



## Primary 7 Social studies

**Vote Dr. Bbosa Science President of Uganda 2031→**



**Vote His Excellence Dr. Bbosa Science  
President of Uganda 2031** 

## Term 1

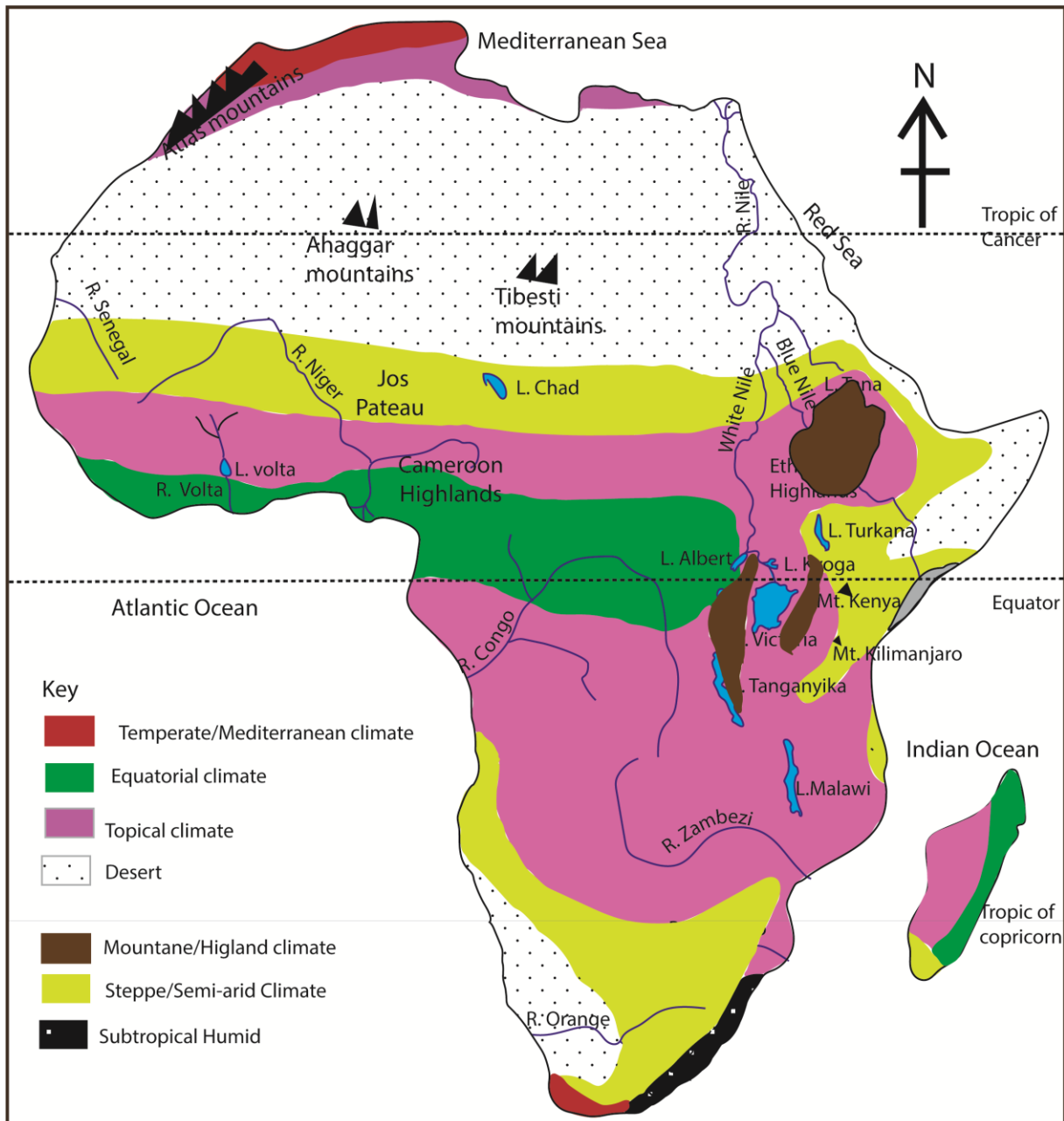
### Theme: LIVING TOGETHER IN AFRICA

#### Topic 3/4: Climate of Africa

##### Learning Outcomes:

The learner appreciates the importance of climate and how it determines and supports humans, animals and plant life

The map of Climatic zones of Africa



## Climatic Regions of Africa

Africa is a huge continent with many different types of weather. We divide these into **climatic zones**. Here is a simple guide to each one:

### (i) Equatorial Climate (The Rainforest)



**Where:** Right along the **Equator** (e.g., Congo Basin).

**Weather:** **Hot and rainy** all year round. It rains almost every afternoon.

**Plants:** Very thick, green **rainforests** with giant trees.

### (ii) Tropical Climate (The Savanna)



**Where:** North and south of the Equatorial zone (e.g., Kenya, Tanzania, Nigeria).

**Weather:** Has two main seasons—a **wet season** and a **dry season**. It is hot most of the year.

**Plants:** Tall **grasses** and scattered trees like the Baobab and Acacia. This is where most wild animals live.

### (iii) Desert Climate (Hot & Dry)

**Where:** The **Sahara** in the north and the **Namib/Kalahari** in the south.

**Weather:** **Very hot** during the day and very little rain (sometimes no rain for years!).

**Plants:** Only tough plants like **cacti** or thorny bushes that can live without much water.

**(iv) Mediterranean/Temperate Climate**

**Where:** The very **northern tip** (Morocco, Tunisia) and the very **southern tip** (Cape Town, South Africa).

**Weather:** It is not too hot and not too cold. It has **four clear seasons** (Spring, Summer, Autumn, Winter).

**Plants:** Mostly **short grasses** used for farming cattle and sheep. Fruits like **grapes, olives, and oranges** grow very well here.

**(v) Montane Climate (Mountain)**

**Where:** On high mountains like **Mt. Kilimanjaro** and the **Ethiopian Highlands**.

**Weather:** The higher you go, the **colder** it gets. It is often misty and cloudy.

**Plants:** Changes as you go up—from thick forests at the bottom to **bare rock or ice** at the very top.

**Summary Table for your Notebook:**

<b>Zone</b>	<b>Main Weather</b>	<b>One Key Feature</b>
<b>Equatorial</b>	Hot & Rainy	Thick Rainforests
<b>Tropical</b>	Wet & Dry Seasons	Tall Grass (Savanna)
<b>Desert</b>	Very Hot & Dry	Sand Dunes / No Trees
<b>Mediterranean/ Temperate</b>	Mild / Moderate	Grapes & Olives, sheep rearing
<b>Montane</b>	Very Cold	Snow on Peaks

**Exercise 1**

1. Name the climatic region that is located exactly along the Equator and experiences heavy rainfall almost every day.
2. Why does tropical climate contain a lot of wild animals
3. Why is Mediterranean climate good for rearing sheep and goats.
4. Why do some mountains in the **Montane climate** zone, like Mount Kilimanjaro, have snow at the top even though they are in a hot continent?
5. Which climatic region is the **hottest and driest**, with very few plants and almost no rain throughout the year?
6. Name one country in Africa with equatorial climate
7. Name any two countries in Africa with Mediterranean climate

**Factors that Influence the Climate of Africa**

Africa is a very large continent, and its weather changes from place to place. These six factors explain **why** some places are hot, cold, wet, or dry.

(i) **Nearness to Water Bodies (Lakes and Oceans)**

**The Rule:** Places near the ocean or large lakes (like Lake Victoria) are usually **cooler and wetter**.

**Why:** Water heats up and cools down slower than land. It also sends moisture into the air, which turns into rain for the coastal towns.

(ii) **Winds**

**The Rule:** Winds bring the weather from where they started.

**On-shore winds:** Blow from the sea to the land and bring **rain**.

**Off-shore winds:** Blow from the dry land toward the sea and bring **dry weather** (like the Harmattan wind from the Sahara).

(iii) **Land Mass (Distance from the Sea)**

**The Rule:** The further you are from the ocean (inland), the **hotter and drier** it gets.

**Why:** By the time clouds from the ocean reach the middle of the continent, they have often dropped all their rain. This is why the center of a large land mass can be very dry.

(iv) **Altitude and Relief (Height of the Land)**

**The Rule:** The **higher** you go, the **colder** it gets.

**Relief:** Mountains act as "walls." They force clouds to go up, cool down, and rain on one side (the **windward side**), while the other side stays dry (the **leeward side**).

