

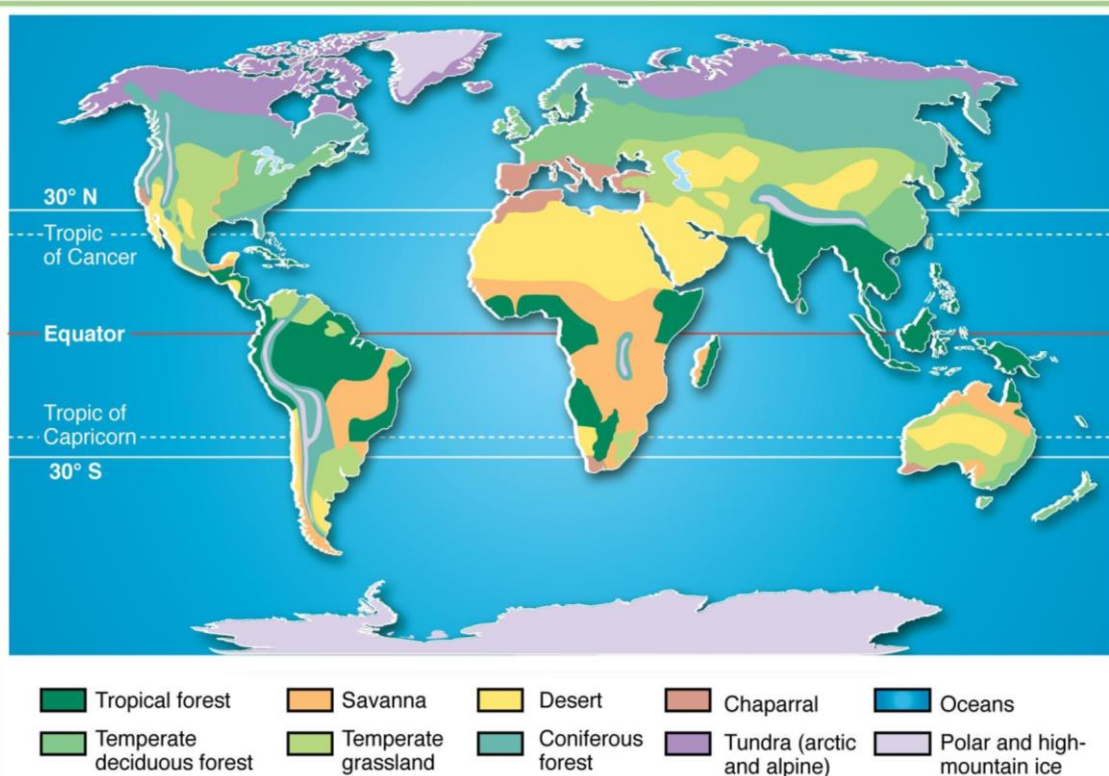
'What on Earth is a Biome?'

What is a biome? Where are they?

A **biome** is a large area of land or water with a similar collection of plants and animals. These places share similar **climate**.

The main biomes are:

| | | | |
|--------------------------|--|---------|------------------|
| polar (ice) | tundra | taiga | temperate forest |
| tropical rainforest | grassland | savanna | desert |
| marine (seas and oceans) | freshwater (lakes, rivers and wetlands). | | |



The UK is in a **temperate forest** biome.

The largest biome on earth is the **marine biome**.

The **tundra** and **polar biomes** are around The Antarctic and The Arctic Circles.

Why is Antarctica so cold?

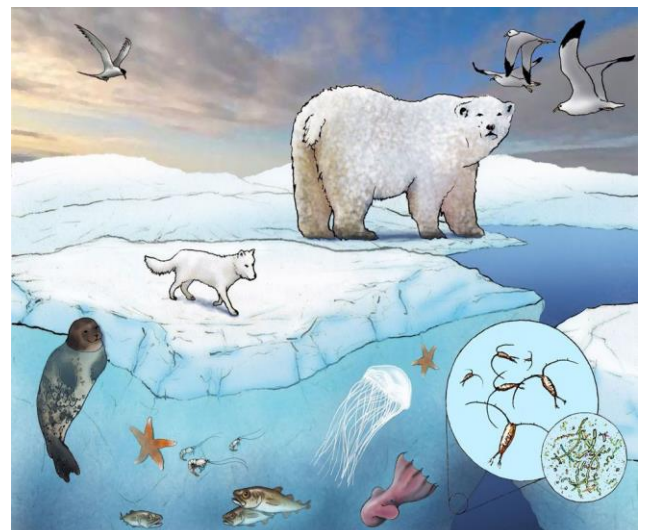
Polar biomes are areas completely covered in ice.

They occur in the polar regions of Earth.

– *Arctic Circle (Northern Hemisphere)*

- *Antarctic Circle (Southern Hemisphere)*

The Polar biomes gets low sunlight energy. Less sunlight means it gets cold and no plants. Ice caps reflect a large amount of sunlight. There is very little rainfall. Antarctica is a desert.



Science Link - Few plants and no trees mean most animals are **carnivores**.

What is a desert?

Desert Biome has a low level of rainfall each year.

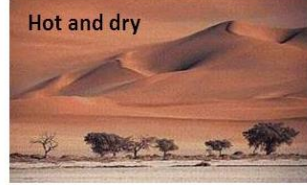
There are four major types of desert in this biome.

The hot desert climate:

Summer - High temperature

Winter - Low temperature

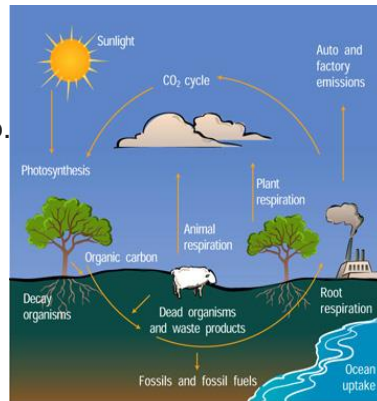
The dry desert climate is caused by high-pressure over the Tropics which brings hot weather.



What is climate change?

Climate change (or global warming), is the process of our planet heating up. The changing climate will actually make our weather more extreme and unpredictable.

As temperatures rise, some areas will get wetter and lots of animals (and humans!) are not able to adapt to changing climate.



How are people affecting Climate Change?

Carbon into the atmosphere from burning fossil fuel, people and animals breathing. Trees balance the cycle by using Carbon in photosynthesis

But **Deforestation** – less trees to use the carbon **so** more carbon in the atmosphere **so** higher global temperatures **so** ice caps melt **so** sea levels rise **so** more flooding and water in the atmosphere **so** more rain.

Key vocabulary

| Spelling | Definition |
|----------------|---|
| biome | A large area on earth with similar plants, animals and climate |
| habitat | Natural environment, within a biome, of an animal or plant |
| climate | The average weather in a biome over a longer time. |
| temperate | A biome with mild temperatures through the year |
| Antarctica | Polar biome in the Southern Hemisphere |
| hot desert | A biome with high temperatures and low precipitation. |
| cold desert | A biome with low temperatures and low precipitation. |
| precipitation | Water that forms in the atmosphere and falls back to the Earth. It comes in many forms, like rain, sleet, and snow. |
| arid | Land and climate with little rain and too dry to support plants. |
| semi-arid | Land and climate with little more rain than arid and supports plants. |
| coastal | An area of land near to the sea |
| deforestation | The action of clearing a wide area of trees |
| climate change | Change in the average weather patterns of Earth's local, regional and global climates. |