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**Primary 5 Social studies**

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## Term 1

### Theme: LIVING TOGETHER IN UGANDA

#### Topic 3/5: Climate of Uganda

##### Learning Outcomes:

The learner is able to understand and appreciate the value of climate to all living things and explain ways of maintaining climate for better health and harmonious living.

##### Weather

**Weather** is the **condition of the air around us at a short time**, like today or tomorrow. It tells us if it is sunny, rainy, windy, or cloudy.

##### Key Points

- Weather changes every day.
- It includes sunshine, rain, wind, clouds, and temperature.
- Weather can change quickly because wind is continuously moving. Moving air brings clouds, rain, or sunshine to different places from time to time.

##### Elements of Weather



## WEATHER ELEMENTS

ELEMENTS	DEFINITION	INSTRUMENTS
Temperature	Degree of hotness or coldness	- Thermometer
Wind	Movement of air from high to low pressure area	- Anemometer - Wind vane/rose
Precipitation (Rainfall)	Water that falls to from atmosphere to surface	- Rain gauge
Air pressure	Force exerted on earth's surface due to air	- Barometer
Relative humidity	Amount of water vapor in the air	- Sling psychrometer (wet and dry bulb)
Clouds	Evaporated water vapour in air	NIL

Weather is different from climate.

- **Weather** is short-term.
- **Climate** is the usual weather of a place over many years.

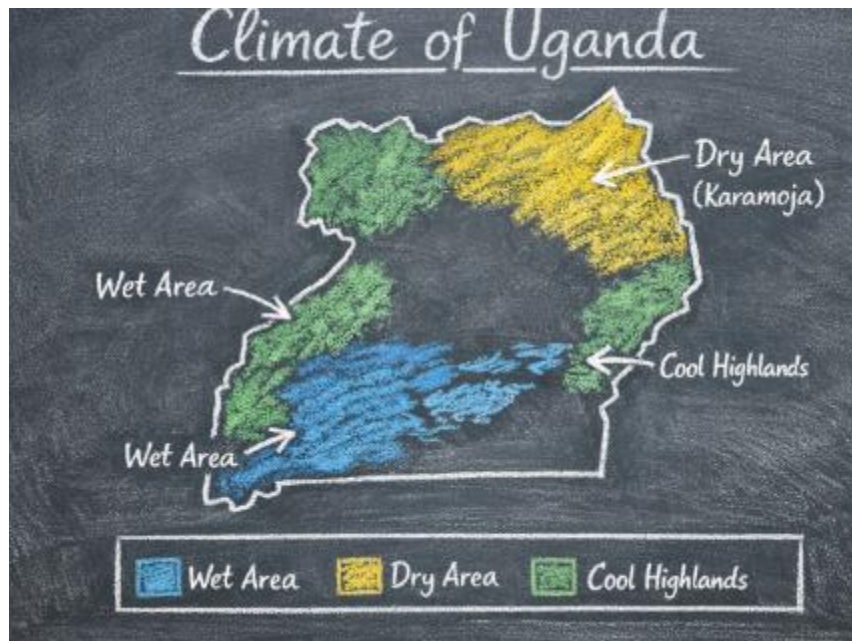
### Exercise 1

- What is weather?
- Name one element of weather.
- How is weather different from climate?
- Give one example of weather today.
- Why does weather change often?

### Climate of Uganda

**Climate** is the **average weather conditions of a place over a long period of time**. It tells us how hot, cold, wet, or dry a place usually is.

Uganda's climate is generally **tropical**, meaning it is warm throughout the year, but it varies in different regions because of altitude and rainfall.



### Points to note

- (i) **Equatorial location** – Uganda lies near the equator, so it is warm most of the year.
- (ii) **Rainfall** – Most areas receive two rainy seasons: March–May and September–November.
- (iii) **Temperature** – Average temperatures range between 20°C and 30°C, but cooler in highlands like Kabale.
- (iv) **Regional differences:**
  - Lake Victoria basin – wet and humid.
  - Karamoja – semi-arid, hot, and dry.
  - Highlands – cool and wet.

