



Cliffs >

A cliff forms where high land meets the sea. The land is battered by powerful waves at sea level, wearing the rock away. The rock above is left without any support so it collapses under its own weight. This makes a steep-sided cliff.



Sea caves >

Powerful waves crash again and again against cliffs, causing the rock at sea level to wear away. This process creates sea caves at the base of cliffs.



Arches

Arches form at headlands, where rocky coastlines jut out into the sea. Powerful waves pound into rock from both sides of the headland. The waves erode (wear away) the rock at sea level to form sea caves on either side. The waves eventually break right through the headland, creating an arch.



Spit >

This spit, known as the Dungeness Spit, is located on the Pacific coast of Washington State, USA. Its curved shape was formed by winds blowing in different directions at different times of the year. It grows by 4.5m (15ft) each year.

A **spit** is an extended stretch of beach material that projects out to sea and is joined to the mainland at one end.



As sand dunes form, the sand is blown in the direction of the wind. Eventually, the roots of plants that grow in these dunes help to hold the sand together.

Coastal *dunes* form when wet *sand* is deposited along the coast and dries out and is blown along *the beach*.



A **bay** is a **part** of a **coast** where the **land curves** inwards.



A **headland** is a cliff that sticks out into the **sea** and is surrounded by water on three sides.



A **beach** is a pebbly or sandy shore, especially by the sea.



Stacks

A sea stack is a column of rock that is cut off from the coastline. The constant battering by powerful waves on sea caves or arches causes the unsupported rock above to collapse under its own weight. On the land side, a new cliff is formed. In some places, on the other side, a column of extra-hard rock, or stack, continues to stand.



A **stump** is formed when a stack breaks down further.