(v) **Vegetation (Plants and Trees)**

**The Rule:** Areas with many trees (like rainforests) have **more rain** and are **cooler**.

**Why:** Trees breathe out moisture into the air through their leaves. This moisture forms clouds that fall back as rain.

(vi) **Human Activities**

**The Rule:** People can change the climate by what they do.

**Bad changes:** Cutting down trees (**deforestation**) and smoke from factories make the land hotter and drier.

**Good changes:** Planting trees (**afforestation**) helps bring back rain and cool air.

**Exercise 2**

1. What happens to the temperature as you climb a high mountain like **Mt. Kenya**?
2. Why do towns along the **coast** usually have more rain than towns far inland?
3. How do **trees** help in making rain?
4. What is the name for the dry side of a mountain that does not get much rain?
5. How does **cutting down trees** (deforestation) affect the temperature of an area?
6. Why is the middle of a very large **land mass** usually drier than the edges?
7. Which factor explains why there is **snow** on the Equator at the top of Mt. Kilimanjaro?

8. Name one **human activity** that can help improve the climate of a dry region.
9. If a wind blows **from the Indian Ocean** onto the land of East Africa, what kind of weather will it bring?

### How Elements of Weather tell us about Climate

To understand the **climate** of a place in Africa, we look at the **weather elements** over a long period (usually 30 years). These elements act like "clues" to tell us which climatic zone we are in.

#### (i) Temperature (How hot or cold it is)

- **Equatorial:** If the temperature is **high (hot) all year round**, we are near the Equator.
- **Montane:** If the temperature **drops (gets colder)** as we go higher, we are in a mountain region.
- **Temperate:** If there are **four clear changes** in temperature (Spring, Summer, Autumn, Winter), we are in the North or South of Africa.

#### (ii) Rainfall (Precipitation)

- **Equatorial:** If it rains **heavily every day** (convictional rain), it is an Equatorial climate.
- **Tropical:** If there is a **long dry season** and a **short rainy season**, it is a Tropical Savanna.
- **Desert:** If there is **almost no rain** at all for the whole year, it is a Desert climate.

#### (iii) Humidity (Moisture in the air)

- **High Humidity:** If the air feels **sticky and wet** all the time, this usually points to the Equatorial Rainforests.
- **Low Humidity:** If the air is **very dry** and makes your skin feel cracked, you are likely in a Desert or Steppe zone.

#### (iv) Wind (Moving air)

- **Sea Breezes:** Frequent moist winds from the ocean tell us we are in a **Coastal** climate.
- **Dry Winds:** Hot, dusty winds (like the **Harmattan**) tell us we are near a Desert region.

#### (v) Sunshine (Cloud Cover)

- **Cloudy:** If the sky is **cloudy most afternoons**, it suggests an Equatorial zone where clouds form daily to bring rain.
- **Clear Skies:** If the sun shines **all day with no clouds**, it is a sign of a Desert climate.

### Exercise 3

1. If a place in Africa has **high temperatures** and **heavy rain** every single month, which climatic region is it?
2. Which weather element would you measure to prove that the top of **Mount Kilimanjaro** is in a Montane climate?
3. If you observe that a region has **no rain** for 10 months of the year, is it likely to be an Equatorial or a Desert climate?
4. How does **humidity** help you distinguish between the Congo Basin (Rainforest) and the Sahara Desert?
5. If the **wind** blowing into a town is always moist and cool from the Indian Ocean, what does this tell you about that town's location?

### How Climate Influences Human Activities

In Africa, the weather and climate decide what kind of work people do, what they eat, and how they live. Different climates offer different opportunities.

#### (i) Hot Areas (Deserts and Semi-Arid Zones)

Because it is very dry and hot, people in these areas do the following:

**Nomadism:** Since there is very little grass, herders (like the Tuareg or Maasai) move their animals from place to place to find water and pasture.

**Irrigation:** To grow food, farmers must bring water from rivers or underground wells to their dry fields (e.g., along the River Nile).

**Mining:** Many deserts are rich in minerals like **oil, gold, and diamonds**. People build mines in the desert to dig up these riches.

**Tourism:** People visit deserts to see the giant sand dunes, ride camels, and experience the unique landscape.

#### (ii) Mediterranean and Temperate Climates

These areas have "just right" weather (mild and pleasant), which is great for:

**Farming:** The cool, rainy winters are perfect for growing **grapes, olives, oranges, and wheat**. This is common in South Africa and North Africa.

**Industry:** Because the climate is comfortable, many **factories** are built in these zones to process crops into products like juice and wine.

**Trading:** These regions are often near the coast with big ports (like Cape Town), making it easy to **buy and sell goods** with other countries.

**Tourism:** Many tourists visit the beaches and vineyards because the weather is not too hot and not too cold.

#### (iii) Equatorial and Tropical Climates (Wet & Hot)

These areas have plenty of rain and heat, leading to many different activities:

**Lumbering:** Because of the thick **Equatorial rainforests**, people cut down tall trees for timber (wood) to make furniture and houses.

**Agriculture:** Farmers grow crops that love rain, like **cocoa, rubber, palm oil, and bananas**.

**Hunting & Gathering:** In the deep forests, some communities still hunt wild animals and gather fruits for food.

**Livestock Farming:** In the **Tropical Savanna**, people keep cattle, sheep, and goats on the vast grasslands.

**Transport & Trading:** Big rivers like the **Congo** are used as "highways" to move goods and people for trade. Rivers also required big capital to construct bridges

**Mining & Tourism:** People mine gold or diamonds in the forest, and tourists visit to see gorillas or go on safaris in the savanna.

**(iv) Montane Climate (Cool & High)**

The cool air and steep slopes of mountains like the Ethiopian Highlands or Mt. Kenya influence work:

**Farming:** The cool weather is perfect for "highland crops" like **tea, coffee, and pyrethrum**.

**Lumbering:** Softwood trees (like pines) grow well here and are harvested for paper and timber.

**Tourism:** People travel from all over the world to **climb mountains** or see unique mountain plants and animals.

**Mining:** Some mountains contain valuable minerals hidden in the rocks that are dug out by miners.

**Exercise 4**

1. Why is **lumbering** a major activity in the Equatorial climate zone?
2. Name two crops grown in the **Montane climate** that prefer cool temperatures.
3. How do people in the Equatorial rainforest use **rivers** for trade and transport?
4. In which climatic zone (Equatorial or Tropical) is **livestock farming** (keeping cattle) most common?
5. What is one reason **tourists** are attracted to the Montane regions of Africa?
6. Why is **nomadism** a common activity in hot, dry desert areas?
7. What do farmers in the desert need to do if they want to grow crops without rain?
8. Name two **minerals** that are often mined in the desert regions of Africa.
9. In which climatic zone would you find people growing **grapes and olives**?
10. Why are most of Africa's big **factories and industries** located in temperate or Mediterranean zones?
11. Give one reason why **tourism** is popular in the Sahara Desert.

12. Why is it difficult to practice **permanent crop farming** in a desert without irrigation?
13. If you wanted to visit a **vineyard** (where grapes grow), which part of Africa would you travel to?

### Human Activities and Their Effects on Climate

Humans interact with the environment every day. Some of our actions help the climate stay healthy (**positive**), while others can damage it and make it hotter or drier (**negative**).

#### Positive Effects (Helping the Climate)

These activities help keep the air cool, bring rain, and protect the earth:

- (i) **Afforestation**: This is planting trees where there were none before. Trees breathe out moisture, which creates **clouds and rain**.
- (ii) **Reforestation**: Planting trees in areas where forests were cut down to "repair" the environment.
- (iii) **Agro-forestry**: This is when farmers plant **trees and crops together** on the same farm. It keeps the soil moist and cool.
- (iv) **Conservation**: Protecting natural forests and swamps (wetlands) so they can continue to clean the air and provide rain.

#### Negative Effects (Damaging the Climate)

These activities can cause "Climate Change," making some areas too hot or causing droughts:

- (i) **Deforestation**: Cutting down too many trees for timber or charcoal. Without trees, the land gets **hotter**, and there is **less rain**.
- (ii) **Industrial Pollution**: Smoke from big factories and cars releases "greenhouse gases." These gases trap heat like a blanket, making the Earth warmer (**Global Warming**).
- (iii) **Overgrazing**: Keeping too many animals (like cattle) on a small piece of land. They eat all the grass, leaving the soil bare and dry, which can turn the land into a **desert**.
- (iv) **Swamp Reclamation**: Draining water from wetlands to build houses or farms. This removes the natural moisture that helps form rain.