### Exercise 2

1. What is weather?
2. What is climate?
3. What type of climate does Uganda have?
4. Why is Uganda generally warm throughout the year?
5. Name the two rainy seasons in Uganda.
6. What is the average temperature range in Uganda?
7. Which part of Uganda is semi-arid?
8. Which region of Uganda is cooler because of high altitude?
9. How does Lake Victoria affect the climate of nearby areas?
10. Why is Karamoja drier than other parts of Uganda?
11. Mention one way climate supports farming in Uganda.
12. How does Uganda's climate attract tourists?

## Influence of physical features on climate of Uganda

Physical features of the Earth, such as mountains, water bodies, forests, and deserts, play a big role in shaping climate conditions of a place

1. **Mountains:**
  - High mountains are usually colder because temperatures drop as altitude increases.
  - They block winds and rain, creating wet conditions on one side (windward) and dry conditions on the other (leeward).
2. **Water Bodies (Lakes, Seas, Oceans):**
  - Areas near large water bodies have moderate climates because water heats and cools more slowly than land.
  - Oceans bring rainfall to coastal regions through moist winds.
3. **Forests:**
  - Forests make places cooler and wetter by providing shade and releasing moisture into the air.
  - They also help in reducing extreme temperatures.
4. **Deserts:**
  - Deserts are hot during the day and cold at night because they lack vegetation and water to regulate temperature.
  - They receive very little rainfall.
5. **Plains and Valleys:**
  - Plains often have moderate climates suitable for farming.
  - Valleys can trap cold air, making them cooler than surrounding areas.

### Exercise 3

1. Why are mountain tops usually colder than lowlands?
2. What happens to rainfall when moist winds hit a mountain?
3. Explain why coastal areas have moderate climates.
4. How do forests influence rainfall?
5. Why are deserts very hot during the day but cold at night?
6. What is the difference between the windward and leeward sides of a mountain?
7. How do oceans affect the climate of nearby land?
8. Why do valleys sometimes feel cooler than plains?
9. Give two ways forests help in controlling climate.
10. Which physical feature is most likely to cause dryness in an area, and why?

## Influence of climate on human activities

Climate affects the way people live, work, and use the environment. Here are some simple examples:

1. **Farming:**
  - Farmers grow crops depending on rainfall and temperature.
  - Warm, wet climates support crops like maize and rice, while dry areas may grow millet or sorghum.
2. **Clothing:**
  - People wear light clothes in hot climates and heavy clothes in cold climates.
3. **Housing:**
  - In hot areas, houses may have wide windows and flat roofs for ventilation.
  - In cold areas, houses are built with thick walls and slanted roofs to keep warmth and shed snow.
4. **Work and Daily Life:**
  - In very hot climates, people may work early in the morning or late in the evening to avoid heat.
  - In cold climates, activities may be limited during winter.
5. **Transport:**
  - Heavy rains can make roads muddy and difficult to use.
  - Snowy climates may require special vehicles like sleds or snow plows.
6. **Food:**
  - Climate influences the types of food available. For example, fish is common in coastal areas, while pastoral communities depend on milk and meat.

### Exercise 4

1. How does climate affect the type of crops farmers grow?
2. Why do people in hot climates wear light clothes?
3. How are houses in cold areas built differently from those in hot areas?
4. Give one example of how climate affects transport.
5. Why do people in hot climates sometimes work early in the morning?
6. How does rainfall influence farming activities?
7. What type of food is common in coastal areas, and why?
8. Explain how climate affects the design of roofs in cold regions.
9. Why do pastoral communities depend more on milk and meat?
10. How does climate influence the daily routine of people?

