

Finn's Global Climate Expedition

Learning objective: To understand the characteristics of different climate zones and the factors that influence global weather patterns.

Join Finn the dolphin on his underwater journey! Read each question carefully and circle the correct answer. For written answers, provide clear, concise explanations.

Answer Key: 1. A, 2. True, 3. False, 4. B, 5. C, 6. Precipitation, 7. B, 8. False, 9. Latitude, 10. True. Greater Depth Reasoning: Climate refers to long-term patterns, whereas weather is the short-term state of the atmosphere. Factors like proximity to the Equator and altitude significantly alter local climates.

Word bank: Equator · Precipitation · Tundra · Atmosphere · Latitude · Tropical · Temperate · Climate

1. 1. Which imaginary line runs around the middle of the Earth, where the climate is typically hot all year round? A) Prime Meridian B) Equator* C) Tropic of Capricorn D) Arctic Circle (1 mark)

2. 2. True or False: The climate of a region describes the average weather conditions over a very long period, usually 30 years or more. (1 mark)

3. 3. True or False: The Tundra biome is known for its high temperatures and dense rainforests. (1 mark)

4. 4. Which of these is NOT a major climate zone? A) Polar B) Volcanic* C) Temperate D) Tropical (1 mark)

5. 5. What is the main reason why places closer to the Equator are usually warmer? A) They are closer to the moon B) The ocean is deeper C) They receive more direct sunlight* D) They have more trees (1 mark)

6. 6. What is the scientific term for rain, snow, sleet, or hail falling from the sky? (1 mark)

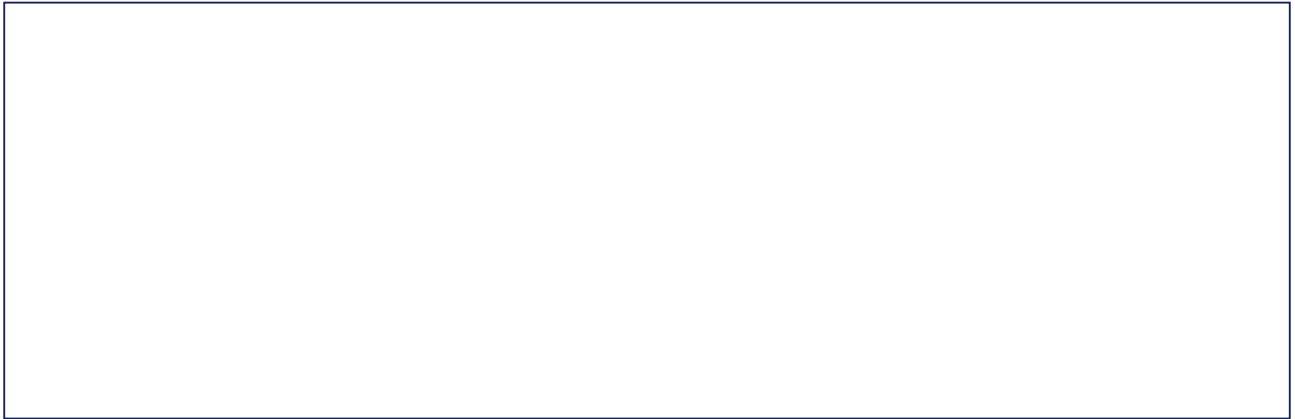
7. 7. How does the distance from the sea affect climate? A) Coastal areas are always colder B) The sea keeps coastal temperatures more stable* C) It has no effect D) The sea makes inland areas wetter (1 mark)

8. 8. True or False: All deserts are hot and sandy. (1 mark)

9. 9. Fill in the blank: The distance north or south of the Equator is measured in degrees of _____. (1 mark)

10. 10. True or False: Greenhouse gases trap heat in the Earth's atmosphere. (1 mark)

Draw: Draw a diagram of the Earth showing the Equator, the Northern and Southern Hemispheres, and label one polar region and one tropical region.



Extension challenge: 1. Explain why the climate in the UK is described as 'temperate' rather than 'tropical'. 2. Compare and contrast the climates of the Arctic and the Sahara Desert. 3. Justify your answer: Why might a mountain range have a different climate on one side compared to the other? 4. What might happen to global climate zones if the Earth's tilt changed significantly? 5. Why is it important for scientists to track climate data over many decades? 6. Imagine you are a researcher; create a travel itinerary for Finn the dolphin that visits three different climate zones, describing the gear he would need for each.