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#### P.4 SST CLASSWORK WEEK TWO

Monday 8th June, 2020.

## WEATHER IN OUR DISTRICT

#### Weather:

-This is the condition of the atmosphere of a given place at a given time **Or**: Weather is the atmospheric condition of a place at a given time.

# Weather forecasting

-This is telling of future weather changes.

## Meteorology

-This is the study of weather

Or: The studying of weather changes and conditions.

# **Meteorologists**

-These are people that study weather conditions.

A place where weather conditions are studied is called a **meteorological station**. Uganda's meteorological station is located at Entebbe in **Wakiso District**.

#### Elements of weather

These can also be called makers of weather.

- Rainfall
- Sunshine
- Wind
- Clouds
- Humidity
- Temperature
- Air pressure

#### Conditions of weather

- Rainy weather
- Sunny weather
- Windy weather
- Cloudy weather

- Cold / Hot weather
- Humid weather

# Activity

- 1. What is weather?
- 2. What do we call the study of weather changes?
- 3. Mention any two elements of weather.
- 4. In which district do we find the biggest meteorological centre in Uganda?
- 5. Give any two conditions of weather.

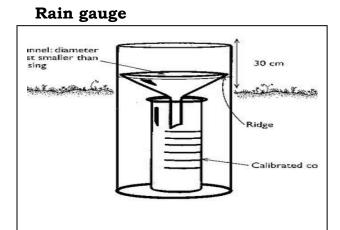
# Tuesday 9th June, 2020.

#### **RAINFALL**

- ➤ Rain refers to the droplets of water that fall from the sky. When rain is collected, measured and studied, its total amount is what is called rainfall.
- The instrument used to measure the amount of rain (fall) in an area is known as a rain gauge. Below is a diagram to show the rain gauge.

## Drawings:

# Measuring cylinder



Rain is measured in **millimetres**. This is because we measure how deep it has gone into the soil (ground)

## THE RAIN CYCLE

This is the continuous process through which rain is formed.

# Processes involved in a rain cycle

- Evaporation
- Condensation
- Transpiration

#### **Activity**

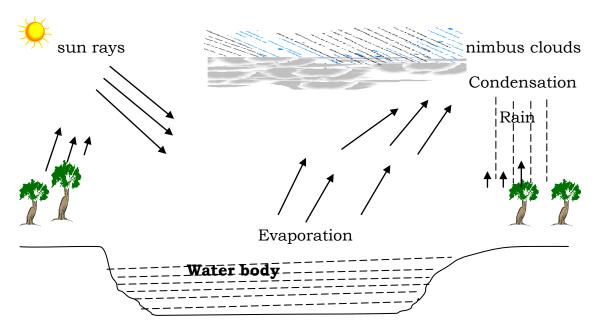
- 1. In which units is rainfall measured?
- 2. How is a rain gauge useful at a weather station?
- 3. What is a rain cycle?
- 4. Name two processes involved in a rain cycle.

# Types of rainfall

### Convectional rainfall

- > This is the type of rainfall received in areas with lakes, water bodies and forests. Convectional rainfall usually falls in afternoons.
- ➤ It is received in districts like Kampala, Wakiso, Kalangala and others.

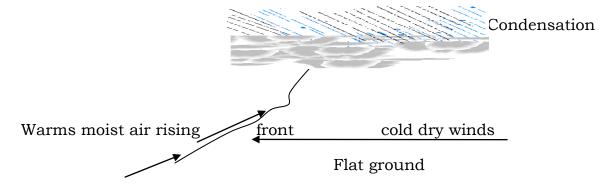
# Diagram to show convectional rainfall



# Cyclonic rainfall

This type of rainfall is experienced when warm moist air masses meet cold dry masses rise, condense and form rain. Warm air rises because it is lighter than cold air. It's mainly received in flat areas like Karamoja and Teso.

Cyclonic rainfall is also called frontal rainfall

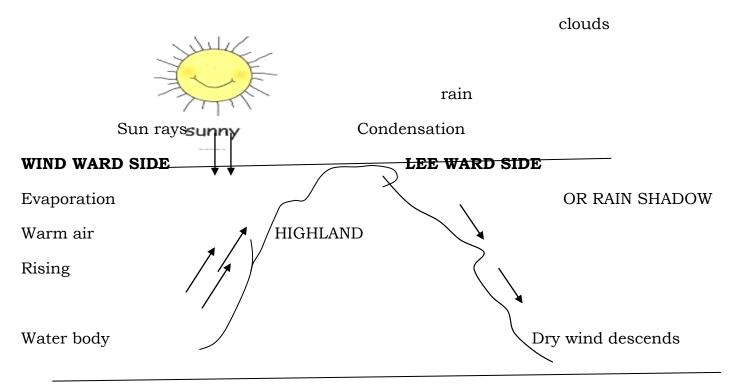


- A place where the two wind masses meet is called a **front**.
- > Hence it being called the frontal rainfall.
- ➤ It is received in districts like Abim, Kotido, Kaabong and Bukedea

