

Mapping the Wonders of the World with Finn

Learning objective: To use four-figure grid references, interpret scale, and identify symbols to navigate complex geographical features.

Finn the dolphin has been busy mapping the coastline and the nearby Whispering Woods. Use your knowledge of map conventions to help him complete his exploration log. Remember to use your ruler for scale calculations and look carefully at the map key provided in your atlas.

Finn is currently exploring the coastal region near Sandy Bay. The map shows a lighthouse at grid reference 1245, a dense forest at 1447, and a mountain range represented by close-set contour lines. The scale of this map is 1:25,000, meaning 1cm on the paper represents 250 metres in the real world.

Word bank: Grid reference · Scale · Compass rose · Topographical · Cartography · Latitude · Longitude · Contour lines

1. If Finn swims from the lighthouse (1245) to the edge of the forest (1447), and the distance on the map measures 8cm, calculate the actual distance in kilometres. Show your working out. (3 marks)

2. Explain why cartographers use contour lines on a map instead of just writing the height of a mountain in text. (2 marks)

3. Compare and contrast the function of a scale bar with the function of a compass rose. Why are both essential for navigation? (3 marks)

4. Using a four-figure grid reference, identify the location of the mountain peak if it sits within the square bounded by Easting 15 and Northing 48. (1 mark)

5. Justify your answer: If the contour lines on a map are spaced very far apart, what does this tell you about the steepness of the terrain in that area? (2 marks)

6. What might happen if a map creator omitted the map key? Describe the difficulties a traveller would face. (2 marks)

Draw: Draw a bird's-eye view map of a small fictional island. Include a compass rose, a scale bar, and at least four different physical features represented by symbols. Create a small map key to explain what your symbols mean.



Extension challenge: Imagine you are an explorer planning an expedition across a region you have never visited. Write a short paragraph explaining how you would use six-figure grid references to ensure your team does not get lost in a dense, featureless jungle.