

Finn's Cartography Challenge

Learning objective: To consolidate understanding of map skills, including grid references, symbols, keys, and compass directions.

Join Finn the dolphin on a coastal expedition! Use your geographical knowledge to navigate these questions. Write your answers clearly and show your working for the calculation questions.

Answer Key: 1. (D) 4-figure grid reference; 2. True; 3. 2cm; 4. (B) A key; 5. False (they indicate height); 6. East; 7. Symbol; 8. (C) 1:25,000; 9. Scale; 10. True. Greater Depth Analysis: Encourage pupils to justify why contour lines are packed closely together on steep cliffs versus wide apart on flat floodplains.

Word bank: Ordnance Survey · Compass rose · Grid reference · Key · Contour lines · Scale · Latitude · Longitude

1. 1. Which of these is used to identify a specific 1km square on a map? (A) Longitude (B) Compass rose (C) Latitude (D) 4-figure grid reference* (1 mark)

2. 2. True or False: The needle on a compass always points towards Magnetic North. (1 mark)

3. 3. If a map has a scale of 1:10,000, how many kilometres does 2cm on the map represent in the real world? (1 mark)

4. 4. What part of the map explains what the symbols and colours represent? (A) The title (B) A key* (C) The border (D) The margin (1 mark)

5. 5. True or False: Contour lines on a map are used to measure the depth of the ocean. (1 mark)

6. 6. If you are travelling from a point at 123 456 to a point at 133 456, in which cardinal direction have you moved? (1 mark)

7. 7. What is the technical term for a small drawing or icon on a map that represents a physical feature like a church or a campsite? (1 mark)

8. 8. Which of these is a typical scale for a detailed local walking map? (A) 1:1,000,000 (B) 1:500,000 (C) 1:25,000* (D) 1:100 (1 mark)

9. 9. What do we call the ratio of a distance on the map to the corresponding distance on the ground? (1 mark)

10. 10. True or False: A 6-figure grid reference is more precise than a 4-figure grid reference. (1 mark)

Draw: Draw a bird's-eye view map of your dream park. Include a compass rose, a map key with at least five unique symbols, and a scale bar.



Extension challenge: Greater Depth Questions: 1. Explain why cartographers choose different scales for world maps versus local town maps. 2. Compare and contrast how physical features (like mountains) are shown on a map compared to human-made features (like roads). 3. Justify why it is essential for an explorer to understand both latitude and longitude when navigating the open ocean. 4. What might happen if a map key was missing from a complex topographical map? 5. How would you determine the steepness of a hill using only the information provided by contour lines? 6. Design a route for Finn the dolphin to travel through a harbour; write a short paragraph explaining your choice of grid references and compass directions.