

Finn's Global Biome Expedition

Learning objective: To identify, describe, and compare the characteristics of major global biomes, understanding how climate influences the distribution of flora and fauna.

Finn the dolphin has been mapping the world from the shore. Use the word bank to correctly sort the biome characteristics into the table below. Once sorted, use your geographical knowledge to answer the deeper thinking questions.

Word bank: Tropical Rainforest · Tundra · Desert · Savanna · High rainfall and dense canopy · Extremely cold with permafrost · Arid with minimal precipitation · Distinct wet and dry seasons · Epiphytes and broad-leafed trees · Mosses and low-lying shrubs · Cacti and succulent plants · Grasses and scattered acacia trees

1. Complete the table: Match each Biome to its corresponding climate and vegetation characteristics from the word bank. (4 marks)

2. Explain why the vegetation in a desert is structurally different from the vegetation found in a tropical rainforest. Consider the impact of precipitation levels. (3 marks)

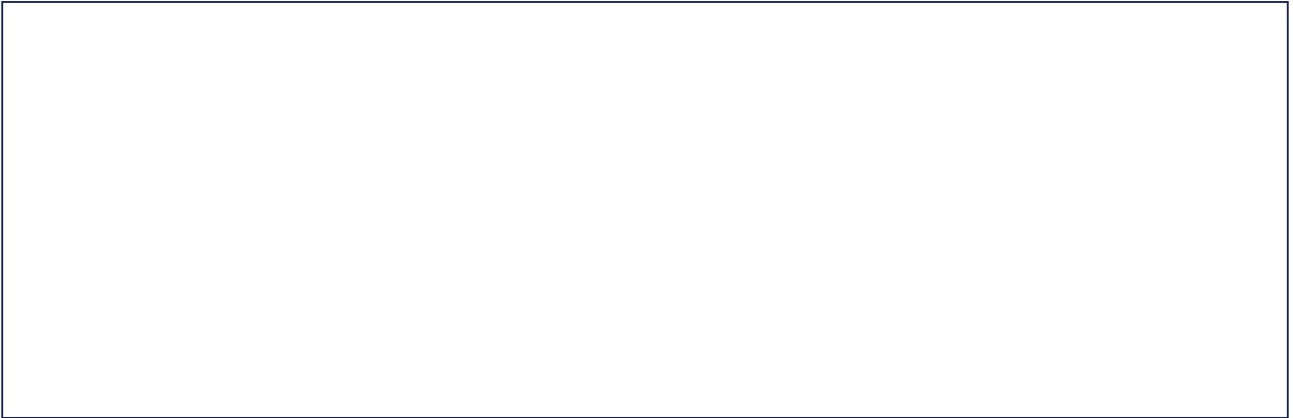
3. Compare and contrast the Tundra and the Savanna. What is the most significant climatic difference between these two environments? (3 marks)

4. Justify your answer: If the global temperature were to rise significantly, which biome would face the most immediate threat to its ecosystem stability? Explain your reasoning. (3 marks)

5. What might happen to the biodiversity of a tropical rainforest if the canopy layer were removed by deforestation? (3 marks)

6. Identify one way an animal might have physically adapted to survive in the arid conditions of a desert biome. (2 marks)

Draw: Draw a cross-section of a tropical rainforest, clearly labelling the four distinct layers: forest floor, understory, canopy, and emergent layer.



Extension challenge: Imagine you are a scientist documenting a new, undiscovered biome. Write a short field report (150 words) describing the climate, the types of vegetation you would expect to find, and one unique animal adaptation that would allow a creature to survive in this specific environment.