

Key Question: Where are the mountains in the world? Why do volcanoes and earthquakes occur?

## Geography - Year 3

### Knowledge Organiser

Teaching focus: Mountains, Volcanoes and Earthquakes  
Learning Lens: Physical

### Previous Knowledge

The seven continents and five oceans of the world. The location of some countries, including the United Kingdom and Kenya. What climate means and different types of weather.

### Project Hook or 'Wow' memory

Building and erupting volcano and a structure to withstand an earthquake.

### The key skills we want pupils to use during this topic:

Use maps and digital/computer mapping to locate countries and describe features studied

Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom

Be able to describe and understand key aspects of mountains, volcanoes and earthquakes.

### Key vocabulary

<b>Active</b>	An active volcano has erupted recently or is expected to erupt quite soon.
<b>Dormant</b>	A dormant volcano is not active but is capable of becoming active later on.
<b>Extinct</b>	A volcano that has erupted in the past but will no longer erupt.
<b>Fault Lines</b>	A long crack in the surface of the Earth. Earthquakes usually occur along fault lines.
<b>Magma</b>	Molten rock that is formed in very hot conditions inside the Earth.
<b>Tectonic Plates</b>	Seven major and eight minor segments of the Earth's crust that move.
<b>Vent</b>	A part of a volcano through which lava and gases erupt.

Learning Steps	Key Knowledge (answers)
<b>What is special about Mount Everest?</b>	Mount Everest is the tallest mountain in the world at 8849m above sea level in the Himalayas. The temperature ranges from -60 C to -3C. The first successful ascent was on 29th May 1953 at 11:30am by Edmund Hillary and Tenzing Norgay.
<b>Where are the mountains in the world?</b>	Main mountain ranges are the Himalayas Asia, Alps Europe, Rocky Mountains North America and Andes South America. Able to name highest mountain in each continent. Highest peaks in the UK are: Ben Nevis (Scotland), Snowdon (Wales), Scafell Pike (England and Slieve Donard (Northern Ireland).
<b>How and why are mountains formed?</b>	When two tectonic plates converge the intense pressure causes the plates to buckle and form a mountain in different ways: Fold, Fault Block or Dome mountains.
<b>What is a volcano? What is the structure of a volcano and why do they erupt?</b>	A volcano is a very deep hole in the Earth's crust, that can let out hot gases, ash and lava. Many volcanoes are mountains. Volcanoes have long vents that go all the way down through the crust, to magma in between the crust and mantle. It is so hot here that rocks melt into liquid. This is called magma, which travels up through the vent when the pressure is too much and flows out as lava.
<b>Why do people live on or near volcanoes?</b>	People live near volcanoes because the advantages outweigh the disadvantages: fertile soil for agriculture, the presence of minerals, geothermal energy for electricity and tourism.
<b>What is an earthquake and where do they occur?</b>	Earthquakes mainly occur along the fault lines of the tectonic plates. Pressure slowly starts to build up where the edges get stuck and once the pressure gets strong enough, the plates suddenly move causing an earthquake.

### Final Written Outcome

A non-chronological report about the tectonic plates in action in Italy relating to the mountains, volcanoes and earthquakes.

A poster that includes pictures and sentences about the mountains, volcanoes and earthquakes in Italy.

