



Coasts Knowledge Organiser

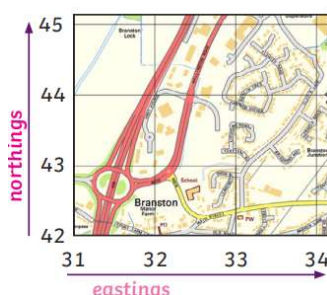
Stubbington



Grid References

A map is criss-crossed with horizontal and vertical lines that create a grid.

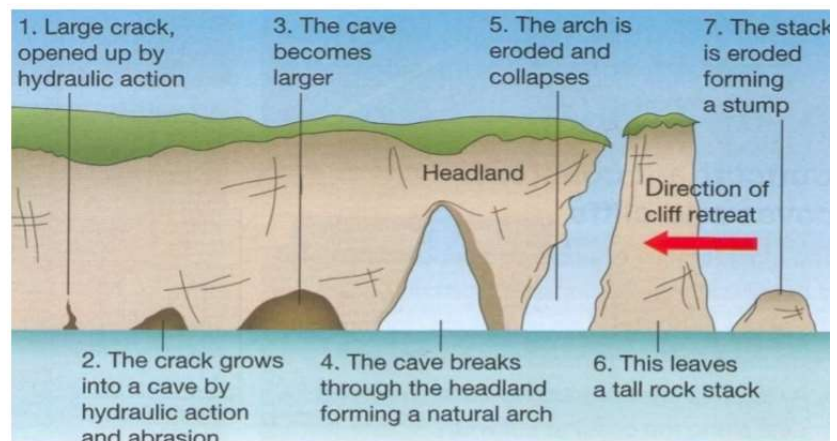
- The grid and squares help to narrow a search area so you can locate features on a map.
- Usually, the lines are numbered with two digits.
- Easting and northing numbers are put together to create a four digit grid reference, e.g. (32,43), which refers to the bottom left corner of a square on the map.
- Grid references can be even more specific by adding an extra digit to both the easting and northing numbers.
- These six-digit grid references, e.g. (323,432), tell us more precisely whereabouts in the square something is.



Key vocabulary

| | |
|-----------------------------|--|
| Erosion | The process by which the coastline gets worn away and moved elsewhere. |
| Hydraulic action | The power of the wave forces water and air into cracks in the rock. This pressure forces fractures in rock to split apart. Over time, this creates faults and notches which get bigger |
| Abrasion | The waves pick up rocks from the sea and throw them against the cliffs. Over time, this rubs and smooths the rock, like using sandpaper |
| Coast | The area where the land meets the sea |
| Beach | A low-lying area where the land meets the sea, made up of fine, loose sediment |
| Headland | An area of land protruding into the sea |
| Bay | A large body of water in the land next to a sea or lake between two headlands |
| Grid references | The numbered squares on a map used to locate a place. |
| Easting | The numbers used in a grid reference that run west to east. |
| Northing | The numbers used in a grid reference that run south to north |
| Ordnance Survey maps | Detailed maps of Great Britain where each square represents 1km squared (1km ²). |

Landforms created by erosion



Protecting the coast



Sea walls are the usual way to keep the sea out. They are often curved, to reflect the waves away.



You could build **revetments**, which are a bit like fences. The waves batter them instead of the cliffs.



Rock armour (big rocks) soaks up the waves' energy. It slows down the erosion of cliffs, and sea walls.



Groynes help, because they stop sand being carried away. Sand absorbs some of the waves' energy.



You could build an artificial **reef** of rocks out at sea, so that the waves break earlier, away from the beach.



You could even add more sand or shingle to a beach, to build it up. This is called **beach nourishment**.