



BIOMES KNOWLEDGE ORGANISER



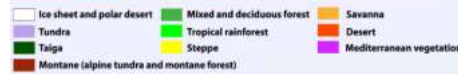
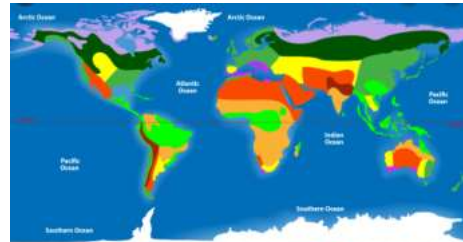
Overview

-Biomes are areas of our planet in which there are similar climates, landscapes and living things (animals and plants).

-There are many different types of biomes, including rainforests, deserts, polar deserts, temperate forests and savannahs.

-The things that live within each biome depends on how warm or cold it is, how wet or dry it is, and how fertile the soil is.

-Both plants and animals within biomes depend upon one another to stay alive - plants are food for many animals, and animals help to spread pollen and seeds for plant reproduction.



A map showing the different types of biomes across the world.

Answers to the Important Questions

What are biomes?

- Biomes are large areas of Earth that have similar climates, landscapes and living things.
- For example, a rainforest biome is characterised by having a warm, wet climate, and lots of high trees (living things).

What causes biomes?

- The type of biome that occurs somewhere is generally influenced by three different factors:
 - The temperature of the place;
 - How much rainfall there is;
 - The landscape (e.g. altitude, soil type, etc.)

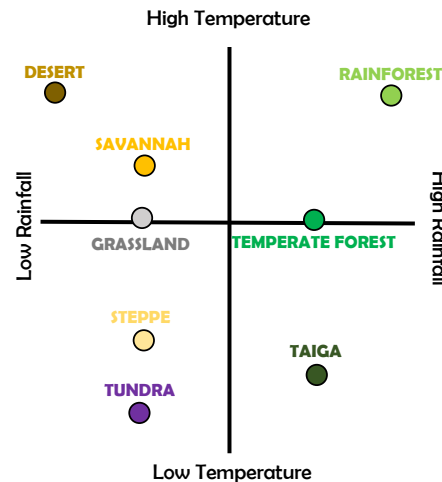
How do plants and animals live in their biomes?

- The plants and animals of each biome have traits that help them to survive in their biome. Plants and animals that live in smaller areas of a biome depend on each other to survive. These smaller areas are called ecosystems. Each biome has many ecosystems.

What biome is in the UK?

The main biome for the UK is a temperate forest. The UK's temperate climate is the predominant causes of this. The climate is not too hot or cold and it is not too dry or wet. There are some local variations.

Where do different biomes occur?



Land Biomes

Rainforests		Tropical rainforests are hot and wet all year around . They so named because they generally lay <u>within the Tropics</u> of Cancer and Capricorn. They are home to <u>half of the plants and animals</u> on the planet.
Deserts		Deserts are extremely hot and dry all year around . Only <u>few plants</u> grow here, e.g. cacti/ shrubs, because the soil is too shallow and rocky. Animals who live here often come out <u>after dusk</u> , when it is cooler.
Savannahs		Savannahs are hot all year around , with a <u>long dry season</u> and a short (but sometimes severe) rainy season. <u>Grasses, shrubs and occasional trees</u> grow here, but there is an <u>abundance of animal life</u> .
Temperate Forests		Temperate means ' <u>in moderation</u> ' (not to extremes) and so these forests are in places that are not too hot, cold, dry or wet. There are four distinct seasons: <u>spring, summer, autumn and winter</u> . There are often many deciduous trees, which lose their leaves in the winter. The UK contains temperate forest.
Steppe		Steppes are grassland habitats are places that receive <u>less rain than forests but more than deserts</u> . Often, these areas are far from oceans, or are sheltered from rains by mountains.
Tundra		In tundra regions, there is <u>very little rain or snow</u> , and the temperatures are freezing – winters are long and summers are short. Part of the soil is frozen year-round, however in summer <u>some mosses can grow</u> .

Aquatic Biomes

Marine		The marine biome includes the saltwater oceans, and so it is the largest biome on Earth (approx. 70% of the world's surface). Marine biomes may include shallow and deep oceans and estuaries.
Freshwater		Freshwater biomes have less salt than marine biomes. They include ponds, lakes, streams, rivers and wetlands. Freshwater systems are found all over the world. A vast array of wildlife live in freshwater, e.g. some species of fish, reptiles, mammals and birds.
Coral Reef		Coral looks like rocks, but are actually tiny little organisms called polyps. They form in shallow, clear water which receive lots of sun. Although there are few corals reefs (compared to the other aquatic biomes), 25% of all marine species live in coral reefs.

Key Vocabulary

- Biome
- Region
- Rainforest
- Savannah
- Tundra
- Forest
- Grassland
- Desert
- Polar Desert
- Climate
- Landscape
- Plants
- Fertile
- Animals
- Moderation

Biomes Key Facts

On land, most plant and animal species are found in the rainforest biome.

The word tundra comes from the Finnish word 'tunturia' which means 'treeless land.'

Many of the trees in the temperate deciduous forest contain sap which keeps their roots from freezing during winter.

A grassy biome may be called 'grassland', 'steppe', or 'savanna' depending upon the temperature.

Areas of high altitude (e.g. mountains) have a different kind of biome called 'montane.'

Although daytime temperatures in desert biomes are normally hot, they can get extremely cold at night.