

Exploring the Emerald Canopy: A Journey into the Rainforest

Learning objective: To understand the physical characteristics and layers of a tropical rainforest.

Read the text carefully and answer the questions below. Use full sentences where appropriate.

Finn the dolphin has traded his ocean maps for a trek through the tropical rainforest. Located near the Equator, these vibrant ecosystems are hot, humid, and teeming with life. The rainforest is organised into four distinct layers, much like a multi-storey building. At the very top, the emergent layer features giant trees that stretch high above the rest to reach the sunlight. Below this sits the canopy, a thick blanket of leaves and branches that acts as a roof for the forest, sheltering the creatures beneath. In the understorey, the air is still and dark, home to plants that thrive in the shadows. Finally, the forest floor is a busy place where fallen leaves decompose rapidly, providing nutrients for the soil. This unique environment supports incredible biodiversity; thousands of species of insects, birds, and mammals rely on the dense vegetation for survival. Because it rains almost every day, the rainforest remains lush and green all year round. Finn is amazed at how every plant and animal plays a vital role in keeping this complex, breathing world in balance.

Word bank: Equator · Emergent · Canopy · Understorey · Forest floor · Humidity · Biodiversity · Photosynthesis

1. Name the four layers of the rainforest described in the text. (2 marks)

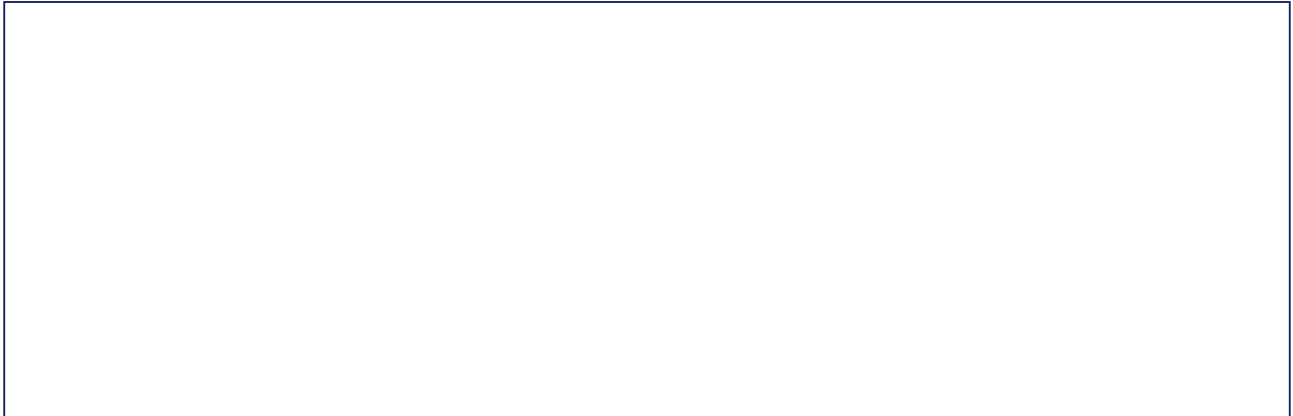
2. According to the passage, why is the forest floor an important part of the ecosystem? (2 marks)

3. Why do you think the canopy is described as a 'roof' for the forest? (3 marks)

4. Explain why the plants in the understorey have adapted differently to those in the emergent layer. (3 marks)

5. Finn believes the rainforest is the most important habitat on Earth. Justify whether you agree or disagree with his opinion using evidence from the text. (4 marks)

Draw: Draw a cross-section of a rainforest, clearly labelling the four layers mentioned in the text and adding at least two animals you might find in each layer.



Extension challenge: Compare and contrast a tropical rainforest with a woodland habitat found in the UK. What might happen to the rainforest if the trees in the canopy were removed? Write a short paragraph explaining your thoughts.