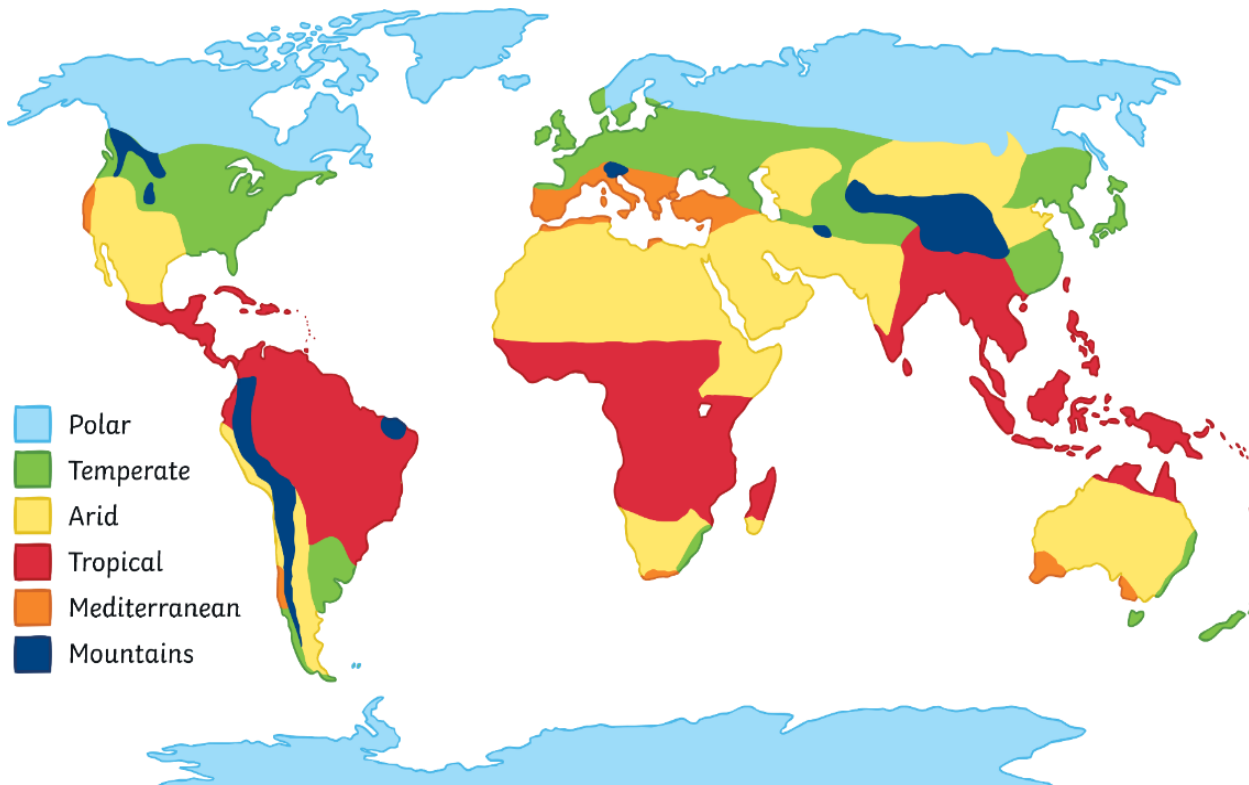


YEAR 4: GEOGRAPHY AUTUMN 1: GLOBAL CLIMATE COMPARISON



Equator:

The Earth is divided into sections by imaginary lines. The Equator is an imaginary horizontal line around centre of the Earth. Anything south of the Equator is in the Southern Hemisphere and anything north, in the Northern Hemisphere. The Sun's energy is strongest along the Equator.

Climate Zones:

When things aren't in balance, nature likes to even things out. The extra energy at the Equator needs to be spread across the planet and it's this that creates different climate zones. Warm air rises at the Equator and moves towards the Polar Regions.

Climate:

A country's climate is influenced by:

- how near or far it is from the Equator
- how near or far it is from the sea
- how high or low the ground is
- where it is on a continent

Climate Zone	Description	Example
Polar	Very cold and dry all year round.	Antarctica
Temperate	Cold winters and mild summers.	United Kingdom
Arid	Dry and hot all year round.	Sahara Desert
Tropical	Hot and wet all year round.	Nepal
Mediterranean	Dry, hot summers and mild winters.	Spain
Mountainous	Very cold, sometimes wet, all year.	Himalayas

Key Vocabulary

Climate	A description of the pattern in weather conditions in a certain place over a specific period of time, usually 30 years.
Weather	A description of the conditions in a particular place at a particular time.
Carbon dioxide	A greenhouse gas produced by burning fossil fuels.
Climate zone	A collection of countries in similar places on the globe that experience similar weather conditions.
Habitat	The home of an animal or plant.
Equator	An imaginary horizontal line that divides the Earth into two hemispheres.
Global warming	The heating of the Earth's surface, atmosphere and oceans as a result of human activity.

Climate Change:

The climate across the world has naturally changed over millions of years. Today, because humans have been burning fossil fuels, more carbon dioxide has entered the Earth's atmosphere. Carbon dioxide acts like a greenhouse; letting the Sun's rays through to heat up the atmosphere but stopping the heat from escaping. This makes the planet warm faster than it naturally would, causing the climate to change.

Effect on Habitats:

Animals and plants are adapted to surviving in their habitats. When the conditions in their habitats change (e.g. the temperature gets hotter), they become less suited to their environment.

Preventing Climate Change:

- Use less energy by switching off appliances when they're not being used
- Reduce, reuse and recycle!
- Walk or cycle rather than using a car

Physical Effects of Climate Change:



Warmer temperatures could result in melting glaciers, rising sea levels and droughts. These changes will effect living conditions, animal populations and food availability.