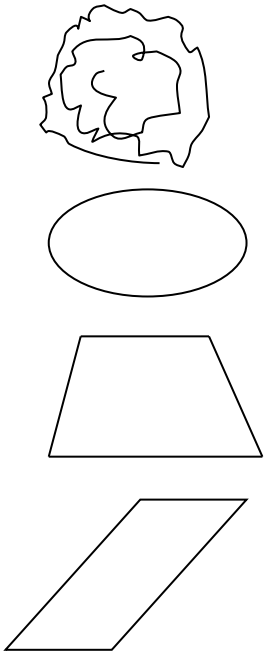
Importance of maps.

- It helps to locate places or features.
- It helps us to identify places or features.
- Maps help us to represent information.
- Maps help us to store information

Draw the pictures and maps of the following objects

Picture **Maps**





ELEMENTS OF A MAP .

- ✓ A compass direction
- ✓ A scale
- ✓ A title/heading
- ✓ A frame
- ✓ A key

Importance of different elements of a good map.

Element	Importance
❖ A compass direction	❖ It helps to show the direction of places on a map. -A map reader may fail to know the direction of places shown on the map if he/she reads a map without a compass direction.

❖ A title/ heading	❖ It helps one to know what the map is all about. - One who reads a map without a title may fail to know what the map is all about.
❖ A key	❖ It helps a map reader to interpret symbols used on a map. -A key gives detailed information about the map. -A map reader may fail to interpret/ know the meaning of symbols used on a map if he/she reads a map without a key.
❖ A scale	❖ It helps a map reader to calculate the actual ground distance on a map. -A map reader may fail to calculate the actual ground distance between places on the map if he/she reads a map without a scale.
❖ A frame	❖ It shows the extent of the area represented by the map.

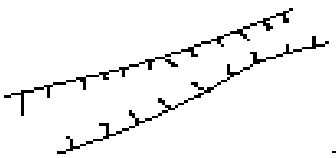
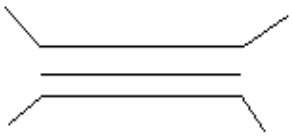
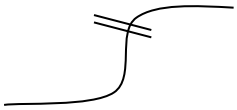
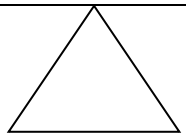
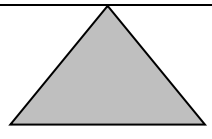
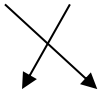
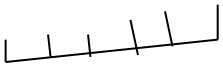
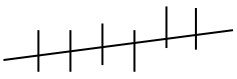
Map symbols

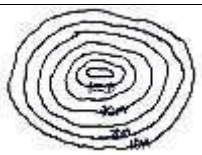
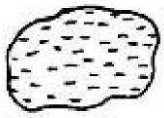
These are features which represent real objects on a map.

Importance of Symbols on a map

- ✓ They help to reduce overcrowding on a map.
- ✓ They help to represent real objects on a map.
- ✓ For easy representation in map work.
- ✓ To make map reading easy.

Examples of map symbols

		
Rift Valley	Bridge	Swamp
		
Hill	Dam	Water Falls
		
River	Mountain	Mountain Peak
		
Quarry	Canal	Railway Line

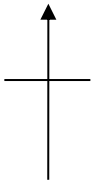
 Factory	 contours	 airport
permanent lake 	 hospital	 A port

A Compass

It is an instrument used to show direction of places.

A drawn compass is called a compass rose.

A symbol of a compass



Compass directions

It is a symbol (an element) of a map that is used to tell the direction of places on a map.

The compass points are divided into the cardinal points ,semi-cardinal points (secondary points) and tertiary points.

<u>Cardinal points</u> are the four major points of a compass.

These include;

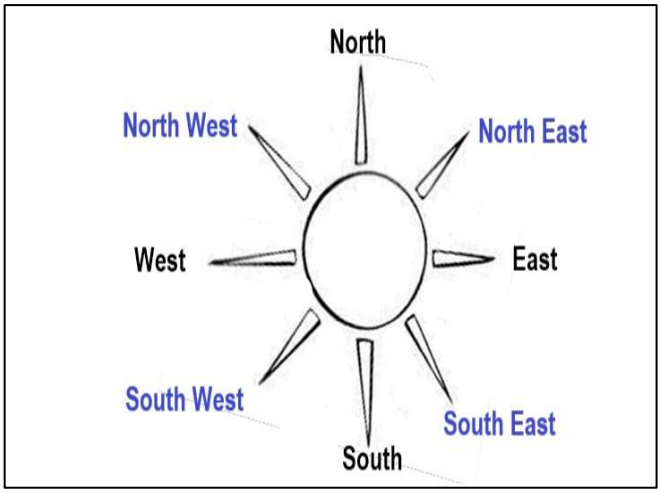
- ✓ North
- ✓ South
- ✓ West
- ✓ East

<u>Secondary points</u> are the directions that lie midway of cardinal points.

Semi-cardinal points lie at 45˚ from the cardinal points.

These include;

- ✓ South East
- ✓ South West
- ✓ North East
- ✓ North West



People who use a Compass

1. Sailors
2. Tourists
3. Pilots
4. Soldiers
5. Scouts and Girl guides
6. Astronauts
7. Rally drivers
8. Mountain climbers
9. Surveyors

Ways of finding direction:

- ✓ Using a compass
- ✓ Using the sun
- ✓ Using the neighbors.
- ✓ Using landmarks

Finding directions using degrees

- ➢ We use clockwise and anti-clockwise to find direction.
- ➢ Clockwise moving the right.
- ➢ Anti-clockwise moving to left.

Examples.

1. Prudence was facing North direction, she turned 45^{o} clockwise. What is her new direction?

   It is North East direction

2. Mugaye was facing North East direction. He turned at an angle of 45^{0} clockwise. What is his new direction?

   It is East direction

3. Sekibuto was facing South East direction. He turned at an angle of 90^{0}. What was the new direction?

   It is South West direction

4. Kapere was facing South West direction, he turned at angle of 135^{0} clockwise. What is his new direction?

   It is North direction

5. Kawumpuli was going to Owino facing North West direction. He turned at an angle 225^{0} clockwise. What is his new direction?

   It is South direction

6. Ssali was moving towards Namboole facing South East. He turned at an angle of 45^{0} anti-clockwise. What is his direction?

   It is East direction

7. Wava was going to Didis while facing East direction. She turned at an angle of 135^{0} anti-clockwise. What is her direction?

   It is East West direction

Using a Shadow/Sun to find direction

1 Pingu was going to school in the morning, he saw his shadow on his left. To which direction was he facing.

It is North

2 Karen was going home in the evening; she saw her shadow on her right. To which direction was she moving?

3 Musa was going to the factory in the evening. He saw his shadow on his left. To which direction was he moving?

4 Mary was going to garden in the morning. She saw her shadow on her left. To which direction was she facing?

5 Henry was going to the church in the morning. He saw his shadow on his left. To which direction was he facing?

SCALE

It is an element of a map used to measure the actual distance of places on a map in relation to the actual ground distance.

What is a sketch map?

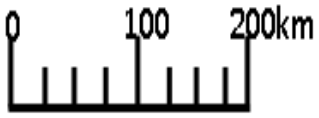
It is a map not drawn on a scale. Or it is a map drawn without a scale.

Types of scale

(i) linear scales.
(ii) Statement scale
(iii) Fractional scale /Representative scale

(i) Linear scale.

This is the type of scale drawn using lines that are divided into equal parts.



Example;

Find the actual ground distance between town Q and town S if there is a distance of 6cm between the two towns on the map.

Solution;

1cm = 100km
6cm =
(6×100)km
= 600km.

Therefore, the actual ground distance between Town Q and Town S is 600km.

(ii) Representative scale/ fractional scale.

This is the type of scale written as a mathematical fraction. It can also be written as a ratio.eg. 1:100km or $\frac{1}{100km}$

(iii) Statement scale.

This type of scale can be given as a statement or words.
Eg.1cm on a map represents 100km on the ground.

Using a scale to find distance

Examples

1. Nsubuga moved from town A to B a distance of 5 cm. Given that I cm represents 50 km (1:50 km). Find the actual distance.

A ——— 5 cm ——— B

1 cm = 50 km

5 cm = (5x50)km

= 250 km

2. Noah moved a distance of 7 cm from class A to class B. Given that I cm = 150 km. Find the actual distance.

A ——— 7 cm ——— B

1 cm = 150 km

7 cm = (7x150) km

= 1050 km

EXERCISE.

1.Juliet moved a distance of 10cm from town A to B. Given that 1 cm represents 20 cm. Find the actual ground distance in Km.

2.Musumali moves a distance of 5cm from home to school on the map. Given that 1cm = 2km find the actual ground distance in Km.

Why is it difficult for Prudence to read a map without a scale?

She will not be able to calculate the distance between places on the map in relation to the actual ground distance.

Why is it difficult for Sarah to read a map without a compass?

She will not be able to tell direction of places.

KEY

It interprets the map symbols, signs and colours used on the map.

Why is it difficult to read a map without a key?

It is difficult to interpret map symbols.

TITLE/HEADING

It shows what a map is all about.

Why is it difficult to read a map without a title?

It is difficult to tell what a map is all about.

LOCATION OF UGANDA USING THE GRID REFERENCE SYSTEM

Grid reference is the method of locating places using the lines of longitude and latitude

Grid refers to the network of horizontal and vertical lines used as references coordinates to locate places on a map.

We can locate Uganda on a map using latitudes and longitudes.

Uganda is found between 29^0 East of Greenwich and between 1^0S and 4^0N of the Equator

Latitudes and Longitudes

Latitude is the distance North or South of Equator.

Lines of latitude: Imaginary lines drawn on a map from East to West.

Longitudes: Is the distance North or South of the Equator.

Lines of longitude is the imaginary lines on a map from North to South.

Examples of latitudes

1. Equator O^0.
2. Tropic of Cancer 23½ N.
3. Tropic of Capricorn 23½ S.
4. Arctic circle 66½ N.
5. Antarctic circle 66½ S.

The main latitude is the Equator marked O^0

Why the is Equator marked O^0

(i) It is the midpoint of the world.

(ii) It is the point where the measurement of latitude begins.

The equator divides the world into two hemispheres

(i) Northern hemisphere

(ii) Southern hemisphere

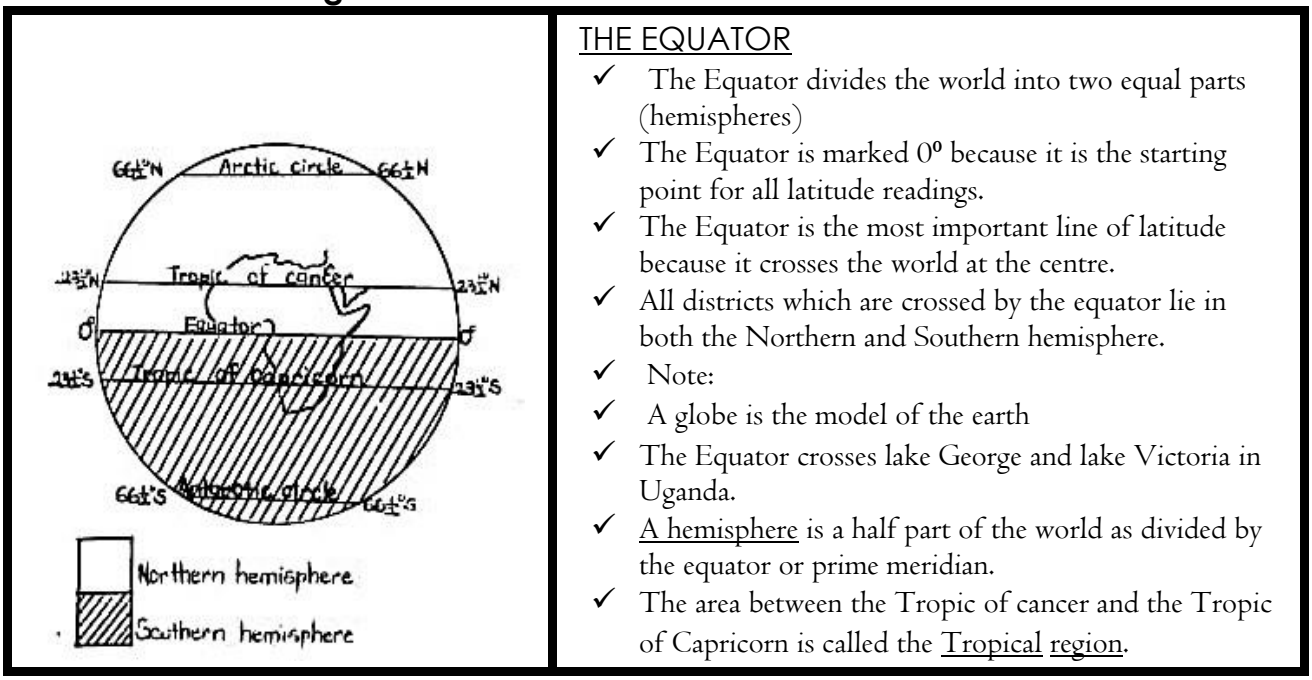
Countries crossed by the Equator in East Africa

(i) Uganda (ii) Kenya

Other countries in Africa that are crossed by the Equator.

Somalia, DRC ,Gabon, Congo Brazzaville

Lines of latitude on a globe



THE EQUATOR

- ✓ The Equator divides the world into two equal parts (hemispheres)
- ✓ The Equator is marked 0^0 because it is the starting point for all latitude readings.
- ✓ The Equator is the most important line of latitude because it crosses the world at the centre.
- ✓ All districts which are crossed by the equator lie in both the Northern and Southern hemisphere.
- ✓ Note:
- ✓ A globe is the model of the earth
- ✓ The Equator crosses lake George and lake Victoria in Uganda.
- ✓ A hemisphere is a half part of the world as divided by the equator or prime meridian.
- ✓ The area between the Tropic of cancer and the Tropic of Capricorn is called the Tropical region.

When the sun is over head on the following latitudes
Equator 21st March and 23rd September.
Tropic of Cancer 21st June.
Tropic of Capricorn 22nd December.

Districts in Uganda crossed by the Equator.

- Ibanda
- Kasese
- Mpigi
- Mukono
- Wakiso
- Namayingo
- Kalungu
- Bukomasimbi
- Buvuma
- Sembabule
- Lyantonde
- Kamwenge
- Mayuge

Equinox.
This is when the sun is over head at the Equator

Lakes in Uganda crossed by the Equator
(i) Lake George.
(ii) Lake Victoria.

The mountain in Uganda crossed by the Equator
Mountain Rwenzori.
East African country which is not crossed by the Equator
Tanzania.

Countries within the Southern hemisphere
(i) Rwanda
(ii) Tanzania
(iii) Burundi

Importance of latitudes
i.) They help to locate places on a map
ii.) The equator help to determine how far a place is North or South from it.
iii.) They help to determine the climate areas.

Lines of longitude.
i.) They are imaginary lines drawn on a map crossing from North to South.
ii.) Longitudes sometimes are called Meridians.

Examples of lines of Longitudes
(i) The International dateline. (180ºE or W)
(ii) Greenwich Meridian marked O^0

a.) Prime meridian / Greenwich meridian.
i.) The prime meridian is the main longitude and it is marked 0^0 because all other lines of longitude are marked beginning from it.
ii.) The prime meridian is also called the Greenwich meridian because it passes through a Town in England called Greenwich.
iii.) In Africa the Greenwich meridian passes through a city called Accra in Ghana.

Other African countries crossed by the Greenwich meridian.
i.) Ghana
ii.) Mali

iii.) Burkina Faso
iv.) Algeria

Importance of the Prime meridian.

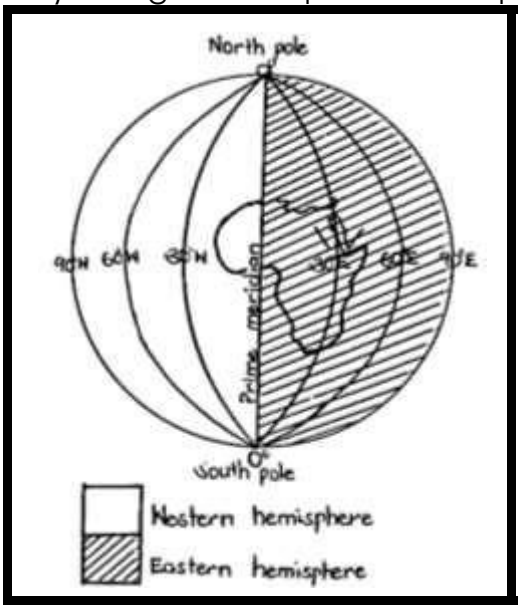
i.) It helps to determine time in GMT (Greenwich Mean Time)
ii.) It helps to locate places on a map.

b) **The International Date Line**

It marked 180^{0}E or W of the Greenwich and it helps to determine the date.

Importance of longitudes.

i.) They help in telling time in Greenwich Mean Time (GMT)
ii.) Longitude helps to locate places on a map.



The Prime Meridian/ Greenwich Meridian

- The Prime meridian is also called the Greenwich meridian because it crosses Greenwich town in London.
- The Prime meridian is marked 0^0 because it is the starting point for all longitude readings.
- The Prime meridian divides the world into the Eastern and Western hemisphere.
- All countries crossed by the Prime meridian lie in both the Eastern and Western hemisphere.

Note;

- The Prime meridian helps in telling international time.
- The International dateline separates one day from the next day.
  e.g. East of the International dateline may be Wednesday while West of it is Tuesday.

Importance of Greenwich Meridian

To helps to tell time./It determines the time zone.

What general name is given to lines of longitude?

Meridians.

Similarities between longitudes and latitudes.

- Both are imaginary lines drawn on maps.
- Both are used to locate places.

Using the Prime meridian to tell the international time.

- ✓ A time zone is an area/region with the same standard time.
- ✓ Different regions of the world have different time zones according to the distance from the Prime meridian.
- ✓ Places which are in the same time zone have the same standard time.
- ✓ e.g. Uganda, Kenya and Tanzania are in the same time zone, and so have the same standard time. (East Africa standard time)
- ✓ East Africa lies at longitude 45^0 while Rwanda and Burundi are 30^{0}E of the Greenwich meridian.

Note:

The rotation of the earth on its axis causes days and nights.
The earth makes one complete rotation of 360^0 in one day (24hours).
Therefore, it rotates through an angle of 15^0 in every 1hour (60min).
Every 15^0 E or W of the Greenwich meridian is a time zone.

When you travel 15º westwards, you lose an hour while travelling 15º eastwards makes you gain an hour.

We usually add (+) hours for places which are in the East and subtract (-) the time when finding the time for places which are in the West.

Changing of the time to and from 24hr clock (by either adding or subtracting 12 hrs.) affects the units in which the time is given.(i.e. From am to pm and vice versa).

Time in each time zone is calculated basing on the Greenwich mean time (GMT) which is at 0º longitude.

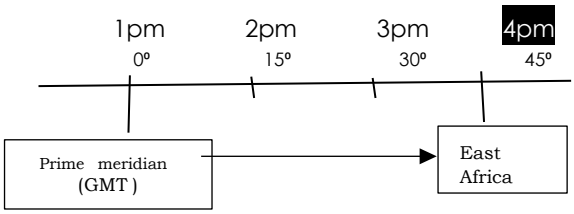
1. Find the time in East Africa which is 45º if it is 1:00pm at GMT.

Solution,

15º=1hr

45º= $\frac{45}{15}$ hrs.

=3hrs



Time in East Africa=1:00pm

+3.00hrs

4:00pm

Therefore, time in East Africa is 4:00pm.

2. What time will it be in country T which is 60ºW if it is 3:00pm in Ghana?

Solution

15º=1hr

60º= $\frac{60}{15}$ hrs.

=4hrs

Time in country T is = 3:00pm (+12hours)

60º 45º 30º 15º 0º

=15.00hrs

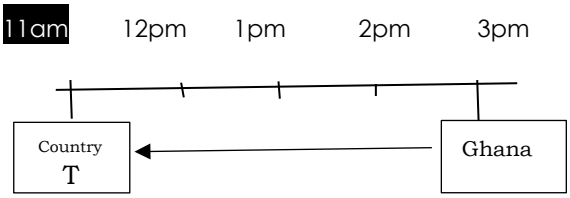
15.00hrs

-4.00hrs

11:00am

Therefore, the time in country T will be 11:00am.

OR:



Locating Uganda using the grid reference system.

- Uganda is located between latitude 4ºN and 1ºS and longitude 29ºE and 35ºE of the Greenwich meridian.
- The farthest point in the North is Zulia while Kisoro is the farthest in the South.
- Ishaka is the farthest town in the West while Amudat is the farthest in the East.
- Location of Uganda using the grid reference system.

MOVEMENT OF THE EARTH

The Earth makes two movements these are: Rotation and Revolution.

Rotation of the Earth is the movement of the Earth on its axis.
An Axis is an imaginary line on which the Earth rotates.
The earth spins from East to West that is why the sun seems to be rising from the East.
The Earth takes 24 hours to make a complete rotation.

Effects of rotation.
It causes days and nights.
This is because the side of the Earth that faces the sun experiences day while the other side experiences night.

Revolution of the Earth is the movement of the Earth around the sun.
It takes 3651/4 days to make a complete revolution.
The ¼ day makes a complete day after every 4 years.
This is known as a leap year. A leap year has no remainder when divided by four.
The month of February of a leap year has 29 days. The rest have 28 days.