### Exercise 5

1. What is the difference between **afforestation** and **reforestation**?
2. How does **deforestation** (cutting down trees) lead to less rainfall in an area?
3. Why is **overgrazing** by livestock bad for the climate of a region?
4. Name one **positive** activity a farmer can do to help keep their land cool and moist.
5. How do **factories** contribute to making the Earth's atmosphere warmer?

## Revision questions

1. Why are the lowlands areas in Uganda warmer than highland areas?  
Low land are at low altitude hence warmer.
2. State any one way in which human activity has reduced the amount of rainfall received in some parts of Uganda.
  - (i) **Cutting down trees:** When people cut forests for **charcoal, timber, or farming**, there are fewer trees to breathe out moisture into the air. Without this moisture from trees, it is harder for **rain clouds** to form.
  - (ii) **Drying Swamps:** Draining **wetlands** to build houses or farms removes the water that usually evaporates to make rain.
  - (iii) **Global Warming:** Smoke from **factories and old cars** makes the air too hot, which can change the normal rain patterns.
3. Mention any factor that has made the temperate climatic region of South Africa suitable for sheep rearing.
  - (i) **Cool Temperatures:** Sheep have thick wool and stay healthy in the **cool, mild weather** of the plateau.
  - (ii) **Abundant Grass:** The region is a vast **grassland (Veld)**, providing plenty of natural food for sheep to graze on.
  - (iii) **Low Rainfall:** It is dry enough that sheep do not get diseases caused by too much mud or dampness, which can happen in very rainy areas.
  - (iv) **Large Open Spaces:** The flat land allows farmers to keep **large flocks** of sheep that can move around easily.
4. (a) Name any types of trees that grow in deserts.  
Cactus  
Cassia
- (b) State any two characteristics of trees that grow in deserts.
  - (i) deep roots to reach ground water
  - (ii) reduced leaves to reduce water loss
  - (iii) fleshy stems to store water
  - (iv) thick barks and waxy cuticle to reduce water loss
  - (v) reduced air pores
- (c) Give one way in which the Harmattan winds influence the climate of the Sahara Desert.
  - (i) **Cooler Temperatures:** They are **cool winds** that blow during the winter months (December to February), making the desert feel chilly at night.
  - (ii) **Dryness:** The winds are very **dry**, which causes moisture to evaporate quickly, drying out the air and the land.
  - (iii) **Dust Clouds:** They carry huge amounts of **fine dust and sand**, which can block the sun and make the sky look hazy or "foggy."

- (iv) **Lower Humidity:** They reduce the **humidity** (moisture in the air), which can cause people's skin and lips to feel dry or cracked.
5. How does the distance of an area from large water body affect the climate of the surrounding land?
- (i) **Rainfall:** Areas **closer** to water usually get **more rain** because moisture evaporates from the water to form clouds.
- (ii) **Temperature:** Large water bodies stay cool in summer and warm in winter. This makes coastal areas **milder** (not too hot or too cold).
- (iii) **Inland Areas:** Places **far away** from water (inland) are usually **drier and hotter** because the moist winds lose their rain before reaching them.
- (iv) **Breezes:** Water bodies create **cool breezes** that blow onto the land during the day, helping to lower the temperature.
6. Give one reason why plants in the desert areas have deep roots.  
To enable them reach ground water
7. Write any one factor that enables people to survive in a semi-desert condition.
- (i) **Irrigation:** They dig wells or use pipes to bring water from rivers to grow their food.
- (ii) **Nomadism:** Herders move their **animals** (like goats and camels) from place to place to find the little grass and water available.
- (iii) **Drought-Resistant Crops:** They plant special seeds like **millet and sorghum** that can grow even when it is very hot and dry.
- (iv) **Water Storage:** They build **tanks or dams** to trap and save every bit of rain that falls during the short rainy season.
- (v) **Tough Animals:** They keep animals like **camels** that can go for many days without drinking water.
8. Mention any one effect of long period of drought on agriculture.
- (i) **Crop Failure:** Without enough water, crops like maize and beans **wither and die**, leading to no harvest.
- (ii) **Death of Livestock:** Cattle, goats, and sheep die because there is **no water** to drink and the **grass** dries up.
- (iii) **Pests and Diseases:** Very dry weather can bring pests like **locusts** that eat the few plants left.
- (iv) **Food Shortage:** Because crops and animals die, there is very little food for people to eat or sell (famine).
- (v) **Soil Damage:** The ground becomes very hard and **cracked**, making it difficult for farmers to plough when the rain finally returns.

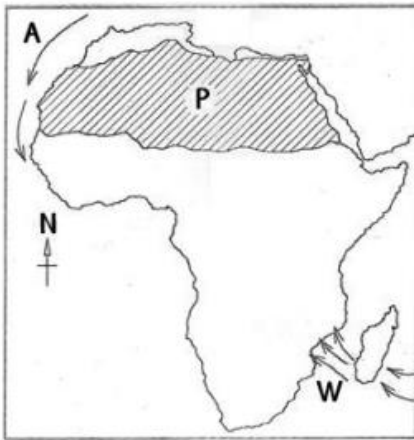
9. Mention any one way in which the temperate grasslands are economically important to the people of South Africa.
- (i) **Livestock Farming:** They provide huge grazing lands for **sheep** (to produce wool) and **cattle** (for meat and milk).
  - (ii) **Growing Food:** Farmers grow most of the country's **maize (corn)**, wheat, and sunflowers on these flat plains.
  - (iii) **Mining Wealth:** The rocks beneath the grass contain **gold, coal, and diamonds**, which are mined and sold for a lot of money.
  - (iv) **Job Creation:** Many people find work in **factories** that process the farm produce and minerals from the region.
10. Name any one type of grassland that covers a large portion of Africa.  
Savanna/Savannah
11. Give any one factor that brings about differences in the vegetation distribution in mountainous regions.
- (i) **Temperature drops:** It gets **colder** the higher you climb, so only tough plants can grow at the top.
  - (ii) **Rainfall changes:** Some parts of the mountain get **more rain** than others, creating thick forests at the bottom and dry grass at the top.
  - (iii) **Soil thickness:** The soil is usually **deeper and richer** at the base of the mountain but thin and rocky near the peak.
12. Why is pastoralism not highly developed among the nomadic communities in Africa?
- (i) **Frequent Droughts:** Very long dry seasons mean there is often **no water or grass** for the animals to stay healthy.
  - (ii) **Animal Diseases:** Dangerous pests like **tsetse flies** and ticks carry diseases that can kill many cattle at once.
  - (iii) **Poor Quality Grass:** In dry areas, the grass is often **tough and dry**, which is not good for making animals fat or producing much milk.
  - (iv) **Traditional Methods:** Many herders keep animals for **prestige (status)** rather than for selling them at the market to make money.
  - (v) **Lack of Markets:** Nomadic areas are often far from big towns, making it **hard to transport** and sell milk or meat.
13. Mention any one of the citrus fruits grown in the Mediterranean climate region of Africa.
- (i) **Oranges:** These are the most popular and are exported to many other countries.
  - (ii) **Lemons:** These grow very well in the sunny, dry summers of this region.
  - (iii) **Limes:** Often grown for their juice and zest.
  - (iv) **Tangerines and Mandarins:** These are sweet, easy-to-peel fruits that love the mild winters.

