

GEOGRAPHY · Y4-Y6

Climate Zones

Knowledge Organiser — KS2 Geography

Key vocabulary

1

Climate

The usual weather of a place over a long time (years).

2

Weather

The conditions outside on any given day. Climate = average; weather = today.

3

Equator

Imaginary line around the middle of the Earth. The hottest part of the planet is near here.

4

Tropics

Areas near the equator. Hot all year round.

5

Temperate

Climate with mild temperatures and four distinct seasons. Most of UK is temperate.

6

Arid

Very dry. Deserts have arid climates.

7

Polar

Climate near the North or South Pole. Very cold, often frozen.

8

Biome

Large area with similar climate, plants, and animals (like 'rainforest' or 'desert').



9

Climate change

Long-term change in Earth's climate, mostly caused by humans burning fuels.

10

Hemisphere

Half of the Earth — Northern (above equator) or Southern (below).

Main climate zones

The world has different climates depending on

- TROPICAL (near the equator): hot all year, lots of rain. Rainforests and savannahs. Examples: Amazon, Congo, Indonesia.
- ARID (deserts): very little rain, often hot days/cold nights. Examples: Sahara, Arabian Desert, Australian Outback.
- TEMPERATE (middle latitudes): mild, four seasons, regular rain. Examples: UK, much of Europe, eastern USA, New Zealand.
- CONTINENTAL (large land masses): hot summers, very cold winters. Examples: central USA, central Russia.
- POLAR (near the poles): freezing all year, very dry, snow and ice. Examples: Antarctica, Arctic, Greenland.

Why climate varies

Three main reasons

- 1. DISTANCE FROM THE EQUATOR — the further away, the colder. Sun's rays hit the equator most directly.
- 2. HEIGHT ABOVE SEA LEVEL — higher up = colder. Mountains are cold even near the equator.
- 3. DISTANCE FROM THE SEA — places near the sea have milder weather. Inland areas have more extreme temperatures.
- Other factors: ocean currents (warm or cold), wind direction, mountain ranges blocking weather.
- The Sahara is hot because it's near the equator AND inland. Antarctica is cold because it's at the South Pole.



Major biomes

Where climate creates similar

- TROPICAL RAINFOREST: hot, wet all year. Half the world's species live here. Amazon, Congo, Borneo.
- DESERT: very dry. Some hot (Sahara), some cold (Gobi). Animals adapted to little water.
- GRASSLAND/SAVANNAH: warm with wet and dry seasons. Lions, elephants, zebras (African savannah).
- TEMPERATE FOREST: four seasons, leaves drop in autumn. Most of UK and Europe.
- TAIGA (BOREAL FOREST): cold winters, evergreen pine forests. Canada, Russia, Scandinavia.
- TUNDRA: permanently frozen ground, no trees. Above the Arctic Circle.
- ICE/POLAR: covered in ice all year. Antarctica, Greenland, Arctic Ocean.
- Climate change is shifting these biomes — some shrinking, some changing rapidly.

