

L.O. I know how to explain erosion

Geography

What is the coast?

The coast is where the land meets the sea.



What physical features can you see on the coast?



What physical features can you see on the coast?



beaches cliffs
sand pebbles
rocks caves
rock pools
arch stack

Why does the coast look different everywhere?

- ❖ The sea constantly bashes against the edge of the land in different directions.
- ❖ Some rock in the land is soft, some is hard.
- ❖ Some places have more strong and forceful storms than others.

Coastal Changes

Today we are learning about how the coast changes over time.

Why does this happen?



Watch up to 40 seconds only now.

How are bays and headlands formed?



INSIDE THE COAST

The coasts are made of soft or hard rock. Often it can be in big patches likes this:

HARD ROCK

Soft rock

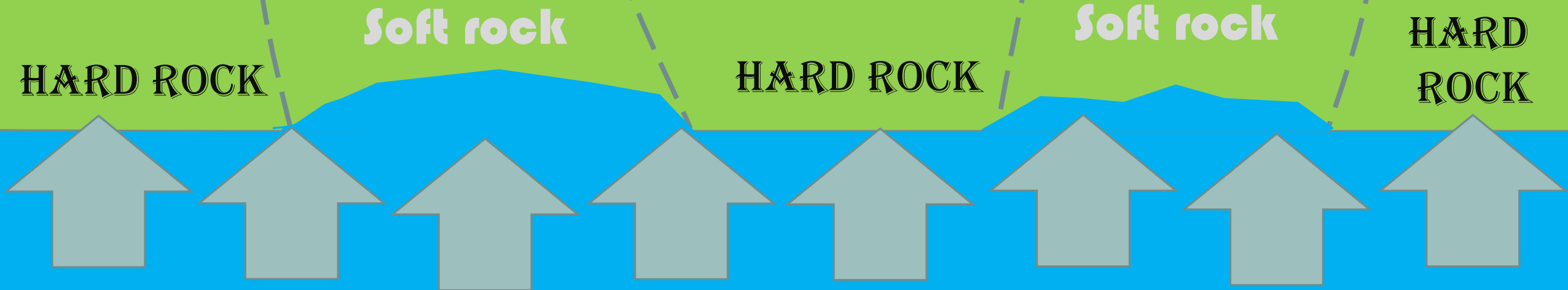
HARD ROCK

Soft rock

**HARD
ROCK**

INSIDE THE COAST

Over time the sea can erode away the soft rock parts of the coast.



INSIDE THE COAST

In the gaps sand and rocks can collect and form sandy or pebbly bays.



These lovely sandy bays are formed as the weaker section of coastline here have been eroded. The headlands stick out as they are harder more resistant rock which aren't as easily eroded.

Softer, less resistant rock has already been eroded. Sediment has formed beaches.

Harder, more resistant rock



Activity 1

Choose either of the following slides for activity 1.

How are bays and headlands formed?

The diagram is divided into two panels. The left panel, titled 'Original Coastline Before Erosion', shows a flat coastline with a light green land area and a blue sea area. The land is divided into five vertical sections labeled 'HARD ROCK', 'Soft rock', 'HARD ROCK', 'Soft rock', and 'HARD ROCK' from left to right. Dashed lines indicate the boundaries between these sections. The right panel, titled 'Present Day Coastline', shows the same land area after erosion. The 'Soft rock' sections have been eroded away, creating two bays. The 'HARD ROCK' sections remain as headlands. Below the diagrams are several horizontal lines for writing.

Explain the process of erosion which creates bays and headlands under the diagrams.

How are bays and headlands formed?

The diagram is divided into two panels. The top panel, titled 'Original Coastline Before Erosion', shows a flat coastline with a light green land area and a blue sea area. The land is divided into five vertical sections labeled 'HARD ROCK', 'Soft rock', 'HARD ROCK', 'Soft rock', and 'HARD ROCK' from left to right. Dashed lines indicate the boundaries between these sections. The bottom panel, titled 'Present Day Coastline', shows the same land area after erosion. The 'Soft rock' sections have been eroded away, creating two bays. The 'HARD ROCK' sections remain as headlands.

Make a copy of this diagram to show the coastline before and after erosion.