- (v) **Grapefruits:** Grown in large orchards for both eating and making juice.
14. (a) Name two elements of climate that influence human settlement.
- (i) **Rainfall:** People settle where there is **enough rain** to grow food and provide water for drinking.
- (ii) **Temperature:** Most people prefer to live in **mild areas** that are not too hot (like deserts) or too cold (like high mountain tops).
- (iii) **Sunshine:** Areas with good sunshine are better for **farming**, which attracts more people to live there.
- (iv) **Humidity:** Very damp and sticky air (high humidity) can make places uncomfortable and bring **diseases** like malaria, so people may avoid those areas.
- (v) **Wind:** People often avoid settling in places with **strong, destructive winds** or very dry, dusty winds.
- (b) State one effect of the revolution of the earth.
- (i) **Different Seasons:** It causes **Spring, Summer, Autumn, and Winter** to happen at different times of the year.
- (ii) **Varying Day Length:** It makes some days have **longer hours of sunlight** (Summer) and others have shorter hours (Winter).
- (iii) **Changes in Temperature:** As the Earth moves, different parts get more or less heat from the Sun, making the weather **hotter or colder**.
- (iv) **A Full Year:** It marks the time it takes for one **calendar year** to pass.
- (c) What term is used when the sun is overhead the equator?  
Equinox
15. How does altitude influence the climate of an area?
- (i) **Temperature:** The higher you go, the **colder** it gets. This is why mountain tops like **Mt. Kilimanjaro** are freezing while the bottom is hot.
- (ii) **Air Pressure:** At high altitudes, the air is **thinner** and holds less heat, which is why highland areas are usually cooler than lowlands.
- (iii) **Rainfall:** Mountains force air to rise, which cools it down to form **clouds and rain** on one side (the windward side).
16. Mention any one reason why the Veld of South Africa are suitable for sheep rearing?
- (i) **Cool Climate:** The mild to cool temperatures are perfect for sheep with thick wool to stay healthy.
- (ii) **Plenty of Grass:** The vast, flat grasslands provide a natural and constant source of **food (pasture)**.
- (iii) **Dry Conditions:** These areas are not too wet, which helps prevent sheep from getting foot rot or other diseases caused by damp ground.

- (iv) **Large Open Spaces:** There is plenty of room for farmers to keep **huge flocks** of sheep that can move around easily to graze.
17. How does afforestation influence the climatic condition of a place?
- (i) **Increases Rainfall:** Trees release moisture into the air through their leaves, which helps form **rain clouds**.
- (ii) **Cools the Air:** Trees provide **shade** and release water vapor that acts like a natural air conditioner to lower the temperature.
- (iii) **Acts as a Windbreak:** Thick forests slow down **strong, dry winds** that can blow away the soil and dry out the land.
- (iv) **Cleans the Air:** Trees breathe in bad air (carbon dioxide) and give out **fresh oxygen**, making the environment healthier.
18. State any one way in which forests improve people's health.
- (i) **Clean Air:** Trees act like "lungs" for the Earth, giving us **fresh oxygen** to breathe and cleaning away dirty smoke.
- (ii) **Medicines:** Many plants and trees in the forest are used to make **herbal medicine** to treat malaria, coughs, and other sicknesses.
- (iii) **Fresh Food:** Forests provide **healthy fruits**, nuts, and honey that help our bodies grow strong.
- (iv) **Cool Shade:** On very hot days, trees provide **cool places to rest**, which prevents people from getting heatstroke or too tired.
- (v) **Clean Water:** Forest roots filter rainwater, making the water in nearby streams **safer and cleaner** to drink.
19. State any one way in which an Oasis is important to the people who live in the Sahara Desert.
- (i) **Source of Water:** it provides **fresh water** for people and animals to drink in a very dry place.
- (ii) **Farming:** It has fertile soil where farmers can grow crops like **date palms**, vegetables, and fruits.
- (iii) **Resting Place:** It acts as a "stop" for travelers and traders (caravans) to **rest and refill** their water bags.
- (iv) **Settlements:** Because there is water, people can build **permanent homes** and villages there instead of moving around.
20. Mention any one way in which forests help to reduce the effects of bad weather.
- (i) **Windbreakers:** Thick trees slow down **strong winds** so they don't blow away roofs or dry out the soil.
- (ii) **Prevent Floods:** Tree roots act like a sponge, soaking up heavy rain so the water doesn't overflow and **flood** homes.

- (iii) **Stop Erosion:** Roots hold the soil firmly so that heavy rain doesn't wash away the **good farming land**.
  - (iv) **Cooling the Air:** During very hot weather, forests provide **shade** and moisture to keep the area from getting too dry and dusty.
21. Give any one reason why the floor of the rift valley has high temperatures.  
It is at lower altitude
22. Mention any one way in which distance from the Equator affects climate of an area.
- (i) **Temperature:** Places **near the Equator** are very hot because they receive direct sunlight all year. As you move **farther away** toward the poles, it gets colder.
  - (ii) **Rainfall:** Areas on the Equator usually get **heavy rain** almost every day. Places farther away often have distinct wet and dry seasons or become very dry deserts.
  - (iii) **Seasons:** Near the Equator, the weather stays mostly the **same** all year. Farther away, you start to see clear changes like **Winter and Summer**.
23. (a) Mention any two countries in Africa which experience the Mediterranean type of climate
- (i) **South Africa:** Specifically, the **Western Cape** region (around Cape Town).
  - (ii) **Morocco:** Along the northern coast and near the Atlas Mountains.
  - (iii) **Algeria:** In the fertile coastal areas along the Mediterranean Sea.
  - (iv) **Tunisia:** Most of its northern territory has this climate.
  - (v) **Libya:** In small coastal pockets like the Jebel Akhdar region.
  - (vi) **Egypt:** Only along the very thin northern strip near the city of Alexandria.
- (b) Name any two crops in this type of climate
- (i) **Citrus Fruits:** Oranges, lemons, limes, and tangerines.
  - (ii) **Grapes:** Used to make **fresh juice** and raisins.
  - (iii) **Olives:** Grown to make **olive oil** for cooking.
  - (iv) **Wheat and Barley:** These grains grow well during the rainy winter months.
  - (v) **Fruits with Stones:** Like **peaches, apricots, and plums**.
  - (vi) **Vegetables:** Tomatoes, onions, and cucumbers.
24. Mention any climatic condition which has enable dairy farming to be carried out in the Kenyan Highlands
- (i) **Cool Temperatures:** High altitude keeps the air **cool**, which helps high-quality dairy cows (like Friesians) stay healthy and produce more milk.
  - (ii) **Reliable Rainfall:** Frequent rain ensures that **green grass and fodder** grow all year round for the cows to eat.
  - (iii) **Low Pests:** The cool weather reduces the number of dangerous insects like **tsetse flies** that carry diseases.

25. State any problem farmers may face as a result of cutting down forests.
- Less Rainfall:** Fewer trees mean less moisture is released into the air, leading to **droughts** that dry up crops
  - Soil Erosion:** Without tree roots to hold the ground, heavy rain washes away the **fertile topsoil**, making the land poor for farming.
  - Strong Winds:** Without a forest to act as a **windbreak**, strong winds can blow away young plants and dry out the soil.
  - High Temperatures:** The land becomes much **hotter** without the cooling shade of trees, which can make crops wither and die.
26. Study the sketch map of Africa below and use it to answer the questions that follow.

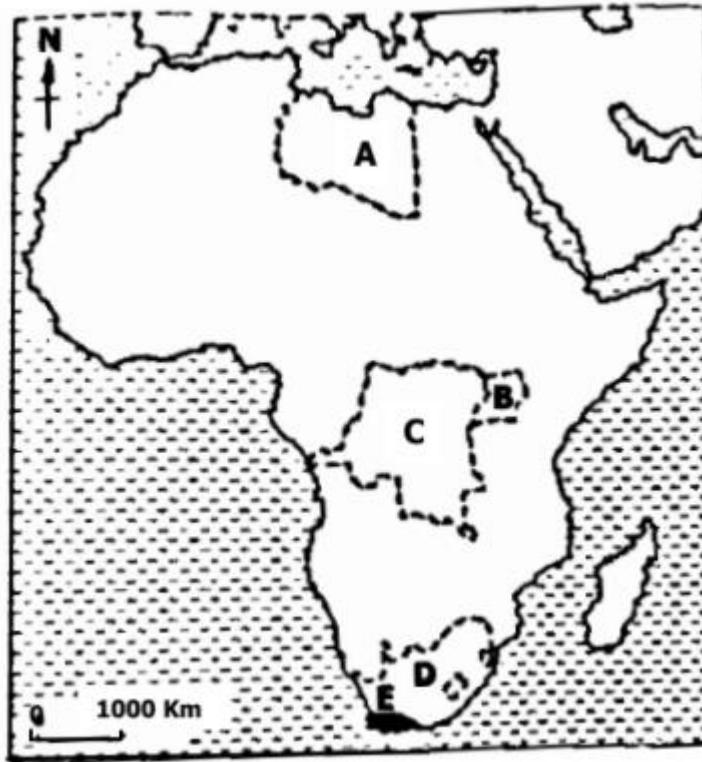


- Name the ocean current marked with letter A.  
**Canary Current.**
  - How do the winds marked W affect the climate of the eastern part of Africa?  
South East Trade Winds bring heavy rainfalls on the eastern part of Africa
  - State the type of climate experienced in the shaded region marked P.  
Desert climate (hot and dry)
  - Why does the shaded region marked P experience very cold nights?  
Has no cloud cover to insulate the area below  
Sand gets cold quickly
27. State any one reason why it is important to care for the forests.
- Brings Rain:** Trees release moisture into the air, which helps form **clouds and rain** for our crops.
  - Clean Air:** Forests act as "lungs" for the Earth by giving us **fresh oxygen** to breathe.
  - Prevents Erosion:** Tree roots hold the soil firmly so that it is not washed away by **wind or floods**.
  - Homes for Animals:** They provide a safe place and food for **wildlife** like birds, monkeys, and bees.