Effect of revolution.
It causes seasons of the year.

Note

i.) There are two types of year i.e.:

(i) **Leap year** is the fourth year of every four years, which has 366 days. It has 29 days of February and has no remainder when divided by four.

(ii) **Ordinary year** is the year when the month of February has 28 days and the year has 365¼ days.

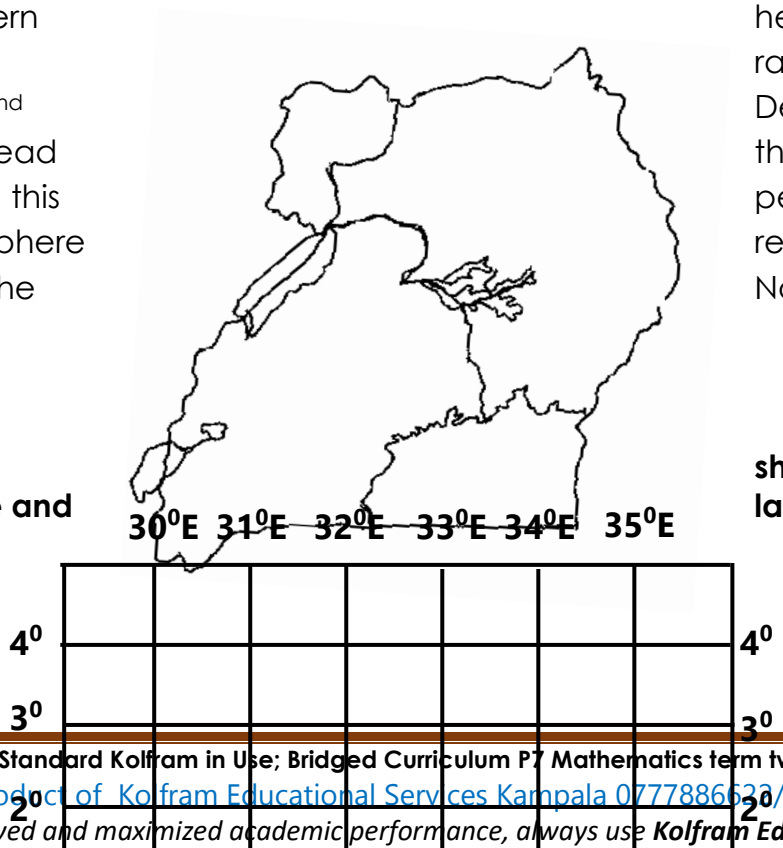
ii.) The revolution of the earth also causes the sun to come directly overhead the equator twice and once over the two tropics, in a year.

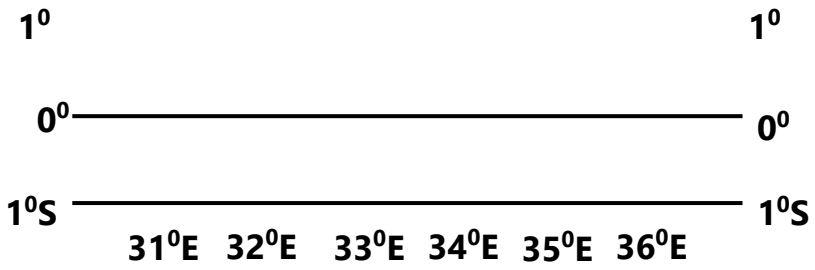
iii.) On 21st March and 23rd September the sun is overhead the equator and these two days are called equinox meaning having equal days and nights.

iv.) On 21st June the sun is over head the tropic cancer and in this period the Northern hemisphere receives more rainfall than the South.

v.) On 22nd December the sun is overhead the tropic of Capricorn and in this period the Southern hemisphere receive more rainfall than the North.

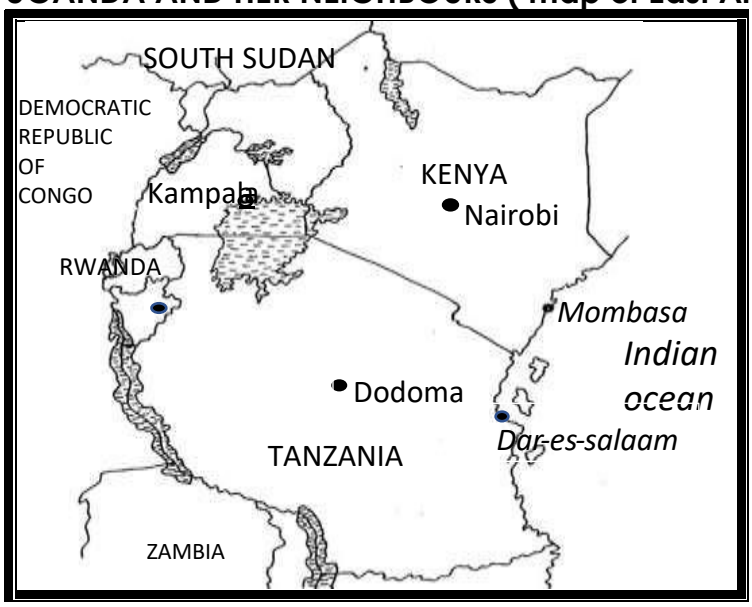
A map showing lines of longitude and latitude.





Geographically Uganda lies between latitude **4½⁰ N and 1½⁰S**, and between longitudes and **29⁰E and 35⁰E**

UGANDA AND HER NEIGHBOURS (map of East Africa)



Countries that share boundaries with Uganda

Country	Direction from Uganda	Direction to Uganda	Capital City	Current President
Kenya	East	West	Nairobi	H.E Uhuru Kenyatta
Tanzania	South	North	Dodoma	Mama Suluhu Hassan
DRC	West	East	Kinshasa	H.E Felix Tshisekedi
South Sudan	North	South	Juba	H.E Salva Kiir
Rwanda	South West	North East	Kigali	H.E Paul Kagame

<u>Uganda as a land locked country</u>.

A land locked county is a country without a coastline.
Uganda uses her neighbours' seaports for overseas trade
Neighbors of Uganda which are land locked.
1. Rwanda.

2. South Sudan
3. Burundi

Seaports Uganda uses

A Seaport is a place at the coast where ships anchor.

Seaports that handle Uganda's imports and exports.

(i) Mombasa

(ii) Dar-es Salaam

Uganda mostly imports and exports her goods through port Mombasa because port Mombasa is nearer to Uganda than other sea ports.

Imports

These are goods brought in to a country from another e.g. vehicles, computers etc.

Exports

These are goods a country sells to another . Coffee, cotton, etc.

Problems faced by a land locked country

1. High taxes are charged on goods (Imports and exports).
2. Goods delay in transit.
3. High transport cost.
4. Goods lack privacy due to thorough checking.
5. There may be damage of goods on transit.
6. There is limited trade with the rest of the world.
7. High prices for imported goods.

Ways how landlocked countries overcome the problems they face

- ✓ By using air transport when importing goods.
- ✓ By using various sea ports when importing goods.
- ✓ By promoting domestic industrial production.
- ✓ By joining common markets in the region. e.g. East African Community (EAC)
- ✓ By improving security along the high ways.

Why Uganda should have good relationship with her neighbours.

(i) To promote trade.

(ii) To get goods she doesn't have.

(iii) To widen market for her goods.

(iv) To use the neighbours seaport.

(v) To promote friendship and cooperation in the country.

How a land locked country can promote international trade

(i) By developing railway transport.

(ii) By using air transport.

(iii) By promoting friendship and co-operation with her neighbours.

How port Mombasa promotes trade in Uganda

(i) It handles Uganda's imports and exports.

What is smuggling of goods?

This is illegal importation and exportation of goods.

Dangers of smuggling of goods

a. It reduces market for locally made goods.
b. It reduces revenue for the government.

c. It leads to importation of expired goods.
d. It leads to importation of substandard goods.

Non-land locked countries.

A Non-land locked country is a country which has a coastline.
A Non-land locked country is a country which is located along the coast.
It is also called **a coastal country**.
Non-landlocked countries have their own sea ports that handle their imports and exports.

Non-landlocked countries that neighbour Uganda.

- ✓ Kenya
- ✓ Democratic Republic of Congo
- ✓ Tanzania

Major sea ports of Uganda's neighbours.

Non landlocked country	Sea port
Kenya	Port Mombasa
Tanzania	Port Dar-es-salaam
Democratic Republic of Congo	Port Matadi

Benefits enjoyed by Non-land locked countries.

- ✞ They pay less taxes on their imported goods.
- ✞ They earn income through taxing goods for land locked countries that pass through them.
- ✞ They can easily trade with other countries.

Exercise

1. Mention the four geographical regions that make up Uganda.
2. Give any two reasons why Uganda is divided into districts.
3. State any one problem a country faces as a result of having many districts.
4. Mention any two sub-regions found in each of the following regions of Uganda.
   - **(i)** Northern region
   - **(ii)** Western region
   - **(iii)** Eastern region
5. Mention any two economic activities that are commonly carried out in highland areas.
6. What is the major cause of landslides in highland areas?
7. Mention any two problems faced by people living in highland areas.
8. How can road transport be made possible in highland areas?
9. Mention any three elements of a good map.
10. What is an island?
11. Name the two island districts in Uganda.
12. State any one factor that hinders economic development in island districts.
13. How is a map different from a picture?
14. Which problem is a map reader likely to face when reading a map without;
    - **(a)** A key
    - **(b)** A title
15. Why are symbols always used on maps instead of real objects?
16. Draw the maps of the following objects.

a hut	a tree	a table	a pot

17. Give any two ways one can locate places on a map.
18. What general name is given to lines of latitude?
19. Name any one water body the equator crosses in Uganda.
20. Why is the equator marked 0^0 ?
21. How is a compass direction useful to a map reader?
22. Draw the map symbols for each of the following features.

A rift valley	A waterfall	A dam	A canal

23. How are lines of latitude and lines of longitude important?
24. Name the line of longitude that helps in telling the international time?
25. Find the time in East Africa which is 45^0 E if it is 3:00pm in Ghana.
26. Name the country which Uganda neighbours to the West.
27. Give the meaning of lines of Longitude.
28. Why are lines of latitude sometimes called Parallels?
29. Mention the three types of scales used on maps.
30. Why are maps drawn by P.5 pupils referred to as sketch maps?
31. Find the actual ground distance between Town Q and Town P which are 5cm apart on the map using the scale 1cm=100km.
32. State the standard measure for lines of longitude and lines of latitude.
33. Why is the Prime meridian sometimes called the Greenwich meridian?
34. Mention any three districts which are crossed by the equator in Uganda.
35. Musa was facing North East and he turned through an angle of 135^0 ante-clockwise. Which new direction did he face?
36. What causes days and nights?
37. Why is Uganda referred to as a land locked country?
38. Name the two land locked countries that border Uganda.
39. State any two problems Uganda faces due to her location.
40. How is Uganda different from Kenya in terms of location?
41. State the effect of the rotation of the earth on its axis.
42. Name the sea port that handles most of Uganda's imports and exports.
43. Why does Uganda mostly use the above seaport to handle her imports?
44. Give any two ways Uganda can solve the problems she faces due to her location.
45. Give any two reasons why Uganda should cooperate with her neighbours

TOPIC TWO: PHYSICAL FEATURES IN UGANDA

Physical features are natural landforms on the earth's surface that give it shape.

Types of physical features

i.) Relief features

ii.) Drainage features

Relief features

Relief is the general appearance of land.

Relief features are the natural landforms that are identified by their altitude.

Altitude

It is the height above sea level.

Examples of relief features

i. Hills
ii. Rift valley
iii. Plains
(iv) Plateau
(v) Mounain Valley

Drainage features

Drainage features are the natural landforms that contains water in them

Examples of drainage features

(i) Lake
(ii) Seas
(iii) Rivers
(iv) Oceans
(v) Streams

Plateau

Plateau is the raised flat topped piece of land.

OR Is a raised table land.

Draw a symbol of a plateau



The plateau covers the largest part of Uganda.

It lies between 200m and 2000m above the sea level.

<u>Features found on a plateau</u>

- Lakes
- Rivers
- Streams
- Valleys
- Hills

Activities carried out on a plateau

- Farming/Agriculture .
- Tourism.
- Fishing
- Mining.
- Settlement
- Industrialization.
- Lumbering

<u>Importance of plateaus.</u>

- They have fertile soils for crop growing.
- They promote wildlife conservation.
- They have plenty of pasture for animal rearing.
- They are promote tourism.
- The help in formation of cyclonic rainfall.

Problems faced by people who live on plateau

(i) There is soil erosion.
(ii) Poor transport system especially in hilly areas.
(iii) Crop pests and diseases.
(iv) Landslides are common in hilly area.

The highest point of Uganda is on top of mountain **Rwenzori**
The lowest point is at Nimule at Uganda's boarder with Sudan.
The plateau of Uganda is higher to the south and lower to the north.

What evidence is there to show that Uganda's plateau is tilted to North?
River Nile flows from the south to the north of Uganda.

Mention some physical features on the plateau
(i) Lakes (ii) Rivers (iii) Rift valley (iv) Hills

THE HIGHLANDS/ MOUNTAINS
Highlands or mountains are areas about 2000 metres above sea level and beyond.
In Uganda they include Mt. Rwenzori, Moroto, Mt Mufumbiro and Mt Elgon

Types of mountains
(i) Block mountains horst.
(ii) Volcanic mountains.
(iii) Fold mountains.(***not found in Uganda***)

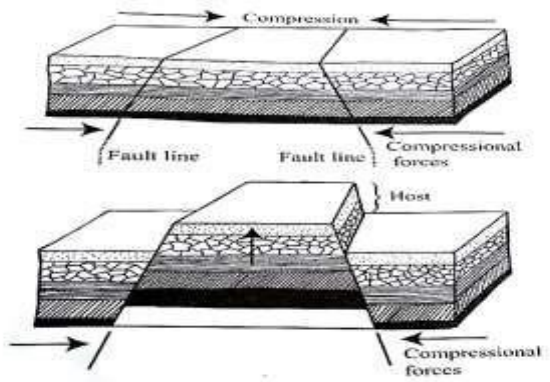
Block or Horst mountains
These mountains are also called horst mountains.
They were formed as a result of faulting.

What is Faulting
Faulting is a process where cracks develop in the rock within the earth crust as a result of tension and compression forces.

Forces that led to the formation of a block mountain
- ✓ Compressional forces
- ✓ Tensional forces.

Faulting leads to formation of
(i) Block mountains.
(ii) Rift valley.
(iii) Fault guided rivers and lakes

Formation of Block mountain



The land on either side of the cracks sinks or is pushed up.
The land that sinks forms a rift valley while that which is pushed up forms a block mountain.
An example of a block mountain in Uganda is **Mt. Rwenzori**.

Mt. Rwenzori
Mt. Rwenzori is a block or horst mountain.
It has very many peaks which form ranges.
It is surrounded by districts like Kasese, Kabarole and Bundibugyo
Mt. Rwenzori is shared by two countries Uganda and Democratic Republic of Congo. The highest peak on Mt. Rwenzori is Margherita.
Mt. Rwenzori was named "Mountain of the Moon" by Henry Morton Stanley.

Why did Stanley name Mt. Rwenzori the mountains of the moon?
Because of the snow on its peak which glitters like a moon.

Why is Mt. Rwenzori snowcapped?
(i) Its highest peak crosses the snow line.

Mountain Rwenzori is a source of rivers like River Mubuku, river Sebwe, River Nyamwamba, River Mpanga

Reasons why there are no plants and animals at the top of Mt. Rwenzori
(ii) It is too cold on the top to support plants growth on which animals feed
(iii) Mt. Rwenzori top is snow copped.

Give reasons why it is difficult to build roads and railways in Bundibugyo
(i) It is a mountainous area.
(ii) It is expensive to construct roads on the mountain slopes in Bundibugyo.
Bakonzo and Bamba are the tribes which live on the slopes of Mt . Rwenzori.
Transport is difficult along the slopes of Mt. Rwenzori so donkeys are mainly used as means of transport.

Why would you advise the people of Bundibugyo to rear donkeys?
For easy transport.

Other mportance of donkeys to people of Bundibugyo
(i) It is a source of income.
(ii) Provides meat to the people.
(iii) Used for ploughing.

<u>Volcanic mountains</u>
Volcanic mountains are mountains formed as result of volcanicity.

What is volcanicity?
It is a process by which magma comes out of the earth crust during an eruption.

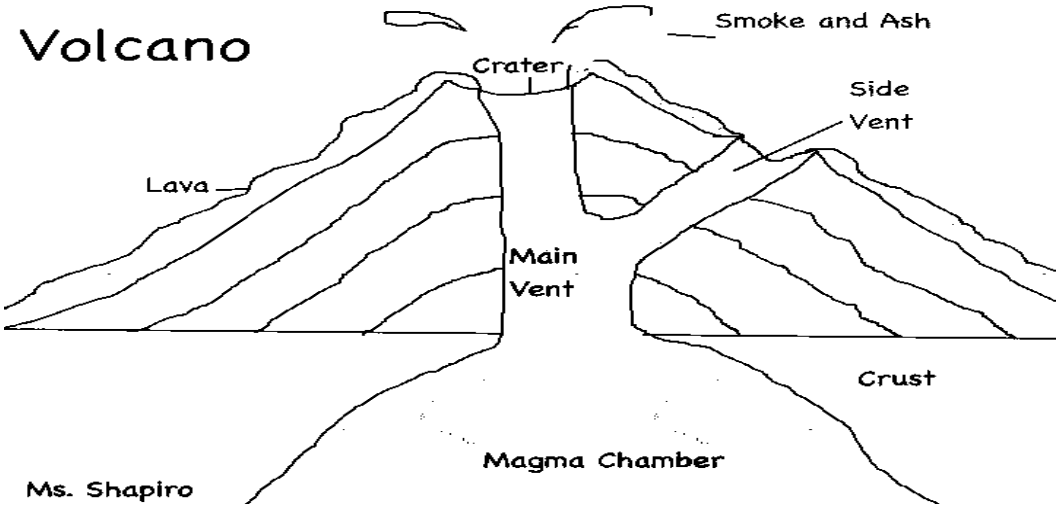
- ✓ Volcanicity can also be called volcanic activity or volcanic eruption.
- ✓ <u>A volcano</u> is a mountain with a vent through which magma is forced through the earth crust and onto the earth's surface.
- ✓ <u>Magma</u> refers to the molten rock in the earth crust.

Lava refers to the molten rock on the earth's surface

Materials that come out during volcanic eruption

(i) Magma
(ii) Ash
(iii) Cinders
(iv) Gases
(v) Rocks

A diagram showing the formation of a volcanic mountain



Types of volcanoes

Type of volcano	Description	Example(s)
Active volcanoes	These are mountains that have erupted in the recent past and still show signs of erupting.	• Mountain Mufumbiro
Dormant volcanoes/ Sleeping volcanoes	These are mountains that have not erupted in the recent past but still show signs of erupting.	• Mountain Moroto.
Extinct volcanoes	These are mountains that do not show any signs of erupting.	• Mountain Elgon • Mountain Napak • Mountain Morungole • Mountain Zulia • Mountain Kadam

Importance of volcanicity

- It leads to formation of fertile volcanic soils which are favorable for crop growing.
- Volcanic mountains attract tourists who bring in income.

Dangers of volcanicity.

- It leads to death of people and animals.
- It leads to destruction of property.
- It leads to air pollution.

Other features formed as a result of volcanicity.

- Crater lakes.
- Calderas
- Inselbergs

  An inselberg is an isolated hill that stands above the general level of the surrounding land e.g. Labwor hill in Karamoja, Musaijamukuru hill in Hoima, Osukuru hill in Tororo.

  These inselbergs attract tourists who bring in income and are also a major source of minerals e.g. The Osukuru hills which provide limestone used for making cement.
- Lava dammed lakes
- Hot springs /geysers e.g. Kitagata hot springs in Bushenyi, Sempaya hot springs in Bundibugyo

✓ *Hot springs attract tourists and also help in generation of geothermal energy.*

Mountain Elgon

- ✓ It is found in eastern Uganda at the border of Uganda and Kenya.
- ✓ Mt. Elgon was formed by volcanicity.
- ✓ It is the second highest mountain in Uganda.
- ✓ Its peak is called Wagagai
- ✓ It is locally known as Mt. Masaba
- ✓ Joseph Thomson was the first European explorer to see mountain Elgon.
- ✓ Mountain Elgon national park is located on mountain Elgon.

Districts that share part of mountain Elgon

- Mbale ❖ Sironko ❖ Kapchorwa ❖ Manafwa

Rivers that originate from mountain Elgon.

- River Manafwa ❖ River Malaba
- River Mpologoma ❖ River Nzoia in Kenya

Guiding question

1.Which people live on the slopes of Mt. Elgon?

Bagisu/ Bamasaba

2. How are the Bagisu similar to Baganda and the Chagga of Tanzania?

(i) Both are Bantu.
(ii) Both are farmers who grow matooke and coffee.
(iii) Both the Bagisu and Chagga are highland Bantu tribes.

3. How are the Bagisu similar to Baganda in their economic activities

(i) Both are farmers.
(ii) Both grow coffee.

4. Why is Arabic coffee mainly grown on the slopes of Mt. Elgon

(i) Presence of fertile volcanic soils.
(ii) There is reliable rainfall which favors Arabica coffee.
(iii) There are low temperatures needed by Arabica coffee

5. How is the formation of Mt. Elgon different from that of Mt. Rwenzori

Mt. Elgon was formed by volcanicity while Mt. Rwenzori was formed by faulting.

