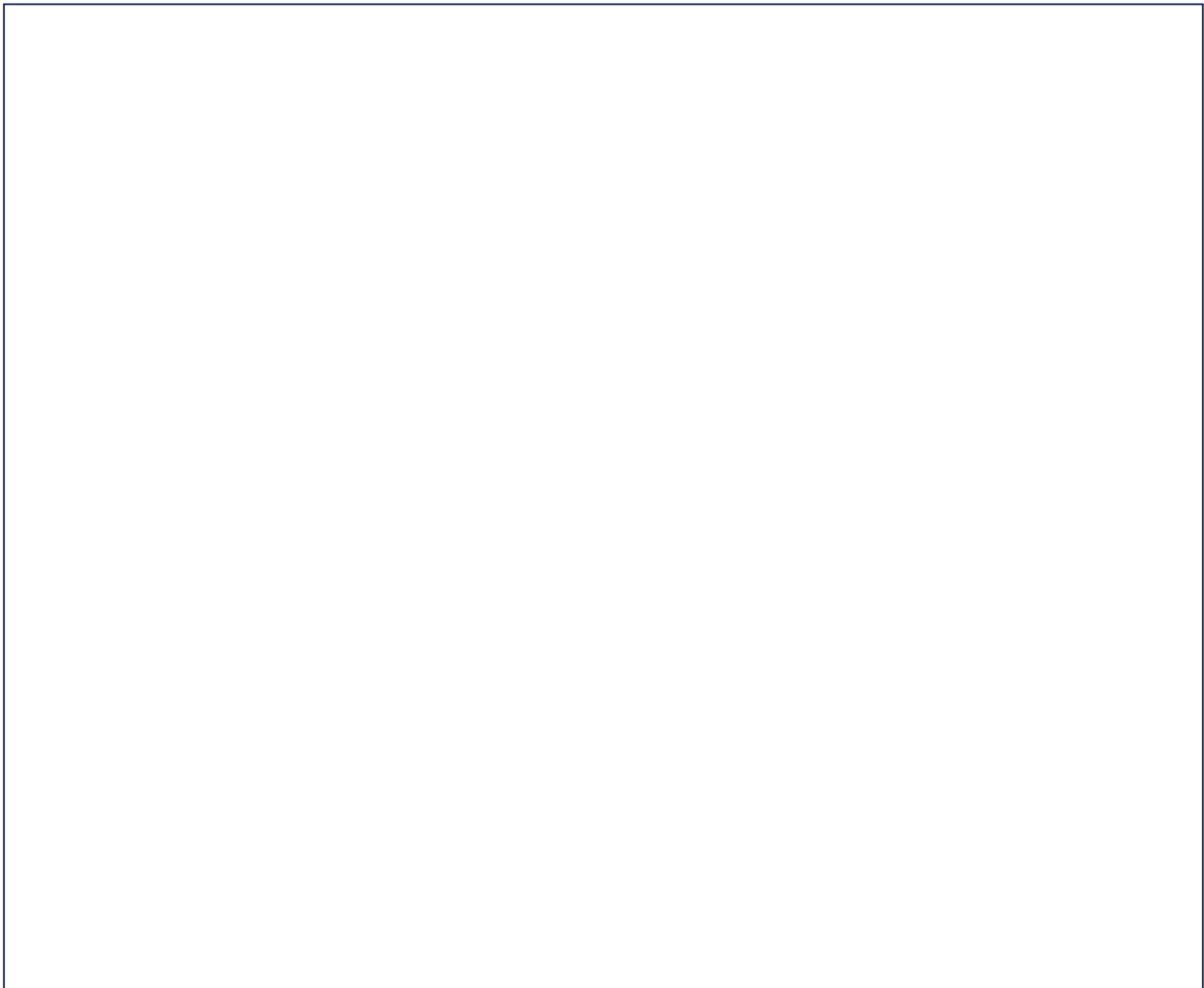


Coastal Explorations with Finn the Dolphin

Learning objective: To identify and illustrate key physical features of a coastline and understand the processes of erosion and deposition.

Follow the drawing prompts below to create a detailed diagram of a coastline. Use your labels from the word bank to annotate your sketch accurately.

Draw: Create a landscape-style diagram of a stretch of coastline. Use a pencil to sketch the hard, resistant rock of the headland and the softer, sandy sediment of the bay. Include a 'sea arch' connected to the cliffs and a lonely 'sea stack' standing in the water. Use clear lines and arrows to show the direction of waves hitting the headland. Add shading to distinguish between the steep, cliff-face textures and the smooth, flat surface of the beach.



Label words: Headland · Bay · Stack · Arch · Cave · Wave-cut platform · Longshore drift · Deposition

Steps:

1. Step 1: Draw a rugged coastline with a protruding headland and a sheltered bay. Label these two features.
2. Step 2: Illustrate a sea arch and a sea stack near the headland. Explain why these features form in this specific location.
3. Step 3: Draw a sandy beach within the bay. Label where 'deposition' occurs.

4. Compare and contrast the impact of waves on a headland versus a bay. Why do they experience different rates of erosion?
5. Justify why a stack might eventually disappear completely over a long period of time.
6. What might happen to the shape of the coastline if the sea level were to rise significantly? Explain your reasoning.