- (v) **Resources:** We get important things from forests like **herbal medicine**, fruits, and timber for furniture.
28. Why does the leeward side of mountain receive very little rainfall?
- (i) **Dry Air:** As clouds move over the mountain, they drop all their rain on the first side (the windward side). By the time the wind reaches the other side, it is **dry**.
- (ii) **Warming Air:** The air sinks down the leeward side and gets **warmer**, which prevents clouds and rain from forming.
29. State any way in which an Oasis important to the people who live in Sahara Desert?
- (i) **Source of Water:** it provides **fresh water** for people and animals to drink in a very dry place.
- (ii) **Farming:** It has fertile soil where farmers can grow crops like **date palms**, vegetables, and fruits.
- (iii) **Resting Place:** It acts as a "stop" for travelers and traders (caravans) to **rest and refill** their water bags.
- (iv) **Settlements:** Because there is water, people can build **permanent homes** and villages there instead of moving around.
30. Give any problem caused by too much rainfall to the community.
- (i) **Floods:** Water can overflow from rivers and cover the land, drowning **crops** and destroying **homes**.
- (ii) **Destroys Roads:** Heavy rain can wash away bridges and make roads very **muddy**, so cars and buses cannot move.
- (iii) **Diseases:** Standing water after a flood can bring illnesses like **malaria** (from mosquitoes) and **cholera**.
- (iv) **Soil Erosion:** The rushing water carries away the fertile **topsoil**, making the land poor for farming.
- (v) **Landslides:** In hilly areas, the wet ground can slip down and bury houses or **block paths**.
31. Mention any one problem people living in mountain areas face.
- (i) **Difficult Transport:** The land is very steep and rocky, making it hard and expensive to build **roads**.
- (ii) **Soil Erosion:** When it rains, the water washes away the good soil down the slopes, making it hard to **farm**.
- (iii) **Cold Weather:** It can get very **cold and misty**, which can make people and animals sick.
- (iv) **Landslides:** During heavy rain, large amounts of mud and rocks can slide down and destroy **houses**.

- (v) **Hard Work:** It is tiring to carry goods up and down the steep hills because **vehicles** often cannot reach the homes.

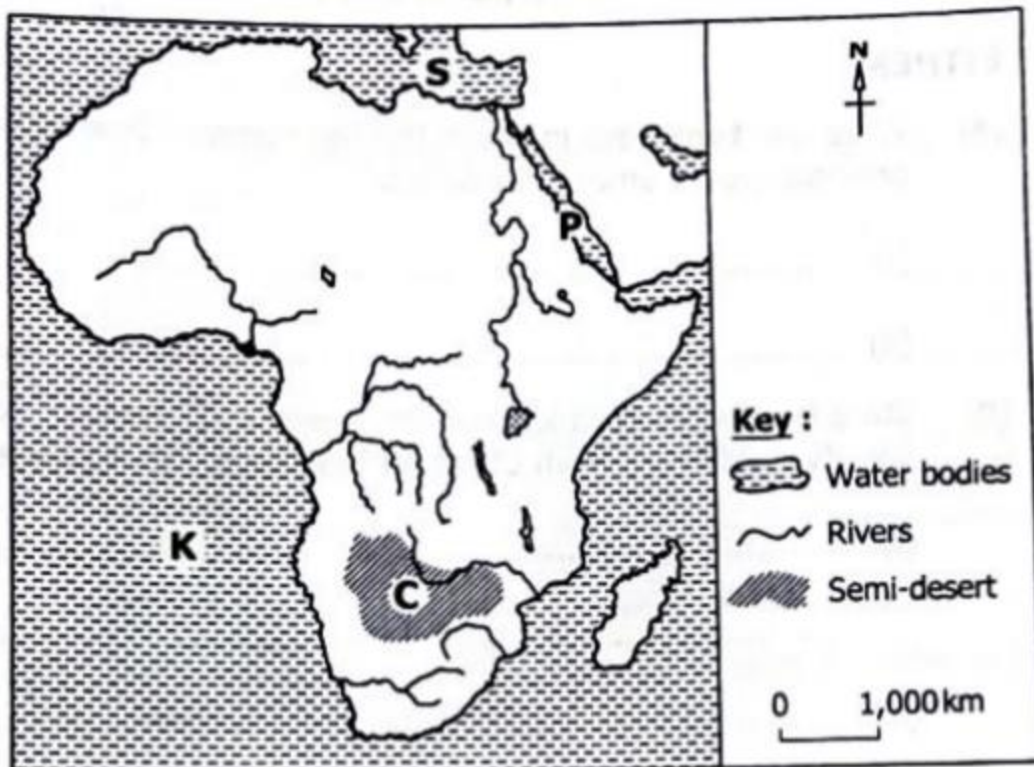
32. Study the sketch map of Africa below and answer the questions that follow



- (a) Name countries marked  
A – Libya  
B – South Africa
- (b) What advantage does country marked C over country marked B in terms of location?  
C has access to the sea while B is landlocked
- (c) Which climatic region of Africa is found in the shaded area marked E?  
Mediterranean climate
33. (a) What do you call a place where weather is recorded?  
Weather station
- (b) Write any two elements of weather which are recorded at the place you have named in (a) above.
- (i) **Temperature:** How hot or cold the air is (measured with a **thermometer**).
  - (ii) **Rainfall:** The amount of rain that falls (measured with a **rain gauge**).
  - (iii) **Wind Speed:** How fast the wind is blowing (measured with an **anemometer**).
  - (iv) **Wind Direction:** Where the wind is blowing from (measured with a **wind vane**).
  - (v) **Wind strength and direction:** by wind sock
  - (vi) **Air Pressure:** The weight of the air (measured with a **barometer**).
  - (vii) **Humidity:** The amount of moisture in the air (measured with a **hygrometer**).

- (viii) **Sunshine:** How many hours the sun shines (measured with a **Campbell Stokes recorder**).
- (c) Mention one way the recorded information about weather benefits the people in the community.
- (i) **Farmers:** It helps them know the best time to **plant their seeds** or harvest their crops before a heavy rain or drought.
  - (ii) **Safety:** It gives **early warnings** about dangerous weather like floods or strong winds so people can move to a safe place.
  - (iii) **Travelers:** It helps **pilots and drivers** know if it is safe to travel or if they should wait for better weather.
  - (iv) **Daily Planning:** It helps everyone decide **what to wear** (like a sweater or a hat) and if they should carry an umbrella.
  - (v) **Health:** It helps doctors prepare for diseases that spread during rainy seasons, like **malaria**.
34. Which neighboring country of Uganda is mainly covered by equatorial rain forests?  
Democratic Republic of Congo (DRC)
35. Give any one reason why fast maturing crops are suitable for growing in Karamoja.
- (i) **Short Rainy Season:** The rain in Karamoja only lasts for a very short time, so crops must grow quickly before the water runs out.
  - (ii) **Frequent Droughts:** If a crop takes too long to grow, it might die when the long dry season begins.
  - (iii) **Food Security:** These crops provide **food quickly** for families to eat after a long dry period.
  - (iv) **Heat Resistance:** Fast-growing crops like **sorghum and millet** are tough and can survive the hot sun of Karamoja.
36. (a) Where in Africa do we find the temperate grasslands?  
South Africa
- (b) Give any two main economic activities of the temperate grassland?
- (i) **Livestock Farming:** Rearing **sheep** for wool and **cattle** for beef and milk.
  - (ii) **Large-scale Crop Farming:** Growing huge amounts of **maize (corn)**, wheat, and sunflowers.
  - (iii) **Mining:** Digging up valuable minerals like **gold, coal, and diamonds** found under the grassy plains.
  - (iv) **Industrial Processing:** Using factories to turn crops into food and wool into **clothes**.
- (c) What method is used for growing sugarcanes in the areas mentioned in (a) above?  
Plantation farming

37. Which type of climate covers a greater part of Africa?  
Tropical climate
38. Where is snow found in East Africa?  
Peaks of mountain Rwenzori and Mt. Kilimanjaro
39. State any one problem an area would face if it received no rain throughout the year
- (i) **No Water to Drink:** Rivers, wells, and water holes dry up, leaving people and animals thirsty.
  - (ii) **Famine (Food Shortage):** Crops cannot grow without water, so there is no food to harvest.
  - (iii) **Death of Livestock:** Cattle, goats, and sheep die because there is no water and no **grass** for them to eat.
  - (iv) **Dust and Heat:** The land becomes very dusty, and the weather feels much **hotter** and drier.
  - (v) **Migration:** People and animals are forced to **move away** to other places to find water and stay alive.
40. Study the sketch map of Africa below and use it to answer the questions that follow.