## Problems in Wet and Warm Areas

Wet and warm areas, such as tropical regions, face several challenges for living things. Here are some of the main problems and possible solutions:



### 1. Too Much Rainfall

*Problem:* Floods destroy crops, homes, and roads.

*Solution:* Build proper drainage systems and plant trees to reduce flooding.

### 2. High Humidity

*Problem:* Clothes and food spoil quickly; diseases like malaria spread easily.

*Solution:* Use proper storage methods and mosquito nets to prevent disease.

### 3. Pests and Insects

*Problem:* Wet and warm conditions favor mosquitoes, termites, and crop pests.

*Solution:* Spray insecticides, keep surroundings clean, and use protective measures.

#### 4. Diseases

*Problem:* Warm and wet climates encourage diseases such as malaria, cholera, and typhoid.

*Solution:* Drink clean water, use mosquito nets, and maintain hygiene.

#### 5. Rotting of Materials

*Problem:* Wooden structures and food rot quickly in damp conditions.

*Solution:* Use stronger building materials and store food properly.

### Exercise 5

1. What problem does too much rainfall cause in wet and warm areas?
2. How can planting trees help reduce flooding?
3. Why do clothes and food spoil quickly in humid areas?
4. Name one disease common in wet and warm regions.
5. How can mosquito nets help people in tropical climates?
6. What type of pests are common in wet and warm areas?
7. Why is clean water important in such climates?
8. How does humidity affect building materials?
9. Give one solution to prevent crops from being destroyed by pests.
10. Explain how drainage systems help communities in wet areas.

### Revision exercise

1. Write one benefit of windy weather to human activities
  - (i) Helps in winnowing
  - (ii) Helps to generate electricity
  - (iii) Helps to dry clothes
2. State any one way in which human has reduced the amount of rainfall in some parts of Uganda
  - Deforestation
  - Overgrazing
3. How does the distance of an area from large water bodies affect the climate of the surrounding land?

The closer the water body, the more moderate the climate
4. State any one benefit of giving information on the weather to people
  - (i) Farmers know when to plant or harvest.
  - (ii) Travelers and transport workers avoid dangerous conditions.
  - (iii) Communities stay safe from floods, storms, or droughts.

5. Why do some people build their houses with slanting roofs?
- (i) In **rainy areas**, slanting roofs prevent water from collecting on top of the house, which could cause leaks or damage.
  - (ii) In **cold regions**, slanting roofs help snow slide off quickly, reducing the weight on the building.
6. Name the type of rainfall received in the plain areas of Uganda.  
Convictional rainfall
7. Give the type of weather suitable for maize harvesting periods.  
Dry weather
8. Name two elements of climate that influence human settlement.
- **Temperature**
    - People prefer to settle in areas with moderate temperatures.
    - Very hot deserts or extremely cold regions discourage settlement.
  - **Rainfall**
    - Areas with reliable rainfall attract farming communities.
    - Too little rainfall leads to drought, while too much can cause floods.
  - **Humidity**
    - High humidity can make life uncomfortable and encourage diseases.
    - Moderate humidity is more favorable for settlement.
  - **Wind**
    - Gentle winds help in cooling and farming.
    - Strong winds or storms can destroy houses and discourage settlement.
  - **Sunshine**
    - Adequate sunshine supports farming and solar energy use.
    - Too much sunshine in deserts makes living difficult.

