

## Year 6 – Spring term

### How have natural disasters impacted the West Coast of America?

crust	the outer layer of the earth
dormant	something that is dormant is not active or growing but has the ability to be active at a later time
flood	a large amount of water covering an area
magnitude	the magnitude of an earthquake is a measure of how strong or violent it is
mantle	a layer of something that covers a surface
Richter Scale	a system used to measure the strength of an earthquake
Ring of Fire	the Ring of Fire is a string of volcanoes or earthquakes, around the edges of the Pacific Ocean.
seismograph	a piece of equipment that measures and records the strength of an earthquake
tectonic plates	one of the parts of the earth's surface that move in relation to each other

#### What is a **Natural Disaster**?

Natural disasters are sudden and terrible events in nature. They cause damage, destruction and death.

Examples of natural disasters include floods, earthquakes, tsunamis, volcanic eruptions, and hurricanes..

#### What is a **volcano**?

A volcano is an opening of the Earth's crust. Ash, magma and gases escape from this opening. Volcanic eruptions can be a hazard to people and the environment.

Volcanoes occur either at the unstable boundaries of tectonic plates or in the middle s of plates where the crust is thin or where there is a particularly hot spot in the mantle.



#### How is the **West Coast** effected by Natural disasters?

The West Coast of North America is effected by natural disasters as it is situated on major tectonic plates that collide together to create earthquakes.

The Ring of Fire surrounds the edges of the giant Pacific Plate. A plate is a section of the rocky outer layer of Earth. Earth's plates move at different rates and in different directions. As the Pacific Plate and the plates around it grind into each other, they cause earthquakes and volcanoes.

#### What is an **earthquake**?

The earth has a crust which is made of different pieces called tectonic plates. These plates fit together like a jigsaw and are moving at a rate of a few centimetres a year, in different directions and at different speeds. Some plates slide past each other, others move away from each other and some bump into each other. As plates move in different directions over long periods of time, friction causes energy to build up. It becomes so great that the energy is released, which creates a shock wave – an earthquake.



#### What causes **hurricanes and flooding** and how have **humans impacted** this?

A hurricane is a storm system rotating around an area of low pressure, which produces strong winds and heavy rain. They are tropical cyclones which originate in the Atlantic basin.

Humans have impacted the intensity of hurricanes, as global warming has caused warmer and moister atmosphere and warmer oceans making it more likely that hurricanes will be stronger than before. This has also led to more flooding.

Additionally, more floods have occurred as the rising temperate have caused the ice caps to melt. This have resulted in rising sea levels and higher levels of precipitation. The rising temperatures have also caused droughts, therefore when it rains the ground cannot absorb the water as quickly meaning that flash floods occur.

#### Why does the **UK** have fewer **natural disasters**?

The United Kingdom do not experience significant earthquakes or volcanoes because it's not located near a tectonic fault-line.

The UK does not experience many tropical storms / hurricanes as they only form near the equator where the ocean water is warmer.

Most of the UK coastline looks out onto small seas rather than boundless open ocean, so the prospects for a tsunami wave are much lower.