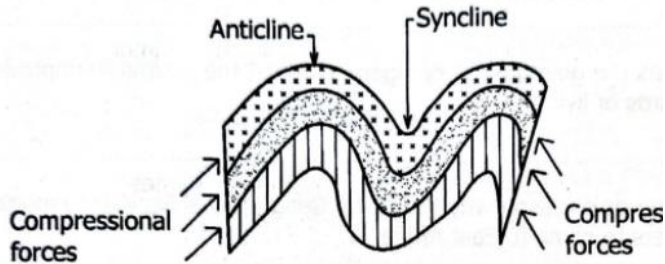
- (a) Name the water body marked K  
Atlantic Ocean
- (b) How was water body marked S connected to water body marked P to shorten the distance travelled by traders?

Suez Canal

(c) State two conditions that make area marked C more suitable for nomadic herding than crop farming.

- (i) **Low Rainfall:** It is a very dry (semi-arid) area where it does not rain enough for crops to grow well.
- (ii) **Frequent Droughts:** The rain is unreliable, and crops often die if the water disappears.
- (iii) **Mobility:** Herders can move their animals to find grass and water in different places, but crops are stuck in one spot and cannot move if the soil stays dry.
- (iv) **Tough Grass:** The natural grass and bushes can survive the heat and provide food for livestock even when it is too dry for farming.

41. Name any mountain in Africa but outside East Africa formed by the process below



- (i) **Drakensberg Mountains** in South Africa
- (ii) **Muchinga Escarpment (Zambia)**
- (iii) **Mitumba Mountains (Democratic Republic of the Congo)**
- (iv) **Lendu Plateau (DRC)**

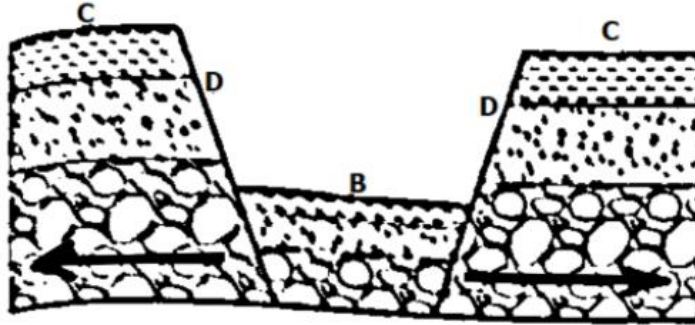
42. Name any one block mountain found in Tanzania.

- (i) **Pare Mountains**
- (ii) **Usambara Mountains**
- (iii) **Udzungwa Mountains**
- (iv) **Livingstone (Kipengere) Range**

43. Mention any one desert found in Africa

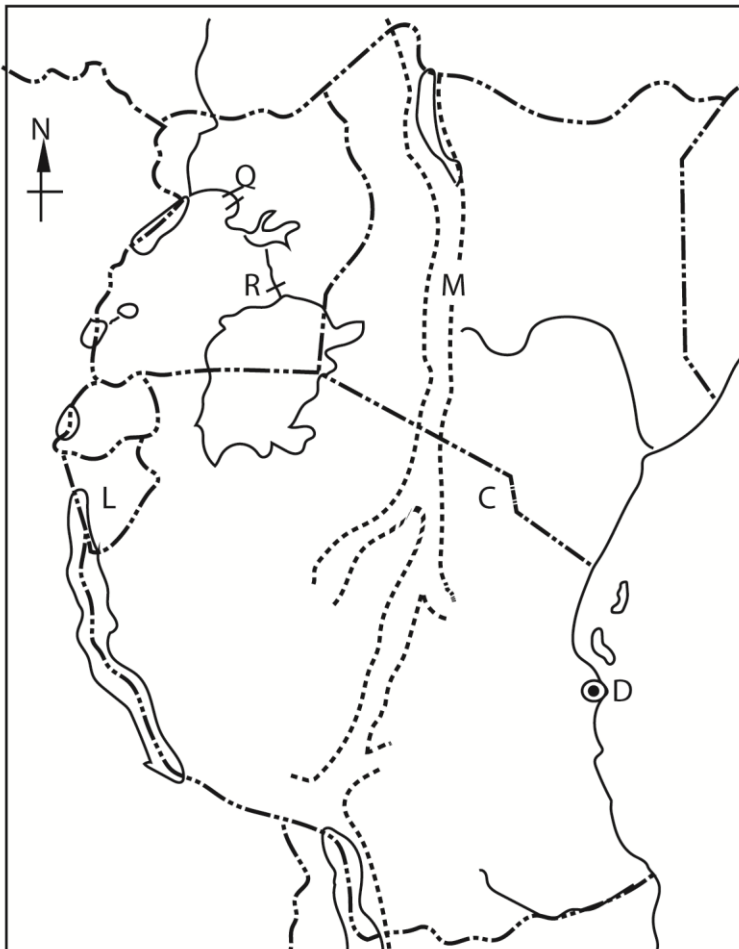
- (i) Sahara Desert
- (ii) Kalahari Desert
- (iii) Namib Desert

44. The diagram below shows a formation of a physical feature. Use it to answer the questions that follow



- (a) Name the process shown with arrows on the diagram  
Normal fault
- (b) Which physical feature is formed in the area marked B?  
Valley/ lake
- (c) What term is used to mean the slopes marked D on the diagram above?  
Steep escarpment

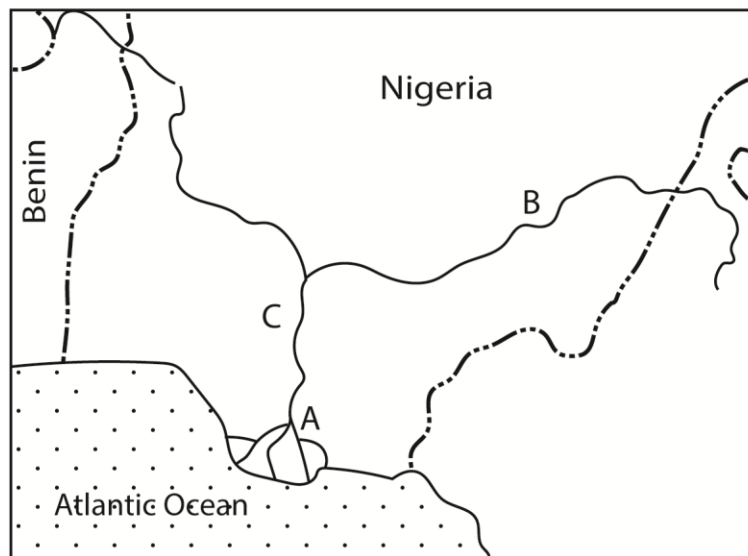
45. Study the sketch map of East Africa below and use it to answer the questions that follow



- (a) Name the physical feature marked M.

