

Exploring the Layers of the Rainforest with Finn

Learning objective: To identify and illustrate the four distinct layers of the tropical rainforest and explain how the structural characteristics of the vegetation vary across these strata.

Finn the dolphin has traded his ocean maps for a map of the Amazon rainforest! Using the word bank provided, create an annotated diagram showing the four layers of the rainforest. Ensure your drawing shows the different types of vegetation found in each zone.

Draw: Draw a large, cross-section view of a tropical rainforest. Use a vertical layout to clearly separate the four layers. Draw giant, straight-trunked trees reaching the top, thick tangled vines (lianas) hanging between branches, and broad, waxy leaves. Use bold colours to show the darkness of the forest floor compared to the bright, sunlit emergent layer. Add labels and arrows pointing to specific plant features like roots and leaves.



Label words: Emergent Layer · Canopy · Understory · Forest Floor · Buttress Roots · Drip Tips · Lianas · Epiphytes

Steps:

1. Label your drawing to show where you would find 'buttress roots' and explain why these are an evolutionary advantage for trees in the rainforest.
2. Compare the amount of sunlight received by the 'Emergent layer' versus the 'Forest floor'. What might

happen to the vegetation on the forest floor if a large tree in the canopy falls down?

3. Identify one plant adaptation mentioned in the word bank and justify why it helps the plant survive in a hot, wet climate.
4. Explain why the canopy is considered the most biodiverse layer of the rainforest.
5. If you were to climb from the forest floor to the emergent layer, describe how the temperature and humidity might change as you ascend.
6. Justify why deforestation in the canopy layer has a devastating impact on the species living in the understory.