Knowledge Organiser: Biomes

Important Topic Vocabulary

adaptations – the process of change by which an organism or species becomes better suited to its environment.
arid – having very little rain. Arid land is so dry that very little plants can grow there.
climate – the climate of a place is the general weather conditions that are typical of it.
coniferous – A coniferous forest or wood is made up of conifers.
conifers – A tree that bares cones and needle-like leaves which they do not lose in winter.
deciduous – a tree or bush that loses its leaves in the autumn every year.
ecosystem – all the plants and animals that live in a particular area together.
Equator – an imaginary line on the middle of the Earth at an equal distance from the North and South Poles.
fertile – land or soil that is fertile is able to support the growth of a large number of plants.
habitat – the natural home or environment of an animal, plant or other organism.
organism – an individual animal, plant or single-celled life form such as bacteria of fungus.
temperate – a climate or place that is never extremely hot or extremely cold.
vegetation – plants, trees and flowers can be referred to as vegetation.

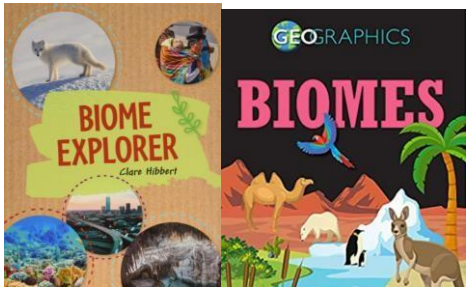
Wonderful Websites

https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zvsp92p

https://kids.britannica.com/kids/article/biome/403913

https://www.softschools.com/facts/biomes/

Brilliant Books



What you should already know:

Living things are referred to as organisms.

A temperate climate is a climate that has very mild temperatures and does not get extremely hot or cold. England has a temperate climate.

A tropical climate is hot all year round and has lots of rain. Brazil has a tropical climate and is home to the largest tropical rainforest in the world - The Amazon Rainforest. Tropical rainforests are close to the Equator, hot and wet all year and dense in plants and animals.

What are biomes?

Biomes are areas of our 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 plants and animals of each biome have traits that help them to survive in their particular biome. Plants and animals that live within smaller areas of a biome also depend on each other for survival. These smaller areas are called ecosystems.

Each individual plant and animal could not exist by itself on planet Earth. All living organisms need other living organisms to survive. How these organisms interact with the Sun, soil, water, air and each other in an area is called an ecosystem.

Each biome has many ecosystems.

The major biomes that we will be looking at include: tropical rainforest, desert, temperate forest (deciduous), grassland (temperate), savannah (tropical grassland), taiga forest (coniferous), tundra, marine and freshwater.

Tropical rainforest- near the Equator (equatorial), hot and wet all year, rich in plants and animals, poor soils.

Temperate forest- cool summers and mild winters, rain throughout the year and rich deciduous woodland.

Taiga- north of the equator, on mountains, long cold winters, short mild summer, limited rainfall, coniferous trees.

Grassland- warmer summers and very cold winters, low rainfall and mainly grassland vegetation.

Savannah (tropical grassland)- within the tropics, hot with a wet and dry season, mainly grass and scrub and a few specially adapted trees. (Kenya, Zambia and Tanzania. Northern Australia, Venezuela and Brazil)

Desert- very hot and dry and limited plants and water. Arid- receive less than 250mm of rain per year. Deserts can be hot or cold. (Antarctica can be called a desert because of its low levels of precipitation). The Sahara Desert is the largest desert in the world.

Tundra- the areas that surround the North and South Poles, below freezing for most of the year, ground permanently frozen, light snowfall.

Marine- the largest biome in the world (salt water). Covers 70% of the Earth. The average temperature is 4 degrees. Animals and plants have adaptations that help them to remove salt or take on water.

Freshwater- low levels of salt, includes ponds, streams, lakes and rivers. Animals and plants have many adaptations to help them retain salt.

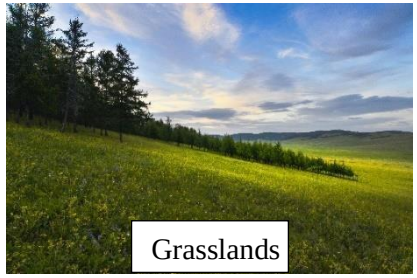

Marin

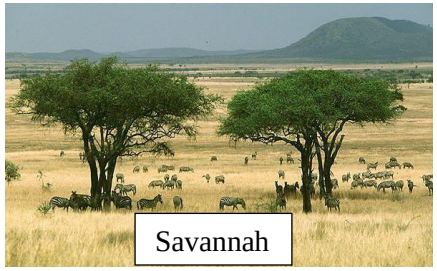

Freshwater

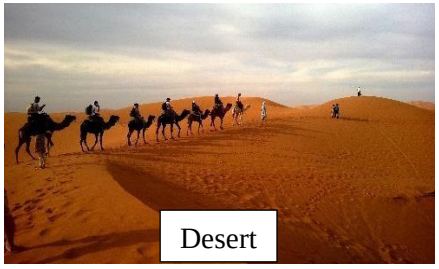

Temperate forest

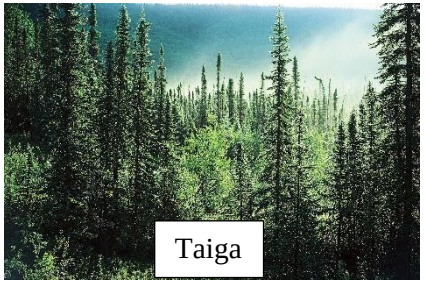

Tropical rainforest


Tundra


Grasslands


Savannah


Desert


Taiga