6. Why are the slopes of Mt. Elgon densely populated

(i) Presence of fertile volcanic soils for agriculture.
(ii) Favorable climate for agriculture.

7. In Uganda which type of coffee is grown best in volcanic soils?

Arabica coffee.

8. How does Mt. Elgon influence the climate of Mbale?

(i) It helps in formation of relief rainfall.

Mufumbiro ranges (4127m)

- ✓ They are located in south western Uganda at the boarder of Uganda, Rwanda and DRC. It is the third highest mountain in Uganda
- ✓ Mt. Mufumbira was formed by volcanicity.
- ✓ **The three ranges which lie in Uganda are:**

(i) Muharvura 4127m
(ii) Mgahinga
(iii) Sabinyo 3645m

It forms a range of mountains in the Kigezi sub-region in South Western part of Uganda.
The Mufumbiro range is a home for the mountain gorillas in Bwindi and Mgahinga national park.
Mountain Mufumbiro mainly occupies Kabale, Kisoro and Kanungu districts.
The area around mountain Mufumbiro was referred to as "the Switzerland of Africa" by Winston Churchill because it has features which are similar to those of the Alps mountains in Switzerland.

Tribes that live on the slopes of mountain Mufumbiro.

- ✞ Bakiga , Bafumbira, Bakiga, Bahororo, Batwa

Crops mainly grown on slopes of mountain Mufumbiro

- ✞ Potatoes ❖ Sorgum ❖ Vegetables
- ✞ Pyrethrum

Muhavura is the highest peak on Mt. Mufumbira ranges.
It is a home of **mountain Gorillas**.

Mountain Moroto

- ✓ It is located in the North Eastern part of Uganda.
- ✓ Its highest peak is called Sokdek.
- ✓ Sogolomon is the second highest peak of mountain Moroto.
- ✓ The Karimojong tribe mainly lives on the slopes of mountain Moroto.
- ✓ The Karimojong mainly carry out pastoralism.
- ✓ The area around mountain Moroto receives very little rainfall because it receives dry winds from the North East.
- ✓ People living around the mountain include Karamojong and the Jie of Kenya.

What type of rainfall is received around mountainous areas

It is relief rainfall.

How are mountains important to the people who live near them?

(i) They help in formation of rainfall.
(ii) They modify the climate of an area.

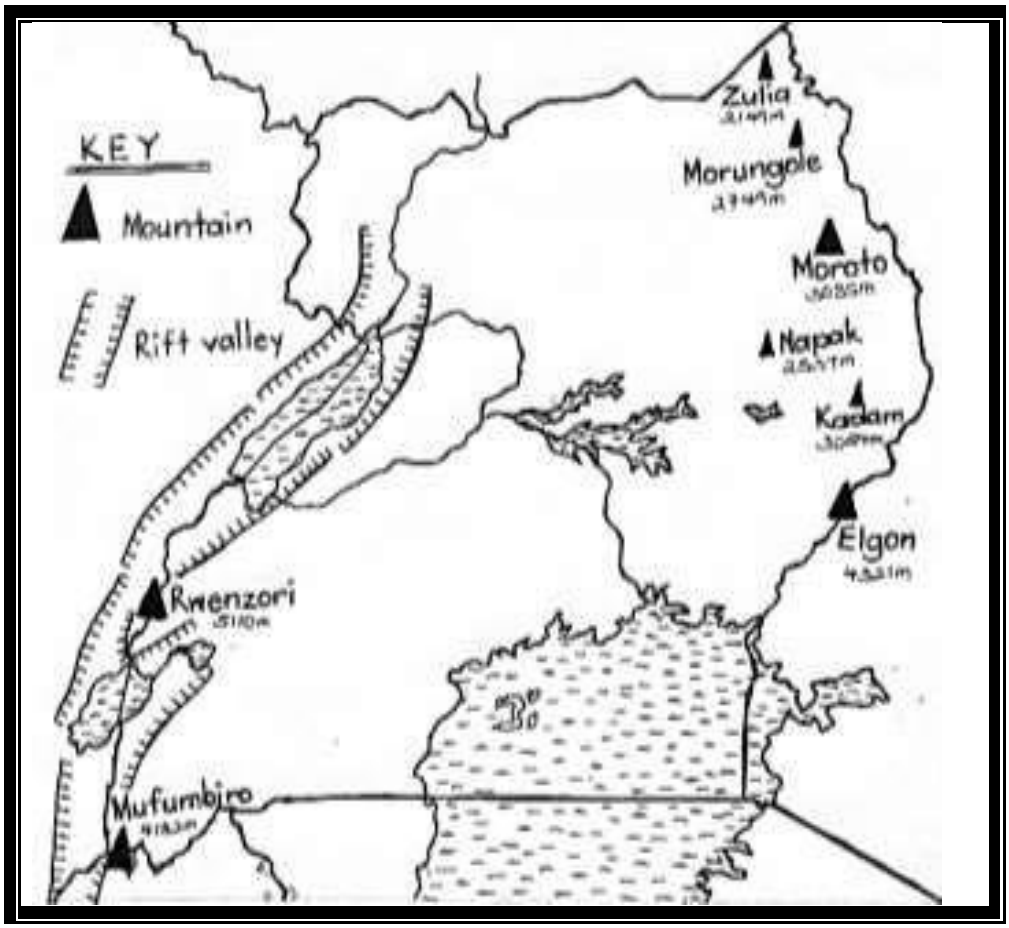
(iii) They are fertile soils for agriculture.
(iv) Attract tourists. It is a tourist attraction centre.
(v) Mountains form a natural boundary between countries.
(vi) Mountains are sources some rivers.

How do mountains influence the climate of an area?
They help in formation of rainfall.

Problems faced by people who live in mountain areas of Uganda
1. There is soil erosion.
2. There are landslides.
3. There is poor transport .
4. Land shortage due to high population.
5. There is a problem of land fragmentation.
6. Poor sanitation.

Solutions to problems faced by the people in mountainous areas
1. They rear donkeys to simplify transport.
2. They construct winding roads though expensively.
3. The farmers terrace their land to control soil erosion.

Major mountains in Uganda.



GUIDING QUESTIONS
1. **Why is soil erosion common in Kabale and Mbale?**

They are mountainous areas.

2. **Why is soil erosion not common in Mukono (Wakiso)?**

- Mukono is a flat area.
- It is not a mountainous area.

3. Ways farmers use to control soil erosion in Kabale, Kisoro and Mbale

- By terracing.
- By controlling ploughing.
- By strip cropping.
- By planting trees and grasses.

4. What is land fragmentation?

- The division of land into small plots.

5. What causes land fragmentation?

- Over population

6. Why do farmers in Kabale terrace their land?

- To control soil erosion.

7. Why are landslides common in Kabale and Kisoro?

- The slopes of the mountains in both sides have been cleared for settlement.
- Both are mountainous areas.

8. Give one reason why there is land shortage in Kabale

- There is over population.
- Mountains occupy large place.

9. Why do tourists like to visit mountainous areas?

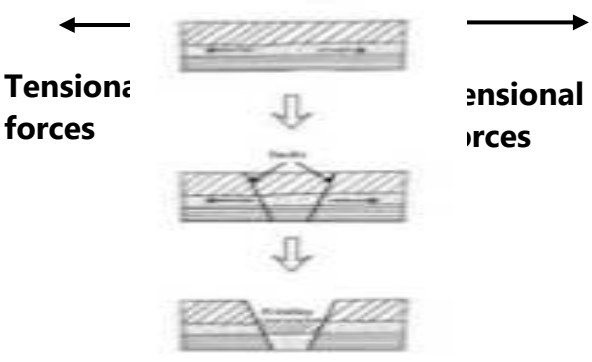
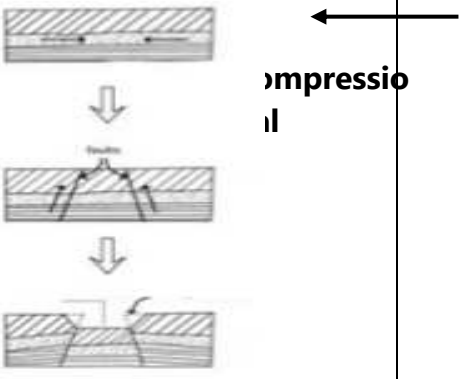
- To enjoy cool climate
- To enjoy seeing the mountain scenery.
- For mountain climbing

Rift Valley

It is a long wide depression on the earth surface with escarpments.

How was a Rift Valley formed?

(i) It was formed by faulting process helped by Tensional forces.
(ii) It starts from R. Jordan and ends at Beira Mozambique.

Formation by tensional forces	Formation by Compressional forces
	

What is an escarpment?

It is the steep side of Rift Valley.

The rift valley has two branches/ arms namely

- Western rift valley (runs through Uganda)
- The Eastern rift valley (runs through Kenya and Tanzania)

Note: -***Albertine escarpment*** *is the major escarpment of the Western rift valley.*

-Crude oil was discovered in the Albertine region.

Features found in the rift valley.

- ✓ Lakes e.g., lake Albert, lake Edward and lake George.
- ✓ Rivers
- ❖ Valleys
- ✓ Hills

Lakes in Western branch of the valley in Uganda

(i) Lake Albert
(ii) Late Katwe
(iii) Lake Edward
(iv) Lake Mutanda
(v) Lake George

Some lakes in Uganda which are not found in rift valley include:

1. Lake Victoria
2. Lake Kyoga
3. Lake Mburo
4. Lake Wamala
5. Lake Kwania
6. Lake Nabugabo

Characteristics of Rift Valley lakes

1. They have salty water.
2. They are deep.
3. They have no major outlets
4. They have more inlets than outlets.
5. They are long and narrow.

Economic activities carried out in rift valley

1. Mining
2. Fishing
3. Tourism
4. Crop farming
5. Pastoralism

Importance of Rift Valley

- ✓ It is a tourist attraction centre..
- ✓ Rift valley lakes have minerals e.g. salt and soda ash.
- ✓ Pastoralism is carried out in Rift valleys
- ✓ It has a large space where wild animals are kept in game parks.
- ✓ It has lakes where fishing is carried out.
- ✓ It promotes wild life conservation.
- ✓ It has plenty of pasture for animal rearing.
- ✓ It forms natural boundaries between countries

Disadvantages of rift valley

- ➢ Poor transport system around rift valley areas.
- ➢ Landslides are common.
- ➢ It is affected by soil erosion
- ➢ Floods are common
- ➢ It experiences very high temperatures due to low altitude.

Of what importance is Lake Katwe to Uganda's economy?

a. It provides salt to people of Uganda.
b. It attracts tourists.
c. Provides employment.

Drainage features in Uganda

Lakes

- ✓ A lake is a big depression filled with water on the earth surface.
- ✓ A lake is a mass of non-flowing water on the earth's surface.
- ✓ A lake is a large area of water that is surrounded by land.

Types of lakes.

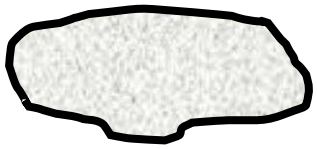
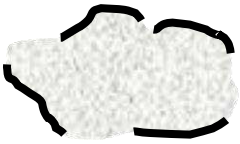
- ✞ Permanent lakes.
- ✞ Seasonal lakes.

Permanent lakes are lakes which contain water throughout the year.

Examples of permanent lakes in Uganda.

- ✞ Lake Victoria.
- ✞ Lake Edward.
- ✞ Lake Mburo.
- ✞ Lake George.
- ✞ Lake Albert.
- ✞ Lake Kyoga

Seasonal lakes are lakes which dry up in the dry season and get water in the wet season.

	
A map symbol of a permanent lake	*A map symbol of a seasonal lake*

Types of Lakes formation

(i) Depression / Down warped lake
(ii) Rift valley lakes.
(iii) Man-made lakes.
(iv) Crater lakes.
(v) Ox-bow lakes.
(vi) Lava dammed lakes.

Depression Lakes

These are lakes which were formed as a result of down warping.

Examples of depression lakes or lakes formed as a result of down warping

- ✓ Lake Victoria
- ✓ Lake Kachira
- ✓ Lake Kyoga
- ✓ Lake Mburo
- ✓ Lake Opeta
- ✓ Lake Bisina
- ✓ Lake Kwania
- ✓ L Wamala

Characteristics of depression lakes

(i) They are shallow.
(ii) They are wide

(iii) They have fresh water
(iv) They have both inlets and outlets.
(v) They have an irregular shape

Give one reason why depression lakes have fresh water
They have both inlets and outlets.

How was Lake Victoria formed?
It was formed as a result of down warping.

Lake Victoria
- ✓ It is the largest lake (Fresh water lake) in Uganda, East Africa and Africa.
- ✓ It is shared by Uganda, Kenya and Tanzania.
- ✓ Its traditional name is Nyanza (For Kenya and Tanzania) and Nalubaale in Uganda.
- ✓ It is referred to as an inter-territorial lake because it is shared by three countries in East Africa.
- ✓ It has inland ports which promote inter-territorial trade through handling the goods of the three East African countries.

- ✓ It was named by a British explorer called **John Hannington Speke** after the queen of England called **Victoria** at the time of his coming to Uganda.

<u>Inland ports on Lake Victoria in Uganda.</u>

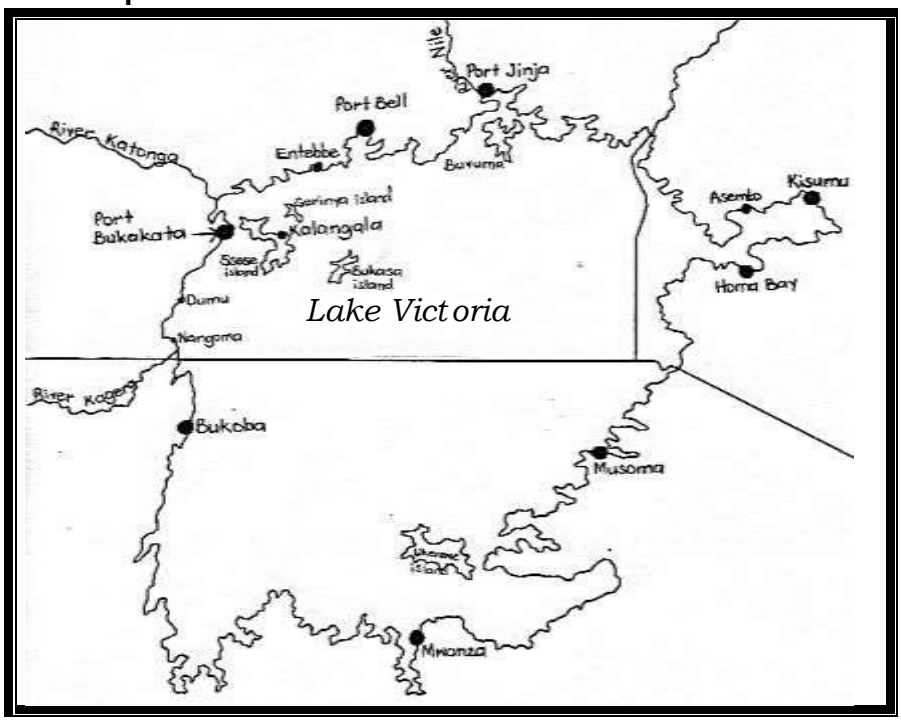
A port is a place on a water body where water vessels load and off loads

- ✞ Port Bell.
- ✞ Port Bukakata
- ✞ Port Jinja
- ✞ Port Bell
- ✞ Port Jinja

Other ports on Lake Victoria

(i) Port Bukoba
(ii) Port Musoma
(iii) Port Kisumu
(vii) Entebbe
(viii) Port Mwanza

Inland ports on lake Victoria



It has many islands e.g. Ssese Island, Bugala, Kome which form the present Kalangala District.

Major economic activities carried out by the people of Kalangala

(i) Fishing
(ii) Tourism
(iii) Lumbering
(iv) Farming
(v) charcoal burning

Problems faced by people of Kalangala

1. Poor communication and transport network.
2. There is easy spread of water borne diseases.
3. Shortage of electricity.
4. Poor infrastructure
5. Illiteracy

Give the main product got from oil palm in Kalangala

Cooking oil

Other products got from Oil palm

(i) Soap
(ii) Cosmetics.

How will the people of Kalangala benefit from oil palm growing?

- It creates chances of employment.
- It is a source of income or foreign exchange.
- It will lead to the development of infrastructure.

How Kalangala is economically important to Uganda

- Fishing takes place.
- Attracts tourists.
- Farming is carried out.
- There is oil palm growing.
- There is a lot of Lumbering

Importance of Lake Victoria towards the industrial development

- Provide fish to fish processing industries.
- Provides water to industries for cooling machines.
- It is used in transporting the finished goods

Why does Kalangala receive convectional rainfall?

- It is surrounded by l Victoria
- It has thick forests.

How does Lake Victoria promote trade?

It provides water transport.

Why there are many people on the shores of Lake Victoria

1. There is favorable climate for farming..
2. Presence of fertile soils for farming.
3. Provides job opportunities to people.eg fishermen, captains, sailors

Problems faced by fishermen/ fishing industry in Uganda

(i) Poor transport system.
(ii) Poor storage facilities.

(iii) Poor methods of preserving fish.
(iv) Presence of the water hyacinth.
(v) Presence of dangerous marine animals.

Importance of inland ports of Uganda
(i) They handle Uganda's imports and exports.
(ii) They provide employment to people.

Problems caused by water hyacinth
(i) It kills fish.
(ii) It makes transport difficult.
(iii) It destroys fishing nets.
(iv) It is a habitat for dangerous wild water animals like snakes.

Ways of destroying the water Hyacinth
(i) Using beetles (biological method)
(ii) Using machines to remove it.
(iii) By hand picking of the water hyacinth.

Importance of water hyacinth to people
(i) It can be used to make crafts
(ii) It can be used to make animal feeds.
(iii) It can be used to make manure.

Lake Kyoga

- It has fresh water. (It is a fresh water lake).
- It was formed by down warping.
- It is the swampiest lake in Uganda. This is because it is shallow.
- It is shallow because it is highly stilted.
- The Victoria Nile flows from Lake Victoria towards lake Kyoga.
- This natural evidence proves that Lake Victoria is on a higher altitude than lake Kyoga
- Lake Kyoga is found in the centre of Uganda.

Inland ports of Lake Kyoga.
- ✓ Port Lwampanga.
- ✓ Port Namasale.

Inlets of lake Kyoga.
- Victoria Nile.
- River Sezibwa.
- River Kafu.

(vi) Rift valley lakes
i) They were formed by faulting.
ii) They lie along the rift valley.
iii) Examples are L. Albert, L. George and L. Edward.

Characteristics of rift valley lakes.
- ✓ They are salty
- ✓ Most of them have no outlet rivers.
- ✓ They are deep

- ✓ They are along in shape.
- ✓ They have inland drainage.

Why rift valley lakes are salty

i) They have no outlets/inland drainage
ii) They lie on salty basement rocks.
iii) They have salty ashes.

Note:-*Lake Katwe lies on the floor of the rift valley but it is not considered to be a rift valley lake because it was formed as a result of volcanicity.*

Examples of salty lakes

- ✞ Lake Albert
- ✞ Lake George
- ✞ Lake Edward

Lake George

It is the shallowest lake in Western Uganda formed by faulting.
-It is joined to Lake Edward by Kazinga Channel.
-It is crossed by the Equator.

What is the major tourist attraction found at Kazinga Channel?

Hippopotamus.

Activities carried out on Kazinga Channel

(i) Tourism
(ii) Transport
(iii) Fishing

LAKE EDWARD.

- ➢ It is a rift valley lake formed by faulting.
- ➢ It forms a natural boundary between Uganda and Democratic Republic of Congo.
- ➢ It is connected to Lake George by Kazinga channel.
- ➢ Kazinga channel has the biggest population of hippopotamuses in Uganda.
- ➢ Kazinga channel is located in Queen Elizabeth national park.
- ➢ Henry Morton Stanley was the first European explorer to see Lake Edward.

Lake Albert

- ➢ It is the second largest lake in Uganda.
- ➢ It was formed by faulting.
- ➢ It forms a natural boundary between Uganda and Democratic Republic Congo.
- ➢ It's traditional name is Mwitanzige.
- ➢ It was named Albert by Sir Samuel Baker.
- ➢ It was named Albert after Sir Albert who was the husband of Queen Victoria of England
- ➢ It has a famous Port known as Port Butyaba

Reasons why Port Butyaba was built

1. To link Uganda to Democratic Republic of Congo.
2. To promote transport.
3. To handle Uganda imports and exports.

Other inland ports on Lake Albert.

- Port Ntoroko.
- Port Wanseko.

Activities carried out on Port Butyaba

(i) Trade
(ii) Transport
(iii) Tourism
(iv) Fishing
(v) Fish processing

Lake Mburo

It is found in Mbarara district.
Parts of Lake Mburo is a national game park.

Importance of lake Mburo to Uganda's economy

- Creates chances of employment.
- It earns foreign exchange through tourism

How lakes influence the climate of an area

They help in the formation of rainfall.

Bad fishing practice in Uganda

(i) Use of poison.
(ii) Using undersized fishing nets/equipment to catch fish.
(iii) Catching of young fish.

Crater lakes

A crater lake is a hollow or depression filled with water on top of an extinct volcano.