9. (a) Name two elements of climate that influence human settlement.
- (i) Rainfall
  - (ii) Temperature
  - (iii) Wind
  - (iv) Sunshine
- (b) State one effect of the revolution of the earth.
- (i) It causes **seasons** (summer, winter, autumn, spring).
  - (ii) It makes **day and night lengths change** during the year.
  - (iii) It brings **equinoxes and solstices** (equal days and nights, longest day, longest night).
  - (iv) It causes **climate changes** that affect farming.
  - (v) It makes **different stars appear** in the sky at different times of the year.
- (c) What term is used when the sun is overhead the equator?
- Equinox
10. Mention the weather condition suitable for winnowing grains.
- Windy
11. How does afforestation influence the climatic conditions of a place?
- (i) **Increases rainfall** – evaporation from trees are condensed to rain.
  - (ii) **Reduces temperature** – forests make places cooler.
12. Mention any one way in which drought affect cattle keeper in East Africa.
- Lead to scarcity of water  
Causes scarcity of pasture.
13. Mention any one condition of weather that affects water transport.
- (i) **Heavy rainfall** – causes floods in boats and makes navigation difficult.
  - (ii) **Strong winds** – create big waves that can overturn boats.
  - (iii) **Fog or mist** – reduces visibility and increases accidents.
  - (iv) **Storms** – make water transport dangerous.
  - (v) **Drought** – lowers water levels, making rivers and lakes hard to use.
14. Why does the leeward side of mountains receive very little rainfall?
- The leeward side receives little rain because the air has already lost its moisture on the windward side.
15. Which element of weather is measured using a barometer?
- Atmospheric pressure

16. (a) Name two elements of wind that are measured at a weather station.

Speed

Direction

Force/strength

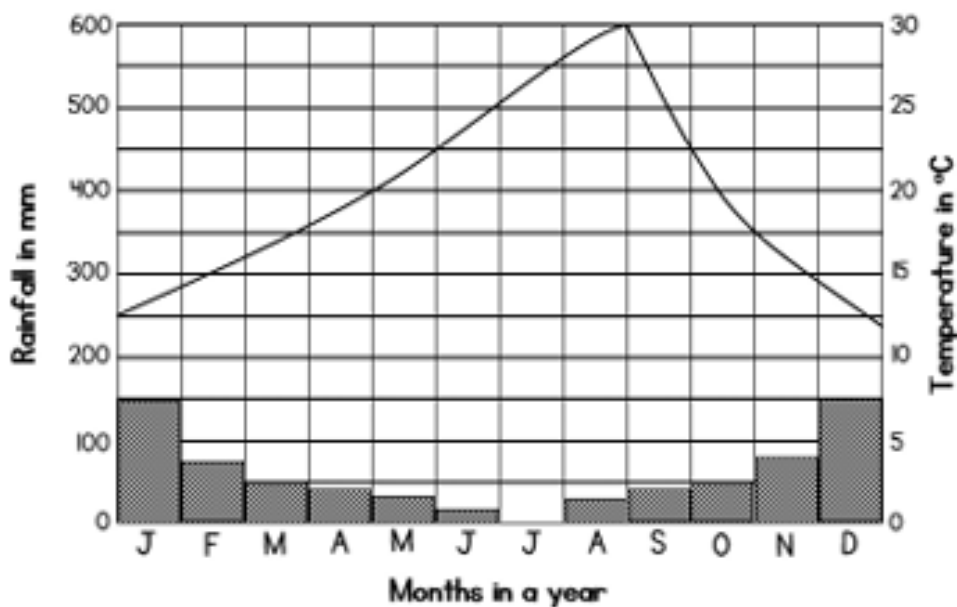
(b) Why are the North-East and South-East Monsoon winds called trade winds?

They are called trade winds because they blow steadily from east to west and were used by sailors for trade across the oceans.

(c) Give any one reason why the North-East trade winds that blow towards the horn of Africa do not bring rainfall.

They are dry winds, i.e. they lose moisture before reaching horn of Africa.

17. Study the graph below and answer the question that follow



(a) During which month of the year does this place experience no rain at all?

July

(b) Name the months in which the highest amount of rainfall will be received

January and December

(c) What type of climate is shown on the graph?

