

Biomes

Geography

Pine

Previous Knowledge

What should I already know?

Key Stage 1

- Name and locate the seven continents and five oceans.
- Identify the characteristics of the four countries and capital cities of the United Kingdom.
- Identify the locations of hot and cold areas of the world in relation to the Equator and the North and South Poles.

Key Stage 2

- The climate of places is affected by their location (e.g. the equator, Tropics).
- Identify where the countries, capital cities and seas are in the United Kingdom.
- Develop map skills knowledge.

Geographical skills and knowledge

What will I know or be able to do by the end of this unit?

- Locate and label the Equator and the tropics.
- Identify the main climate zones.
- Describe the climate in the tropics.
- Identify the position and significance of the Equator, the hemispheres and the tropics.
- Explore the latitudes of each biome.
- Compare and contrast the biomes.
- Locate and label on a map the Earth's biomes.
- Locate and label on a map the Earth's climate zones.

Text Link

The Wild Robot by Peter Brown

Overview

Subject - Geography

As geographers, the children will build on their knowledge and understanding of the physical geography of the world and climates (KS1 and Year 4) through learning about biomes- distinct biogeographical units consisting of a biological community that have formed in response to a shared regional climate. The children will learn about the factors that can affect an ecosystem and consider the fragility of the Earth's biomes.

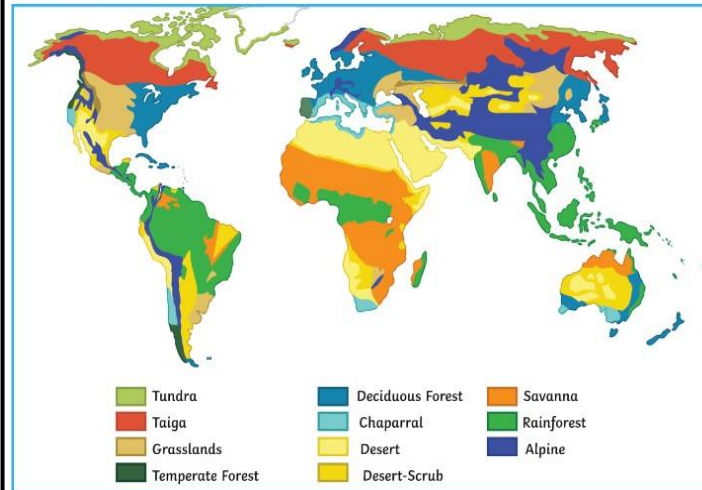
Enquiry question

"The Earth's biomes are fragile environments." To what extent do you agree?

Biomes

Biomes are a way to categorise the Earth's surface. These categories are based on climate patterns, soil types and the animals and plants that inhabit an area. There are terrestrial biomes and aquatic biomes. Every part of the Earth's surface is a part of one or more biomes. There are ten biomes: tropical rainforest, temperate deciduous forest, desert, tundra, taiga, grassland, savannah, marine, freshwater and ice.

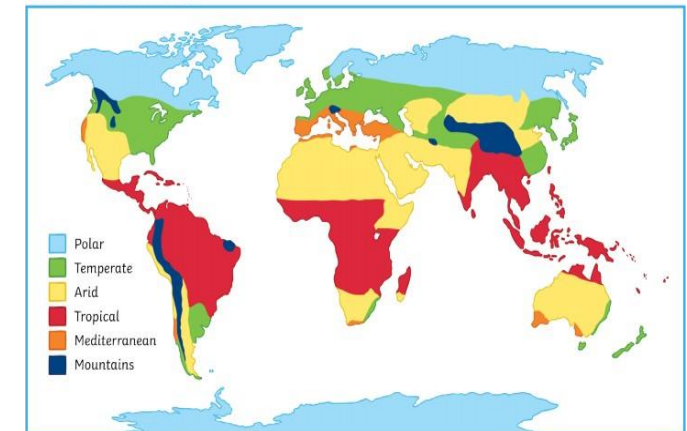
World Biomes



Climate Zones

Climate is the average weather expected in a place (weather is the day-to-day conditions in a place). Earth has seven zones of expected climate: polar, subpolar, temperate, tropical, sub-tropical, equatorial and sub-equatorial. Biomes are directly linked to climate zones.

