Biomes

Lesson sequence

Lesson 1: To identify what I know about biomes, vegetation belts and different climate zones

Lesson 2: To identify the position of the equator, the Tropics of Cancer and Capricorn an understand how these effect the world's climate zones

Lesson 3: To understand what biomes are and where they are located across the world.

Lesson 4: To explore the biomes of the world.

Lesson 5: To learn how human activity and is putting the world's biomes at risk.

Lesson 6: To learn about the conservation of plants (flora) and animals (fauna) in a forest biome.

Vocabulary

- Ecosystem
- Biome
- Vegetation
- Tropical rain forest
- Savanna
- Desert
- Shrub land
- Temperate forest
- Coniferous forest
- Tundra
- Mountains
- Polar ice
- Grassland
- Climate zone
- Biome
- Vegetation belt
- Terrestrial
- Ecosystem
- Flora
- Fauna
- Adaptation
- Symbiotic
- Biodiversity

Sticky learning

New Knowledge

- Know the position and significance of latitude, longitude, equator, northern and southern hemispheres, the Tropics of Cancer and Capricorn, the arctic and Antarctic circle, the Prime-Greenwich meridian and time zones (day and night).
- To know and understand world climate zones, biomes and vegetation belts.
- To know the natural and man-made challenges facing the planet, biomes and regions with an appreciation of some of the possible consequences of these
- Know the position of the equator, the Tropics of Cancer and Capricorn, the arctic and Antarctic Circle.
- To know and define the terms climate and weather and use examples to show the difference between them.
- To know and define the term 'vegetation belt', 'flora' and 'fauna'
- To know the world has many different biomes and that these are large ecosystems with distinct climatic conditions, flora and fauna.
- Know and name different climate zones and the weather conditions prevailing in an area in general.
- Know and name different biomes
- Know the characteristics of the tundra, savannah, desserts, tropical rainforest, temperate forests and deciduous forests and taiga (coniferous forest) biomes.
- To know where these biomes are located.
- To know the flora and fauna which inhabit that biome
- To know how biomes are threatened by climate change and ways which this impacts the human, physical and environmental geography of a climate zone or biome.
- To learn about the conservation of plants (flora) and animals (fauna) in a forest biome.
- To define conservation, biome fragility and sustainable development/sustainability
- To know how to find the correct topological map to find information about different countries, climate zones, biomes and vegetation belts.

New Skills

Select the appropriate map/resource to locate places, features and information in support to answer their geographical questions

Use their field work skills to investigate an issue and communicate the outcome of their research

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.