Crater lakes in Uganda

Lake Katwe
Lake Bunyonyi
Lake Nyamunuka
Lake Nyakasura

Lava dammed lakes

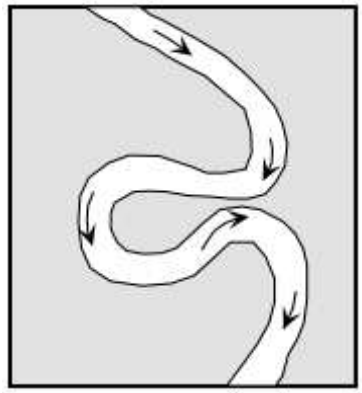
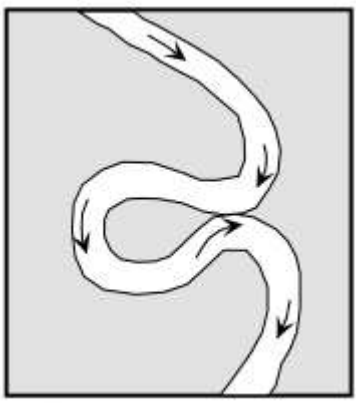
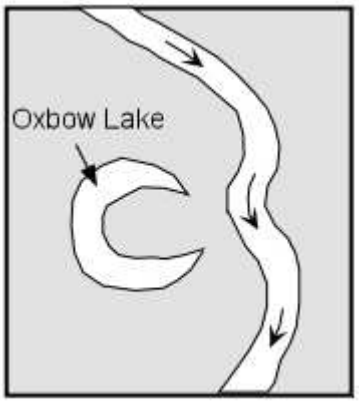
These are lakes formed when lava blocks the river course.

Examples include

Lake Mutanda (Kisoro district)

Ox-bow lakes

These lakes were formed as a result of river meandering.

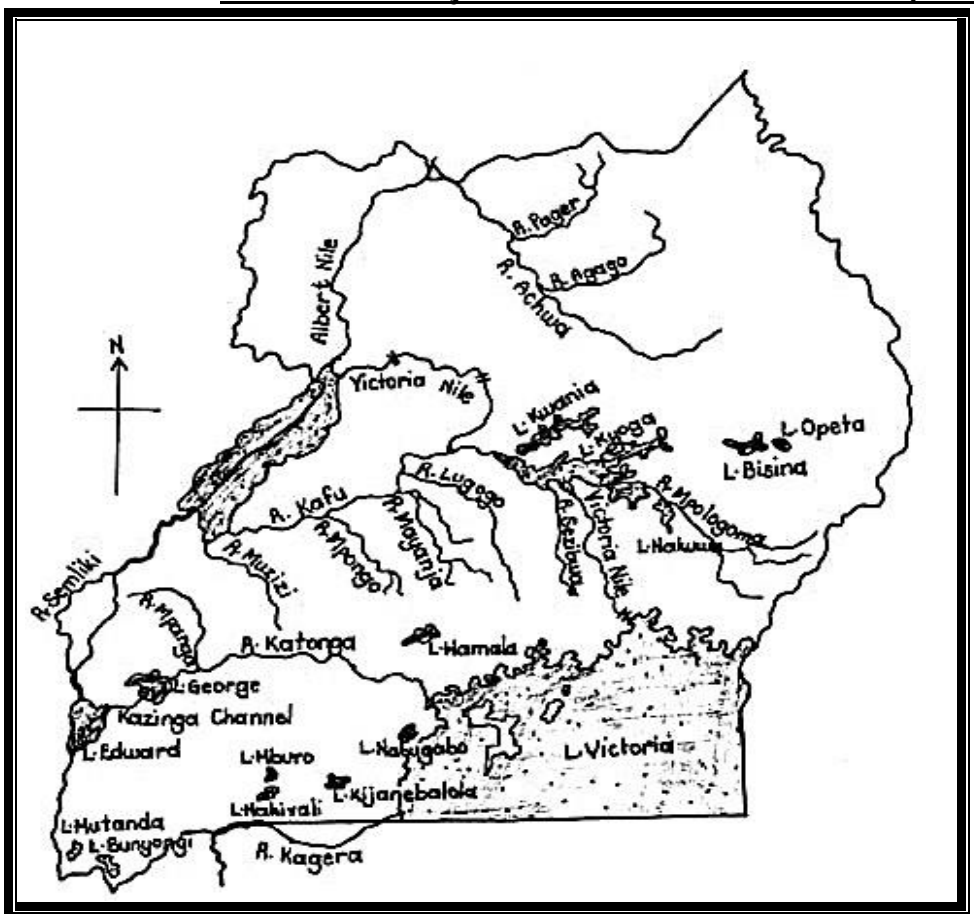
Step 1	Step 2	Step 3
		

Man-made lakes

These were formed as a result of human activities like dam construction.

Example of man-made lake in Uganda is Kabaka's lake, Kajjansi Lake and Kibimba Lake, Lake Nasser in Egypt

Location of major lakes and rivers on the map of Uganda.



Rivers in Uganda

A river is a mass of flowing water on the earth's surface.

- ✓ Many rivers in Uganda originate from high plateaus and highlands because such areas receive plenty of rainfall which provides water to the rivers.
- ✓ Rivers flow from higher altitude to a low altitude.

Types of rivers

➢Permanent rivers. These are rivers which flow throughout the year

Examples of permanent rivers.

- ✞ River Nile
- ✞ River Kafu
- ✞ River Kagera
- ✞ River Sezibwa
- ✞ River Mpologoma
- ✞ River Achwa
- ✞ River Katonga

Seasonal rivers.

These are rivers that mainly flow during the wet season and dry up during the dry season.

Terms associated with rivers:

a.) **A river source** is where a river starts.

b.) **A river mouth** is where a river ends.

c.) **A watershed** is a stretch of highland separating two/more rivers.

d.) **A basin** is an area drained by a river and its tributaries.

e.) **An estuary** is an open mouth of a river.
f.) **A delta** is a mouth of a river made up of distributaries.
g.) **A distributary** is a small river leaving the main one.
h.) **A tributary** is a small river joining the main one.
i.) **A confluence** is a place where two or more rivers meet.
j.) **Meanders** are bends of rivers.
k.) **A drainage basin** is an area of land drained by a river, its tributaries and distributaries.
l.) **A flood plain** is a flat area near a river that often floods when the water level rises.

Major Rivers in Uganda
RIVER NILE
It is the longest river in Uganda, East Africa ,Africa and the world.
Its local name is Kiira.
River Nile has its source in Lake Victoria.
River Nile flows through Uganda, Republic of South Sudan, Sudan and Egypt (Nile valley countries).
It begins from Lake Victoria in Uganda and ends in Mediterranean Sea in Egypt.
The Nile flows northwards because the North is on a lower altitude.
The Nile has three parts
1. Victoria Nile (between lake Victoria and lake Albert)
2. Albert Nile (between lake Albert and Nimule)
3. White Nile (from Nimule northwards)

River Nile pours its water in Mediterranean Sea.
River Nile ends in a Delta.

Why does River Nile flow towards northern Uganda ?
(i) Uganda's plateau is tilted towards the north.
(ii) Northern Uganda is on a lower altitude than southern Uganda.

Name the first European to see River Nile
He was John Speke in 1862.
Why isn't it correct to say that John Speke discovered the source of River Nile
The native around the river had seen it before.
Name the major water falls found on the River Nile
Bujagali falls. (iii) Murchison falls. v) Nalubaale falls
(ii) Karuma falls iv) Ripon falls
NB Nalubaale dam and Kiira dam were built along R Nile in Uganda to generate more H.E.P
Hydro electric power dams
- ✓ Nalubaale power dam
- ✓ -Kiira dam
- ✓ Karuma power dam
- ✓ -Bujagali power dam -Karuma dam.

Some of the power stations found on R. Nile in Uganda are:
i) Nalubaale power station

ii) Bujagali power station
iii) Kiira power station

Uganda exports her hydro electricity to

i) Kenya
ii) Tanzania
iii) Rwanda

Give two economic importance of water falls

(i) They help to generate hydro electricity.
(ii) They are tourist attraction centre.

The tributaries of River Nile

(i) Atbara
(ii) Achwa
(iii) Blue Nile
iv) Kafu

Sections of the Nile

(i) Victoria Nile from Lake Victoria to Lake Albert.
(ii) Albert Nile from Lake Albert to Nimule.
iii) White Nile outside Uganda

Reasons why some rivers are not navigable.

i) Some rivers have fest flowing waterfalls.
ii) Some rivers have suds (floating vegetation/ Islands) / water weeds.
iii) Existence of dams on some rivers.
iv) Some rivers have rocks on their floor.
v) Dangerous aquatic animals.
vi) Some rivers are shallow
Some rivers are narrow

Reason why the banks of River Nile are densely populated.

- ✓ Presence of fertile soils for agriculture.
- ✓ Reliable rainfall for agriculture.
- ✓ Presence of dangerous aquatic animals.
- ✓ Some parts of river Nile are shallow and narrow
- ✓ Fishing takes place (presence of employment opportunities.)

How River Nile is important to industries of Uganda

(i) It helps in the generation of hydro electricity.
(ii) Provides water for cooling down machines in the industries around them.
iii) Provides water to industries which is used as raw material.

<u>Other rivers in Uganda</u>

River Katonga

It flows from lake George into lake Victoria

River Kagera

It flows from Lake Kivu in Rwanda into Lake Victoria.
It forms a natural boundary between Uganda and Rwanda

River Kafu

It flows from Lake Albert to Lake Kyoga.

River Semliki

- Flows from Lake Edward and pours its water into Lake Albert.

- It has a delta and oil deposits.
- It flows in the western rift valley on the boarder of Democratic Republic of Congo and Uganda.

River Achwa.

It is the main tributary of River Nile in Uganda.
It joins river Nile near Nimule in South Sudan.

Activities carried out on and around lakes and rivers.

- Fishing.
- Crop growing
- Tourism
- Transportation.
- Trading.
- Industrialization

Importance / advantages of rivers to man.

1. They help in generation of Hydro Electric Power.
2. Rivers provide water transport.
3. Rivers help in formation of rainfall.
4. Rivers are homes of aquatic animals.
5. Rivers are sources of fish.
6. Rivers provide water for irrigation, industrial and home use.
7. Some rivers have mineral deposits e.g. R. Semliki and R. Nile have oil.

How do people misuse water bodies?

1. By over fishing
2. By fish poisoning
3. Through pouring wastes materials in water bodies.

Dangers of living near rivers

- Flooding of the area.
- Easy spread of water borne diseases
- Drowning
- They harbor dangerous aquatic animals
- They harbour disease vectors.
- Rivers and lakes hinder road and railway construction.

Problems facing rivers in Uganda

- Silting which reduces the depth of water bodies.
- Overuse of water from lakes and rivers
- Drought which lowers the water level.
- Dumping of wastes into water bodies.
- Over fishing

THE INFLUENCE OF PHYSICAL FEATURES:

a) On People

- ✓ The wind ward side of a mountain attracts very many people due to the presence of fertile soils for cultivation, and also receives plenty of rainfall.
- ✓ The lee ward side of a mountain has very few people because it receives very little rainfall.
- ✓ Plains favour pastoralism due to the presence of pasture.
- ✓ Road and railway transport is poor in highland areas due to the presence of steep slopes.

- ✓ Many people settle around lakes and rivers because such areas receive reliable rainfall and have fertile soils which support crop cultivation.

Factors which attract human settlement in;

i) Plateau areas

- ✞ Presence of pasture for animals.
- ✞ Agricultural mechanization is easy in such areas.
- ✞ Construction of houses, roads, railways and industries is easy.
- ✞ Natural hazards like floods are not common in these areas.

ii) Highland areas

- ❖ Presence of fertile soils.
- ❖ Availability of reliable rainfall.

Common economic activities carried out in highland areas.

- Crop farming
- Mining
- Dairy farming

Reasons why there are very few people living in higher parts of mountains.

- ✞ Transport is poor in higher parts of the mountains
- ✞ Highland areas experience very low temperatures which do not favour human settlement.

b) On Plants

- ✞ Areas around lakes and rivers have many plants due to plenty of rainfall received.
- ✞ Slopes of mountains have forests due to presence of fertile soils and reliable rainfall received.
- ✞ Mountain tops have few plants due to low temperatures and bare rocks.

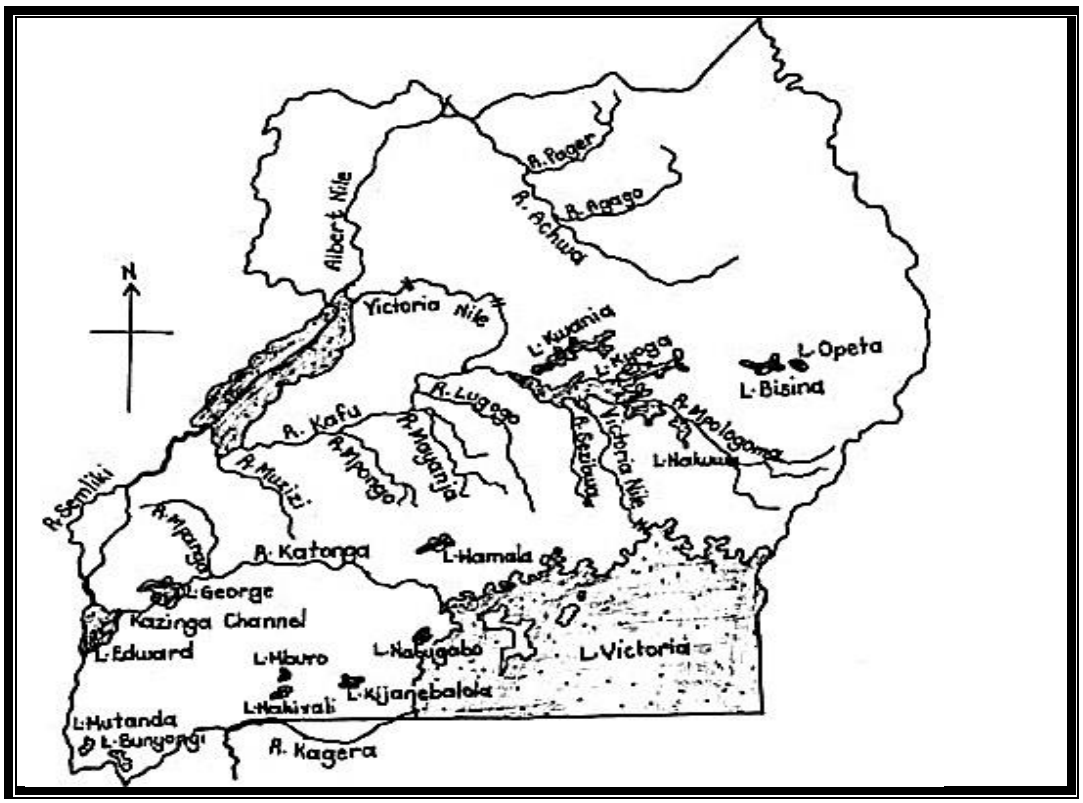
c) On Animals.

- ✓ Plains have plenty of grass which attracts wild animals.
- ✓ Water bodies favour aquatic animals.
- ✓ Pastoralism in common on plateau areas due to the presence of pasture for animals.
- ✓ There are many climbing animals e.g. mountain gorillas in highlands due to the presence of many fruit trees.

d) On Climate.

- ✓ Mountains receive plenty of relief rainfall.
- ✓ The wind ward side of a mountain receives plenty of rainfall because it receives warm moist air.
- ✓ The lee ward side of the mountain receives very little rainfall because it receives dry winds.
- ✓ Mountainous areas experience very low temperatures because they lie at a higher altitude.
- ✓ Rift valleys and low lands experience very high temperature because they are of low altitude.
- ✓ Lake shores receive plenty of convectional rainfall.

A MAP SHOWING UGANDA'S MAJOR PHYSICAL FEATURES



TOPIC 3: THE CLIMATE OF UGANDA

Climate is the average weather condition of a place recorded for a long period of time 30-35 years

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

Meteorology is the study of weather.

Elements of weather are measured and recorded at a weather station/ meteorological centre.

The biggest meteorological centre/ weather station in Uganda is Entebbe meteorological centre.

Meteorologist is a person who studies the weather conditions

How is climate different from weather?

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

Weather forecasting is the prediction of future weather changes of an area at a given time.

Importance of weather forecasting to:

Farmers:

(i). It helps them to plan for their farm activities i.e. to know when to plant and harvest crops.

Pilots

(ii) It helps a pilot to fly when there are no weather disasters.

Sailor

(i) It warns the sailor about bad weather or disasters.

(ii) It helps a sailor to know when to sail.

Terms related to the climate

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

ii) **Contours** are lines draw n on a map to show places with the same altitude.

iii) **Isobars** are lines draw n on a map to show places with the same pressure.

iv) **Isohyets** are lines drawn on a map to show places with the same rainfall.

Types and conditions of weather.

Type of weather	**Condition of weather**
Rainy weather	Rainy
Windy weather	Windy
Cloudy weather	Cloudy
Sunny weather	Sunny
Foggy weather	Foggy

Elements of weather

These are things which causes atmospheric changes of a given place at a given time.

(i) Rainfall
(ii) Sunshine
(iii) Wind
(iv) Humidity
(v) Air pressure
(vi) Clouds
(vii) Temperature

Ways people protect themselves from bad weather.
Sunny (Too much sunshine)
(i) By using umbrellas.
(ii) By using sunglasses.
(iii) Using hats.
(v) By wearing light clothes

Rainy Weather
(i) By using umbrellas
(ii) By using rain coats.
(iii) By using gumboots.

Cold Weather
By wearing heavy clothes.

Windy Weather
By planting of trees in the compound.

Give one agricultural activity done in rural areas in a:
(a) Wet Season
(i) Growing crops.
(ii) Planting of crops.
(iii) Weeding in the garden
(iv) Spraying of crops.

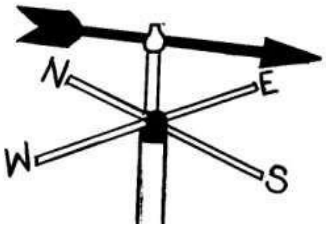
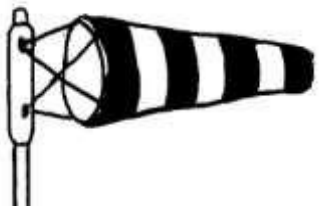
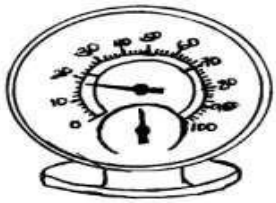
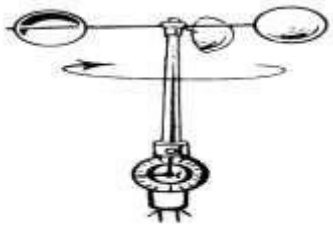
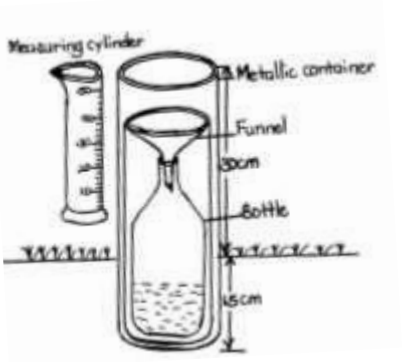
(b) Dry season
(i) Harvesting crops.
(ii) Land preparation
(iii) Drying harvested crops
(iv) Storing of dried crops.

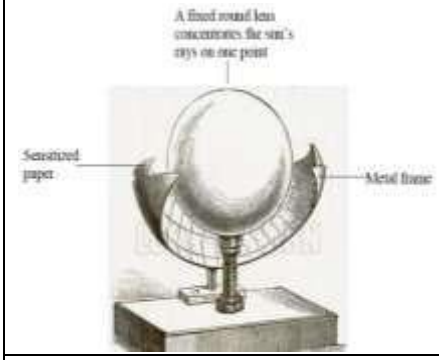
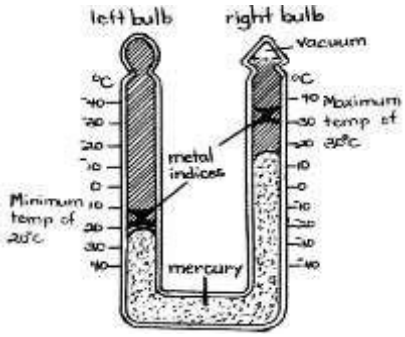
How climate affects people's way of dressing?
Hot climate requires light clothes while cold climate requires heavy clothes.

Things that can be done to maintain good climate in an area
a. By afforestation/Planting of trees.
b. By conserving wetlands.
c. By preserving forests.
d. Practicing agroforestry
e. practicing re afforestation

WEATHER INSTRUMENTS
Wind vane
It shows direction of wind.
Why should a wind vane be placed in an open area?
(i) To show the right direction of wind.
(ii) To avoid obstruction of the right movement of wind.
N.B. The pointer of a wind vane points or faces where the wind is blowing from.

If the wind is blowing to western direction, to which direction should the wind vane face?
Eastern direction.

