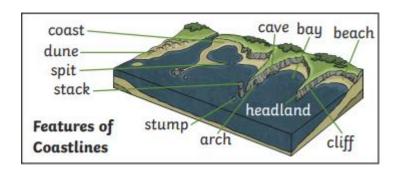
### Year 6

# How are our coastlines changing?



Key Vocabulary				
acidic	A chemical substance, usually a liquid, which reacts with other substances to form salts. Some acids burn or dissolve other substances that they come into contact with.			
border/ boundary	The outer part or edge of a region or country that divides it from another.			
deposition	When material/sediment is moved and dropped off in a different place.			
dissolve	When a solid substance mixes with liquid to make a solution.			
erosion	When natural materials are worn away and transported to a different place.			
weathering	The process of wearing away rocks by the weather.			



## Weathering and Erosion

**Weathering** is the process of wearing away rocks by the weather.

There are three different types of weathering:

- physical weathering
- chemical weathering
- biological weathering

Erosion is where natural materials are worn away and transported by environmental features such as water, wind and ice.



**Erosion** – Wind blows loose particles away or into other rocks causing the rock to be worn away.

Physical Weathering	Chemical Weathering	Biological Weathering	
Water gets into cracks in the	Slightly <mark>acidic</mark> rainwater can	Caused by animals and plants.	
rock, it can then freeze	cause a chemical reaction and	Roots can grow under rocks an	
causing the water to expand,	over time this can <b>dissolve</b>	cause damage. Animals can	
creating cracks in the rock.	some of the rock.	wear away paths, dig holes etc.	

### **Features of Coastlines**

#### Bays and Headlands

Where there is harder and softer rock, the softer rock will **erode** more quickly and can form bays. The harder rock erodes more slowly and can form headlands surrounding bays.

soft rock

hard rock

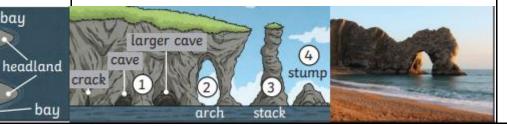
soft rock

hard rock soft rock

#### Arches, Stacks and Stumps

Softer or weak sections of the rock are eroded more easily.

- 1. Over time, waves cause cracks to open, forming caves.
- 2. If a cave forms in a headland, it may break through causing an arch to form.
- 3. The top of the arch can weaken and may collapse into the sea, leaving a stack.
- 4. Over time, the stack will **erode** leaving a small stump of rock.



#### Spits

Formed by deposition.

- 1. The tide carries eroded material along the coastline.
- 2. Deposits form a long, thin sandy area of land.
- 3. Changing winds may cause the spit to form a hook shape.
- 4. Mud flats develop on the inland side of the spit.



### Why do boundaries change?

bay

Many countries and borders across the world have and are still changing due to:

Human Political Activity

- Tribes claiming areas of land
- Invasion/war
- Migration of other settlers
- Royal/Political union

Natural activity

- Rising sea levels
- Natural processes and events e.g. changing river courses, volcanic eruptions

These include the UK and other countries in Europe such as Germany, Poland and Czechoslovakia. These changes can have an impact on the borders, language, religion and culture of the country.

### **Changing Landscapes**

Landscapes can change over time for many different reasons.

- New houses/buildings and roads are built
- Old buildings are demolished or updated
- Areas of land may be cleared for farming or building

Some landscapes are important and there are things in place to stop

development such as:

- Listed buildings
- National/country Parks
- Green belt/ conservation areas
- Sites of Special Scientific Interest
- World Heritage Sites