

Finn's Great Cartography Expedition

Learning objective: To use and understand eight-point compass directions and interpret grid references to navigate maps.

Finn the dolphin has discovered a series of hidden coves along the coastline. Look at the grid map provided by Finn (imagine a 6x6 grid where A-F are columns and 1-6 are rows). Use your knowledge of coordinates and the eight-point compass (North, North-East, East, South-East, South, South-West, West, North-West) to plot the route and answer the questions below. Remember to explain your reasoning using geographical vocabulary.

Word bank: Compass · Grid reference · Coordinates · North-East · South-West · Cardinal points · Cartography · Topography

1. Finn starts at grid reference B2. If he travels two squares North and one square East, what is his new grid reference? Explain how you calculated this. (2 marks)

2. If a ship is located at E5 and needs to travel to B2, what compass direction would the captain need to follow? Justify your choice. (2 marks)

3. Compare and contrast the function of a grid reference with the function of a compass point. Why do cartographers need both? (3 marks)

4. What might happen if a mapmaker forgot to include a compass rose on their map? Explain the impact on someone trying to navigate. (2 marks)

5. Finn finds a treasure chest at D4. If he is currently at A1, describe the route he must take using at least two different compass directions. (3 marks)

6. Justify why it is more accurate to use an eight-point compass rather than a four-point compass when mapping a winding coastline. (2 marks)

Draw: Draw your own 6x6 grid map of an island. Include a 'Key' with symbols for a sandy beach, a forest, and a rocky cliff. Place a star at 'C3' and draw an arrow showing a path from the beach to the star, labelling the compass direction of the journey.



Extension challenge: Design a 'Hidden Treasure' challenge for a partner. Create a series of five instructions using coordinates and compass directions that lead from one corner of your map to the treasure. Write a paragraph explaining why accurate scale and orientation are essential for real-world explorers.