

Mastering the Map: Advanced Cartography with Finn

Learning objective: To apply advanced map skills, including the use of 8-point compasses, 4-figure grid references, and the interpretation of complex symbols and scales.

Finn the dolphin is mapping a newly discovered archipelago. Use your expert geography skills to help him navigate and document the islands. Read each question carefully and justify your reasoning where required.

Word bank: North-East · South-West · Intercardinal · Scale · Legend · Coordinate · Orientation · Topography

1. Finn is travelling from the Coral Reef to the Sandy Cove. If the Coral Reef is located exactly North-West of the cove, explain which direction Finn must travel to return to the reef from the cove. Justify your answer. (2 marks)

2. Compare and contrast the purpose of a map's 'Key' (legend) with the purpose of a 'Scale'. Why are both essential for a geographer to understand the reality of the land? (3 marks)

3. Finn finds a treasure chest at grid reference 42 67. If he moves three squares East and two squares North, what is his new 4-figure grid reference? Explain the process you used to find it. (2 marks)

4. What might happen if a cartographer accidentally used a scale of 1cm = 10km instead of 1cm = 1km when mapping a small island? How would this affect someone trying to navigate the terrain? (2 marks)

5. Finn notices that the symbols for 'Forest' and 'Marshland' look very similar on his map. Suggest a way to redesign these symbols to make them more distinct and intuitive for other explorers. (2 marks)

6. Imagine Finn discovers a steep mountain range on the island. Explain how he could represent the height and steepness of these mountains on a 2D map without using a 3D model. (2 marks)

Draw: Create an original map of 'Finn's Archipelago'. You must include an 8-point compass rose, a scale bar, a key with at least five unique symbols, and a grid system with coordinates.



Extension challenge: Write a brief set of precise navigational instructions for a fellow explorer to get from your map's starting point to the treasure chest, using only intercardinal directions (e.g. North-East) and specific distances based on your scale.