

Finn's Oceanic Mapping Mission

Learning objective: To accurately identify and use four-figure grid references to locate features on a map.

Finn the dolphin is mapping out a new coral reef! Look at the provided grid below. Each square represents a specific area of the ocean. Use your knowledge of grid references (reading along the bottom axis first, then up the side axis) to identify the coordinates for each discovery. Follow the 'Across, then Up' rule to find your location.

Word bank: Grid Reference · Coordinates · Horizontal · Vertical · Easting · Northing · Map Legend

1. Finn has spotted a shimmering school of silver fish at grid square 02, 05. Describe exactly how you found this square using the terms 'easting' and 'northing'. (2 marks)

2. There is a hidden treasure chest located at 04, 02. If you move one square to the right and two squares up, what is your new grid reference? (2 marks)

3. Compare and contrast the importance of grid references for a navigator at sea versus a mapmaker drawing a town plan. Why is precision vital? (3 marks)

4. Justify your answer: Is it possible for two different items to occupy the same four-figure grid reference? Explain why or why not. (2 marks)

5. What might happen if a cartographer labelled the horizontal axis as the 'northing' instead of the 'easting'? Explain the impact on a traveller. (2 marks)

6. If a shipwreck is located at 01, 03 and a rescue submarine is at 05, 03, explain the path the submarine must take to reach the wreck. (2 marks)

Draw: Draw a 6x6 grid on squared paper. Label the horizontal axis 00 to 05 and the vertical axis 00 to 05. Place a coral reef at (01, 01), a sunken anchor at (04, 02), and a giant clam at (02, 04). Create a legend to explain your symbols.



Extension challenge: Design a treasure map for a partner. Write three complex clues using grid references that require the solver to move across multiple squares (e.g., 'Start at 01, 01, move two squares east and one square north').