- Eastern rift Valley
- (b) Name the country L  
Burundi
- (c) State any one way in which the Port marked D promotes trade in the East Africa region.  
Handles imports of Tanzania and Uganda  
Handles exports of Tanzania and Uganda
- (d) Give one reason why hydroelectricity is produced in parts of River Nile marked Q and R.  
They have water falls
- (d) State any one reason why area marked C is cooler than the area marked B on the diagram  
C is at high altitude

46. Study the sketch map below and answer the questions that follow



- (a) Name the features marked by the following letters.  
A – River Delta  
B – tributary (River Benue)
- (b) Name any one other river in Africa that ends in the same way as river marked C above  
R. Nile
- (c) How is part marked A economically important to Nigeria?
- (i) **Oil and Gas:** It provides almost all of Nigeria's **crude oil**, which is sold to other countries to earn money (foreign exchange)
  - (ii) **Jobs:** Thousands of people work in **oil companies**, while many others earn a living through **fishing and farming**.

- (iii) **Trade:** Large **ports** in the delta allow ships to bring in goods and send out products like rubber and palm oil to the rest of the world.
  - (iv) **Agriculture:** The wet, fertile land is perfect for growing **oil palms**, which are used to make cooking oil and soap.
  - (v) **Water transport:** for good and people
47. Give an example of a volcanic mountain found in South Africa.  
**Pilanesberg**
48. Name the water passage that connects Mediterranean Sea to the Red Sea.  
Suez Canal
49. How does Sudan benefit from River Nile?
- (i) **Farming (Irrigation):** It provides water to grow crops like **cotton and sugar** in dry areas through big projects like the Gezira Scheme.
  - (ii) **Electricity (Hydro-power):** Huge dams like the **Roseires Dam** use the flowing water to make electricity for homes and factories.
  - (iii) **Drinking Water:** It is the main source of fresh water for people and animals to drink in a very hot country.
  - (iv) **Transport:** Boats use the river to carry **goods and people** from one town to another.
  - (v) **Fishing:** Many people catch **fish** from the river to eat or sell at the market.
50. Apart from providing water for irrigation which other way is river Nile important to the Sudanese?
- (i) **Electricity (Hydro-power):** Huge dams like the **Roseires Dam** use the flowing water to make electricity for homes and factories.
  - (ii) **Drinking Water:** It is the main source of fresh water for people and animals to drink in a very hot country.
  - (iii) **Transport:** Boats use the river to carry **goods and people** from one town to another.
  - (iv) **Fishing:** Many people catch **fish** from the river to eat or sell at the market.
51. State any one economic importance of River Tana to Kenya?
- (i) **Electricity (Hydro-power):** It has many dams, like the **Seven Forks**, which make most of the electricity used in homes and factories across Kenya.
  - (ii) **Farming (Irrigation):** Its water is used to grow crops like **rice, cotton, and maize** in dry areas like Mwea and Bura.
  - (iii) **Water Supply:** It provides **fresh water** for people to drink and use in big towns and for livestock in the countryside.

(iv) **Fishing:** Many people catch **fish** from the river to sell at the market and earn money.

52. (a) Which river drains the largest part of the Democratic Republic of Congo (DRC)?  
R. Congo

(b) Give any two reasons why the river you have named in (a) above carries the largest volume of water to the Sea.

(i) **Heavy Rainfall:** It flows through the **Equatorial Rainforest**, where it rains almost every day.

(ii) **Many Tributaries:** It has many **smaller rivers** (like the Kasai and Ubangi) that join it and add their water.

(iii) **Large Basin:** It drains water from a **massive area** of land across many countries.

(iv) **Constant Flow:** Because parts of the river are on both sides of the **Equator**, it gets rain from different seasons all year round.

(c) Name the ocean into which the named in (a) above pours its water  
Atlantic Ocean

53. Give any one characteristic of rift valley lakes.

(i) **Long and Narrow:** They usually look like long ribbons because they sit inside a deep crack in the earth.

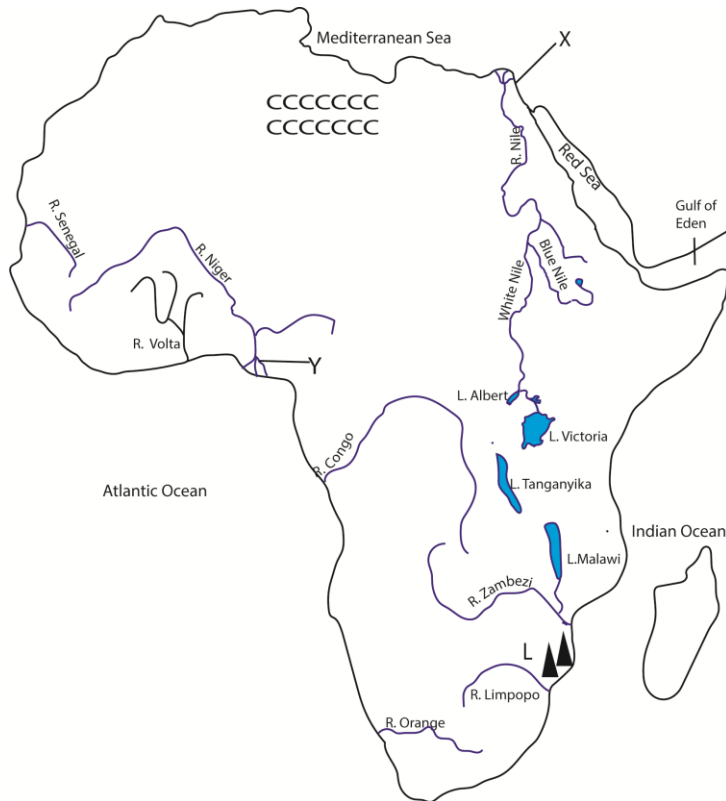
(ii) **Very Deep:** Many are among the deepest lakes in the world because the valley floor has sunk so low.

(iii) **Steep Sides:** They are often surrounded by high, steep walls called **escarpments**.

(iv) **Fresh Water:** Most of them contain fresh water, though some (like Lake Natron) can be very salty.

(v) **Many Fish:** They are famous for having unique types of fish, like **Cichlids**, that aren't found anywhere else.

54. Use the map below to answer the questions that follow.

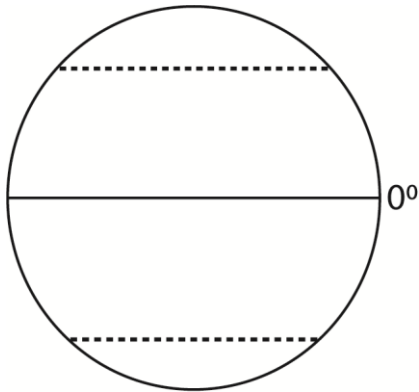


- (a) Name the water passage marked with X  
Suez Canal
- (b) Mention one economic activity carried out in the area marked Y.
- (i) **Oil and Gas:** It provides almost all of Nigeria's **crude oil**, which is sold to other **countries to earn money (foreign exchange)**
  - (ii) **Jobs:** Thousands of people work in **oil companies**, while many others earn a living through **fishing** and **farming**.
  - (iii) **Trade:** Large **ports** in the delta allow ships to bring in goods and send out products like rubber and palm oil to the rest of the world.
  - (iv) **Agriculture:** The wet, fertile land is perfect for growing **oil palms**, which are used to make cooking oil and soap.
  - (v) **Water transport:** for good and people
- (c) Why is the region marked CCC sparsely populated?
- (i) It is a desert,
  - (ii) receives very little rainfall,
  - (iii) very hot during day and very cold during night
- (d) How the mountain ranges marked L formed?  
Faulting/uplift and erosion

16. Study the diagram below and use it to answer the questions that follow.



- (a) Name the imaginary line marked
- (i) S – Prime Meridian
  - (ii) N - Equator
- (b) State one use of the imaginary lines marked S and N to a map reader.
- (i) S – divides the globe between East and West
  - (ii) N – divides the globe between North and South
17. Name the line of longitude that passes through Accra in Ghana.  
Prime Meridian
18. Which major latitude passes through Uganda  
Equator
19. Give any one reason why Uganda has less irrigation projects compared to Libya.  
Uganda has reliable rainfall while Libya is a desert.
20. Give one reason why Antarctica continent is not suitable for human settlement.
- (i) **Extreme Cold:** It is the coldest place on Earth. Temperatures can drop to  $-80^{\circ}\text{C}$ , which is way too cold for our bodies to handle.
  - (ii) **No Food:** Nothing can grow there! There are no trees, bushes, or farms because the ground is covered in thick **ice and snow** all year.
  - (iii) **No Liquid Water:** Almost all the water is frozen solid. Humans need liquid water to drink, but in Antarctica, everything is a giant block of ice.
21. Name any one type of grassland that covers a large portion of Africa.  
Savanna/Savannah grassland
22. The diagram below shows the globe. Use it to answer question below