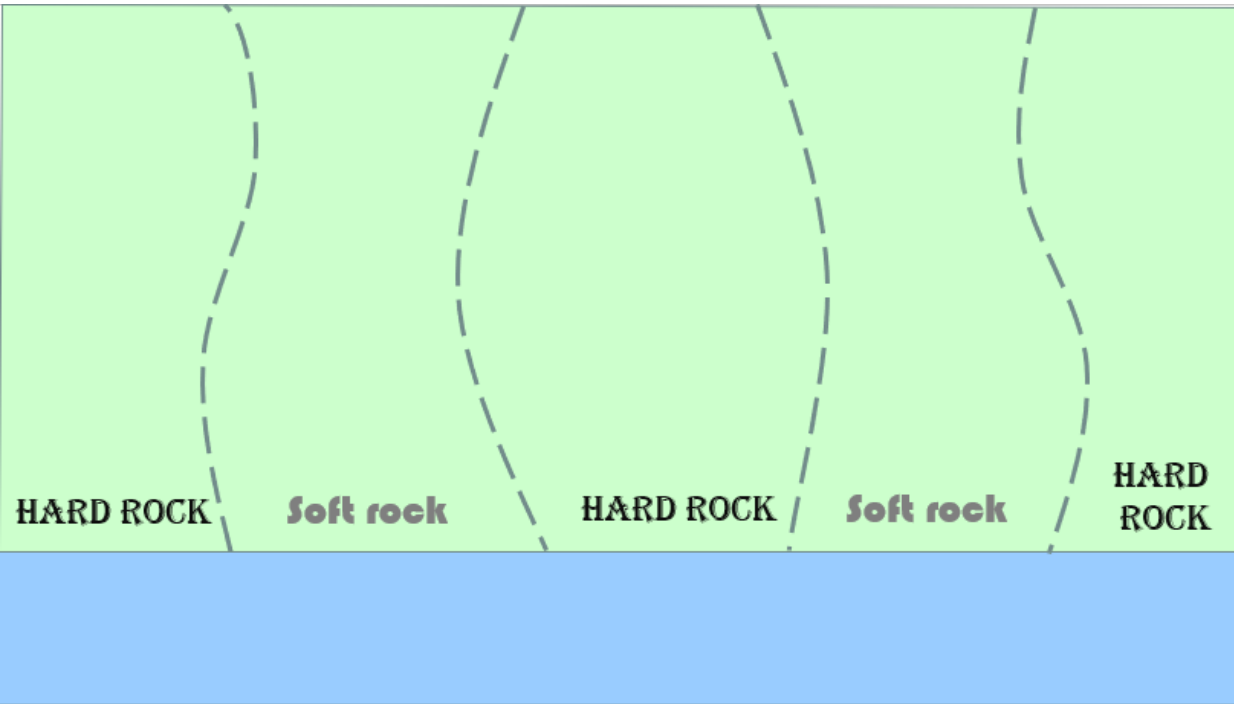
Add the following labels:

- bay
- headland
- hard, resistant rock.
- softer, less resistant rock
- Once formed, bays are sheltered and sand is deposited.

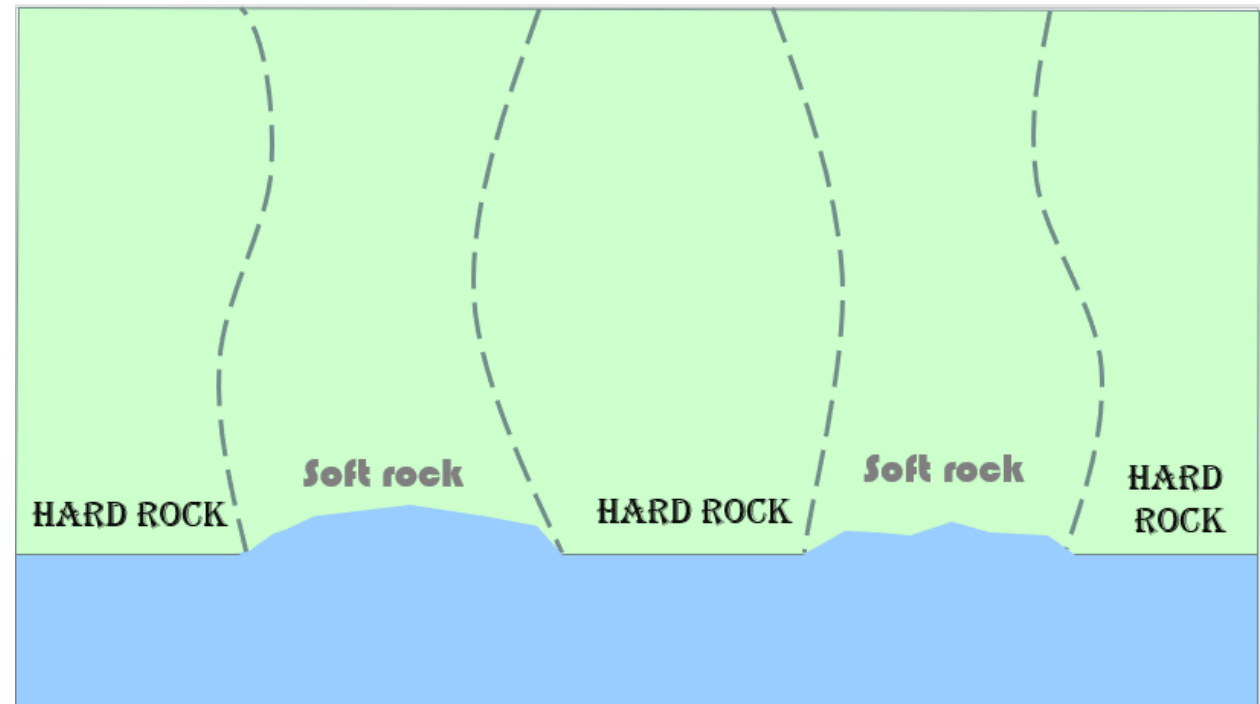
Follow the instructions, draw and label your own diagram.

How are bays and headlands formed?

Original Coastline Before Erosion



Present Day Coastline



How are bays and headlands formed?

Make a copy of this diagram to show the coastline before and after erosion.

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- Once formed, bays are sheltered and sand is deposited.

