

# Fun Facts for Older Primary Students



## Temperature

### What is temperature?

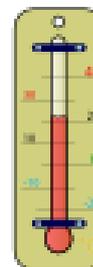
Temperature is the degree of hotness or coldness of something.

### How is temperature measured?

A **thermometer** is used to measure temperature.

There are many different types of thermometers.

A **mercury thermometer** is most commonly used in weather readings.



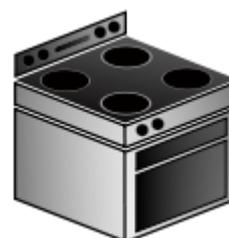
### How does a thermometer work?

- A glass column contains mercury.
- Mercury expands when it is heated and contracts as it cools.
- As the temperature rises, so too does the mercury.
- We read the temperature from the scale marked on the outside of the column.

### When do we use a thermometer?

**EXAMPLE 1:** In the fridge. It is important to store food at a low temperature in order to keep it fresh.

**EXAMPLE 2:** In the oven. In order to cook food, the oven must be set at a high temperature.



### Ireland's temperature

The average annual temperature for Ireland is 9°C.

Ireland does not suffer from the extremes of temperature experienced by many other countries at similar latitude.

### What is room temperature?

We often hear the phrase 'room temperature'. What does this mean?

Room temperature is an indoor temperature from 15 to 25°C (59 to 77°F).

This temperature is suitable for human occupancy. It is neither too hot nor too cold.

## Celsius and Fahrenheit

Temperature can be measured in **Celsius** and **Fahrenheit**.

The **Celsius** scale is most commonly used in Ireland.

It is also known as the 'centigrade' scale. It is divided into 100 parts.

On the Celsius scale, the freezing point of water is 0 °C, and the boiling point is 100 °C.

The **Fahrenheit** scale is commonly used in America.

On the Fahrenheit scale, the freezing point of water is 32°F and the boiling point is 212°F.

## How do I convert readings from Celsius to Fahrenheit?

To convert between the two, we use the following equations:

$$T_C = (T_F - 32) \div 1.8$$

$$T_F = (T_C \times 9/5) + 32$$

$T_C$  means temperature in Celsius.

$T_F$  means temperature in Fahrenheit.

### Example:

**Question:** Convert 24°C (a pleasant, warm day) to Fahrenheit.

$$T_C = 24$$

So,

$$T_F = (24 \times 9/5) + 32$$

$$T_F = (216/5) + 32$$

$$T_F = 43.2 + 32$$

$$T_F = 75.2^\circ\text{F}$$

**Answer:** 24°C = 75.2°F