

## KS3 Geography: Explain this...

### Coastal flooding

Coastal flooding can be a threat to towns, villages and cities around the shoreline of the United Kingdom.

Flooding sea water can cause serious damage to homes, businesses and agricultural land. In extreme cases, it can drive people from their homes and destroy wildlife habitats.

Climate change, extreme weather and the retreat of beaches due to erosion all mean an increased risk of coastal flooding.

Coastal flooding happens when storms and high winds push waves of sea water towards the coast. It is even worse when a storm coincides with the spring tide. This is when the gravitational pull of both the sun and the moon combine to create a high tide.

In December 2013, the United Kingdom was hit by the worst tidal surge in over fifty years.

Gale force winds combined with the high spring tide and an area of low pressure. Thousands of people had to be evacuated from their homes and over a thousand homes were flooded. Two people were killed.

But, the deadliest kind of coastal flooding is when an earthquake shifts the seabed causing a huge tidal wave to form. This is called a *tsunami*.

One of the worst tsunamis ever recorded happened in the Indian Ocean on Boxing Day in 2004. It flooded the coastlines of fourteen countries, in some places reaching up to three kilometres inland, sweeping away homes and villages and killing more than 200,000 people.

Fortunately, because of its geographical situation, the United Kingdom is unlikely to be affected by a tsunami. But, coastal flooding here caused by high tides and climate change can be serious and can threaten lives and livelihoods.