Weather instrument	Importance
 Wind vane / a weather cock	✞ It shows the direction of wind. ✞ A wind vane is placed in an open place or on top of buildings to prevent wind obstruction. Note:-*An arrow of a wind vane usually points to the direction from which wind is blowing.*
 A Windsock	✞ It shows the strength of wind. ✞ It's usually found at the airports, air fields and at chemical plants. Note:-*A wind sock is not among the instruments of weather found at a weather station.*
Hygrometer 	It measures humidity ✞ Humidity is the amount of water vapor in the atmosphere
An Anemometer 	✞ It measures the speed of wind. ✞ It has cups which trap wind and rotate as wind blows into them. ✞ The speed of wind is measured in kilometers per hour (km/hr.)
A Rain gauge 	✞ It is used to measure the amount of rainfall received in an area. ✞ It is always placed at least 30cm above the ground to prevent splashes and flowing water on the ground from entering the rain gauge. ✞ It should be placed 15cm below the ground to prevent the evaporation of water collected and to make it firm. ✞ It is placed in an open flat place to prevent obstruction of rain drops from entering the funnel in order to take accurate measurements. <u>Importance of different parts of a rain gauge.</u> ✞ <u>The funnel</u>-it directs water into the bottle.

	✞ Water bottle-it collects the amount of rain water received. ✞ Measuring cylinder-it is used for measuring the amount of water collected in the bottle. Note:-*Rainfall is measured in millimeters in order to know the depth of water into the soil.*
A Barometer 	✞ It is used to measure air pressure. ✞ Air pressure is measured in millibars. ✞ Measuring air pressure enables experts to predict storms.
A Sunshine recorder  	❖ It shows the duration of sunshine in a day.
Six's thermometer  	❖ It measures the highest and lowest temperatures of the day.

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Other weather instruments are:

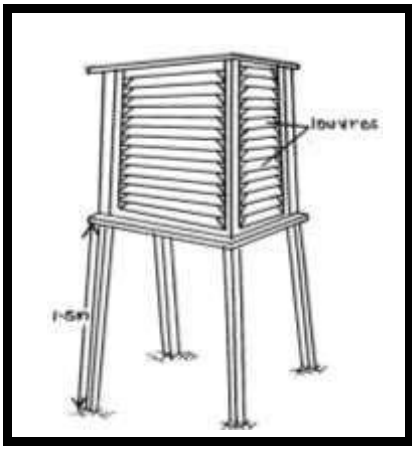
Ceilometer for measuring the intensity of cloud covers

Seismograph for measuring the intensity of earthquakes

A Stevenson screen

It is a wooden box where delicate weather instruments are kept at a weather station.

STEVENSON SCREEN.



- This is a wooden box in which delicate weather instruments are kept at a weather station.
- It protects weather instruments from rainfall and direct heat.
- The Stevenson screen is made of louvres to allow free air circulation in the box.
- It is painted white to enable it reflect sunlight.
- It is raised 1.5m above the ground to keep it free from splash water.
- It is made of wood to prevent it from absorbing heat.

What is the use of a Stevenson Screen at a weather station?

(i) To protect delicate weather instruments from damage.

(ii) It is where the recorded weather records are kept.

Name the weather instruments kept in a Stevenson screen

(i) Barometer

(ii) Six Thermometer

(iii) Hygrometer

Give one reason why a Stevenson screen is made with louvers?

To allow free circulation of air.

The Ministry of Water and Environment is responsible for monitoring weather and climate, and giving advice to the public on weather conditions in Uganda.

Factors which influence the climate of an area

1. Latitude.
2. Altitude.
3. Nature of vegetation.
4. Human activities.
5. Distance from water bodies
6. Prevailing winds

(i) Altitude: The effects of altitude

Altitude is the height above sea level.

It is measured by an instrument called an altimeter.

Why do you think Entebbe is cooler than Gulu?

Gulu is on a low altitude than Entebbe.

Why do you think Gulu is hotter than Entebbe?

Entebbe is on a high altitude than Gulu.

How does the altitude affect climate?

The higher you got the cooler it becomes and the lower you go the hotter it comes.

Temperatures decreases as altitude increases.

Why is Kisoro cooler than Kampala?

Kisoro is on a higher altitude than Kampala.

Places like Kisoro, Kabale, Mbale, Mt. Rwenzori are cooler because they are at a higher altitude.

(ii) Distance from water bodies

Place near larger water bodies receive a lot of rain.

Winds that blow across large the water body carry a lot of moisture which rise up to form rainfall.

Wind that blows from land towards the sea is dry.

They do not bring more rain.

(iii) Latitude (Distance from the Equator)

Places near the equator are hotter than places far away from the equator .

Places near the equator experience high temperature than places far away from the equator hence receiving a lot of rainfall due to high evaporation and transpiration of water bodies and trees.

(iv)Human Activities

Places where large forests are planted have their climate modified.

Places where people have cut down trees on a large scale experience dry condition with very little rain.

How clearing of natural vegetation affects the area.

(i) It reduces chances of rainfall formation.

(ii) It displaces wild animals who live in it.

(iii) It leads to soil erosion

(v) The Nature of vegetation

- Places that have thick forests receive plenty of rainfall while places with little or no vegetation are very dry.
- The type of rainfall received near large forests and water bodies is convectional rainfall.

Lesson 7 Types of rainfall

1. Convectional rainfall
2. Relief/ Orographic rainfall
3. Cyclonic/ frontal rainfall

a) Convectional rainfall.

Convectional rainfall is the type of rainfall received in the forested areas.

Characteristics of convectional rainfall

i) It occurs with lightning and thunder.

ii) It occurs in the afternoon and dawn.

iii) It occurs with heavy short down pour.

b) Relief/ orographic rainfall

It is received in hilly or highland area

c) Cyclonic/ frontal rainfall

It is experienced when two air masses i.e. warm moist air and cool dry air meet and the warm moist air is forced to raise resulting into rain formation.

Climatic regions of Uganda

Climatology is the study of climate.
Climatologist is a person who studies about climate.

There are two main aspects (components) of climate.
- Temperature
- Rainfall

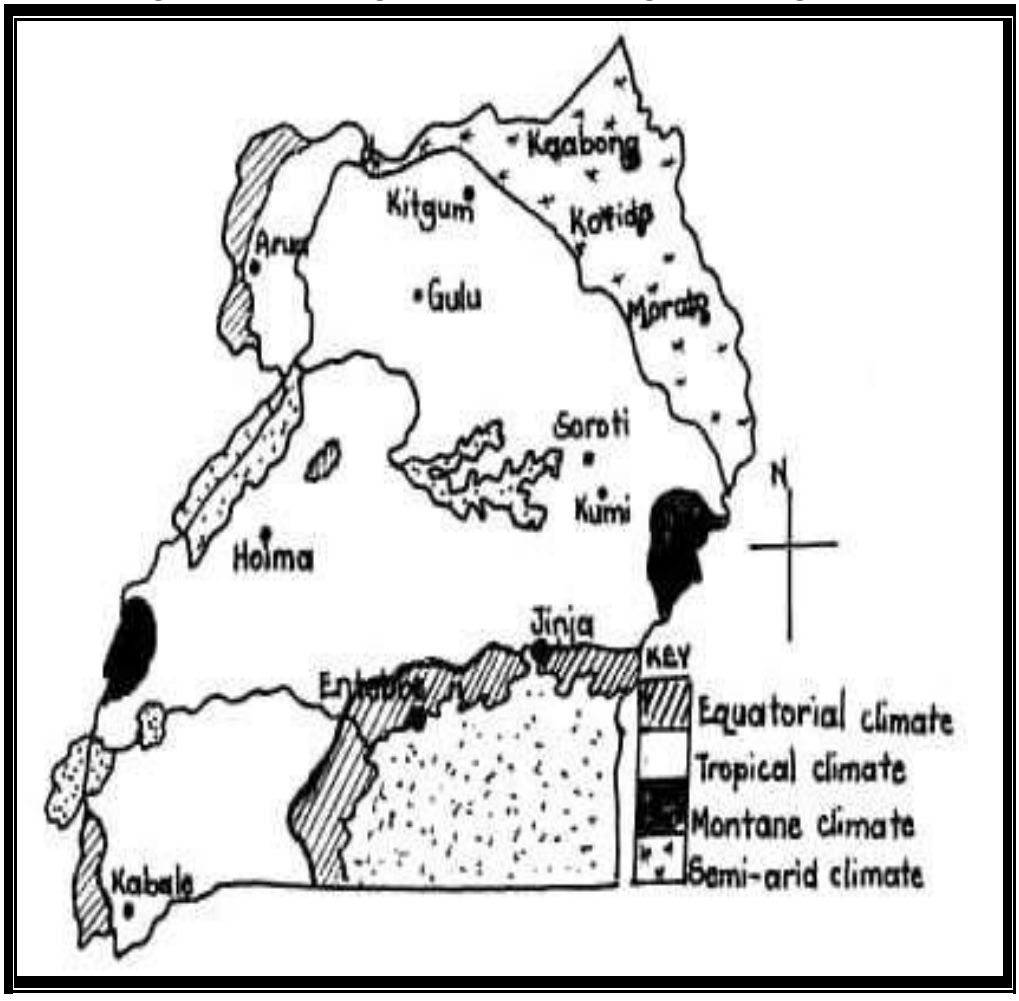
Types of climate experienced in Uganda
(i) Tropical climate.
(ii) Equatorial climate.
(iii) Mountain climate.
(iv) Semi-arid climate.

Climatic regions in Uganda

A climatic region is a large area that experiences the same / similar weather patterns

Climatic regions in Uganda.
- Equatorial climatic region
- Tropical climatic region/ Savannah climatic zone
- ▪Semi-desert climatic region/ savannah climatic zone.
- Montane climatic region/ mountain climatic zone

A Map of Uganda Showing The Climatic Regions of Uganda



THE EQUATORIAL CLIMATE

A. Tropical Climate

The tropical climate is described as dry and wet.
Largest parts of Uganda experience tropical climate.

Why most parts of Uganda receive tropical climate

- Uganda lies within the tropics.
- Tropical climate is experienced between tropic of cancer and tropic of Capricorn.

Characteristics of tropical climate

- ✓ Some months of the year are wet while others are dry.
- ✓ Rainfall is commonly received during Equinox months.
- ✓ Temperatures are too hot during dry month
- ✓ Rainfall decreases as one moves far from the equator.
- ✓ Tropical type of climate is hot and wet.

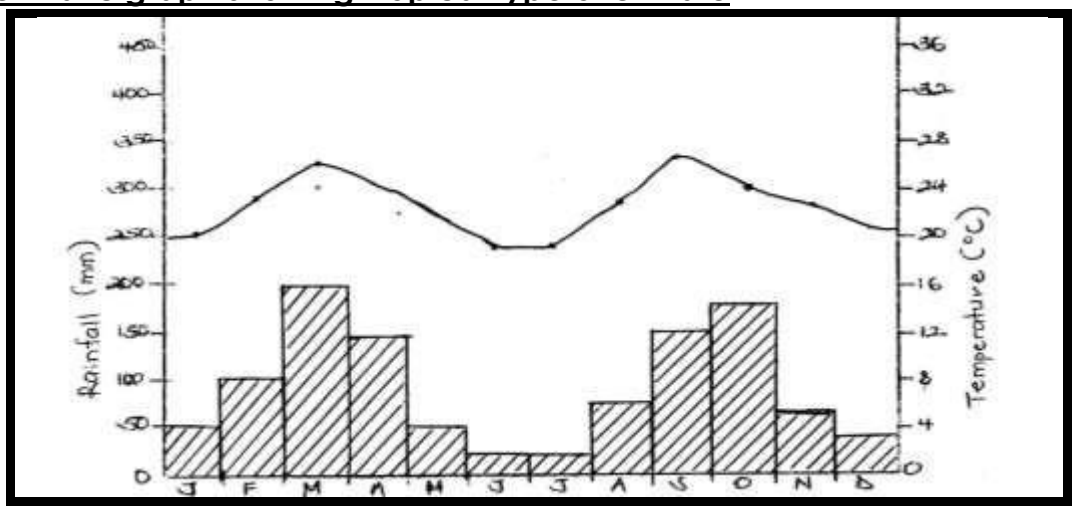
Districts that experience tropical climate

- ✓ Mubende.
- ✓ Gulu
- ✓ Soroti
- ✓ Kibale.
- ✓ Luwero
- ✓ Kitgum
- ✓ Sembabule

The climatic table showing Tropical type of climate.

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temp. (ºC)	20	23	26	24	22	18	19	23	27	24	23	21
Rainfall (mm)	50	110	200	140	50	25	25	75	150	175	60	40

A climatic graph showing Tropical type of climate



Economic activities carried out in Tropical climate regions

(i) Crop farming
(ii) Tourism.
(iii) Mining.
(iv) Fishing.
(v) Cattle keeping.
(vi) Bee keeping
(vii) Charcoal making
(viii) Lumbering

Name the three months with very low rainfall

(i) May (ii) June (iii) July

Name the months with the highest rainfall

(i) March

(ii) October

The crops grown within the areas which experience tropical climate

- Bananas
- Peas
- Beans
- Sorghum
- Millet
- Groundnuts
- Cassava
- Cotton
- Simsim
- Coffee

B. Equatorial Climate

It is referred to as hot and wet .throughout the year

Activities carried out in area with equatorial climate.

(i) Farming (ii) Tourism

(iii) Lumbering (iv) Mining

Crops grown in areas of Uganda which experience Equatorial climate

Oil palm, coffee ,tea, cocoa ,bananas, rubber ,sugarcane

Characteristics of Equatorial climate

- It receives high humidity.
- It is hot throughout the year
- It receives high rainfall.
- It is experienced between 5^0 North and 5^0 South of the Equator

Why equatorial climate is described as hot and wet.

-It receives high temperature and heavy rainfall.

-Equatorial climate receives an average rainfall of 1500m – 2000m

It experiences a temperature range of 25^0c and above

The table below shows the equatorial climate

Mon	J	F	M	A	M	J	J	A	S	O	N	D
Temp	25	27	35	32	38	37	26	24	25	25	25	35
R/F	150	175	200	190	250	255	175	185	200	220	222	202

1. Which month received the highest amount of rainfall?
2. Which month received the lowest rainfall ?
3. **What is the relationship between rainfall and temperature?**
   The higher the rainfall the higher temperature and the lower the rainfall the lower the temperature.

Semi desert climate

-It receives little rainfall

-It is hot and dry almost throughout the year.

Semi desert climate is experienced in the following districts of Uganda;

i) Moroto

ii) Abim

iii) Napak

iv) Kotido

v) Nakapiripirit

vi) Kaabong

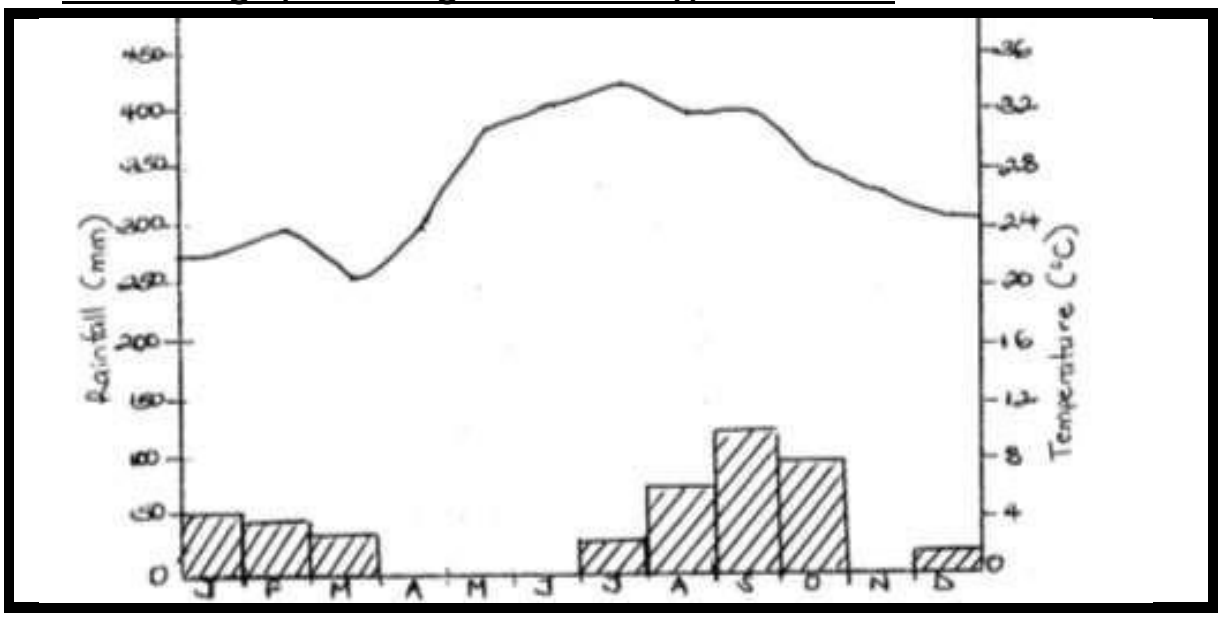
Characteristics of Semi-desert climate.

- ✓ It is hot and dry.
- ✓ There is low humidity.
- ✓ It has very hot days and cold nights.
- ✓ Skies are clear with little cloud cover.
- ✓ It receives low and unreliable rainfall.

A Climatic table showing Semi-desert type of climate.

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temp (ºC)	23	24	21	24	31	33	34	32	32	29	27	25
Rainfall (mm)	50	40	28	==	==	==	30	75	120	100	==	20

A climatic graph showing Semi-desert type of climate



Economic activities carried out in Semi desert climate.

i) Nomadic pastoralism
ii) Tourism
iii) Mining

Pastoralism is the rearing of cattle for survival.

Nomadic pastoralism is the movement of people with their animals from one place to another looking for pasture and water .

People in Uganda who practice nomadic pastoralism include;

i) Karamojong
ii) Jie
iii) Pokot

Why do the Karamojong move from one place to another ?

To look for pasture and water for the animals.

Problems faced by the Karamojong in their activity

i) Cattle diseases
ii) Long drought season
iii) Shortage of pasture and water
(iv) Cattle rustling.

Ways in which government can encourage the Karamojong to live settled life.

i) By building valley dams
ii) Educating the Karamojong to keep a manageable number of cattle
iii) Encourage the Karamojong practice mixed farming
iv) Improving on pasture

Why is North Eastern Uganda sparsely populated

- It is a semi-arid area with no rainfall most of the year which doesn't support crop growing.
- There is insecurity

How has the government tried to solve the problem of water in the drier parts of Uganda?

i) By building valley dams
ii) By drilling boreholes
iii) By using tanks to harvest water

D. Montane/ Mountain climate

Montane climate is received in highland areas of Uganda
Temperatures are low and rainfall is high as one goes higher on the mountain

The wind ward side receives plenty of rainfall because it receives warm moist air.
The lee ward side receives very little rainfall because it receives dry winds.

Some areas that experience Montane climate.

- Areas around mountain Rwenzori
- Areas around mountain Mufumbiro
- Areas around mountain Elgon

Districts in Uganda that experience Montane climate.

- Kasese
- Mbale
- Kabale
- Kanungu
- Sironko
- Kisoro
- Bundibugyo
- Bududa

Characteristics of Montane climate.

- It has cool temperature.
- Relief rainfall is mostly received.
- The wind ward side receives more rainfall than the lee ward side.

Economic activities commonly carried out in Montane climate.

i) Tourism.
ii) Lumbering
iii) Crop growing.

FACTORS THAT INFLUENCE/ AFFECT CLIMATE OF AN UGANDA.

- Altitude.
- Latitude.
- Vegetation cover.
- Nearness to water bodies/Drainage.
- Wind movement.
- Human activities

(i) Altitude

Altitude is the height above the sea level.

Temperature reduces with the increase in altitude.

- The lower parts of a mountain are warmer and have higher temperatures than the higher parts of the mountain.
- The higher the altitude, the cooler the temperature, and the lower the altitude, the hotter the temperature e.g. Mbale is cooler than Kampala because Mbale is on a higher altitude than Kampala.

(ii) Vegetation

- Places with thick vegetation usually receive plenty of rainfall while those that have scanty vegetation usually receive very little rainfall.

Note:-*Vegetation modifies climate of an area by helping in the formation of convectional rainfall through transpiration.*

(iii) Human activities

- Some human activities affect climate positively while others affect climate of an area negatively.

Human activities that affect climate of an area positively.

- Afforestation
- Reafforestation
- Agro-forestry

Human activities that affect climate of an area negatively.

- Deforestation
- Overgrazing
- Bush burning
- Swamp drainage
- Industrialization

Latitude.

Latitude is the distance in degrees North or South of the equator.

- Areas which are near the Equator are hotter than those which are far away from the equator.
- Low latitude areas are areas which are near the equator, and are usually very hot.

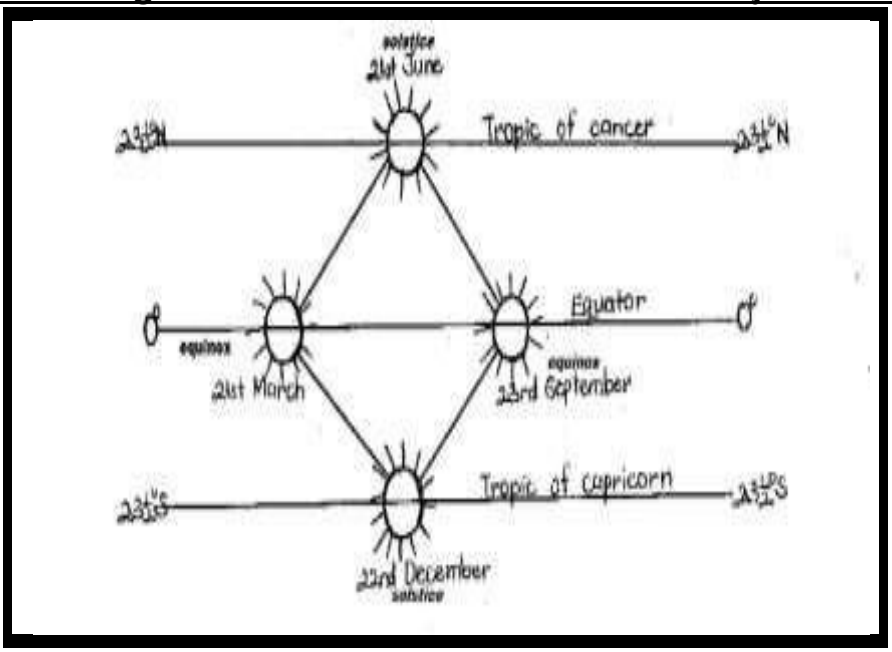
✪ High latitude areas are areas which are far away from the Equator and are usually cool.