# Relief rainfall (Orographic rainfall)

- This type of rainfall is received in highland areas.
- > These include mountains and hills.
- A mountain has two sides i.e. The leew
- ➤ When evaporation takes place, warm m p of the highland, condenses from above it and forms rair
- > The leeward side of a mountain receives very little or no rainfall because it receives dry winds. This is because the winds have lost all the moisture by the time they descend towards this side.

### Diagram to show orographic rainfall.



# Activity

- 1. Name two types of rainfall.
- 2. Which type of rainfall is received in Kalangala district?
- 3. Identify one district which receives frontal rainfall.
- 4. Why does Mbale district receive relief rainfall?

# Wednesday 10th June, 2020. SUNSHINE

> Sunshine is heat and light from the sun.

- ➤ The sun is a natural source of light and heat.
- > Energy from the sun is called solar energy.
- > The sun's intensity is measured using an instrument known as <u>Campbell's sunshine</u> recorder.

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## Uses of sunshine

- It helps in the formation of rainfall
- It helps to dry farmers' crop produce
- It is a source of solar electricity
- It is a source of vitamin D.
- It helps plants to make their food.

### Dangers of sunshine

- Prolonged sunshine causes drought.
- Too much sunshine dries man's crops
- Too much sunshine dries up water bodies
- Too much sunshine hardens the soil for ploughing/ cultivation.

#### **Activity**

- 1. Name the main natural source of light and heat.
- 2. What form of energy is got from heat from the sun
- 3. Name the weather instrument used to measure the amount of sunshine in an area.
- 4. Write any two uses of the sunshine to people.
- 5. How is sunshine dangerous to crop farmers?

### Thursday 11th June, 2020.

#### WIND

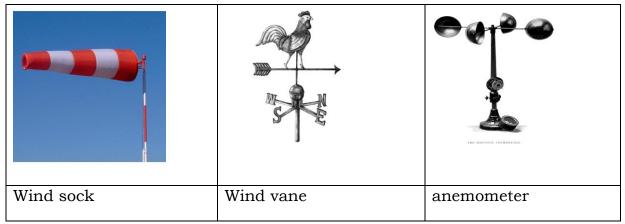
Wind is moving air or Wind is air in motion.

#### Characteristics of wind

- It has no smell (scent)
- It has strength.

- It has direction.
- It has speed.

#### Instruments used to measure wind



- Wind sock shows the strength of wind
- > The wind vane shows the direction of wind
- Anemometer is used to measure the speed of wind.
- ➤ Wind speed is measured in Kilometers per hour (Km/hr)

#### Uses of wind

- Wind helps in winnowing
- Wind helps in flower pollination
- It dries clothes
- It helps in seed dispersal
- It drives away bad smell
- Helps sailors to move canoes/ boats.

# Dangers of wind

- It spreads air borne diseases.
- Strong wind destroys property (houses, crops, animals)
- Strong wind leads to soil erosion.

# Activity

- 1. What is wind?
- 2. State any two elements of wind measured at a weather station.
- 3. Name the weather instrument used to measure the speed of wind.
- 4. How is a wind sock useful at the airport?
- **5.** Give two dangers of strong wind to man.

## Friday 12th June, 2020.

#### **CLOUDS**

Clouds are a collection of dust, moisture and smoke that float in the sky.

# Types of clouds

## Nimbus clouds:

These are very dark and low. These are the ones that provide man with rainfall.

#### Stratus clouds

These bring about drizzling. This is after darkening and lowering.

## Cumulus clouds:

They are white in colour. They appear like cotton wool in the sky. They show fine weather. They are in the sky in the afternoon.

#### Cirrus clouds:

These are the highest clouds in the sky.

#### Cumulus - Nimbus:

They are very large. They move in the sky bringing about storms

#### Uses of clouds

- They help to form rainfall.
- They reduce temperature by blocking strong sun rays.

## **Dangers of clouds**

- They cause lighting which kills people.
- Dark clouds cause plane crashes.

# **Activity**

- 1. Which type of clouds are friendly to farmers?
- 2. Name the highest clouds in the sky.
- 3. Which type of clouds cause thunder and lighting?
- 4. Give two uses of clouds to people.
- 5. How are clouds dangerous to pilots?