

# Memory Geogger

Define the term coastal erosion

#### Identify the processes of coastal erosion explained below.

When waves hit the base of a cliff air is compressed into cracks. Repeated changes in air pressure are caused by water and air being forced in and out of joints, folds and bedding planes. When the wave retreats the air rushes out of the gap. This causes an explosive effect as pressure is suddenly released. This process is supported further by the weakening effect of weathering. Material breaks off cliffs, sometimes in huge chunks. This process is known as

When waves cause rocks and pebbles to bump into each other and break up it is known as \_\_\_\_\_\_\_ is when cliffs erode as a result of weak acids in the sea. \_\_\_\_\_\_ is when destructive waves pick up beach material (e.g. pebbles) and hurl them at the base of a cliff.

When sand and larger fragments wear away the base of a cliff (sand paper effect) or headland it is known as \_\_\_\_\_\_.

From the list below, identify the main processes of coastal erosion

Corrasion Traction

Longshore drift

Abrasion

Saltation

Hydraulic action

Attrition

Corrosion/solution

Suspension

Identify the type of wave that mainly causes coastal erosion.

Rates of coastal erosion will be higher where...



#### Define the term coastal erosion

Coastal erosion is the wearing away of the land and break up of rock by the sea.

#### Identify the processes of coastal erosion explained below.

When waves hit the base of a cliff air is compressed into cracks. Repeated changes in air pressure are caused by water and air being forced in and out of joints, folds and bedding planes. When the wave retreats the air rushes out of the gap. This causes an explosive effect as pressure is suddenly released. This process is supported further by the weakening effect of weathering. Material breaks off cliffs, sometimes in huge chunks. This process is known as hydraulic action.

When waves cause rocks and pebbles to bump into each other and break up it is known as **attrition**.

**Solution** is when cliffs erode as a result of weak acids in the sea.

**Corrasion** is when destructive waves pick up beach material (e.g. pebbles) and hurl them at the base of a cliff.

When sand and larger fragments wear away the base of a cliff (sand paper effect) or headland it is known as abrasion.

## From the list below, identify the main processes of coastal erosion

Corrasion

Traction

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### Identify the type of wave that mainly causes coastal erosion.

Destructive wave

Waves have a large fetch e.g. the south west coast has an 8000 kilometre fetch across the Atlantic Ocean.

Strong winds blow for a long time creating destructive waves.

An area has no beach to buffer the waves.

The cliff material is soft e.g. soft boulder clay along the Holderness means it experiences the highest rate of erosion in Europe.

Cliffs made from rock have many joints.

A headland sticks out into the sea and waves converge on it (wave refraction).