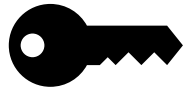


Year 7 Geography Summer Term



Key words

Coast – Where the land meets the sea

Erosion – where material is worn away from the land

Transportation – the movement of eroded material

Fieldwork – research that takes place outside the classroom

Micro-climate - the climate of a very small or restricted area

What is the coast? The coast is the place where the land meets the sea.

Wave types

Destructive waves have a strong swash and a weak backwash. They are big strong waves made when the wind is powerful. They have high energy and they erode the coast.

Constructive waves have a weak swash and a strong backwash. They are less powerful. They have low energy and they build beaches.

What are the processes occurring at the coast?

Erosion: the breaking down of rock

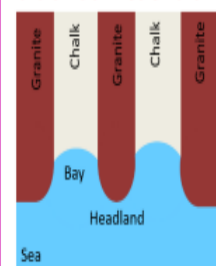
Transportation: the movement of rock

Deposition: the building up of rock

Types of erosion

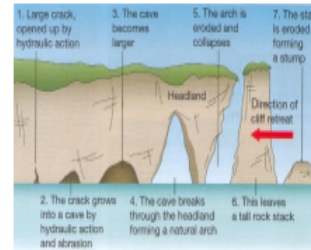
Hydraulic action	Air may become trapped in joints and cracks on a cliff face. When a wave breaks, the trapped air is compressed which weakens the cliff and causes erosion.
Abrasion	Bits of rock and sand in waves grind down cliff surfaces like sandpaper.
Attrition	Waves smash rocks and pebbles on the shore into each other, and they break and become smoother.
Solution	Acids contained in sea water will dissolve some types of rock such as chalk or limestone.

Landforms of EROSION and DEPOSITION



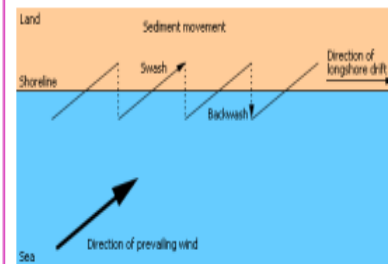
Soft rock erodes faster than hard rock. When hard rock and soft rock are next to each other the coast forms into **headlands and bays**. **Headlands** stick out into the ocean. **Bays** are where the soft rock has eroded away.

Landforms of EROSION: Caves arches stacks and stumps



- Caves** occur when waves force their way into cracks in the cliff face. Water contains sand and other materials that grind away at the rock until the cracks become a cave. This is hydraulic action.
- If the cave is formed in a headland, it may eventually break through to the other side forming an **arch**.
- The arch will gradually become bigger until it can no longer support the top of the arch. When the arch **collapses**, it leaves the headland on one side and a **stack** (a tall column of rock) on the other.
- The stack will be eroded at the base. This weakens the structure and it will eventually **collapse** to form a **stump**.

TRANSPORTATION: Longshore drift



- Waves approach the coast at an angle.
- Swash carries sediment up the beach at an angle.
- Backwash carries sediment down the beach with gravity – at right angles to the beach.
- This creates a zig-zag movement of sediment along the beach.

Weather is the state of the atmosphere at a particular place and time referring to precipitation, temperature, wind, humidity, sunshine and air pressure.

Elements of Weather and how we measure them



Precipitation: measured in mm by a rain gauge.

Temperature: measured by a thermometer in °C

Wind Speed/Direction: measured by an anemometer or vane – measured in knots/compass points.

Humidity – amount of water vapor in air.

Sunshine: measured by a Campbell Stokes Sunshine Recorder

Air Pressure: Measured by a barometer in millibars

How does weather impact us?

The weather has a direct impact on humans. This can be positive, such as more plant growth, increased sales and tourism, more energy production or water supply. But there can also be negative impacts such as travel disruption, medical issues and damage to land and crops. Areas impacted by weather are:
Health /Agriculture (Farming) /Transport /Retail (Shopping)/Tourism/Energy Supply and Water Supply.

Measure and record the weather for a week.

- Take a photo on each day to record an image of the day's weather
- Write your results in a copy of the table. Illustrate it with your photos
- Write a summary of the week's weather and how it affected you. For example, think about the clothing you wore and activities you could or could not do.

Weather observation chart							
	Monday Date:	Tuesday Date:	Wednesday Date:	Thursday Date:	Friday Date:	Saturday Date:	Sunday Date:
Temperature							
Precipitation							
Wind direction							
Wind speed							
Cloud cover							