



WEATHER FOR PRIMARY LEVEL



WEATHER FOR PRIMARY STUDENTS

Weather

Weather is the daily state of the atmosphere, or air, in any given place. The weather is important to people. It affects their comfort, their food supply, and even their safety.

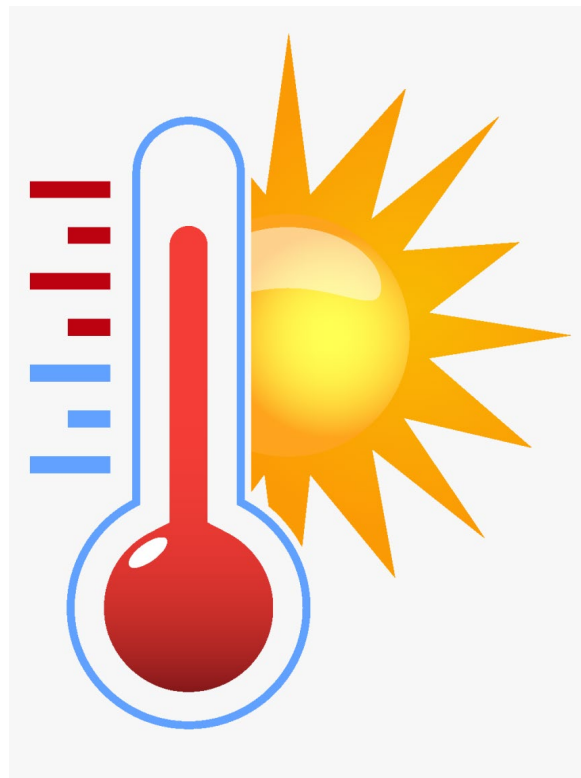
Types of Weather

There are five types of weather: sunny, rainy, windy, cloudy, and snowy.



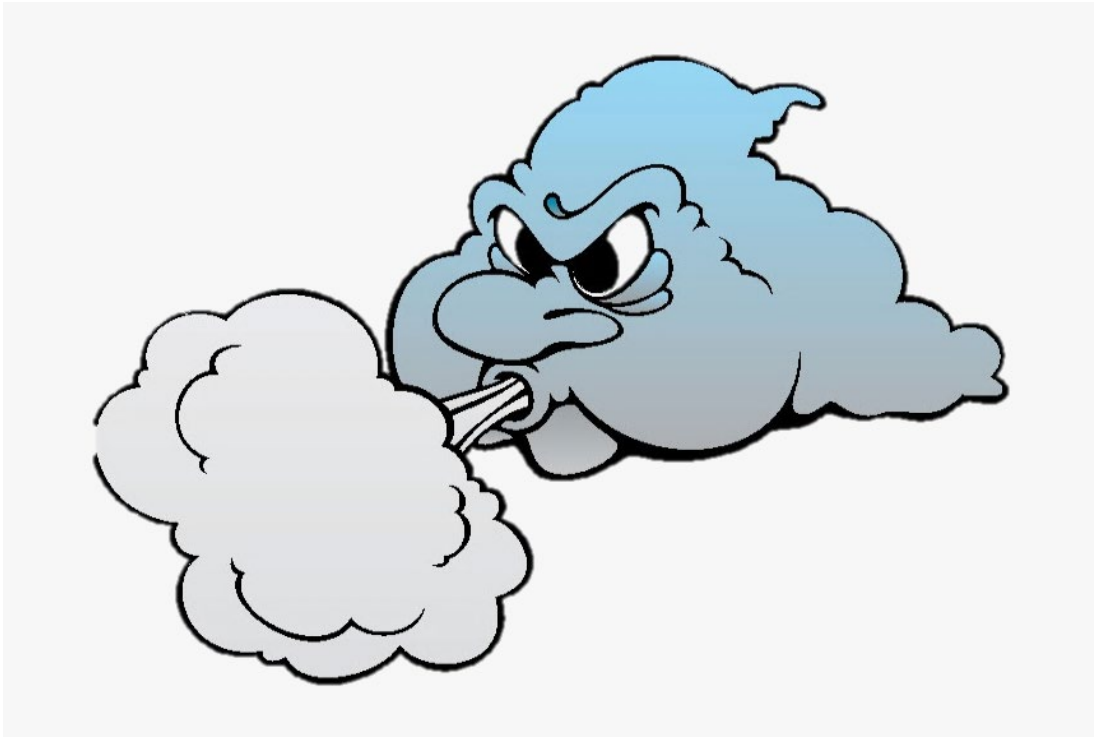
Elements of Weather

Many different elements combine to create weather. **Temperature** is one of the basic elements of weather. Temperature is how warm or cold it is outside.