✪ Areas which are far away from the Equator are usually very cool because they receive slanting sun rays which travel a very long distance to the earth.

Note;

- *Most parts of Uganda are always hot because the sun is overhead Uganda throughout the year.*
- *The Revolution of the earth (in 365days) causes changes in seasons. i.e. wet season and dry season.*
- *Tropical region is the area of land lying between the Tropic of cancer and Tropic of Capricorn.*
- *Equinox is the time of the year when the sun is overhead the equator.*
- *The days and nights are always equal whenever the sun is overhead the equator.*
- *Very high temperatures are experienced around equinoxes.*
- ***Solstice** is the time of the year when the sun is overhead the tropics.*

A diagram showing the time when the sun is overhead major lines of latitude.



(v) Nearness to water bodies (Drainage)

❖ Areas near large water bodies usually receive more rainfall than those which are far away from large water bodies.

- Areas near large water bodies usually receive convectional rainfall.
- Winds that blow over large water bodies pick a lot of moisture which rises and condenses to form convectional rainfall.

Note: *-Water bodies modify climate by helping in the formation of convectional rainfall through evaporation.*

Characteristics of convectional rainfall

- It is mostly received in the afternoon.
- It is usually accompanied by lightning and thunderstorms.

- It is mostly received in areas that experience a lot of evaporation and transpiration.

(vi) <u>Prevailing winds</u>.

❖ Areas that receive warm moist air receive plenty of rainfall while those that receive dry winds usually receive plenty of rainfall.

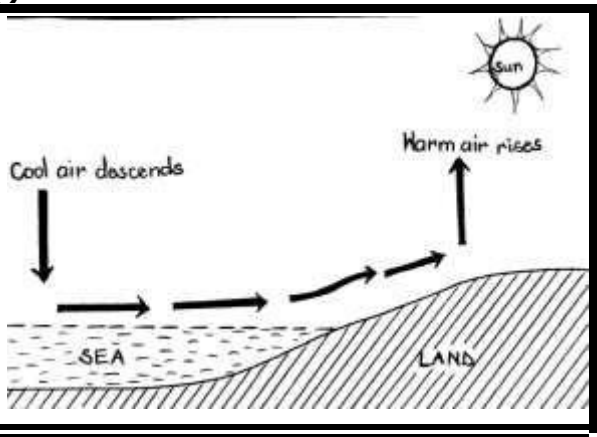
<u>BREEZES.</u>

- <u>A breeze</u> is the movement of air from a cool region to a warm region.

<u>Types of breezes.</u>

- Sea breeze
- Land breeze

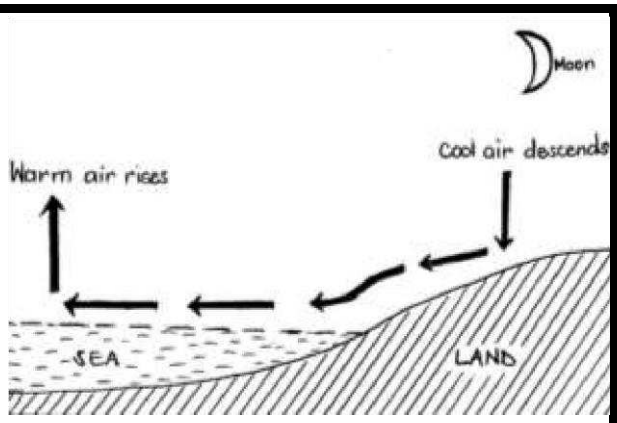
(i) Sea breeze



- This is the movement of cool air from the sea towards land.
- It takes place during the <u>day.</u>
- During the day, the land is heated faster than water bodies.
- The warm air on land rises and cold air from the sea moves towards land to replace it.

NB:-*Sea breezes help in formation of convectional rainfall.*

(ii) Land breeze



- This is the movement of cold air from land towards the sea.
- It takes place during the <u>night.</u>
- At night, the land cools faster than the sea.
- The warm air from the sea where pressure is low rises and the cooler air blows from land towards the sea to replace it.

THE INFLUENCE OF CLIMATE ON HUMAN ACTIVITIES

a) <u>Semi-desert climatic region (Dry areas)</u>

<u>Economic activities commonly carried out in Semi desert climate.</u>

- Pastoralism.
- Tourism.
- Crop cultivation.

<u>The influence of Semi-arid climate on human activities.</u>

1. People grow crops by irrigation.
2. People grow fast maturing crops like maize, beans, millet, sorghum etc. since their area receives short rainy seasons.
3. People build simple huts.
4. Pastoralism is mostly favour by the presence of a large vacant land.

Problems faced by people living in semi-desert climatic region.

1. High temperatures during day time.
2. Shortage of water.
3. Poor transport.
4. Shortage of pasture for animals.

Possible solutions to the problems faced by people living in desert areas.

1. By digging valley dams to store water.
2. By practicing irrigation farming to increase food supply.
3. By growing drought-resistant crops.
4. By growing fast maturing crops.
5. By painting houses with white in order to reflect sunlight.
6. By dressing in light white clothes to reduce heat during day.

b) Equatorial and Tropical climatic region (Wet areas).

Economic activities commonly carried out in Equatorial and Tropical climate.

- Tourism.
- Lumbering
- Crop growing.

The influence of Equatorial and Tropical climate on human activities.

- ✓ Lumbering is done in the tropical rain forests.
- ✓ Tourism is favoured by the plenty of animals.
- ✓ Perennial crops are usually grown due to plenty of rainfall receive e.g. coffee, oil palm, bananas, tea etc.
- ✓ People wear thick clothes to provide warmth during rainy and windy weather.
- ✓ People keep a variety of animals due to presence of pasture for animals.
- ✓ Houses are built with slanting roofs to allow easy flow of rain water off the roofs.

Problems faced by people living in Equatorial and Tropical regions.

1. Floods
2. Attacks from wild animals
3. Poor ground transport.
4. Presence of many disease vectors like tsetse flies, mosquitoes etc.

Possible solutions to the problems faced by people living equatorial and tropical climatic region

1. By building houses with slanting roofs.
2. By wearing rain coats and gum boots to safeguard against rainy weather.
3. By creating more wildlife conservation areas.

c) Montane climate

Economic activities commonly carried out in Montane climate.

1. Tourism.
2. Crop growing.
3. Lumbering

The influence of the montane climate on people.

- ✓ People build houses with slanting roofs.
- ✓ People rear donkeys for use as means of transport.
- ✓ People wear thick clothes to protect their bodies from much coldness.
- ✓ Thick forests promote lumbering in this climatic region.
- ✓ People grow perennial crops due to plenty of rainfall received.

Problems faced by people living in Montane climatic region.

- ✞ Poor transport network.
- ✞ Landslides.
- ❖ Severe soil erosion
- ❖ Much coldness

Possible solutions to the problems faced by people living in montane climatic region

- ✪ By building winding roads.
- ✪ By keeping donkeys for transport.
- ✪ By wearing thick clothes to overcome much coldness.
- ✪ By planting trees to reduce soil erosion and landslides.

NB: *-Plant roots control landslides in highland areas by holding the soil particles firmly.*

Farming in Uganda

Farming is the growing of crops and rearing of animals.
It is also called agriculture.

Types of farming.

i) Arable(Crop farming).
ii) Livestock farming

Systems of crop farming.

- ✞ Subsistence farming.
- ✞ Plantation farming.

SUBSISTENCE FARMING.

- ✓ This is the growing of crops and rearing of animals mainly for home use and the surplus is sold.
- ✓ It is the commonest system of farming practiced in Uganda. This is because subsistence farming is very cheap to practice.

In this system of crop growing, annual crops are mainly grown e.g. Beans, maize, cassava, peas, Irish potatoes etc.

Advantages of subsistence farming.

1. It is cheap to practice.
2. It requires simple tools.
3. It does not require a large piece of land.
4. It requires less labour force.
5. It promotes food security.
6. It does not require a large piece of land.

Disadvantages of subsistence farming.

1. A farmer earns less income.
2. It leads to low productivity.
3. It does not encourage economic development.

MIXED FARMING.

Mixed farming is the growing of crops and rearing of animals on the same piece of land.

Advantages of mixed farming.

1. Farmers gets double income.
2. The farmer can get manure for his crops from animals.
3. Animals can easily depend on crops for food.
4. A farmer gets a balanced diet.

Disadvantages of mixed farming.

1. It is expensive to start and manage.
2. It requires skilled labour.
3. Animals can easily escape and destroy the crops.
4. It requires a large piece of land.

PLANTATION FARMING.

This is the growing of one perennial crop on a large scale.

Plantation farming is practiced by very few people in Uganda because it is very expensive to practice.

Under plantation farming, perennial crops are mostly grown e.g. coffee, tea, cocoa, oil palm etc.

Advantages of plantation farming.

1. It is a source of employment to people.
2. It is a source of raw materials for agro based industries.
3. It is a source of income to the government through taxing plantation owners.
4. It promotes the development of roads.

➢ Note:-*Agro-based industries are industries which use agricultural produce as their raw materials.*

Disadvantages of plantation farming.

1. It is very expensive to carry out.
2. It requires a large piece of land.
3. Crops can easily be affected by drought.
4. Pests and diseases can easily spread from one crop to another.
5. It leads to soil exhaustion.

Examples of plantation crops.

- ✓ Tea.
- ✓ Coffee.
- ✓ Cloves.
- ✓ Sugarcane
- ✓ Cocoa.
- ✓ Cotton.
- ✓ Oil palm
- ✓ Sisal.

TEA

Tea is a beverage crop.

Examples of plantations for tea.

- ✞ Kasaku tea plantation.
- ✞ Igara tea plantation.
- ✞ Nakigala tea plantation.

Tea growing districts in Uganda

- ❖ Mukono.
- ❖ Kabarole.
- ❖ Mubende.
- ❖ Rukungiri.
- ❖ Bushenyi.

Conditions for growing tea.

1. Warm temperatures.
2. Reliable rainfall.
3. Acidic soils.

COFFEE.

- ✞ It is a beverage crop.
- ✞ It contains caffeine.

Types of coffee.

1. Arabica coffee (grown in highlands).
2. Robusta coffee (grown in low lands).
3. Clonal coffee (improved Robusta).

Advantages of growing clonal coffee over other types of coffee.

1. It is more resistant to diseases than other types.
2. It matures faster than other types.
3. It gives more yields than other types.

Factors that favour the growing of arabica coffee on the slopes of mountain Elgon.

- ✞ Presence of deep volcanic fertile soils.
- ✞ Presence of heavy rainfall received.

Note:

Coffee is harvested by hand picking of berries.

Arabica coffee is mainly grown by the Bagishu on the slopes of mountain Elgon and the Bakonzo on the slopes of mountain Rwenzori.

SUGARCANE

Sugarcane stems are crushed to get juice which makes sugar crystals.

Sugarcane plantations in Uganda.

1. Kakira sugarcane plantation in Jinja.
2. Lugazi sugarcane plantation in Buikwe.
3. Kinyara sugar works in Masindi.
4. Sango bay in Rakai.

WHEAT.

- ✓ It is a cereal crop which requires low temperature and heavy rainfall.
- ✓ Grain provide flour used in baking.

Districts that grow wheat.

1. Kapchorwa.
2. Kisoro.
3. Bundibugyo.

COTTON.

- ➢ It is a fibre crop used in textile industries.
- ➢ It is grown using seeds and harvested by hand picking.
- ➢ It is taken to ginneries to remove seeds and remain with lint.
- ➢ The lint is processed into threads by spinning.
- ➢ Kenneth Borup was a missionary who introduced the fast growing cotton seeds in Uganda in 1903.
- ➢ Sir Hesketh Bell encouraged cotton growing in Uganda.

Why the British colonialists encouraged cash crop growing in Uganda.

- ✞ They wanted to get raw materials for their home industries.
- ✞ They wanted the natives to get income and pay taxes.

➢ Note:

The introduction of synthetic fibres e.g. Nylon has reduced the market for cotton hence leading to reduction in cotton production.

Textile industries are industries that use cotton as their raw material e.g. Nyanza Textile Industries Limited (NYTIL)

Cotton growing districts in Uganda.

- Kasese
- Iganga.
- Kamuli

Importance of cotton

- It is used for making threads.
- It is used for making clothes.
- It is used making cotton wool.
- Cotton seeds are used to make animal feeds.

Problems faced by cotton growers.

- Cotton pests and diseases.
- Harsh climate changes.
- Fluctuation of cotton prices.
- Competition from cotton growers.

TOBACCO.

It is grown in West Nile.

It is used to make cigarettes.

- British America Tobacco (BAT) is the body responsible for marketing and processing tobacco.
- The introduction of the tobacco control bill has led to the reduction in tobacco production in West Nile.

OIL PALM.

Oil palm is mainly grown in Kalangala by BIDCO oil company.

Oil palm is used to get palm oil.

Products got from palm oil.

1. Palm Wine
2. Soap
3. Cooking Oil
4. Margarine
5. Candles

Factors that favour oil palm growing.

1. Presence of heavy rainfall.
2. Presence of high temperature.
3. Well drained fertile soils.

Note:

➢ *Harvested oil palm nuts are transported to Jinja for processing and Bidco cooking oil, Bidco washing soap and other products are obtained.*

TYPES OF CROPS.

- Traditional cash crops.
- Non-traditional cash crops.

(i) TRADITIONAL CASH CROPS.

Traditional cash crops are crops which were originally grown for sale.

Examples of traditional cash crops.

- Coffee
- Tobacco
- Cocoa
- Sisal
- Cotton
- Tea
- Oil palm
- Rubber

Why people are encouraged to grow traditional cash crops.

- To promote export trade.
- To get raw materials for industries.

Products obtained/ made from different cash crops

Crop	Product(s)
➢ Cotton	• Clothes, cotton wool, threads
➢ Pyrethrum	• Insecticides
➢ Oil palm	• Palm oil used for making cooking oil, soap, margarine etc.
➢ Tea	• Tea leaves
➢ Tobacco	• Cigarettes
➢ Sun flower	• Cooking oil
➢ Sisal	• Ropes, strings, sacks
➢ coffee	• Coffee powder, gun powder.
➢ Maize	• Maize flour
➢ Rubber	• Latex for making gloves, balls, shoe soles, car tyres, erasers etc.

(ii) NON-TRADITIONAL CASH CROPS.

Non-traditional cash crops are crops which were originally grown for food but can now be sold.

Why the government is encouraging people to grow more non-traditional cash crops.

- ✞ They have a large market.
- ✞ To promote food security in the country.

Examples of Non-traditional cash crops.

- ✞ Beans
- ✞ Maize
- ✞ Cassava
- ✞ Banana
- ✞ Yams
- ✞ Rice
- ✞ Ground nuts
- ✞ Soya beans
- ✞ Vegetables like cabbage

PERENNIAL CROPS.

- ✓ These are crops which take a long time to mature and are harvested several times.
- ✓ Most of the traditional cash crops are perennial.

Examples of perennial crops.

- ✞ Coffee
- ✞ Cocoa
- ✞ Sisal
- ✞ Tea
- ✞ Mango plants
- ✞ Rubber
- ✞ Oil palm

ANNUAL CROPS.

These are crops which take a short time to mature and are harvested once.

Examples of annual crops.

- ✞ Maize
- ✞ Beans
- ✞ Rice
- ✞ Cotton
- ✞ Tobacco
- ✞ Millet
- ✞ Sorghum
- ✞ Cassava
- ✞ Peas

IRRIGATION FARMING IN UGANDA.

- ☑ Irrigation is the artificial supply of water on land to support plant growth.
- ☑ Irrigation farming is the system of crop growing in which land is supplied with water by human means to support crop growth.
- ☑ Irrigation scheme is an area of land which is supplied with water by human means to support crop growth.

- ☑ Irrigation schemes are mostly set up in areas that do not receive reliable rainfall (dry areas).
- ☑ These areas must be having reliable permanent sources of water.
- ☑ Irrigation farming is not well developed in North Eastern Uganda because the area has few reliable permanent sources of water.

Irrigation schemes in Uganda.

1. Doho irrigation scheme for rice
2. Tilda (Kibimba) irrigation scheme.
3. Kiige irrigation scheme for citrus fruits.
4. Ongom irrigation scheme in Lira for citrus fruits.
5. Olweny swamp irrigation scheme in Lira for rice
6. Nsimbe and Rosebud irrigation schemes for flowers.

Irrigation scheme	Source of water	District / country	Crops grown
Doho	R. Manafwa	Butaleja	Rice.
Mubuku	R. Mubuku And R. Sebwe	Kasese	Vegetables, maize
Tilda (Kibimba)	R. Mpologoma	Bugiri	Rice
Sango Bay	L. Victoria	Rakai	Sugarcanes and Maize
Kakira	L. Victoria	Jinja	Sugarcanes
Lugazi	L. Victoria	Buikwe	Sugarcanes
Pabo	R. Achwa	Kitgum	Rice
Kiige	L. Nabigaga	Kamuli	Citrus fruits
Agoro	R. Agago	Lamwo	Tomatoes, Okra, Maize

Common methods of Irrigation.

- Gravity flow method
- Overhead sprinkler method

Advantages of Irrigation farming.

✪ Crops are grown at any time of the year.
✪ It promotes food security in the country.
✪ Irrigation farming helps to put idle dry land into use.
✪ Crops grow well without being affected by sunshine.

Disadvantages of Irrigation farming.

✪ It is very expensive to practice.
✪ It is not possible where there is no reliable source of water.
✪ It leads to soil leaching.

Note:-*Leaching is the sinking of soil nutrients to deeper layers where plant roots cannot reach.*

Ways of caring for crops in the garden.

✞ By weeding them. ❖ By thinning.
✞ By pruning them. ❖ By watering the crops.

Factors that have promoted farming in Uganda

✓ Presence of fertile soils.
✓ Presence of reliable rainfall.
✓ Availability of ready market for agricultural produce.
✓ Improved transport and communication network.
✓ Political stability in an area.
✓ Availability of ready market for agricultural produce.
✓ Presence of large labour force.

Importance of farming.

1. It is a source of food to people.
2. It is a source of raw materials for industries.
3. It has promoted the development of roads and railways.
4. It is a source of employment to people.
5. It is a source of revenue to the government.

Problems faced by farmers.

✪ Shortage of funds/ limited capital.
✪ Prolonged drought.
✪ Outbreak of crop pests and diseases.
✪ Limited market for farm produce.
✪ Poor transport network.
✪ Political instability in some parts of the country.
✪ Shortage of land for crop growing in some areas e.g. in towns.
✪ Changes in prices/unstable prices for agricultural produce.
✪ Rural-urban migration which reduces labour force on farms in rural areas.

Possible solutions to the problems affecting agricultural development in Uganda.

✪ By giving soft loans to farmers.
✪ By spraying the crops with insecticides.
✪ By teaching farmers better farming methods.

- ✪ The government should set minimum prices for crop products.
- ✪ By building better roads in the country.
- ✪ By encouraging the use of irrigation farming.

Note:

The government introduced developmental programmes such as National Agricultural Advisory Services (NAADs) and Operation wealth creation to help farmers to improve their lives.

NAADs is working under the Ministry of Agriculture, Animal industry and Fisheries.

The government also set up the National Agricultural Research Organisation (NARO) to carry out research on how to improve farming activities.

LIVESTOCK FARMING IN UGANDA.

Pastoralism is the rearing of cattle on a large scale.
Livestock farming is also called pastoralism.

Systems of livestock farming.

- ✞ Dairy farming.
- ❖ Nomadic pastoralism.
- ❖ Cattle ranching.

DAIRY FARMING.

Dairy farming is the rearing of cattle on a large scale mainly for milk production.
Cows are mainly reared in this system of pastoralism.
It is commonly carried out in the cool mountainous areas.
Dairy farms in Uganda commonly found in Kisoro and Kabale.

Products from a dairy farm.

- ✞ Milk.
- ❖ Hides.
- ✞ Meat (beef).
- ❖ Hooves

Milk products.

- ✞ Cheese.
- ✞ Ice cream.
- ✞ Butter.
- ✞ Yoghurt.
- ✞ Ghee.

RANCHING.

Ranching is the rearing of cattle on a large scale mainly for beef production.
Bulls are mainly reared in this system of livestock farming.

Products obtained from a ranch.

- ➢ Beef.
- ➢ Hooves.
- ➢ Horn tips.

Examples of ranches in Uganda.

- ✪ Kisozi ranch (Gomba district).
- ✪ Singo ranch
- ✪ Zziwa ranch
- ✪ Kabula ranch in Sembabule.
- ✪ Nyabushozi in Kiruhura.
- ✪ Buruli in Nakasongola.

NOMADIC PASTORALISM.

- ✓ Nomadic pastoralism is the system of animal rearing where farmers move with their animals from one place to another in search for pasture and water.
- ✓ It is mainly carried out in semi-arid areas.
- ✓ Nomadism is commonly practiced by Karimojongs in the North Eastern Uganda.

