Mapping the Wilds with Finn the Dolphin

Learning objective: To accurately identify and plot locations using four-figure grid references on a map.

Finn the Dolphin has been mapping the coastline. Use the provided grid map to help him locate his favourite underwater habitats and landmarks. Remember: go along the corridor (eastings) first, then up the stairs (northings).

Finn's map is divided into squares. Each square has a four-figure grid reference. For example, if a treasure chest is in the square where the line for 05 meets the line for 12, the grid reference is 0512. Always read the bottom line first, then the side line.

Word bank: Grid reference · Eastings · Northings · Coordinates · Compass · Scale · Key

1. Finn finds a beautiful coral reef located in the square where Easting 03 and Northing 14 meet. Write the four-figure grid reference for the coral reef. (1 mark)

2. Look at your map. There is a shipwreck located in grid square 0715. If Finn moves two squares to the west and one square to the south, what is his new grid reference? Explain your method. (3 marks)

3. Compare and contrast the function of 'eastings' and 'northings'. Why is it vital to follow the order of 'along then up' when reading coordinates? (3 marks)

4. A storm has moved a sunken treasure chest from square 0209 to 0411. Calculate how many squares the treasure has travelled in total and justify why a map user must update their grid references after environmental changes. (4 marks)

5. If Finn wants to swim from the sandy bay at 0101 to the deep trench at 0808, describe the path he must take using grid squares. What might happen if Finn misreads a coordinate by just one number? (3 marks)

Draw: Draw a 5x5 grid. Label the bottom axis 01-05 and the vertical axis 10-14. Place a starfish at 0211, a sunken ship at 0413, and a kelp forest at 0310. Add a compass rose in the corner.

Extension challenge: Imagine you are designing a new underwater park. Create your own grid map and write three challenging grid-reference riddles for a partner to solve. Justify why you chose to place your 'Safe Zone' in the specific square you selected.