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Wind, or the movement of air across Earth's surface, is a second element of weather. Winds may be gentle or powerful.







A third element of weather is **humidity**, or the amount of moisture in the air. Warm air can hold more moisture than cold air can.



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Precipitation is a fourth element of weather. Precipitation may come in many forms, including rain, hail, sleet, and snow. The form precipitation takes depends on other weather conditions, such as temperature.

<p style="text-align: center;">Rain</p>  <ul style="list-style-type: none"> • Falling drops of liquid water. • Most common type of precipitation. 	<p style="text-align: center;">Snow</p>  <ul style="list-style-type: none"> • Falls when the temperature in the cloud is below freezing.
<p style="text-align: center;">Sleet</p>  <ul style="list-style-type: none"> • Rain that freeze as it falls. 	<p style="text-align: center;">Hail</p>  <ul style="list-style-type: none"> • Forms when drop of rain freeze and strong wind carry them higher into a cloud.

A fifth element of weather is **atmospheric pressure**. This is the weight of air above a given area. Changes in pressure help people to predict approaching storms. A **storm** is a disturbance in the atmosphere—for example, a **thunderstorm** or a **hurricane**.

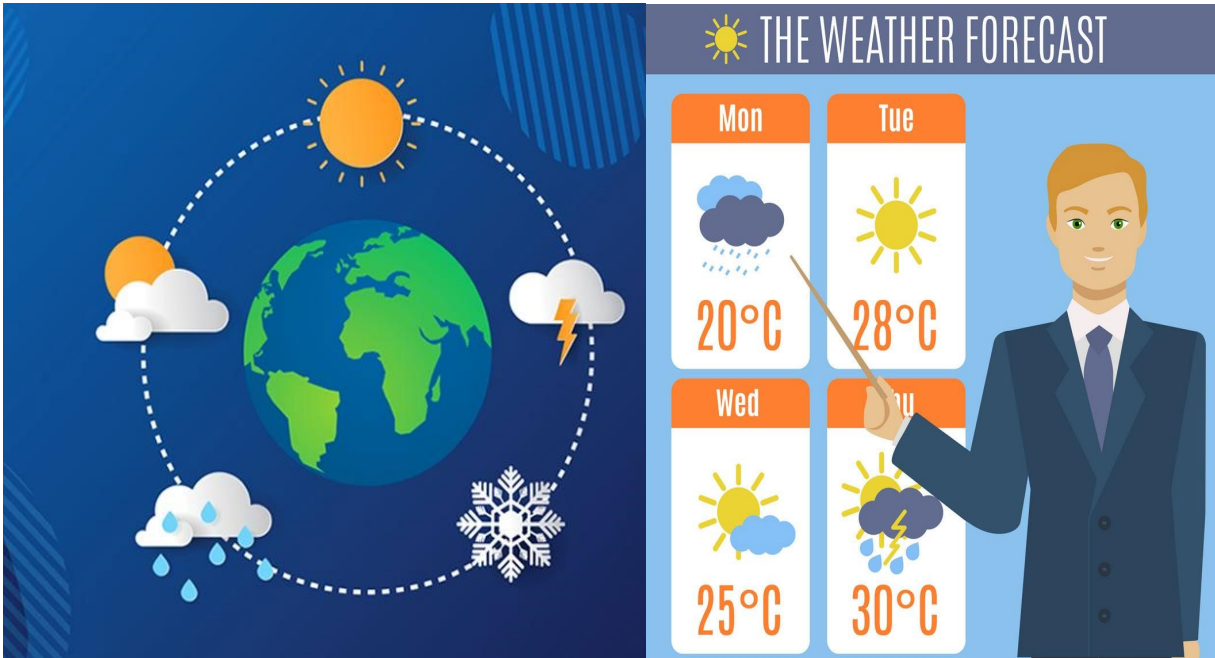


Meteorology

Meteorology is the study of the atmosphere. Meteorologists use science and math to understand and predict weather and climate. They also study how the atmospheric and weather conditions affect the earth and its human inhabitants.