Examples of pastoral tribes in Uganda.

- Karimojongs.
- Bahima.

Districts where nomadic pastoralism is practiced.

- Moroto district.
- Kotido district.
- Nakapiripirit district.

Reasons why pastoralists move from one place to another.

- To look for pasture for their animals.
- To look for water for their animals.
- To break the lifecycle of disease vectors.

Problems faced by the pastoralists in Uganda.

- Cattle rustling.
- Poor breeds of cattle.
- Shortage of water for animals.
- Shortage of pasture.
- Outbreak of animal diseases.
- Poor veterinary services

Possible solutions to the problems facing pastoralists in Uganda.

- Disarming cattle rustlers.
- Constructing valley dams to provide water for animals.
- Growing fodder crops to provide food to animals.
- By extending veterinary services to the pastoral tribes.
- By encouraging pastoralists to keep a limited number of animals.

TOPIC 4: VEGETATION OF UGANDA

What is Vegetation?
This is the plant cover of an area.
Types of vegetation.
i) Natural vegetation
ii) Planted vegetation

What is planted vegetation?
This is the plant cover of an area that is grown by people.

Plantation vegetation include:
i) Crops
ii) Forests
iii) Planted grass
i) Planted lowers

Planted forests

- A forest is a group of trees growing together on the same piece of land.
- Planted forests are groups of trees that grow by the help of man.
- Planted forests are usually planted by man.

Examples of planted forests.

Magamaga forest in Mayuge
Katuugo forest in Nakasongola
Butamira in Jinja
Bugamba in Mbarara.
Mafuga forest in Rukungiri
Lendu forest in Nebbi (the largest in Uganda)
✞ Nyabyeya forest in Masindi

Characteristics of planted forests

- ✪ Trees are planted in rows
- ✪ Trees mainly produce soft wood.
- ✪ Trees are well spaced.
- ✪ Trees are of the same species.
- ✪ Tees mature almost at the same time.

Examples of tree species that commonly grow in planted forests.

✞ Pine ❖ Fir ❖ Cypress
✞ Cedar ❖ Eucalyptus ❖ Spruce .

Uses of some tree species that are commonly planted

Ficus tree (mutuba tree)- it is used for making bark cloth.
Rubber tree-it provides latex used for making rubber balls, erasers, car tyres, shoe soles, gum boots, gloves, elastic bands etc.
Grape tree-it provides grapes used for making wine.
Oil palm-it provides palm oil used for making cooking oil, margarine, soap, candles etc.
Wattle tree-it provides tannin used for softening leather/ animal skins.
Mulberry-it is used for making drugs eg. quinine

Products commonly obtained from soft wood

✞ Match boxes
✞ Match sticks
✞ Papers
✞ Pencils
✞ Ply wood
✞ Wooden rulers
❖ Toilet papers
❖ Soft boards.

Importance of flowers.

- They are a source of income when sold.
- They are used for decoration.
- They are used to give respect to the dead.
- They are used TO express love.

(ii) NATURAL VEGETATION.

Natural vegetation is the plant life cover of an area that grows on its own.
It includes all plants in the environment that grow without the influence of man.

Examples of natural vegetation.

- Natural forests
- Swamp vegetation
- Bushes
- Grasslands
- Thickets
- Shrubs
- Natural flowers

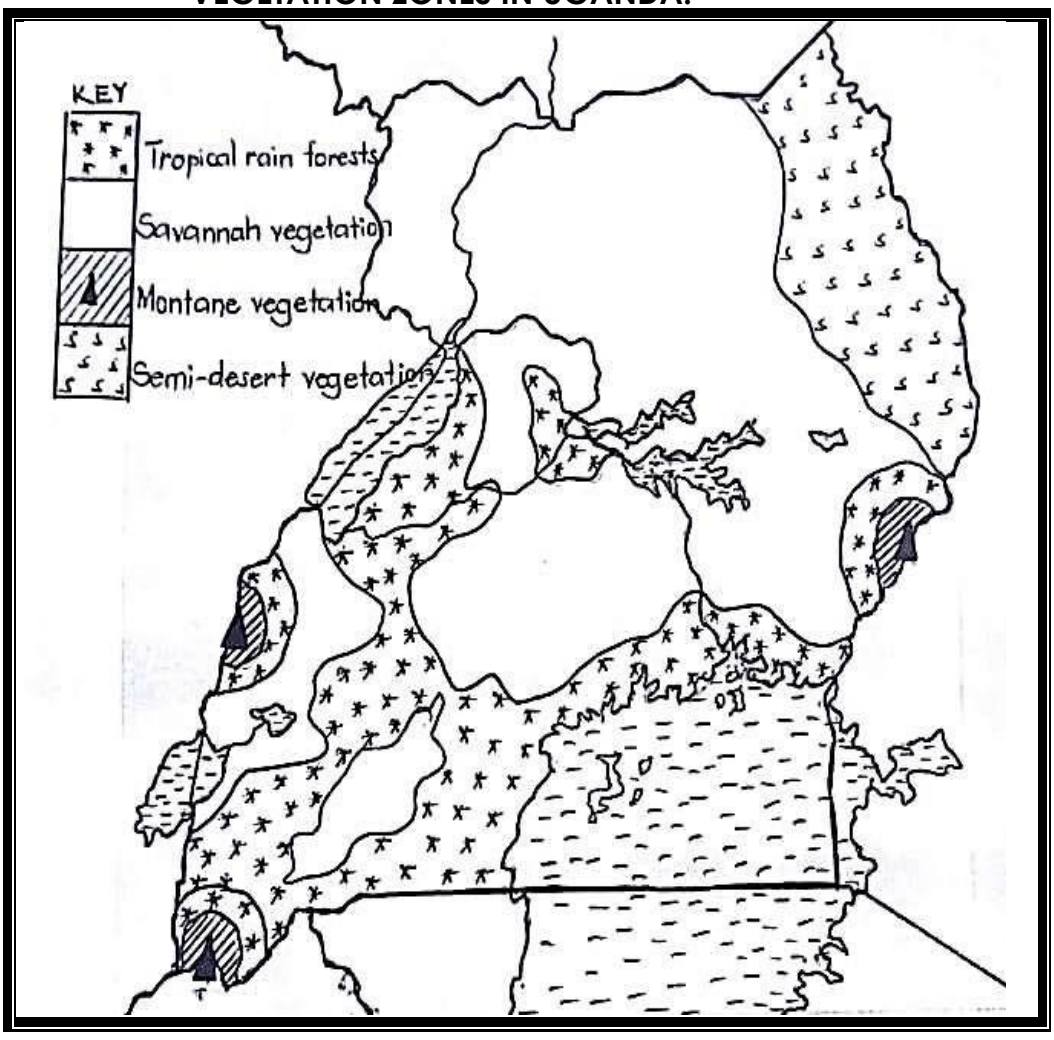
TYPES OF NATURAL VEGETATION/VEGETATION ZONES IN UGANDA.

A vegetation zone is an area under the same kind of plant life cover.

Examples of vegetation zones in Uganda.

- Equatorial rain forests/tropical rain forests.
- Savannah vegetation.
- Semi-desert vegetation.
- Montane vegetation.

VEGETATION ZONES IN UGANDA.



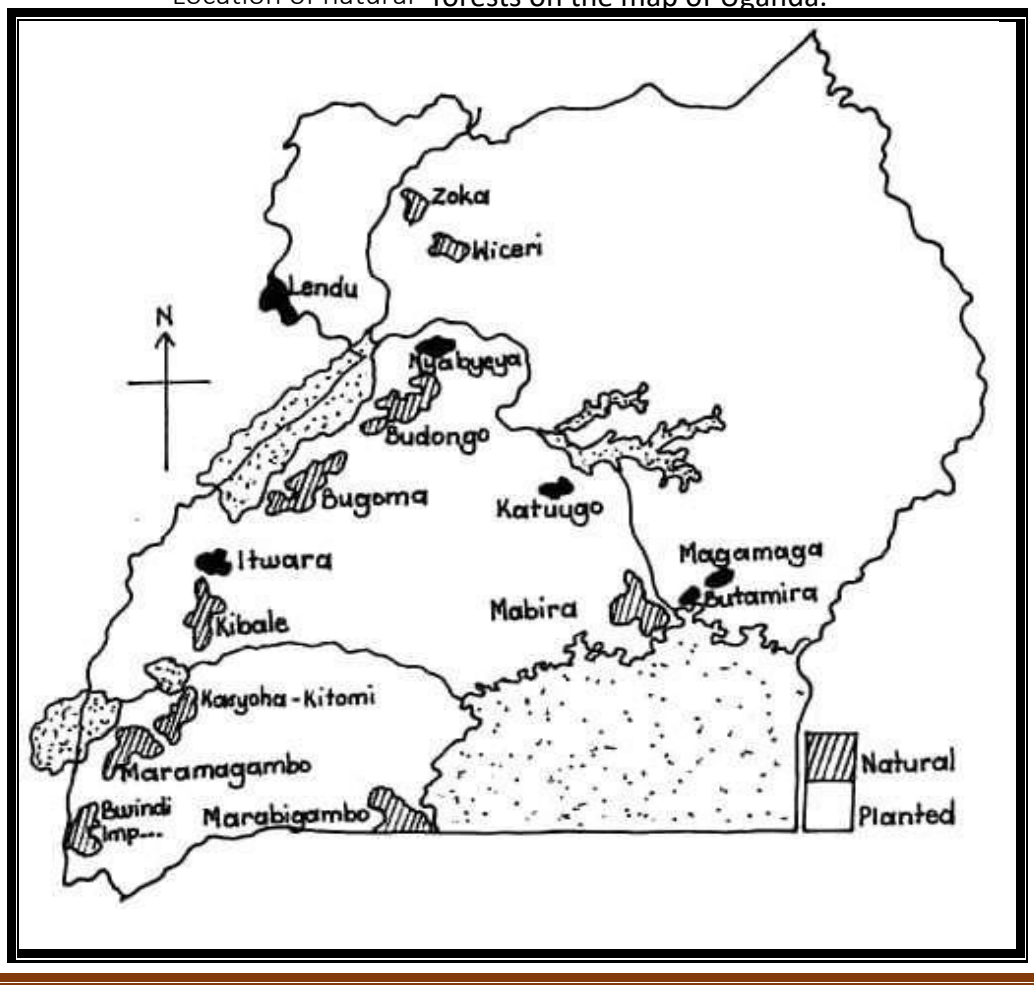
a) EQUATORIAL RAIN FORESTS

- ☑ Equatorial type of vegetation is described as ever green.
- ☑ These forests are ever green because they grow in areas that receive plenty of rainfall.
- ☑ Equatorial rain forests are also called the Tropical rain forests.
- ☑ They are called rain forests because they grow in areas that receive plenty of rainfall.
- ☑ Tropical rain forests mainly grow in areas which experience Equatorial climate, on the shores of Lake Victoria and in the South Western part of Uganda.

Examples of natural forests in Uganda

Forest	District
❖ Budongo (the largest)	❖ Masindi
❖ Mabira	❖ Buikwe
❖ Malabigambo	❖ Rakai
❖ Maramagambo	❖ Rubirizi and Mitooma
❖ Bugoma	❖ Hoima
❖ Mountain Rwenzori forest	❖ Kasese
❖ Kibale forest	❖ Kibale
❖ Ssese forest	❖ Kalangala
❖ Wiceri forest	❖ Amuru

Location of natural forests on the map of Uganda.



Characteristics of natural forests.

- Trees are ever green. (they don't shed their leaves).
- Trees are of different species.
- Trees have broad leaves.
- Trees grow very tall due to phototropism (to get sunlight).
- Trees have buttress roots.
- Trees have hard wood.
- Trees take a long time to mature.
- Trees form a canopy that form a cover to the ground.
- They have a thick undergrowth. This makes them impenetrable.

Note:

Deciduous trees are trees that shed their leave during the dry season.

A canopy is an umbrella-like structure formed by trees in tropical rain forests.

Common tree species in Equatorial rain forests.

- Mahogany
- Teak
- African walnut
- Green heart
- Mvule trees
- Ebony
- Rose wood

Economic activities commonly done in Equatorial rain forests.

- Lumbering
- Fruit gathering.
- Charcoal making.
- Tourism
- Herbal medicine collection

Products obtained/ got from hard wood.

- ❖ Wooden tables
- ❖ Benches
- ❖ Cupboards
- ❖ Wooden desks
- ❖ Wooden windows
- ❖ Wooden chairs
- ❖ Wooden doors

Importance of forests.

- ✪ Forests help in formation of convectional rainfall through transpiration.
- ✪ They are source of income through tourism.
- ✪ They act as a habitat for wild animals.
- ✪ They are source of herbal medicine.
- ✪ They help to reduce soil erosion.
- ✪ They are source of timber.

Problems facing forests

1. Deforestation.
2. Outbreak of bush fires.
3. Human encroachment on forests.

DEFORESTATION

Deforestation is the massive cutting down of trees without replacement.
Lumbering is the cutting down/felling of mature trees for production of timber.

Reasons why people cut down trees/ carry out deforestation.

1. To get land for settlement
2. To get land for crop growing.
3. To get land for constructing roads.
4. To get land for building industries
5. To get timber.
6. To get wood fuel.

Dangers / effects of deforestation.

- ✪ It leads to soil erosion.
- ✪ It leads to desertification/ drought.
- ✪ It destroys the natural habitat for animals.
- ✪ It leads to displacement of wild animals.
- ✪ It leads to extinction of some tree species.
- ✪ It reduces the amount of rainfall received in an area.

FOREST CONSERVATION.

Forest conservation is the act of protecting forests from extinction.

Ways of conserving forests.

- ✞ By practicing afforestation.
- ✞ By practicing reafforestation.
- ✞ By practicing agro-forestry
- ✞ By teaching people on the importance of forests.
- ✞ By educating people about the dangers of deforestation.
- ✞ Through rural electrification. (extension of electricity to rural areas) ➢ Note:

Afforestation is the planting of trees on a large scale where they have never been/ existed.

Reafforestation is the planting of trees on a large scale where they have ever been/ existed.

Agro-forestry is the growing of crops together with useful trees on the same piece of land.

Forestry is the practice of planting and caring for forests.

National Forestry Authority (NFA) is the body that is responsible for conservation of forests in Uganda.

National Environment Management Authority (NEMA) is the body responsible for conservation of the environment in Uganda.

Roles of NFA.

- ✪ It teaches people about the importance of forests.
- ✪ It enforces laws against deforestation.
- ✪ It creates forest reserves.
- ✪ It evicts people settling in forest reserves.

b) SEMI-DESERT VEGETATION

A desert is a large dry area of land with few plants growing on it.

Semi-desert vegetation is mainly found in some parts of North Eastern Uganda.

- ❖ It grows in an area that experiences semi-desert type of climate.
- ❖ Plants that survive in very dry conditions mainly grow in this climatic region.
- ❖ Semi-desert vegetation has few trees because it receives very little rainfall.
- ❖ Trees in semi-desert vegetation have thick barks and thin leaves to reduce the rate of transpiration.
- ❖ Some plants in this area shed leaves to reduce on the rate of transportation.
- ❖ Cactus is able to survive in semi-desert conditions because it stores water in its stem.

Characteristics of Semi-desert vegetation

1. Trees have thick barks.
2. Trees have thin leaves that reduce the
3. Trees are scattered.
4. It has very short grass.
5. Vegetation is scanty and resistant to
6. Trees are short and thorny.
7. Trees have long roots to tap underground water.

Common plants in Semi-desert vegetation.

• Cactus • Poppies • Baobab • Acacia

Districts in Uganda that have Semi-desert vegetation

- Kotido • Abim • Karenga
- Moroto • Nakapiripirit
- Kaabong • Napak

Pastoralism is the major economic activity carried out in Semi-desert vegetation.

c) MOUNTAIN VEGETATION

It is also called montane vegetation

It is found in mountainous areas

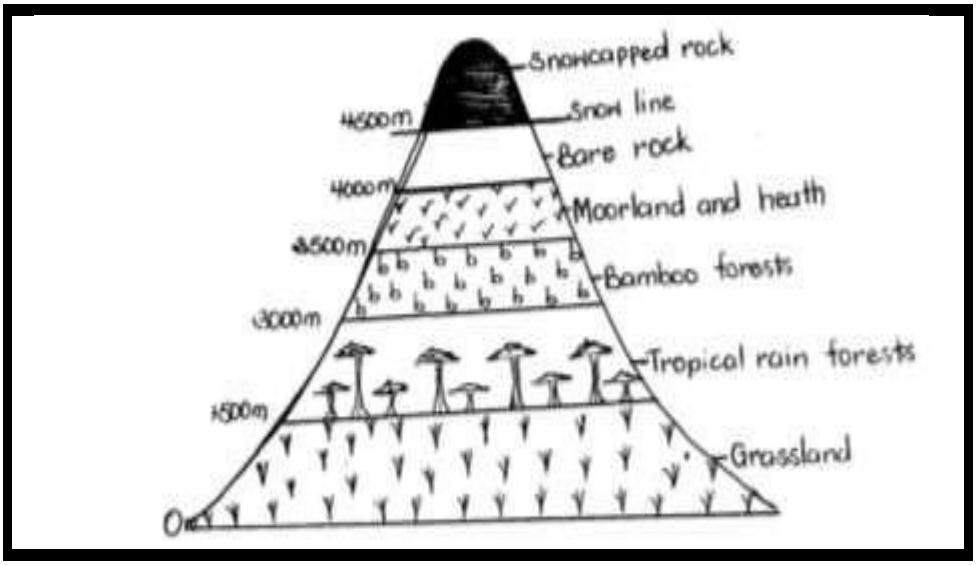
Vegetation changes with increase in altitude.

Montane vegetation is mainly found on the slopes of mountains Rwenzori and Elgon.

Factors that cause vegetation variation in mountainous areas.

- Altitude
- Temperature\
- Rainfall distribution.

Vegetation distribution on a mountain



Note;- *Heath is the low evergreen rough grass.*

-Moorland is an area of highland covered with heath.

Characteristics of montane vegetation.

1. Trees are ever green
2. Trees grow tall and straight.
3. The mountain tops have few plants due to low temperatures.
4. The foothills have savannah grasslands.
5. Vegetation grows in zones according to altitude.

Economic activities commonly carried out in montane vegetation.

1. Lumbering
2. Fruit gathering
3. Cattle keeping/ pastoralism.
4. Charcoal making.
5. Bee keeping
6. Herbal medicine collection.

d) SAVANNAH VEGETATION

- Savannah vegetation is the name given to the Tropical grasslands of Uganda.
- Savannah vegetation covers the largest part of Uganda.
- Savannah vegetation is located in the Tropical climatic region of Uganda.

Savannah vegetation is divided into;

1. Savannah grasslands / dry savannah vegetation
   - ☑ It has short grass and few scattered trees. Savannah woodland / wooded savannah / wet savannah vegetation
   - ☑ It has tall grass and many trees.

Note;

Most parts of Uganda are covered by savannah grasslands.

Most game parks in Uganda are located in savannah grasslands because there is plenty of pasture for animals.

Characteristics of Savannah vegetation

- ✪ It has tall grass.
- ✪ It has scattered trees.
- ✪ Trees have long roots which they use to tap underground water.
- ✪ Grass appears green during the wet season.
- ✪ Trees usually shed their leaves during the dry season. (in order to reduce the rate of transpiration)

Note: -*Deciduous trees are trees that shed their leaves during the dry seasons.*

Districts in Uganda that have Savannah vegetation.

- ✦ Gulu ▪ Soroti ▪ Nakasongola.
- ✦ Kitgum ▪ Mbarara
- ✦ Mubende ▪ Luwero

Common tree species in savannah vegetation. • Acacia • Baobab

Economic activities commonly done in savannah vegetation

- Tourism
- Pastoralism
- Bee keeping

Note:

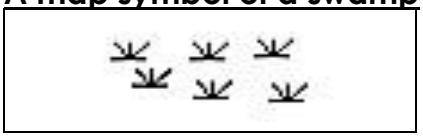
Tourism is favoured by a big number of game parks.

Animal rearing is favoured by the plenty of pasture for animals.

SWAMP VEGETATION

- A swamp is a water logged area with vegetation.
- Or. A swamp is an area that has vegetation and plenty of water.
- Swamps are sometimes referred to as wetlands.
- Swamps are found along rivers, lakes and valleys.

A map symbol of a swamp



Examples of swamp vegetation

✞ Papyrus ❖ Palm trees

Economic activities commonly carried out in swampy areas.

✞ Crop growing ❖ Tourism
✞ Fishing ❖ Pottery
✞ Mining ❖ Brick making .

Swamp resources/ craft raw materials got from swamps.

✓ Papyrus reeds-used for making baskets, mats, hats etc
✓ Palm leaves-used for making mats etc.
✓ Clay-used for making products like cups, plates, pots etc
✓ Sand-used for building.

Common crops grown in swamps

✞ Rice ❖ Vegetables ❖ Yams ❖ Sugarcane.

Importance of swamps.

- ❖ They are a source of water.
- ❖ They are a source of fish e.g. Mud fish.
- ❖ They are a source of minerals e.g. Sand
- ❖ They are habitats for aquatic animals e.g. Crocodiles, hippopotamuses, frogs
- ❖ They help in formation of convectional rainfall.
- ❖ They help to filter water. (they have spongy-like roots which help to filter water)
- ❖ Swamps help to control floods.
- ❖ They are a source of raw materials for craft work e.g. Papyrus reeds, palm leaves etc.
- ❖ They attract tourists who bring in income.

