Finn’s Coastal Adventures

Learning objective: To understand the physical features of a coastline and how erosion shapes the land.

Read the text carefully and answer the questions below in full sentences.

Finn the dolphin loves to travel along the jagged edges of the coastline where the land meets the sea. A coastline is not a straight line; it is a complex place shaped by the constant power of waves. When waves crash against softer rock, they wear it away, creating a curved area called a bay. Often, harder rock is left sticking out into the sea, forming a sturdy headland. Finn watches as the sea carries sand and pebbles, known as sediment, along the shore. This process is called erosion. Over many years, the force of the water can carve out arches and sea caves in the cliffs. Finn enjoys swimming through these natural tunnels, though he is careful to avoid the falling rocks that sometimes tumble down from the cliff tops. By studying these shapes, Finn learns how the earth is always changing. Next time you visit the beach, look closely at the cliffs and the shape of the shore; you are seeing the result of a thousands-year-old battle between the restless ocean and the solid stone of the land.

Word bank: erosion · coastline · headland · bay · sediment · landform

1. According to the text, what is a bay and how is it formed? (2 marks)

2. What is the definition of sediment, as provided in the passage? (1 mark)

3. Why do you think Finn has to be careful when swimming near the cliffs? (2 marks)

4. What does the phrase 'a thousand-year-old battle' suggest about how fast the coastline changes? (2 marks)

5. Do you think coastal erosion is a problem for humans who live near the sea? Explain your answer. (3 marks)

Draw: Draw a diagram of a coastline showing a headland, a bay, and a sea cave. Label each part clearly.

Extension challenge: Research one famous coastal landform in the UK, such as Durdle Door or The Giant's Causeway, and write two sentences about how you think it was formed.