Name the latitude marked 0°  
Equator

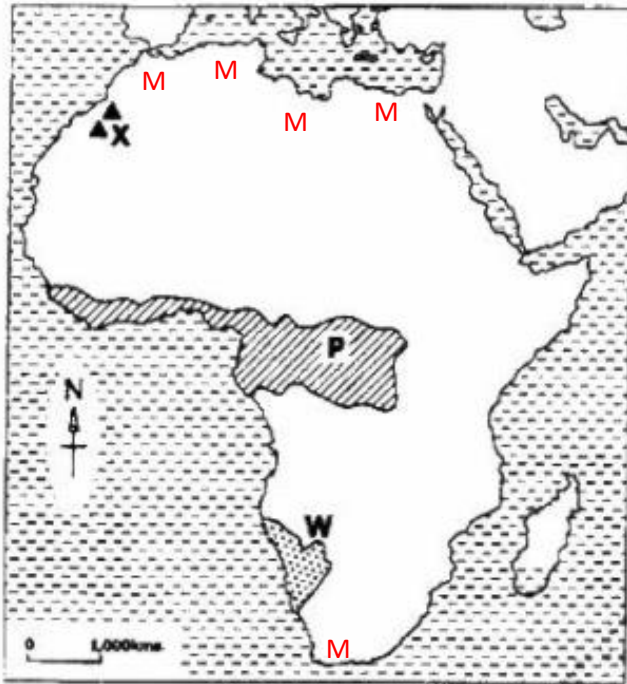
23. Mention any one desert found in Africa  
Sahara desert

**The Namib Desert (Southwestern Africa)**

24. Name the water body that is found at the Western Coast of Africa.

**Atlantic Ocean**

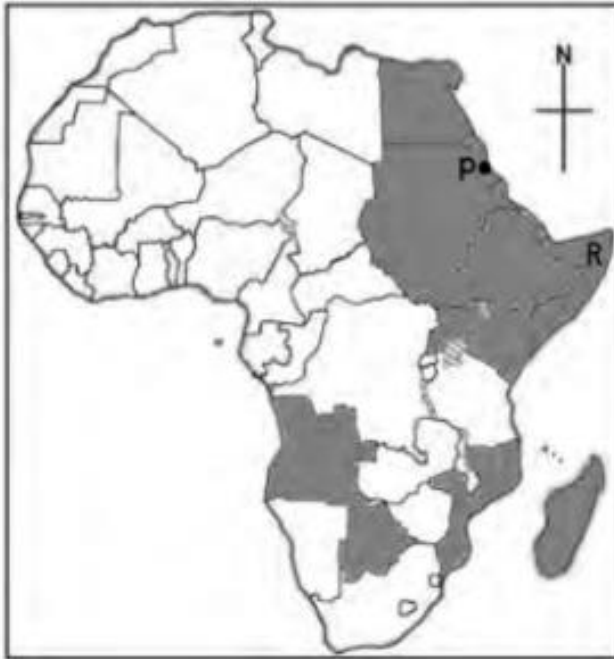
25. Study the sketch map of Africa below and then answer the question that follow.



- (a) What process led to the formation of the mountain marked X?  
**Folding.**
- (b) Describe the climate of the shaded area marked P.  
Desert vegetation
- (c) State any one factor which influences the vegetation in the area marked W.  
(i) Heavy rainfall  
(ii) High temperatures

- (iii) Fertile soil
- (d) On the map above, write M in a region that experiences Mediterranean type of climate.
26. How did the independence of Eritrea affect Ethiopia  
Ethiopia became landlocked/lost access to the sea
27. What time is it at town X which located  $45^{\circ}$  East is it is 6:00am at Greenwich?  
Difference in degrees =  $45 - 0 = 45$   
 $15^{\circ}$  is equivalent to 1hour  
 $45^{\circ}$  is equivalent to  $\frac{45 \times 1}{15} = 3$ hour  
To the East we add  
Hence the time =  $6 + 3 = 9.00$ am
28. Name the water passage that connects the Mediterranean Sea to the Red Sea.  
Suez Canal
29. Name the landlocked country located in the horn of Africa.  
Ethiopia
30. Name any lake that forms a natural boundary between Uganda and The Democratic Republic of Congo.  
(i) Lake Albert  
(ii) Lake Edward
31. Mention any one island country in the African continent that is found in the Indians Ocean.  
Madagascar
32. Name the regional grouping to which Ghana belongs.  
West Africa
33. Apart from Rwanda name one other landlocked country that borders Uganda.  
South Sudan
34. Mention any one island country found in West Africa.  
**Cape Verde**

35. Study the sketch map of Africa below and answer questions that follow.



- (a) Name the port marked with letter P on the map above.  
**Massawa**
- (b) In which one way does port P benefit its country?  
Handles imports and exports
- (c) Name the regional economic grouping to which the shaded countries belong.  
**Intergovernmental Authority on Development (IGAD).**

**Key Details about IGAD:**

**Member Countries:** There are **8 member states** in the region:

Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, and Uganda

- (i) **Purpose:** Its main goals are to promote **economic cooperation**, maintain **peace and security**, and work together on environmental issues like drought and food security.
- (ii) **History:** It was originally formed in 1986 as **IGADD** (Intergovernmental Authority on Drought and Development) to fight against desertification and famine before being "revitalized" into its current form in 1996.
- (iii) **Headquarters:** The central office (Secretariat) is located in **Djibouti City**, Djibouti
- (d) . Mention any one problem faced by country marked R on the map.
- (i) **Hunger and Drought:** It hasn't rained enough for a long time, so crops cannot grow and many farm animals have died. This makes it hard for people to find enough food.

- (ii) **Fighting and War:** Groups like Al-Shabaab cause trouble and fighting, which makes many areas unsafe for families to live in.
- (iii) **Lack of Schools and Hospitals:** Because of the fighting, many children cannot go to school, and there aren't enough doctors or medicine when people get sick.
- (iv) **No Fixed Home:** Many people have had to leave their homes because of the hunger or the fighting and are now living in tents in big camps.

36. Ghana lies on the Prime Meridian if the time in Ghana is 1.00pm, what time will it be in East Africa standard time?

East Africa is located at longitude 45° East

Difference in degrees = 45 – 0 = 45

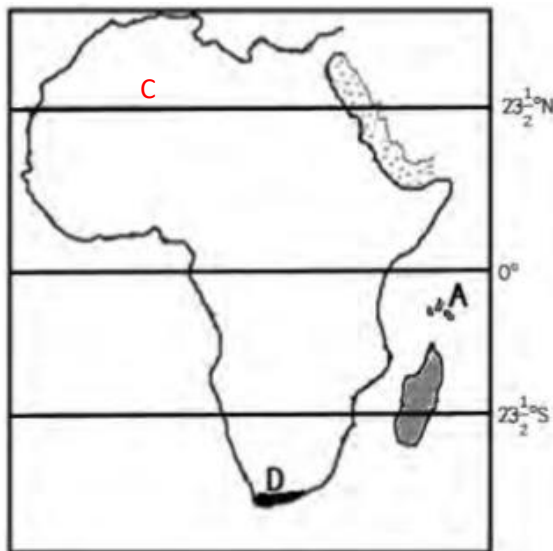
15° is equivalent to 1 hour

45° is equivalent to  $\frac{45 \times 1}{15} = 3$  hour

To the East we add

Hence the time = 1 + 3 = 4.00pm

37. Study carefully the sketch map of Africa below and use it to answer the questions that follow.



- (a) Name the islands marked A on the map above  
Zanzibar
- (b) Why are the islands marked A on the above remembered in the colonial history of Bunyoro and Buganda Kingdoms?  
The British colonial government captured and deported the following leaders to Zanzibar:
  - **Omukama Kabalega** of Bunyoro.

- **Kabaka Mwanga II** of Buganda.
- (c) Show letter C the Tropic of Cancer on the sketch map above
- (d) Mention any one way in which the vegetation zone marked D is important to the people of the area.  
Mediterranean vegetation
38. Name the country in the Horn of Africa which was not colonized.  
Ethiopia

**Thank you**

**Dr. Bbosa Science**

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