

Finn's Cartography Challenge: Mapping the Coastal Grid

Learning objective: To accurately identify and plot four-figure and six-figure grid references on an Ordnance Survey-style map.

Follow Finn the dolphin as you explore this coastal map. Use your knowledge of coordinates to help Finn navigate safely. Remember: 'Along the corridor, then up the stairs' to find your eastings and northings. Use the word bank to help explain your findings.

Word bank: Eastings · Northings · Coordinate · Ordnance Survey · Topography · Intersection · Scale · Landmark

1. Identify the four-figure grid reference for the lighthouse. Explain why you chose these specific digits using the 'along and up' rule. (3 marks)

2. Finn has spotted a hidden cove at 423 156. Describe the location of this cove and justify why six-figure references provide more precision than four-figure ones. (4 marks)

3. Compare and contrast the grid reference of the sandy beach (square 4114) with the rocky cliff (square 4417). How far apart are they in terms of grid squares? (3 marks)

4. What might happen if a mapmaker miscalculated the northings by one grid square? Explain the potential consequences for a traveller. (3 marks)

5. If you were to create a new landmark for Finn to visit at grid reference 435 165, what would it be and why would it be useful in that specific location? (3 marks)

6. Justify why modern digital mapping technology still relies on the traditional grid reference system used by cartographers. (4 marks)

Extension challenge: Design your own 10x10 grid map featuring at least five distinct physical and human geographical features. Create a 'Key' and write three complex grid reference clues for a partner to solve.