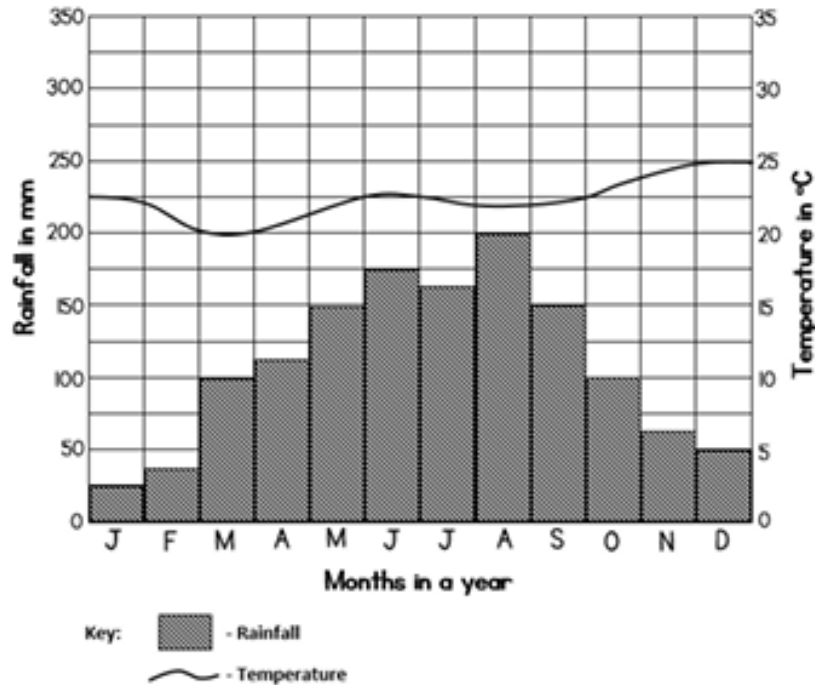
**Mediterranean climate.**

(d) Mention any one economic activity suitable in this area.

(i) for **growing fruits like grapes, oranges, lemons, and olives.**

- (ii) **tourism and livestock rearing** because of the warm, dry summers and mild, wet winters.
18. Mention any one way in which forests help to reduce the effect of bad weather.
- (i) Forests **break strong winds** and reduce storms.
  - (ii) They **bring rainfall** and prevent drought.
  - (iii) Trees **cool the air** and reduce extreme heat.
  - (iv) Forests **hold soil** to stop floods and erosion.
19. Apart from windy and rainy conditions; give any one other weather condition.
- Sunny  
Cloudy
20. Which major activity do farmers in Uganda carry out during a dry season?
- Harvesting and drying crops
21. (a) What do you call a place where weather is recorded?  
Weather station
- (b) Mention 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.
  - (ii) **Rainfall** – amount of rain received.
  - (iii) **Wind** – its direction, speed, and strength.
  - (iv) **Sunshine** – hours of sunlight.
  - (v) **Humidity** – amount of moisture in the air.
- (c) Mention any one way the recorded information about weather benefits the people in the community
- (i) Helps **farmers** know when to plant and harvest.
  - (ii) Guides **travel and transport** to avoid accidents.
  - (iii) Warns people about **storms, floods, or droughts**.
  - (iv) Assists in **planning daily activities**.

22. Below is a climatic graph of Town A. study it carefully answer questions that follow.



- (a) In which month did town A receive the highest amount of rainfall?  
August
- (b) Name the month in which the highest temperature was recorded to town A above.  
December
- (c) What was the temperature range of town A?  

$$\begin{aligned} \text{Temperature range} &= \text{Highest temperature} - \text{lowest temperature} \\ &= 25 - 2.5 \\ &= 22.5^{\circ}\text{C} \end{aligned}$$
- (d) Name the type of climate experienced in the town.  
Savannah climate

23. What name is given to moving air?

Wind

24. In which one way is water in a water body important in the formation of rainfall?

Evaporated water condense to form rainfall.

25. Give any one reason why a school should have a weather station.

- (i) To help **pupils learn about weather** practically.
- (ii) To give **information for farming projects** at school.
- (iii) To help in **planning school activities** according to weather.

**Thank You**

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