World Climate Zones



Tropical Rainforest Biome

Tropical rainforests are rainforests that occur in the equatorial and sub-equatorial climate zones, which are in the tropics. They are hot, wet places with high levels of precipitation – sometimes up to 10 metres of rain can fall in a year.

Temperate Deciduous Forest Biome

Temperate deciduous, also known as temperate broad-leaf forests, are forests dominated by trees that lose their leaves each year. They are found in areas with warm, moist summers and cool winters. In England, the term 'Forest' (capital F) refers to an area where the King/Queen has the right to keep deer and to make Forest Laws, so the term 'woodlands' is used instead.

Desert Biome

The desert biome is an ecosystem that forms due to the low level of rainfall it receives each year. There are four major types of desert in this biome: hot and dry, semi-arid, coastal, and cold. They all have plant and animal life that have adapted to survive there.



Tundra Biome

The tundra biome is a cold and treeless area where harsh conditions make it hard for plants and animals to survive. The word 'tundra' comes from the Finnish word tunturia, which means treeless land. There are two types of tundra: arctic and alpine. The arctic tundra is located within the Arctic Circle, while the alpine tundra is the area high in the mountains above trees. Around 20 per cent of the Earth's land surface is tundra.



Taiga Biome

Taiga, also known as coniferous or boreal forest, is the largest terrestrial biome on Earth. The origin of the name 'taiga' is Russian and means land of the little sticks. The Taiga biome is popular with tourists for activities such as cycling, hiking and canoeing.



Grassland Biome

Grasslands are wide expanses of land filled with low-growing plants such as grasses and wildflowers. The amount of precipitation is not enough to grow tall trees and produce a forest. Across the world, 25 per cent of land is in the grassland biome.



Marine Biome

The marine biome is the biggest biome in the world. It covers about 70 per cent of the Earth. Marine regions are saline and contain millions of species of plants and animals. The amount of light in the marine biome gives it three zones. Coral reefs are part of the marine biome but some see them as a separate biome.



Ice Biome

The ice biome is also known as the polar ice cap biome. An ice cap is a body of ice in a high latitude region of the Earth. The polar ice caps contain the majority of the fresh water supply on earth.

Significant person

Sir David Attenborough (1926-present)

Sir David Attenborough (born 8 May 1926) is an English broadcaster, natural historian and author. He is best known for writing and presenting, in conjunction with the BBC Natural History Unit, the nine natural history documentary series forming the Life collection, a comprehensive survey of animal and plant life on Earth.



Key Vocabulary

aquatic	in water
biomes	A large naturally occurring community of flora and fauna occupying a major habitat, e.g. forest or tundra.
climate	The average expected weather in a place.
equator	The imaginary circle around the Earth's surface. It divides the Earth into the Northern Hemisphere and the Southern Hemisphere.
inhabit	to live in
latitude	The measurement of a part of the Earth in relation to the north or south of the Earth's equator.
terrestrial	on land
tropics	The parallel of latitude 23°26' north (Tropic of Cancer) or south (Tropic of Capricorn) of the Equator.
vegetation belts	plant life as a whole within a certain area



Savannah Biome

A savannah is a rolling grassland scattered with shrubs and isolated trees. The savannah biome is an area that has a very dry season and then a very wet season. (In British English it is spelled 'savannah' but in most other English-speaking countries it is spelled 'savanna'). Tourism is popular, especially in areas such as the Serengeti National Park in Tanzania.



Freshwater Biome

The freshwater biome is an ecosystem made up of any body of fresh water (containing less than 1 per cent salt), such as lakes, ponds, streams and rivers. These cover approximately 20 per cent of the Earth's surface and are in various locations spread out all over the world. Most freshwater biomes consist of moving water and contain many types of fish.