Ways people misuse swamps.

- ➢ By dumping industrial wastes in swamps.
- ➢ Through uncontrolled harvesting of papyrus reeds.
- ➢ By burning swamp vegetation.
- ➢ Through swamp drainage.

Note:

Swamp drainage *is the removal of water from swamps.*

Swamp reclamation *is the act of changing a swamp from its natural state for other uses.*

Swamp encroachment *is the illegal settlement in swamps.*

How people drain swamps.

- ✞ By adding murram in swamps.
- ✞ By digging channels in swamps.

Reasons why people drain swamps.

- ✞ To get land for crop growing.
- ❖ To get land for settlement.
- ✞ To get land for constructing industries.
- ❖ To construct roads.

Dangers of draining swamps.

- ➢ It leads to drought/ desertification.
- ➢ It leads to death of aquatic animals.
- ➢ It leads to floods.
- ➢ It leads to displacement of aquatic animals.
- ➢ It leads to reduction in craft raw materials.

Problems faced by people living near swamps.

- ➢ Floods during the rainy season.
- ➢ Attacks from disease vectors that live in swamps
- ➢ Attacks from aquatic animals.
- ➢ Poor road transport.

VEGETATION DISTRIBUTION IN UGANDA.

Vegetation distribution is the way plant life is spread in an area.

Some parts of Uganda have thick vegetation while others have scanty / scattered vegetation.

Factors that influence/ affect vegetation distribution in Uganda.

- Altitude
- Drainage system
- Rainfall distribution / climate.
- Human activities
- Nature of soils

How the above factors affect vegetation distribution in Uganda.

1. **Climate / Rainfall distribution**

Areas which receive plenty of rainfall have thick vegetation while those that receive very little rainfall have scanty vegetation.

2. **Drainage system**

Areas near large water bodies have thick vegetation while those that are far away from large water bodies have scanty vegetation.

3. **Altitude.**

Areas of low altitude have thick vegetation while those of high altitude have very little vegetation.

4. **Nature of soils / Soil fertility.**

Areas with fertile soils have thick vegetation while those with infertile soils have scanty vegetation.

5. **Human activities**

Some human activities promote the growth of vegetation while others destroy vegetation of an area.

Human activities that destroy vegetation.

- Deforestation
- Overcultivation
- Swamp drainage.
- Overgrazing
- Bush burning

Note:

Deforestation, bush burning and over grazing cause soil erosion.

Deforestation and bush burning lead to displacement of wild animals, prolonged drought and also destroy the natural beauty of the environment.

Qn: *How does deforestation cause soil erosion?*

- *It leaves the land bare exposing it to agents of soil erosion.*

Human activities which promote the growth of vegetation.

- Afforestation
- Agro-forestry
- Reafforestation
- Rotational grazing

THE INFLUENCE OF VEGETATION ON ANIMALS.

ANIMAL DISTIBUTION IN DIFFERENT VEGETATION ZONES.

a) Equatorial Rain Forests.

- There are tall trees that provide shelter to climbing animals.
- There are few herbivorous animals due to little grass.
- There are many climbing animals which feed on fruits in this zone.

Common animals in Equatorial rain forests.

- Baboons
- Monkeys
- Mountain gorillas
- Chimpanzees

Why climbing animals are common in Tropical rainforests.

- They have many fruits which climbing animals feed on.
- There are many trees which provide a natural habitat to climbing animals.

b) Savannah Vegetation

- Grass eating animals (herbivorous animals) are common in this region.
- Flesh eating animals (carnivorous animals) also live in savannah vegetation in order to feed on herbivorous animals.

Why most animals live in Savannah vegetation zone.

- There is plenty of pasture for animals.
- Carnivorous animals live in savannah to hunt other animals.

Common animals in Savannah vegetation.

- Zebras
- Leopards
- Lions
- Warthogs
- Hyenas
- Buffaloes
- Antelopes
- Kobs

c) Swamp Vegetation

❖ Animals that live both in water and on land are common in swamp vegetation.

Common animals in swamp vegetation

- Crocodiles
- Hippopotamuses/Hippopotami
- Frogs
- Snakes
- Tortoises

d) Semi-Desert Vegetation.

There are few animals in semi-desert vegetation due to limited grass and water for animals.

Common animals in Desert vegetation.

- Squirrels
- Ostriches
- Camels
- Newts

e) Mountain Vegetation

- It has many animals with a lot of fur.
- It has many climbing animals that feed on fruits.
- It has many gorillas that feed on bamboo shoots.

Common animals in montane vegetation.

- Mountain gorillas
- Chimpanzees
- Monkeys
- Baboons

PLACES FOR WILDLIFE CONSERVATION.

- National parks
- Game reserves
- Zoos
- Marine parks
- Sanctuaries

NATIONAL PARKS IN UGANDA.

A Game park is a large area of land gazetted by the government for wildlife conservation.

Wildlife refers to animals, birds, plants and insects that live on their own in the natural habitat.

Major national parks in Uganda.

- Murchison falls national park.
- Lake Mburo national park.
- Kidepo valley national park
- Mgahinga national park.
- Mountain Rwenzori national park.
- Mountain Elgon national park.
- Bwindi impenetrable national park.

A Game reserve is a large area of land gazetted by the government for future expansion of game parks.

Controlled hunting can be allowed in a game reserve after seeking permission.

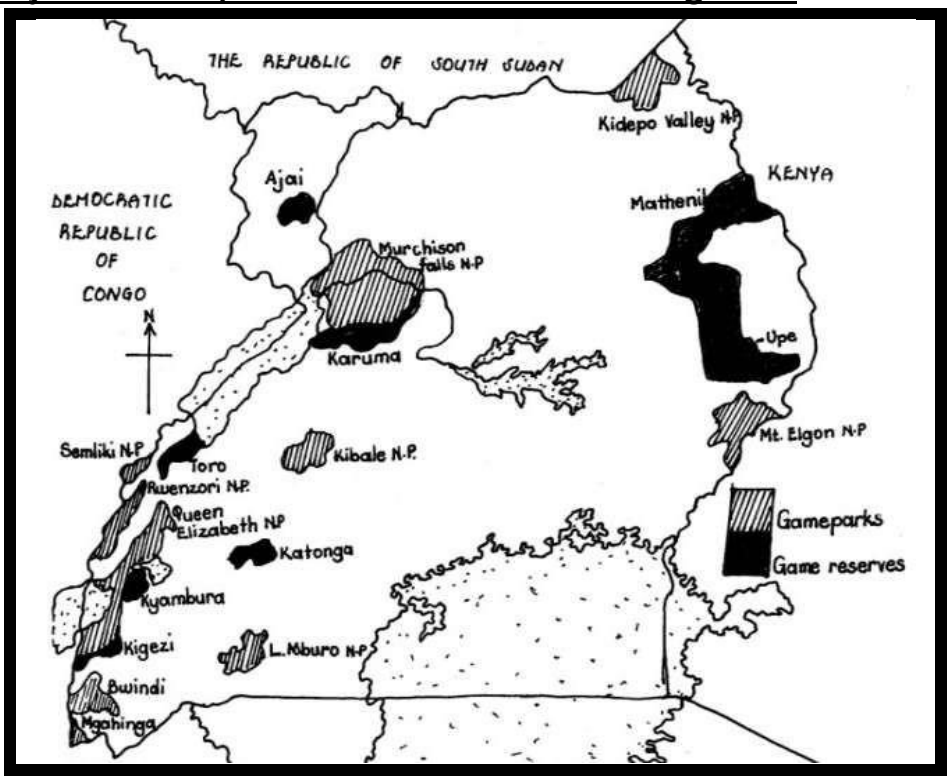
Examples of game reserves in Uganda.

- Pian-upe game reserve.
- Bokora game reserve
- Ajai game reserve
- Kigezi game reserve
- Matheniko game reserve
- Karuma game reserve
- Katonga game reserve

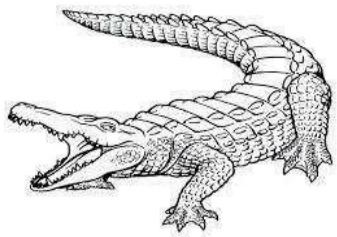
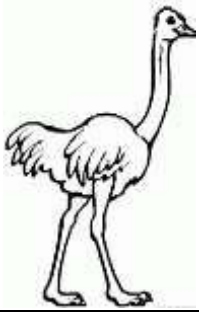
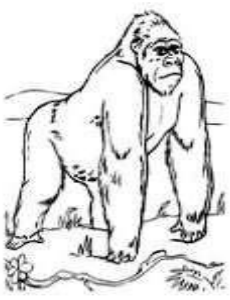
Major tourist attractions in selected Uganda's national parks.

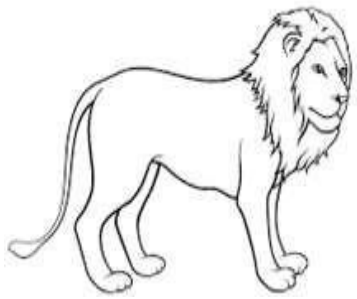
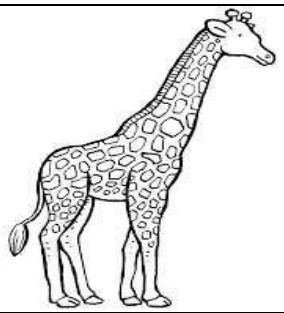
National park	Major tourist attraction	Area (in km^2)	Type
Murchison falls national park	Crocodiles / Murchison falls	3,840	Savannah
Kidepo valley national park	Ostriches	1,442	Savannah
Queen Elizabeth national park	Hippopotamuses	1,978	Savannah
Lake Mburo national park	Flamingo birds/ Zebras	370	Savannah
Bwindi national park	Mountain gorillas	321	Forest
Mgahinga national park		33.7	Forest
Rwenzori national park		996	Forest
Mountain Elgon national park		1,121	Forest
Semliki national park		220	Forest
Kibale national park		795	Forest

Major National parks and Game reserves in Uganda.



Major tourist attractions in Uganda's national parks.

			
Lion	*Hippopotamus*	*Ostrich*	*Gorilla*

			
Crocodile	*Flamingo birds*	*Zebra*	*Giraffe*

Importance of national parks.

- ❖ They create job opportunities to people .e.g. The game rangers
- ❖ They earn income through attracting tourists.
- ❖ They promote the development of infrastructure e.g. Hotels, roads.
- ❖ They are used for education and scientific research.
- ❖ They help to preserve wildlife for the future generation to see.
- ❖ They promote international relationships.

Activities that commonly take place in Uganda's national parks.

- ✦ Animal tracking ▪ Boat rides ▪ Bird watching
- ✦ Mountain climbing ▪ Nature walks ▪ Game drives

Prohibited/ unauthorized activities in national parks.

- ✦ Animal grazing ▪ Hunting
- ✦ Crop cultivation ▪ Human settlement.

Problems facing national parks in Uganda.

a) Poaching

Poaching is the illegal hunting of animals in national parks.

- ☑ It leads to extinction of animal species in national parks.
- ☑ Poaching reduces the number of animals in national parks.

Why people carry out poaching.

- ☑ To get meat.
- ☑ To get horns and ivory from them.
- ☑ To get hides and skins.

b) Prolonged drought

- ❖ It dries pasture on which animals feed.
- ❖ It also destroys the natural habitat for animals.

c) **Bush fires.**

- ✪ They destroy habitats for animals.
- ✪ hey lead to displacement of wild animals
- ✪ They destroy pasture for animals.
- ✪ They lead to death of animals.

d) Outbreak of animal diseases.

Diseases lead to death of animals in national parks.

e) Human encroachment on national parks.

- ❖ It leads to displacement of wild animals.

f) Political instability in some parts of Uganda.

- ✪ It leads to death of animals in national parks.
- ✪ It leads to displacement of wild animals.

✪ It leads to destruction of the natural habitat for animals.

Possible solutions to the problems facing national parks in Uganda.

- By enforcing laws against poaching.
- By sensitizing people about the importance of wild animals
- By improving on security in areas near national parks.
- By extending veterinary services in game parks.
- By enforcing laws against human encroachment on national parks.

Ways of caring for animals.

- By protecting them.
- By feeding them on nutritious feeds.
- By treating sick animals.
- By treating sick animals.

Note: *-Game wardens protect wildlife in national parks, and also control fire from destroying plants and animals.*

Importance of caring for animals.

- ☑ It promotes tourism.
- ☑ It promotes education and research.
- ☑ It reduces death of animals.

TOURISM INDUSTRY IN UGANDA.

- Tourism is the movement of people to places of interest for pleasure, enjoyment or study purpose.
- A tourist is a person who travels to places of interest for pleasure, enjoyment and study purposes.

Tourism is called an industry because;

- It generates income.
- It creates job opportunities to people.

- Tourism is called **an invisible trade** because it generates income without exchanging physical goods.
- Tourism is called **an invisible export** because it generates foreign exchange without exporting physical goods.

Types of tourists.

- Local tourists
- Foreign tourists.

- Local tourists move from one part of the country to another for tourism while foreign tourists move from one country to another for tourism.

Major tourist attractions in Uganda.

- Wildlife
- Vegetation
- Culture
- Historical sites
- Beautiful beaches
- Physical feature
- Climate

Importance of the Tourism industry.

- It creates job opportunities to people.
- It promotes the development of infrastructure like roads, lodges, hotels.
- It promotes international relationship.
- It creates market for locally manufactured goods.
- It is a source of revenue to the government.
- It promotes conservation of wildlife.

Problems facing the Tourism industry in Uganda.

- ✓ Political instability in some parts of Uganda.
- ✓ Poor transport and communication network.
- ✓ Poor accommodation facilities.
- ✓ Shortage of funds to promote the tourism industry.
- ✓ Limited tourist attractions in some parts of Uganda.
- ✓ Limited advertisement of tourist attractions on international media.

Possible solutions to the problems facing Uganda's Tourism industry.

- ✪ By improving on security in all parts of Uganda.
- ✪ By enforcing laws against poaching.
- ✪ By constructing better roads in all parts of Uganda.
- ✪ By advertising Uganda's tourist attractions on international media.
- ✪ By importing new species of wildlife in Uganda.
- ✪ By training more game wardens.
- ✪ By building better accommodation facilities in Uganda.
- ✪ By gazetting more wildlife conservation areas.

Dangers of Tourism.

- ✪ Some tourists come as spies.
- ✪ Tourism can bring about spread of diseases in the country.
- ✪ Tourism can bring about change of culture.
- ✪ Some tourists teach people anti-social behaviors.

General importance of vegetation.

- It is a source of food to people and animals.
- It is a source of herbal medicine.
- It acts as a natural habitat for animals.
- It helps in formation of rain.ie. Convectional rainfall through transpiration.
- It is a source of building materials e.g. spear grass.
- It controls soil erosion.
- It is a source of income through attracting tourists.
- It is a source of raw materials for crafts industry. e.g. papyrus reeds, palm leaves.
- It is a source of wood fuel i.e. charcoal and firewood.
- It purifies air by absorbing carbon dioxide and releasing oxygen to the atmosphere.

Dangers of some vegetation.

- ✞ Some vegetation is poisonous to people and animals.
- ✞ It creates breeding places for disease vectors.
- ✞ It harbours dangerous animals to man.
- ✞ It creates hiding places for wrong doers.

Effects of population / people on vegetation.

1. People clear vegetation to get land for settlement.
2. People clear vegetation to construct industries.
3. People cut down trees in order to get wood fuel.
4. People clear vegetation to construct roads.

VEGETATION CONSERVATION.

- This is the protection of plant life from being destroyed.
- It is the act caring for and protecting plants in the environment.

Human activities which destroy vegetation in an area.

- ✪ Deforestation
- ✪ Swamp drainage.
- ✪ Brick making
- ✪ Bush burning
- ✪ Over cultivation.
- ✪ Over grazing

Ways how man destroys vegetation in an area.

- ❖ Through bush burning
- ❖ Through deforestation.
- ❖ Through swamp drainage.
- ❖ Through uncontrolled wetland harvesting.
- ❖ Through overgrazing.
- ❖ Through overcultivation.

Ways of conserving vegetation.

- ✓ By afforestation.
- ✓ By reafforestation.
- ✓ By agro-forestry.
- ✓ By establishing game parks and game reserves.
- ✓ By establishing forest reserves.
- ✓ Through rural electrification.
- ✓ By using energy saving cooking stoves.
- ✓ By enforcing laws against deforestation.
- ✓ By teaching people about the importance of vegetation.
- ✓ Through rotational grazing.
- ✓ Through controlled harvesting of plants in the environment.

Ways of caring for vegetation in the environment.

i) By watering plants during the dry
ii) By thinning vegetation. season.
iii) By pruning plants.
iv) By adding manure to the soil.
v) Through rotational grazing.
vi) By weeding the crops.

Bodies that promote conservation of vegetation in Uganda.

National Environment Management Authority (NEMA)
This conserves and protects wetlands/environment in Uganda.
NEMA is under the Ministry of Water and Environment.
National Forestry Authority (NFA) This conserves forests in Uganda.

Uganda Wildlife Authority (UWA)

This conserves wildlife in national parks in Uganda.

How NEMA conserves the environment/ roles of NEMA.

- It teaches people about the importance of forests and swamps.
- It creates forest reserves.
- It enforces laws against wetland degradation.
- It evicts people settling in wetlands.

Importance of conserving vegetation.

- It reduces soil erosion.
- It conserves the natural beauty of the environment.
- It promotes constant supply of wood fuel.
- It conserves the natural habitat for animals.
- It promotes tourism.
- It promotes constant supply of craft raw materials.
- It controls drought.

RELATIONSHIP BETWEEN VEGETATION AND POPULATION DISTRIBUTION.

Population is the number of people living in an area at a given time.

Population distribution is the way people are spread in an area.

Some vegetation zones have sparse population while others have dense population.

Population distribution per vegetation zone.

Vegetation zone	Population distribution	Reason for population distribution
• Equatorial rain forests	• They are sparsely populated.	✓ Presence of disease vectors. ✓ Poor transport . ✓ Presence of many thick forests. ✓ Presence of many wild animals. ✓ Presence of soggy soils due to heavy rainfall.
• Semi-desert vegetation	• They are sparsely populated.	✓ They are hot and dry throughout the year. ✓ They receive very little rainfall.
• Savannah vegetation zone	• It is densely populated.	✓ The areas receives reliable rainfall for crop growing. ✓ Presence of fertile soils which support cultivation. ✓ It is not greatly affected by disease vectors. ✓ They have plenty of pasture for animals.
• Mountain vegetation	• Slopes of mountains are densely populated.	✓ Presence of fertile soils. ✓ They receive reliable rainfall which favours crop growing.
	• The tops of mountains have very few people.	✓ They experience very cold climate. ✓ Some have rocks and snow.
Swamp vegetation	• It is sparsely populated.	✞ Swamps have dangerous aquatic animals. ✞ Swamps are greatly affected by floods. ✞ There are many disease vectors in swampy areas.





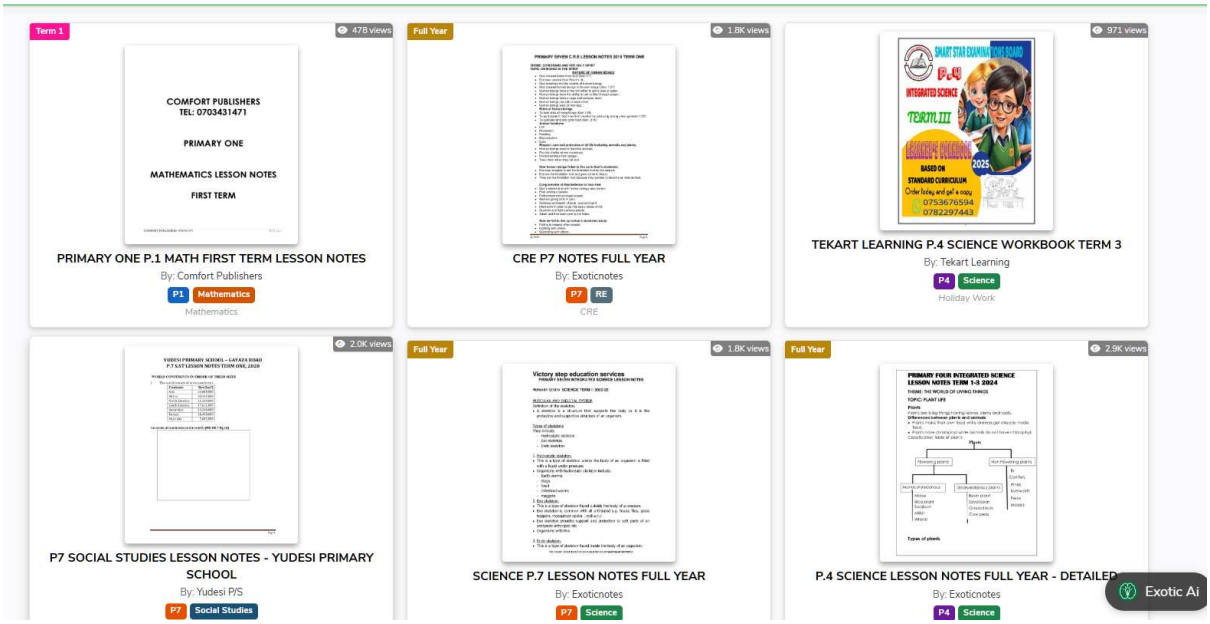


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