

## National Curriculum Intention (s):

Identify the geographical regions and key topographical features of the United Kingdom and understand how some of these aspects have changed over time: Coasts.

### Key Information

Coastal areas are constantly changing.  
All coastal areas are different.



Some areas are worn away by waves and weather conditions. These are called erosion landforms.



Some areas are built up by materials brought in by the sea. These are called depositional landforms.

Beaches are the most common form of depositional landform. They are created when materials (sand, rocks, pebbles and sediment) are transported from elsewhere on the coastline and deposited to form a beach.

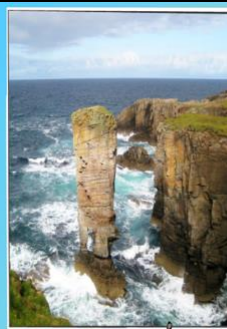


There are two main types of beach: sand and shingle. Shingle beaches are narrower and steeper than sand beaches.



Sea caves are formed when waves erode the base of a cliff. They often start as a small crack in the rock. Sand and rocks carried by the waves also help to wear away the rock of the cliff face.

Natural arches are formed when there is a difference in the rate of erosion due to the varied resistance of bedrock. Sometimes the collapse of rock around a sea cave can produce an arch.



Stacks are formed when sea arches collapse, leaving a single pillar of rock standing. Stacks can collapse or become further eroded to a stump.

### Coastal Management Strategies

**Sea Walls**  
A sea wall deflects energy away from the coast to prevent erosion damage. They are also used as a precaution against flooding.



**Revetments**  
A revetment is a cheaper alternative to a sea wall. It is designed to absorb some of the energy from the waves but still allows water and sediment to pass through it.



**Gabions**  
A gabion is a wire cage filled with rocks. The cages are stacked together against a cliff face or coast to help protect the area against erosion and weather damage.



**Groynes**  
Groynes are built at right angles along a beach in order to prevent sand and sediment from moving along the shore. This builds up the beach which acts as natural protection against coastal erosion.

### Dates and figures

In 2004, an earthquake off Indonesia caused a tsunami to sweep across the Indian Ocean, swamping coastal towns in Indonesia, Sri Lanka and distant Africa. Over 200,000 people lost their lives.

Tier 3 Vocabulary	
Arches	A natural tunnel cut through the headland.
Depositional landforms	Areas built up by materials brought in by the sea.
Erode	Wear away.
Erosion landforms	Areas worn away by waves and weather conditions.
Gabions	A wire cage filled with rocks.
Groynes	A low wall built on a coast to stop waves moving sand and rock along the beach.
Revetment	A structure which protects against erosion.
Sea caves	A natural hollow in a cliff.
Sea walls	A wall built to stop the sea flooding the land.
Stacks	A pillar of rock in the sea.
Tsunami	Giant wave cause by an earthquake or erupting volcano

Both human and natural factors can cause erosion. A famous example is the Holbeck Hall Hotel disaster of 1993.



***Holbeck Hall  
Hotel landslide,  
1993.***