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Meteorologists may work on daily weather forecasting, conduct atmospheric research, teach, broadcast the weather, or advise clients for private meteorological companies.



Weather Instruments

Meteorologists use many instruments to gather information about weather. The **thermometer** and the **barometer** are some of the oldest and most common weather instruments. The **thermometer** measures temperature, and the **barometer** measures atmospheric pressure. Atmospheric pressure is also called barometric pressure. This is the weight of the air as felt at any given spot on Earth. Another common instrument is the **wind vane**, which shows the direction in which winds are blowing. A **rain gauge** is a device for collecting and measuring the amount of rain which falls. An **anemometer** is a device used for measuring wind speed and direction

Today satellites in space collect weather information worldwide. Computers help meteorologists to track weather patterns and to make weather forecasts, or predictions.

Units of Measurement

THERMOMETER



The units of measurement for temperature are **Celsius** and **Fahrenheit**.

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BAROMETER



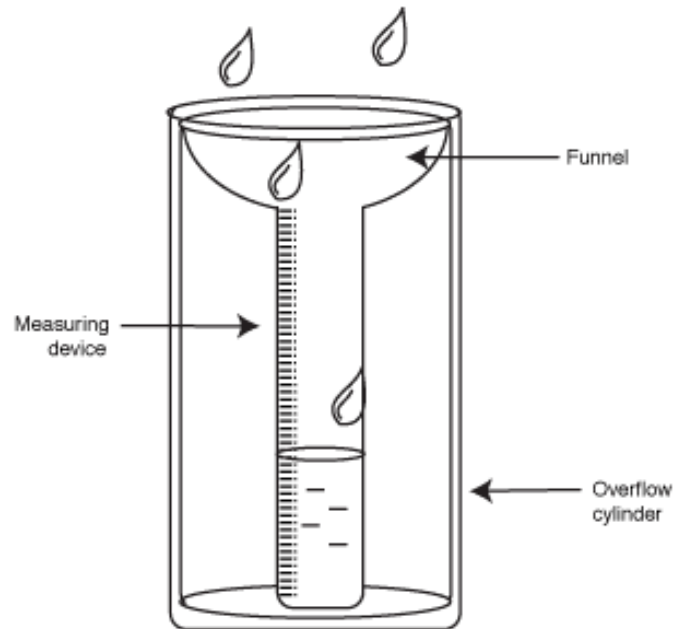
A barometer measures atmospheric pressure in units of measurement called **atmospheres or bars**.

WIND VANE



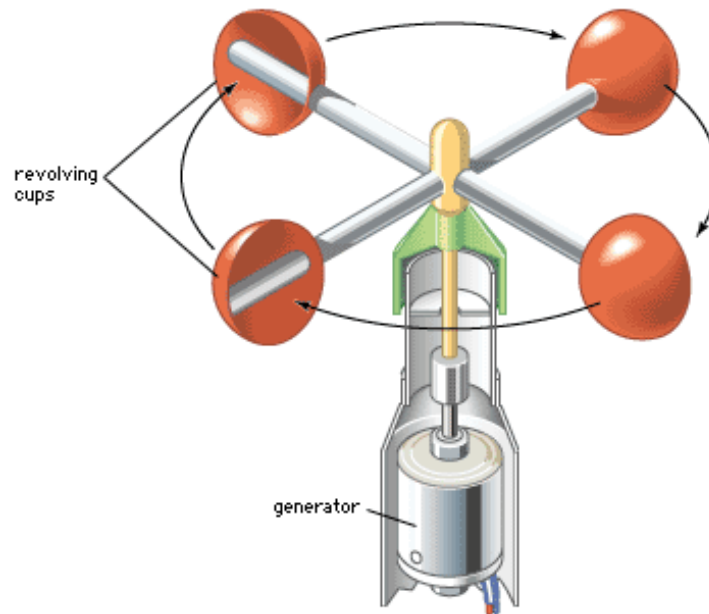
A wind vane does not use units of measurement. It does not really measure anything. It indicates the **direction of the wind**.

RAIN GAUGE



Rain Gauges generally measure precipitation in **millimeters**.

ANEMOMETER



The anemometer measures in **feet per minute**, or FPM.

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Complete this Measuring Weather Activity Sheet below.

Meteorologist : _____

Tools Meteorologists Use:

Write about each tool.



What is an Anemometer?



What is a weather vane?



What is a rain gauge?



What is a thermometer?



Coming Next Week: CLIMATE