



Weather and Climate Fieldwork Unit



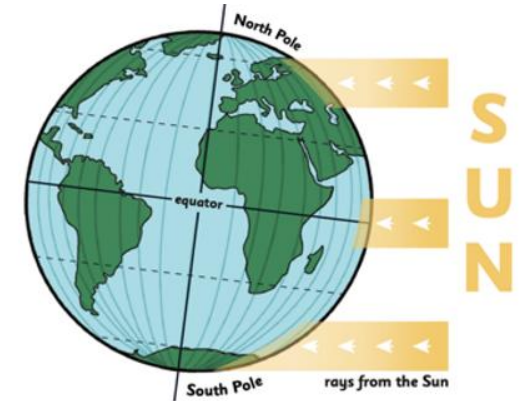
What should children already know?

- Hucknall is in England
- The United Kingdom is made up of four countries: **England, Scotland, Northern Ireland and Wales.**
- The capital of England is London.
- The other capitals of the UK are: **Edinburgh** (Scotland), **Belfast** (Northern Ireland) and **Cardiff** (Wales).
- There are five oceans: **Pacific, Atlantic, Indian, Southern, Arctic.**
- A continent is a large area of land that is separated from others by water or other natural objects.
- The seven continents: **Antarctica, Asia, Australasia, Europe, Africa, North America, South America.**

Why are there different climate zones?

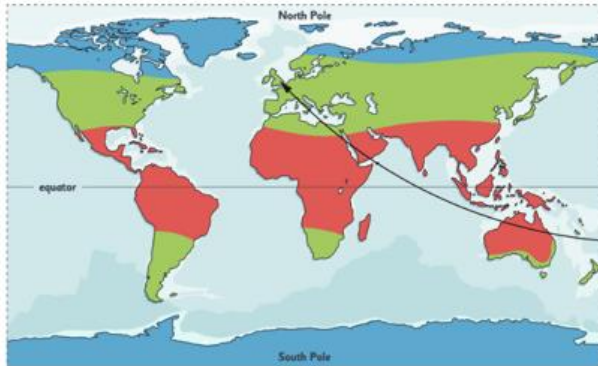
The Earth is round and **tilted at an angle**, so the Sun's rays **don't fall evenly on the land and oceans**. Places on the equator are the **hottest places** on Earth. They are the **closest to the Sun** and get the most **direct sunshine**.

The Sun shines less directly on the **North and South Poles** because they are **further from the Sun**, so they are the **coldest places** on Earth.



This map shows the **different climate zones** around the world.

Climate key: ● hot ● temperate ● cold



Places in the **northern and southern hemispheres** can have a **similar climate** if they are the **same distance** from the **equator**

The United Kingdom

The **UK** has a **temperate climate**.

How does climate affect Weather?



Hot

Hot weather can mean there is **little or no rain all year**. These hot, dry places are called **deserts**.

Hot weather can also be **damp**. Another word for this type of weather is **humid**.

It can **rain a lot** in some hot places. These places are called **tropical**, and **rainforests** are often in these areas.

Places near the **equator** tend to have the **same or similar weather all year round**.



Temperate

These areas lie **between the equator and the poles**.

Places in temperate areas do not tend to have 'extreme' climates.

The temperatures in these areas are described as **mild**. They are not extremely hot or extremely cold.

They have a **moderate amount of rainfall** all year round.

Places in temperate areas have **four seasons**.



Cold

These areas are **close to the poles**.

The **closer** a place is to a pole, the **colder** it is.

The poles have **extremely low temperatures** – less than freezing for most of the year, so there is a lot of **ice and snow**.

Places near the **poles** tend to have the **same or similar weather all year round**.

Key Vocabulary

Weather- a description of what the conditions are like in a particular place over a short time

Climate- the usual weather over a long period

Climate zones- large areas that have similar climates

Temperature-the measure of how hot or cold an area is, measured in degrees Celsius (°C)

Fieldwork is when you go outside and discover things about a place.

Weather Forecast – an informed prediction about what the weather will be today, tomorrow, this week or next

Objectives

- Children will learn the differences between weather and climate.
- Children will identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the equator and the North and South Poles.
- Children will use simple fieldwork and observational skills to study the weather conditions on their school grounds.
- Children will collect, record, present and analyse weather data.
- Children will evaluate their fieldwork.