

Geography Unit 1 : How Gorleston beach suffered from coastal erosion?

OS Maps - Grid References

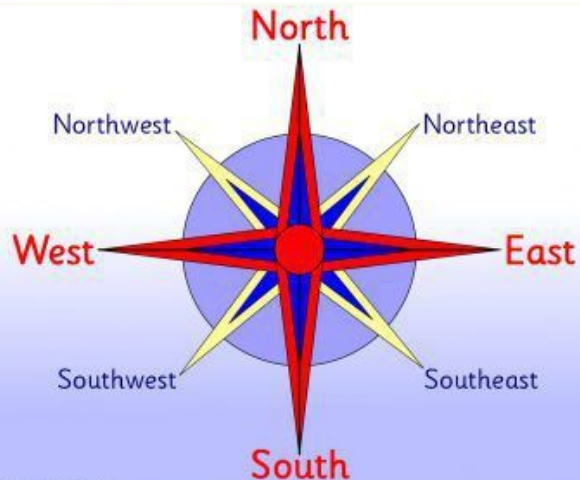
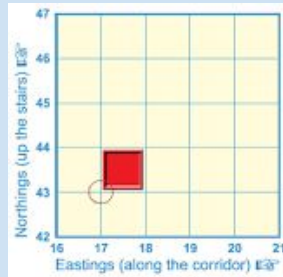
Maps are divided into grid squares to make it easier to locate things.

A grid reference allows someone to mark a place on the map by referring to vertical and horizontal lines called 'eastings' and 'northings'.

The reference given is always for the left hand corner of the square.

Example: 1743 → 17 refers to the eastings coordinate and 43 the northings coordinate.

First, you look along the corridor to find the eastings coordinate. Then you look up the stairs to find the northings coordinate.



Bays and Headlands

If a coastline is made of sections of harder and softer rock, these will erode at different speeds when attacked by waves.

Where the softer rock has eroded more quickly, bays form.

The harder rock erodes more slowly, and forms headlands surrounding bays.



Sand

Most sand comes from mountains and is created by erosion. As the rock is eroded, it can get washed into streams and rivers and carried to the sea.

Erosion of the cliffs along the coast can also cause large rocks to break and fall into the sea. Here, they are worn down into tiny pieces as the waves toss them around.

Pebbles are eventually ground down into sand that can then be moved along the coast to form beaches.

Coastal Erosion = the process of the coastline being worn away over time by destructive waves, storms and human interference.

Other Features Caused by Erosion

Split - Hooked shaped land made when the tide carries eroded rock along the coastline.

Caves - over time, the force of the waves causes small cracks to open up in the rocks. Water then forces itself into these cracks causing them to grow - eventually into caves.

Arch - if a cave forms in a headland, waves can break through to the other side causing an arch.

Stacks - waves keep hitting arches making them wider until part of it collapses - leaving a stack of rock.

Stump - Over time, stacks are worn down by the waves, leaving a small stump of rock.

