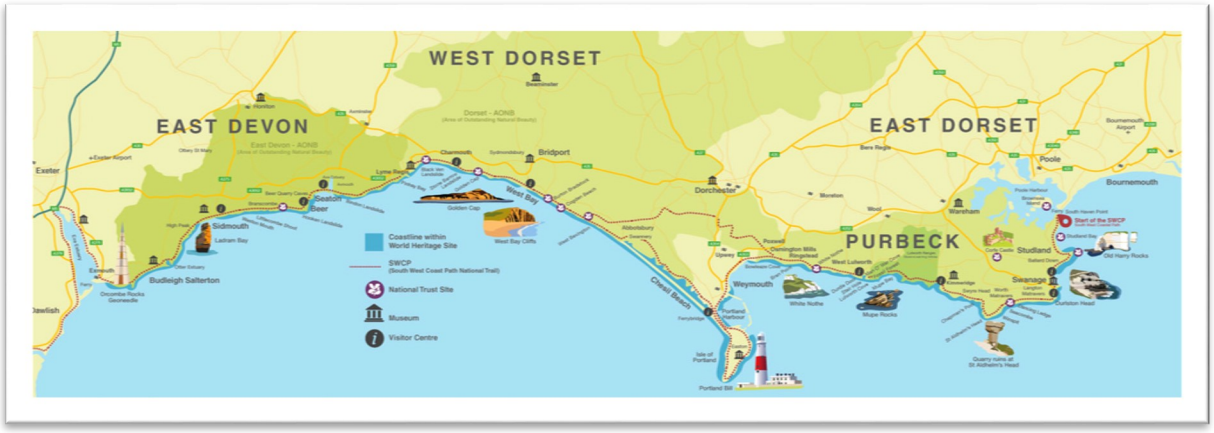
YEAR 5 - COASTS

The Jurassic Coast - Where it is in the world:

Place: The Jurassic Coast
Continent: Europe
Country: England
County: Dorset
Settlement type: Coastal
Language: English



Location Background:

The Jurassic Coast is a World Heritage Site on the English Channel coast of southern England. It stretches Orcombe Point near Exmouth in East Devon to Old Harry Rocks near Swanage in East **Dorset**, a **distance** of 96 miles (154 km).

This coast got its name from the rocks found at its site, which are from the Triassic, **Jurassic** and Cretaceous periods.

Key Vocab:	
arch	When waves erode (wear away) rock to create a hole that can be passed through
bay	Found between headlands where the waves have eroded the softer rock more rapidly
beach	An area of sand or shingle sloping down to a sea or lake
cave	Found in coasts made of harder rock
cliff	A steep rock face along the coast
coast	Where land meets the sea
erosion	The wearing away of the land
fetch	The distance a wave has travelled
headland	An area of land sticking out to sea formed of more resistant (harder) rock
longshore drift	Waves approaching the coast at an angle result in the gradual zig-zag movement of beach materials along the coast
sea defences	Measures taken to defend the coast from erosion, cliff collapse and flooding
spit	A long, narrow build-up of sand and shingle formed by longshore drift and deposited (dropped-off) where the coastline abruptly changes direction
stack	Rock left standing out at sea after wave erosion has separated it from the mainland
stump	Formed by continuing wave action attacking a stack until it collapses
tide	The alternate rising and falling of the sea linked to the gravitational pull of the moon
transportation	The moving of material (e.g. sand, rocks) from one place to another
waves	Caused by the transfer of energy from wind blowing over the surface of the sea

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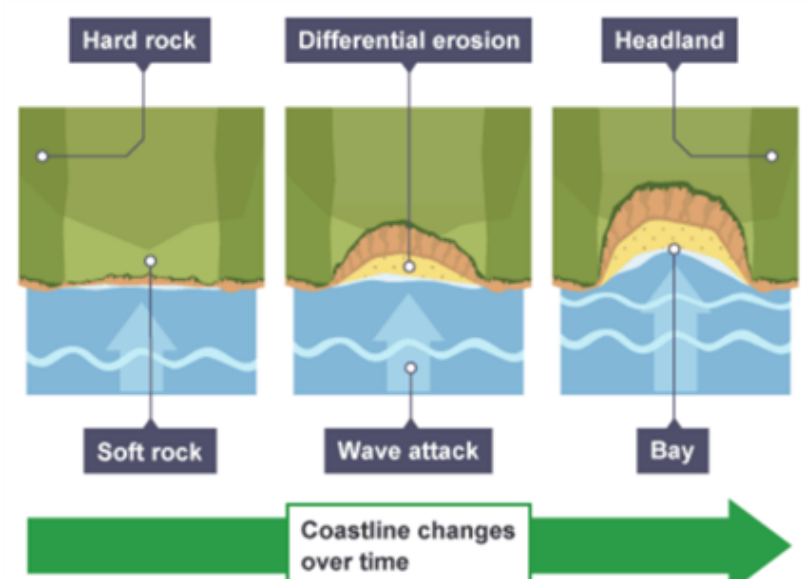

Headlands and bays:

Cliffs along the coastline do not erode at the same pace. When a stretch of coastline is formed from different types of rock, headlands and bays can form.

Bands of soft rock such as clay and sand are weaker and therefore they can be eroded quickly. This process forms bays. A bay is an inlet of the sea where the land curves inwards, usually with a beach. Hard rock such as chalk is more resistant to the processes of erosion. When the softer rock is eroded inwards, the hard rock sticks out into the sea, forming a headland.

Caves, arches, stacks and stumps:

Erosion commonly found on a headland.

1. **Cracks** are formed in the headland through the erosional processes of abrasion from waves and sea debris/rocks/pebbles.
2. As the waves continue to grind away at the crack, it begins to open up to form a **cave**.
3. The cave becomes larger and eventually breaks through the headland to form an **arch**.
4. The base of the arch continually becomes wider through further erosion, until its roof becomes too heavy and collapses into the sea. This leaves a **stack** (an isolated column of rock).
The stack is undercut at the base until it collapses to form a **stump**.