

| Key Vocabulary | Definition |
|---|--|
| Biome | Biomes are areas of the planet with similar climates, landscapes, animals and plants |
| biodiversity | Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life. |
| equator | The Equator is the imaginary circle around Earth that is everywhere equidistant from the geographic poles and lies in a plane perpendicular to Earth's axis. The Equator divides Earth into the Northern and Southern hemispheres. In the system of latitude and longitude, the Equator is the line with 0° latitude |
| Tropic of Cancer & Tropic of Capricorn | The Tropic of Cancer is an imaginary latitude line above the equator that runs across the globe at about 23 degrees north, while the Tropic of Capricorn is an imaginary latitude line below the equator whose latitude line circles the globe at about 23 degrees south. |
| Antarctic | Antarctica, the southernmost continent and site of the South Pole, is a virtually uninhabited, ice-covered landmass. |

World Biomes

Knowledge Bank

What are biomes?

Biomes are areas of the planet with similar **climates, landscapes, animals** and **plants**. What lives in each biome depends on:

- how **warm** or **cold** it is
- how **dry** or **wet** it is
- how fertile the **soil** is

The animals in a biome depend on plants for food.

The plants in a biome can also depend on the animals to **spread pollen and seeds** so new plants can grow. So both plants and animals rely on each other to stay alive.

What are the six types of biome?

1. Rainforests

Tropical rainforests are hot and wet all year round.

They are home to half of all the different types of plants and animals on the planet.

This part of the **Amazon tropical rainforest** in Peru is home to these brightly-coloured Macaws. They eat seeds and like to nest in holes, like hollow trees. They eat mud from riverbanks in the forest, as it contains special minerals they need for their diet.

Macaws in Tambopata National Reserve, Peru.

2. Deserts

Deserts are **dry** all year round.

Only a few plants might grow, such as small shrubs or cacti, because the soil is shallow and **rocky**. Animals come out at dusk when it is cooler.

3. Savannah

The **savannah** is **hot** all year round with a long, **dry** season.

Only grasses and shrubs grow here. It is home to lots of different types of animals such as elephants, zebras and wildebeest.

4. Woodlands

Woodlands are habitats where the main plants found are trees, but mosses, ferns and lichen can also be found.

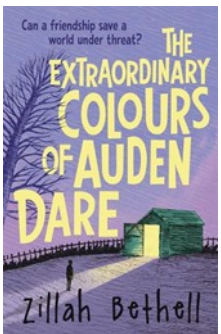
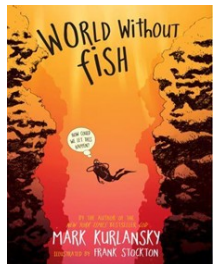
The climate is **warm** and **mild**, with more **rain** falling in the winter than in the summer.

5. Grasslands

Grasslands are areas of land that are vast and open. **Grasses** are the main plants.

The largest grasslands are found in **East Africa**. Zebras, giraffes, elephants and rhinos all live in grasslands.

6. Tundra



The **tundra** is the coldest of all the biomes. There is very little rain or snow and the temperatures are freezing. Winters are long and summers are short. Part of the soil is frozen all year round, although the top part defrosts in summer and plants such as mosses can grow.

In the **Arctic**, the ice provides a natural hunting ground for the **polar bear** where it can find its favourite prey: seals.

The polar bear is top of the food chain here although melting ice due to climate change is threatening the balance of this biome.

At the other end of the Earth, the **Antarctic** Polar region has the same climate zone, but different animals live there. The Antarctic has no polar bears, but it does have penguins.

Why do biomes like the rainforest matter?

Healthy rainforest biomes are rich in **biodiversity**. It means lots of different plants and animals live there. Rainforests like the Amazon have lots of natural resources and are also important for the climate. These vast forests store carbon too, but they are threatened by deforestation and climate change. Scientists say that unless we manage this rainforest more carefully, we will lose them.

A sloth in the rainforest.

Where do we find tropical rainforests around the world?

The map above shows where rainforest biomes are located in the world.

There is a link between climate, vegetation and biomes. Tropical hot wet climates are found **close to the Equator** where the energy from the Sun is more concentrated.

The tropical rainforests of the world are located close to the Equator, between the Tropic of Capricorn and the Tropic of Cancer.

