

TENDER HEART HIGH SCHOOL

SECTOR 33 B, CHANDIGARH

CLASS: VII

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SUBJECT: GEOGRAPHY

DATE: 13/5/24

Chapter 3 (continue)

Weather and Climate

(4) Weather Instruments:

(A) Thermometer

- Temperature is measured with the help of Thermometre.
- It is a narrow glass tube filled with mercury and Alcohol.
- In Fahrenheit, the Freezing point of water is 32° and in Celsius it is 0° .
- In Celsius, the boiling point of water is 100° and in Fahrenheit it is 212° .

(B) Barometer

- Atmospheric Pressure is measured by Barometre.
- It was invented by Galileo and Torricelli in 1643.
- Unit of pressure is millibars (mb)
- Line joining places of Equal Atmospheric Pressure are isobars.
- Barometre are of two types:-
 - * Simple Barometre.
 - * Aneroid Barometre.
- An Aneroid Barometre is easily portable and very easy to handle.
- Atmospheric Pressure is measured by Barograph.

(C) Wet and Dry Bulb Thermometer

- It is a measure of amount of Water Vapour present in the Air.
- It is of two types:
 - * Relative Humidity
 - * Absolute Humidity
- Humidity is measured with the help of Wet and Dry Bulb Thermometer or Hygrometer.
- The difference between readings of dry and Wet Bulb Thermometers give an indication of Humidity of Air.
- large difference shows low relative Humidity and small difference shows high relative humidity.
- when dry bulb and wet bulb readings are same, the air reaches the saturation point and relative humidity becomes 100%.

(D) Rain Gauge:

- It is used to measure Rainfall.
- It consists of a cylinder which has a vessel at the bottom to collect water on a funnel on the top.
- The circumference of the funnel is equal to that of the cylinder.
- This ensures that all the water going through funnel is collected in the vessel.
- It is kept in open, level space and placed 30 cm above the ground.
- It also measures amount of Snowfall and hail.

(E) Sunshine:

- Sunshine depends upon seasons and revolution around the Sun.
- Sunshine is recorded by a Sundial.
- places having equal Sunshine is referred as isohels.

(5) WIND SPEED AND DIRECTION

→ Wind speed and wind direction are determined by:

- * Pressure Belt
- * Rotation of Earth
- * Friction

Wind Direction

→ Wind Direction is determined by a Wind Vane.

→ It is fixed on a pole. It has two parts - the front part has Arrow and back part has tail.

→ The part of the compass is stationary and shows wind direction.

Wind Speed

→ The wind speed is measured with the help of Anemometre.

→ It is cup shaped instrument consisting of 3 or 4 cups mounted on pole.

→ A Dial at the base is fixed to record number of spins. This helps us to know wind speed.

→ Wind Speed is expressed in Beaufort Scale.

ISOTHERMS

→ Isotherms are the lines joining places of Equal Temperature.

ISOHYETS

→ Isohyets are the line joining places of equal precipitation.

I hope you all have understood today's topic very well. So you are required to read today's topic properly.

With this I will end the interactive session.