

### Coastal erosion and weathering:

- Coasts are constantly changing due to waves, erosion, transportation and deposition.
- How coasts change depend on the types of rocks that are in different areas. **Harder rock**, like limestone and sandstone, **erodes slowly**. **Softer rock**, like clay, **erodes more quickly**.

### Key words and terms:

#### **Weathering:**

The weakening of rock before it is eroded.

#### **Erosion:**

The wearing away and removal of material by a moving force, like a wave. **Deposition:**

When material being transported by the sea is dropped.

#### **Abrasion:**

See the first table.

#### **Hydraulic power:**

See the first table.

#### **Solution:**

See the first table.

#### **Freeze-thaw weathering:**

See the first table.

#### **Landform:**

A feature of the landscape which has been formed by erosion, transportation and deposition.

#### **Fault:**

A crack in a rock.

Name	Description
Abrasion	As waves smash rocks against cliff surfaces, they are worn away and become smoother. This is known as the "sandpaper effect".
Hydraulic power	Air becomes trapped in faults in cliffs. When waves break against the cliffs, the air is compressed and forces the fault to become bigger. This eventually causes a piece of the cliff to break away.
Solution	Acids in sea water dissolve certain types of rock, such as limestone or chalk, causing them to gradually erode over time.
Freeze-thaw weathering	Water collects in faults during the day. At night, this water freezes and expands. This makes faults bigger over time and is similar to hydraulic power.

### Coastal landforms:

- Landforms which occur on coasts include **headlands, bays, caves, arches, stacks and stumps**.
- A is a **cave**. These form when a fault is eroded.
- B is an **arch**. These form when two back to back caves break through a headland.
- C is a **stack**. These forms when an arch grows bigger and the roof of the arch eventually collapses.
- D is a **stump**. These form when stacks erode over time and eventually collapse.
- E is a **bay**. These form when weak rock, such as clay, is eroded, creating a sheltered area.
- F is a **headland**. These form when harder rock erodes slowly, causing it to stick out into the sea as the weaker rock around it is eroded.

