

Extreme Biomes

YEAR 5/6: Summer 2

What are the different biomes and why are they important to our world?

COVERAGE: What are the different biomes and why are they important to our world?

The children will be exploring the physical and human features of the different Biomes that cover our planet and how they can be cared for.

Locational Knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities

Place Knowledge

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

Human and Physical Geography

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
- Name the largest desert in the world and locate desert regions in an atlas.
- Understand the importance of different Biomes to the world.
- Identify and name the Tropics of Cancer and Capricorn as well as Arctic/Antarctic Circles
- Explain how World time zones work.

Geographical Skills

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

KEY LANGUAGE AND KEY VOCAB:

Temperature

Precipitation

Rainfall

Salt water

Freshwater

Fauna

Flora

Wildlife

Vegetation

Location

Hemisphere

Southern and northern

KNOWLEDGE AND FACT SHEET

Geography Knowledge Organiser: Biomes

What Are Biomes?
Biomes are naturally occurring areas on Earth which share similar landscapes and climates and are home to similar animals and plants. Other factors such as temperature, geology and soil are also considered when defining a biome. The whole world is split into different biomes.

Different Types of Biome
There is some disagreement on exactly how many types of biomes there are but most people think there are six. These are:

- Aquatic
- Desert
- Forest
- Grassland
- Rainforest
- Tundra

Aquatic
The aquatic biome is the largest type - it covers over 70% of Earth! This biome can be further divided into two main types: freshwater and saltwater.

Desert
Desert biomes cover around one-third of the Earth and are the driest type of biome. They can be hot or cold, depending on where on the planet they are. Plants and animals have adapted to live in these harsh conditions. Plants found in desert biomes include cacti and creosote bushes while animals that survive here include snakes and lizards.

Forest
Forest biomes cover approximately 30% of the planet and are home to a wide range of trees and plants. There are three main forest biomes: temperate, tropical and taiga. Animals such as moose, deer, bears and squirrels can all be found in forest biomes.

Grassland
Grassland biomes are areas which have enough rainfall for grasses to grow but not enough for forests to develop. Farming often takes place in grassland biomes because of the soft soil. The tropical grasslands in Africa are home to giraffes, zebras and lions.

Rainforest
Rainforests are the most diverse of all biomes. They cover less than 10% of the Earth but produce nearly 50% of all of our oxygen. The temperature is hot and wet all year long and in some, it rains all the different types of animals and plants on the planet.

Tundra
The coldest of the biomes! Due to the low temperatures and dry conditions, these biomes are home to very few plants and animals. However, mosses and short grasses still grow here and Arctic hares and reindeer make their homes in tundra biomes. This type of biome covers one-fifth of the planet.

Did You Know...?
The plants and animals which live in each type of biome have adapted to help them survive in that biome.

World Biomes Map

KEY QUESTIONS:

1. What are the characteristics of different Aquatic Biomes?
2. What are the characteristics of different desert biomes?
3. What are the characteristics of different forest biomes?
4. What are the characteristics of different grassland biomes?
5. What are the characteristics of tundra biomes?

KEY SKILLS AND KNOWLEDGE

Geographical Language

- link words to theme e.g. settlement – urban/ rural/land use/ sustainability: rivers – confluence/tributary

Enquiry

- ask questions: what is this landscape like? how is it changing? What patterns can you see/ how has the pattern changed?
- analyse evidence and draw conclusions e.g. from field work data on land use comparing land use/ temperature. Look at patterns and explain reasons behind it.
- communicate in ways appropriate to task and audience e.g. use email to exchange information about locality with another school.

ENRICHMENT:

- Children will be selecting a project piece at the end of the unit. They will choose one of the biomes and find out how we as a class/community/world, can ensure this particular biome is cared for.

Previous Learning:

The children have examined the different physical and human geographical features of South America and produced a study about one of the countries.

School Drivers to Examine	

Children will look at:

- **Care of the Environment** = children will look at the different biomes that are around the planet and discuss how they can care for these different environments so they remain to protect and support the world's environment and fight climate change.
- **Culture and Diversity** = children will look at the cultures that live in these different environments and how diverse these different cultures are to our own.