

Exploring the Earth's Great Biomes with Finn

Learning objective: To understand the defining characteristics of global biomes and the factors that influence them.

Read the passage below carefully. Use your knowledge of geography to answer the questions, ensuring you provide full sentences for your justifications.

Our planet is a magnificent tapestry of distinct environments known as biomes. Finn the dolphin, who travels across our vast oceans, explains that a biome is a large community of flora and fauna occupying a major habitat. These regions are primarily defined by their climate, particularly temperature and annual precipitation. Near the equator, we find tropical rainforests, where high humidity and consistent rainfall support an incredible density of life. Conversely, moving towards higher latitudes, we encounter the tundra—a harsh, treeless landscape where the subsoil remains frozen throughout the year. Between these extremes lie temperate deciduous forests and vast grasslands. Every biome represents a delicate balance; the vegetation has evolved unique adaptations to thrive in its specific conditions. For example, cacti in arid deserts store water, while the thick fur of creatures in cooler regions provides vital insulation. Understanding these biomes is essential, as they regulate our global climate and provide the resources required for life to flourish. As humans continue to influence the landscape, protecting these diverse ecosystems has never been more critical for the health of our world.

Word bank: biome · ecosystem · precipitation · equatorial · latitude · vegetation · adaptation

1. Identify two specific factors mentioned in the text that determine the classification of a biome. (2 marks) (2 marks)

2. According to the passage, what distinguishes the tundra from other biomes? (2 marks) (2 marks)

3. Explain why vegetation in different biomes might look significantly different from one another. (3 marks) (3 marks)

4. Infer why Finn the dolphin might be particularly interested in the health of the Earth's biomes. (3 marks) (3 marks)

5. Justify your answer: Is it more important to protect rainforests or temperate forests? (3 marks) (3 marks)

Draw: Draw a split-screen illustration showing two contrasting biomes. On one side, draw a tropical rainforest with lush, green canopy layers; on the other, draw a tundra landscape with sparse vegetation and snowy ground.



Extension challenge: Research a specific biome not mentioned in the text (such as the taiga or the chaparral). Create a 'Biologist's Field Guide' entry for that biome, including its average temperature, typical wildlife, and one specific adaptation a plant has developed to survive there. Explain why this adaptation is crucial for the plant's survival.