

Finn's Rainforest Expedition: The Layers of Life

Learning objective: To identify and describe the four distinct layers of a tropical rainforest and explain how the climate supports such high biodiversity.

Finn the dolphin has traded his fins for hiking boots to explore the Amazon! Use the word bank to label the rainforest layers in the correct order from the ground up to the sky. Then, apply your knowledge to answer the questions below, considering how each layer provides a unique habitat for the creatures living there.

Word bank: Forest Floor · Understory · Canopy · Emergent Layer

1. Explain why the 'Emergent Layer' requires plants to be resistant to strong winds and intense sunlight, whereas plants on the 'Forest Floor' must be adapted to low-light conditions. (3 marks)

2. Compare the 'Canopy' to a bustling city. Justify your answer by describing how this layer acts as a centre for activity for rainforest animals. (3 marks)

3. What might happen to the biodiversity of the rainforest if the 'Canopy' layer were significantly thinned by deforestation? Explain your reasoning. (3 marks)

4. If a rare, shade-loving flower was discovered, which layer would you suggest it lives in? Provide evidence for your choice. (2 marks)

5. Tropical rainforests are often called the 'lungs of the Earth'. Given what you know about the dense vegetation in all four layers, why is this nickname scientifically significant? (2 marks)

6. Contrast the climate conditions of the top-most layer with the bottom-most layer. Why does this create 'vertical stratification' in the rainforest? (3 marks)

Draw: Draw a cross-section of a rainforest tree. Label each of the four layers clearly and draw one animal or plant species that is uniquely adapted to thrive in each specific section.



Extension challenge: Imagine you are a scientist documenting a new species. Invent an animal that lives specifically in the 'Understory'. Write a short paragraph describing its physical adaptations (e.g., colour, movement, diet) and justify why it is perfectly suited to the humid, semi-shaded environment of that layer.