

Geography - The Earth's Biomes: A Fragile World?

Year 5 Autumn 1

Key Facts and Vocabulary

Why should we learn about the Earth's biomes?

Each of the Earth's biomes support many unique ecosystems and the flora and fauna within them have particular traits that help them survive in their particular biome. These ecosystems have come to depend on each other for survival, but human activity is threatening to unbalance them. In this unit, you will learn the knowledge and skills that will help you to determine just how fragile the biomes really are.

- A **biome** is a large area of land with a particular climate, types of plants (flora) and animals (fauna).
- **Climate** is the average weather conditions in a location over a 30-year-period. Climate is affected by distance from the Equator, elevation and terrain. Have a look at **Map 1** for a closer look at the Earth's climate zones.
- An **ecosystem** is the interaction of living and non-living things in an environment. There can be many ecosystems within one biome.
- There are **6 major biomes** that we will be learning about. Have a look at **Map 2** to see a simple map of where the major biomes are located.

Tropical Rainforest Key features • Very steady temperature between 20°C and 25°C • Rains all year round • Trees are very tall and varied • Most plants are evergreen not deciduous		Tundra Key features • Temperature ranges from -34°C and 6°C • Coldest of all the biomes • Little rain, lots of frost and permafrost • No trees grow and only a few small plants	
Temperate Deciduous (Broadleaf) Forest Key features • Temperature ranges from -30°C and 30°C • Goes through all four seasons • Range of trees: most lose their leaves in the autumn • Even rainfall throughout most of the year		Grasslands (Savanna) Key features • Dry season and a rainy season • Temperature ranges from -40°C and +40°C • Mostly grass grows and the occasional, individual tree	
Coniferous Forest (Taiga) Key features • Temperature ranges from -54°C and 30°C • Low average temperature • Most of the trees are evergreen • Largest land biome		Desert Key features • Temperatures over 50°C in the day and below freezing (0°C) at night • Very few clouds and very little rain • Very few plants (flora) or animals (fauna)	

Did you know that not all geographers agree on the exact biomes and vegetation belts? Take a look at **Map 3** for a more detailed breakdown.

Website Links

- <https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zvsp92p>
- <https://education.nationalgeographic.org/resource/biomes>

Geographical Concepts

Space– How natural and man-made places fit together in the jigsaw of the world.

Environmental geography - This considers how we use the natural world and how people have the ability to change it.

Physical processes – Looking at an event or sequence of events that occur naturally due to the power of the planet.

Geographical Skills

- Collect information about a place and use it in a report.
- Explain how a region fits into its wider geographical location.
- Explain how a place might change in the future.
- Describe and understand key aspects of biomes and vegetation belts.

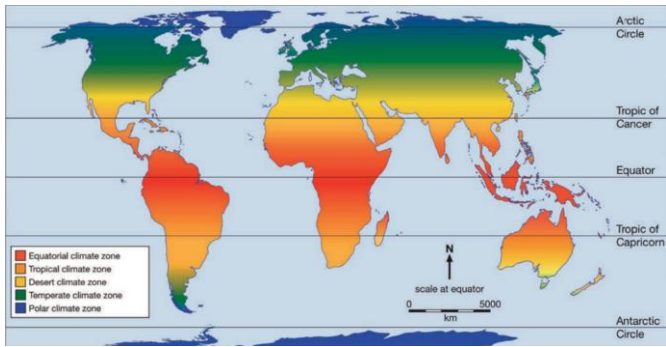
Enquiry Questions

- What are the Earth's biomes?
- Why are biomes where they are?
- How do climatic factors affect biomes?
- Why are biomes under threat?
- How are biomes being protected?
- How fragile are the Earth's biomes?

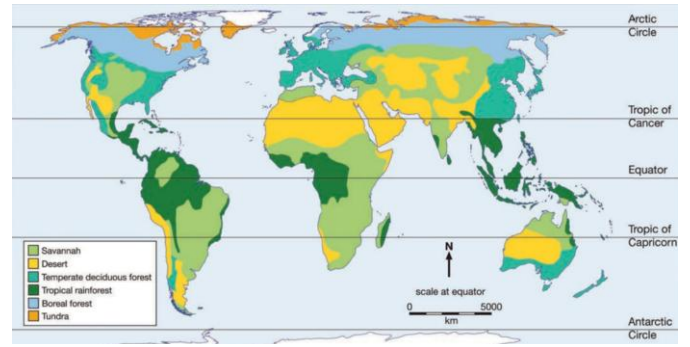
Why don't you...

- Research your favourite biome and create an advert persuading people to protect it?
- Sketch a biome and label the flora and fauna with features that help it to survive there?
- Research an animal whose ecosystem is under threat in your local area?

Map 1: The Earth's Climate Zones



Map 2: Simple Map of Earth's Biomes



Map 3: Map of Earth's Biomes and Vegetation Belts

