

Year 3 Enquiry question: Why do some earthquakes cause more damage than

Key Objective and Rationale

Within this enquiry, we will continue our map work from the last enquiry but now look on a global scale. We will understand what creates an earthquake and the factors that determine the number of deaths and level of destruction they are likely to cause.

Important Things I Will Know

An earthquake is caused by the movement of tectonic plates.

Earthquakes of a higher magnitude have an epicenter near plate boundaries.

We can measure earthquakes using a Richter scale.

The damage an earthquake causes is dependent on: the magnitude, where the earthquake happens, time of day or night and the economy of the country.

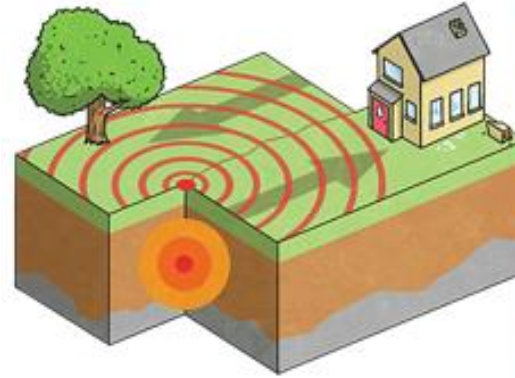
Volcanoes are caused by the escaping heat from inside the earth at plate boundaries.

Red-hot liquid rock called magma rises up through cracks in the rocks of the Earth's crust and erupts out onto the surface as lava.

The Ring of Fire goes through the Pacific, outlining the countries and is a hot spot for active volcanoes and frequent earthquakes.

New Zealand sits on the edge of the Australian and Pacific tectonic plates.

Maps and images I Will Refer to



Christchurch,
New Zealand



Tirua, Chile











Leogane, Haiti

Geographical Techniques I will Use to Support my Learning

Statistical representation	Scatter graphs, data tables, storyboarding.
Map work	Distribution maps: political, relief, population density, distribution of earthquakes and volcanoes.
Imagery	Aerial, satellite photographs and GIS Google Earth.

Important Vocabulary I Will Learn and Use

Earthquake	A sudden shaking due to movement in the earth's crust.	
Infrastructure	Physical systems in a community (e.g. buildings, roads, power supplies)	
Richter Scale	Way of measuring the magnitude of an earthquake.	
Volcano	A hill or mound, which acts as an opening in the earth's crust.	
Tectonic Plate	Moving pieces that work together to make up the earth's crust.	
Tectonic plate boundary	The edges where two plates meet (also called fault lines).	
Magnitude	A measure of the amount of energy released.	
Epicentre	The location on the earth's surface, directly above where an earthquake has happened.	

Geographical Thinking Skills I Will Use

Describing	Giving an account of an event or thing.
Selecting	Choosing the most appropriate information.
Reasoning	Making our own ideas without firm evidence or all the evidence.
Synthesising	To make an explanation using our ideas from evidence and sources.
Explaining	To show an understanding of how or why something is the way it is.
Empathising	Imagining how others are feeling, in a situation we haven't been in.

Geographical Concepts

<u>Creation</u>	<u>Community</u>	<u>Compassion</u>
Weather	Relief	Biodiversity
Desert		
Climate		
Biome		
Region		