

SUBJECT: Geography

UNIT: Year 8 World of Water



Relief of the UK can be divided into uplands and lowlands. Each have their own characteristics.

- Areas -200m: Flat or rolling hills. Warmer weather. i.e. Fens
- Areas +600m: Peaks and ridges cold, misty and snow common. i.e. Scotland.



Erosion

The break down and transport of rocks – smooth, round and sorted.

Abrasion - Rocks hurled at the base of a cliff to break pieces apart.

Attrition - Rocks that bash together to become smooth/smaller.

Hydraulic Action - Water enters cracks in the cliff, air compresses, causing the crack to expand.

Solution - A chemical reaction that dissolves rocks.

Transportation

Longshore drift:

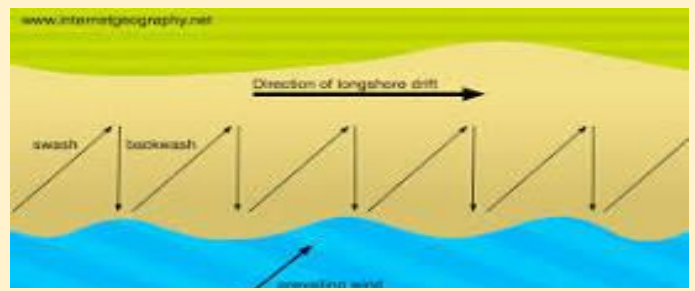
Prevailing wind causes waves to approach the beach at an **angle**. The **backwash** carries sediment down the beach at a right angle (straight back) down the beach. This creates a **zigzag** movement along the coast.

Waves:

Waves are created by wind blowing over the surface of the sea, friction is created - producing a swell in the water. There are constructive and destructive waves.

Factors affecting wave size:

1) Fetch how far the wave has travelled 2) Strength of the wind. 3) How long the wind has been blowing for.



Formation of Headlands and Bays

Waves attack the coastline. Softer rock is eroded quicker forming a bay. More resistant rock is left jutting out into the sea. This is a headland and is now more vulnerable to erosion.

Landforms

Erosion attacks the headland, eroding cracks into caves, then eroding the cave through to an arch. Overtime the arch becomes top heaving and collapses, leaving a stack.

Spit

Form when the coastline changes direction and longshore drift continues to move material along the beach. Longshore drift deposits material in the sea and over time this builds up to create a spit.

Coastal Management

Soft engineering is made from natural materials, looks nicer and costs less, but needs regular maintenance.

Hard engineering is made from tough materials like concrete, is expensive and doesn't look nice but lasts a lot longer.

Soft = beach replenishment, managed retreat.

Hard = Groynes, Sea Walls, Rip rap/Gabions.

