

Weather



What's your favourite type of weather? Why?

Read and think



1. Read and find:

- the four basic elements of weather.
- which instrument measures each element.
- the unit of measurement for each element.

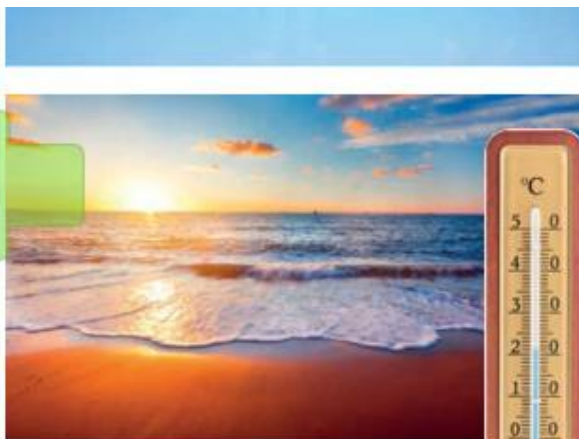


Weather is the condition of our atmosphere. It has **four** basic elements. **Temperature** is the amount of **heat** in the air. **Wind** is the **movement** of the air. **Humidity** is the amount of **water vapour** in the air. **Precipitation** is water in liquid or solid form that falls from the air to the ground.

The air **temperature** can be hot, warm, cool or cold. The Sun's position influences temperature. Temperatures are higher at midday when the Sun is high in the sky. Temperatures are lower in the morning at sunrise and in the evening at sunset.



Wind has two components: **wind direction** and **wind speed**. Wind direction is caused by air moving from an area of high **pressure** to an area of low pressure. Pressure is the force exerted by the atmosphere on the Earth's surface.



A **thermometer** measures temperature in degrees Celsius ($^{\circ}\text{C}$). For example, 36°C is very hot and 5°C is very cold.

A **weather vane** shows wind direction using the cardinal points. For example, an east wind blows from east to west.

An **anemometer** measures wind speed in kilometres per hour (km/h). For example, 40 km/h is a strong wind speed.



A weather vane



An anemometer



Humidity is the amount of water vapour in the air. Air with a lot of water vapour is **humid**. Air with very little water vapour is **dry**. When humidity is high you can feel uncomfortable. In hot weather you feel hotter and in cold weather you feel colder. When humidity is low you usually feel good, but your skin and lips can feel dry.



A **hygrometer** measures relative humidity as a percentage. At 85% air feels very humid. At 20% air feels dry.



Precipitation is water in liquid or solid form that falls from the air to the ground.



Precipitation comes from water in clouds and most precipitation starts as ice. This is because, even in hot weather, the air high in the sky is very cold. But precipitation can fall on the ground in **four** forms: rain, snow, **sleet** and **hail**.

We use a **rain gauge** to measure precipitation in millimetres (mm). For example, 2 mm per hour is light rain and 20 mm per hour is heavy rain.



Activities



2.   Say the *Weather instrument* chant.

3. In your notebook, match to make sentences. 

- a) Wind is...
- b) Temperature is...
- c) Humidity is...
- d) Precipitation is...
- e) Weather is...

- 1. the amount of water vapour in the atmosphere.
- 2. a combination of four atmospheric conditions.
- 3. the movement of air in the atmosphere.
- 4. the amount of heat in the atmosphere.
- 5. liquid or solid water falling to the ground.