



Learn it! Link it!

Curriculum Theme: Seaside Rocks

Information to help...

Key Vocabulary

Cause, effect, response, abrasion, arch, bay, beach, cave, caves, chalk, clay, cliff, coast, deposition, dramatic, dune, erosion, hard rock, headland, high tide, hydraulic action, low tide, notch, resistant, soft rock, spit, stack, storm surge, stump, tide, undercutting, wave-cut, weathering.

Facts/case study...

- Erosion is the wearing away of rock.
- Hydraulic Action – as waves smash against the cliff, air becomes trapped in cracks in the rock; this causes the rock to break apart.



Factors that affect rate of erosion:

- Resistance of the rock – less resistant rocks like clay and sandstone are easily eroded. More resistant rocks like granite, limestone, and chalk erode more slowly.
- Strength of the waves – affected by wind strength and duration.
- Undercutting is where the waves erode the base of the cliff and this creates an overhang of rock.
- Shape of the coastline – depends on the types of rock. If a coastline is made up of the same types of rock then it will all erode at the same rate but where it is a mixture of hard and soft rock, this is where it erodes at different rates and we see arches, stacks and stumps etc.
- Bays are formed where soft rocks are rapidly eroded by waves. When bays are formed, they become sheltered by headlands and become less eroded.
- Headlands are formed where the hard rock resists erosion and stick out as rocky outcrops beside bays.
- Stacks are columns of rocks which stand separate from the rest of the headland. They result from a combination of wave attack and weathering on the roofs of arches. When the roof of an arch eventually collapses, it leaves a stack.
- An arch is formed when two caves eventually erode into the back of each other, passing right through the headland.
- Caves are formed when sea water attacks the bases of cliffs, it gets inside cracks and erodes the rock. The cracks gradually widen into small caves.

Concepts:

Social: Many people use the coast as a source of tourism and leisure.

Economic: Many businesses operate in coastal areas and rely on tourism for income.

Environmental: How the sea erodes and destroys coastlines and landforms. How human activity impacts the natural environment.

Cause: Erosion occurs when the sea wears away the rocks on the coast – this is called hydraulic action.

Effect: The damage caused, risk to life and homes.

Response: What do people do in order to prevent rapid and destructive coastal erosion?

Links to what I already know:

- ✓ I know what a coast is
- ✓ I know that beaches are found by the sea
- ✓ I can name and locate some of the world's oceans and continents
- ✓ I know what the terms human and physical features mean



Learning and teaching strategies I need to succeed:



Think about how you learn. Revisit key facts and prior knowledge. Recognise what you don't understand and research to clarify	Write like a Geographer and include key geographical vocabulary	Locate Identify Compare Check understanding	Plan writing tasks carefully. Evaluate and edit. Identify previous knowledge. Identify ways you can remember what you have learnt. Identify ways to commit to your long-term memory.	What do I know now? Reflect on: the causes of erosion and how and when human interaction with the environment is required.
Metacognition	Assess the task	Plan the approach	Apply strategies	Reflect