



Year 4 Knowledge Organiser

Geography

Extreme Earth



What I should already know:

I can locate the seven continents on a map.
I can identify an area of the world that has volcanoes.
I know that tornadoes mainly occur in America.
I know earthquakes are caused by tectonic plate movement.

Project Aim:

To look at the destructive powers of nature, from volcanoes and earthquakes to tsunamis and tornadoes.

Useful Links:

<https://www.bbc.com/bitesize/t/0pics/z849q6f>

http://news.bbc.co.uk/cbbcnews/hi/find_out/guides/tech/earthquakes/newsid_1894000/1894934.stm

Volcanoes:

Use this great interactive resource to explore where volcanoes are in the world and find out more about them:

<https://earth.google.com/web/data=CiQSiIhgNGFiYmQ4OWNiNDUwMTFhZzgwYzQ1ZmYzYTA0NDEwZDg>

What I need to know:

Earthquakes

Earthquakes are caused when the earth's tectonic plates suddenly move. Most earthquakes occur near the tectonic plate boundaries. Earthquakes can cause lots of damage to roads, buildings and property.

Tsunamis

A tsunami is a giant wave caused by a huge earthquake under the ocean. The earthquake causes a large amount of water to be displaced very quickly causing a series of waves. As the waves travel through shallower water near land, they get bigger. The wave crashes onto the land causing devastation to buildings and lives.

Tornadoes

A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big cumulonimbus clouds. There can be thunder and lightning at the same time. You can see tornadoes due to the dust and water droplets caught in the clouds.

Volcanoes

Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing magma to sometimes erupt through it. Active volcanoes have erupted in the last 10 000 years. Dormant volcanoes haven't erupted in the last 10 000 years but may erupt again. Extinct volcanoes aren't expected to erupt again.

Key Vocabulary

Hurricane – an intense tropical storm with powerful winds and heavy rain. Other names for a hurricane include cyclone, typhoon and tropical storm.

Eye of the storm – a relatively calm, clear area at the centre of a hurricane.

Active volcano – an active volcano is one that has erupted recently, and there is the possibility that it may erupt again.

Dormant volcano – a dormant volcano is one that has not erupted for a long time, however, it may still erupt in the future.

Erupt - To suddenly burst out causing lava to explode out of the earth's surface.

Extinct volcano – an extinct volcano is one which hasn't erupted in at least 10,000 years, and that scientists don't think will erupt again for a very long time.

Molten – something made into a liquid by heat.

Magma – hot fluid or semi-fluid below the earth's crust.

Tectonic plate – segments of the Earth's crust that move in relation to one another which can cause earthquakes or volcanic eruptions.

Tsunami - This is essentially a giant wave caused by a huge earthquake under the oceans.