



# Year 3: Geography



## Autumn Term – Earthquakes and volcanoes

### Enquiry - *Why do some earthquakes cause more damage than others?*

Overview of unit:	Substantive Knowledge:	Disciplinary Knowledge:
<p>In Year 3 pupils will be studying the topic of Earthquakes and Volcanoes. The children will be introduced to some key aspects of physical geography, in particular one of the major outcomes of tectonic activity in the world – earthquakes. The children will begin to understand why it is that earthquakes only tend to occur in certain areas of the world and investigate the causes and impact of recent earthquakes before looking more widely at global patterns. The children will consider why some earthquakes of the largest magnitudes do not always cause as much death and destruction as earthquakes of lesser magnitude.</p>	<ul style="list-style-type: none"> <li>• What causes an earthquake.</li> <li>• The distribution of earthquakes occurring around the world.</li> <li>• Why earthquakes happen at some locations but not others.</li> <li>• How the magnitude of an earthquake is measured.</li> <li>• Why earthquakes with the greatest magnitude do not necessarily cause the most deaths and destruction.</li> <li>• What causes a volcano.</li> <li>• Why volcanoes and earthquakes often occur at the same locations around the world.</li> <li>• The location of the 'Pacific Ring of Fire' and why it is a hot spot for earthquakes and volcanoes.</li> <li>• The location, cause and effects of the Christchurch (New Zealand) earthquake of 2011.</li> </ul>	<p><b>Describing:</b> giving an account of why some earthquakes cause more damage than others.</p> <p><b>Selecting:</b> choosing the information most suitable and relevant to discuss why New Zealand has so many earthquakes.</p> <p><b>Reasoning/speculating:</b> thinking and forming ideas about why most earthquakes happen in the same places as volcanoes.</p> <p><b>Synthesising:</b> bringing together a range of ideas and facts from different sources to develop an explanation of why some earthquakes cause more damage than others.</p> <p><b>Explaining:</b> showing understanding of how or why the largest earthquakes don't always show the most damage.</p> <p><b>Empathising:</b> placing yourself in another's position to understand how people in New Zealand may have felt.</p>

#### Sequence:

In key stage 1 children will have learnt the term 'location'. They will have previously used all the disciplinary skills mentioned such as: describing, reasoning/speculating, selecting and explaining.

#### Vocabulary:

**Earthquake:** the sudden shaking of the ground which happens when masses of rock change position along a fault in the earth's crust

**Strata:** layers of rock

**Epicentre:** the point on the Earth's surface directly above where an earthquake happens underground.

**Richter scale:** how the magnitude or energy released by an earthquake is measured Projection an estimate of what might happen in the future based on what is happening now.

**Pattern:** how objects are arranged or laid out on the earth's surface.

**Tectonic plate:** one of the large moving sections of the Earth's crust.

**Remote:** a faraway place situated a long distance from centres of population.

**Crust:** the thin outermost layer of the Earth made of solid rock.

**Mantle:** the very thick layer of rock that lies between the Earth's crust and its central core.

**Core:** the very hot centre of the Earth which is solid on the inside and liquid on the outside Volcano a landform (usually a mountain) from which red hot liquid rock called magma erupts Fault a crack in the earth's crust particularly between two tectonic plates

**Magma:** red hot liquid rock that rises up from the mantle through cracks

**Spring Term – Human settlements – cities around the world (Mega Cities)**  
**Enquiry- *Why do so many people live in megacities?***

Overview of unit:	Substantive Knowledge:	Disciplinary Knowledge:
<p>The children will discover the topic of megacities. They will find out where the megacities are located, features of megacities and which continent they would find them. The children will expand their knowledge of map skills.</p>	<ul style="list-style-type: none"> <li>• What the terms 'rural', 'urban' and 'urbanisation' mean.</li> <li>• What a megacity is and their distribution globally.</li> <li>• The top ten megacities.</li> <li>• Why the number of people living in megacities is increasing globally.</li> <li>• Why Baghdad became the first city with one million inhabitants.</li> <li>• The location of the ten largest cities in the United Kingdom.</li> <li>• Why Milton Keynes is the fastest growing city in the UK.</li> <li>• Name and locate the countries, largest cities and physical features of the continent of South America.</li> <li>• Why the government of Brazil decided to construct a new capital city in 1960.</li> <li>• The physical and human features of the city of Brasilia.</li> <li>• The main attractions and disadvantages of living in megacities.</li> </ul>	<p><b>Describing:</b> giving an account of what a megacity is, why so many people live in them and where they are located.</p> <p><b>Selecting:</b> choosing the information most relevant.</p> <p><b>Reasoning/ speculating:</b> thinking and forming ideas about why so many people live in megacities. without necessarily firm evidence to back it up</p> <p><b>Synthesising:</b> bringing together a range of ideas and facts from different sources to develop an explanation of the growing population in megacities.</p> <p><b>Explaining:</b> showing understanding of how or why so many people live in megacities.</p> <p><b>Empathising:</b> placing yourself in another's position in a city to better understand what the advantages and disadvantages are.</p>
<p><b>Sequence:</b> In key stage 1 and Autumn year 3, children will have learnt the term 'location'. They will also have learnt about the different continents of the world and they will have looked at maps previously and will be expanding this knowledge in year 3. They will have also learnt the term 'environment' from Key stage 1 when they learnt about the weather in year 2.</p>		
<p><b>Vocabulary:</b> Pattern, Pollution, City, Megacity, Population density, Constraint, Migration, Favela, Employment, Congestion, Smog, Environment, Distribution, Location, Interaction, Settlement, Urban, Rural, Urbanisation, Trade, Development, Region, Economic activity.</p>		

**Summer Term – Contrasting climates**  
**Enquiry – *Why are jungles so wet and deserts so dry?***

Overview of unit:	Substantive Knowledge:	Disciplinary Knowledge:
<p>To understand how different areas of climate known as biomes give rise to very distinctive communities of plants and animals.</p>	<ul style="list-style-type: none"> <li>• The difference between weather and climate.</li> <li>• How temperature and precipitation vary in the UK.</li> <li>• The location and features of the main climate regions of the world.</li> <li>• How climate affects the landscape of different environments.</li> <li>• What a biome is and the name and location of the world's main biomes.</li> <li>• The flora and fauna of the main biomes of the world.</li> <li>• The physical features of the Atacama Desert.</li> <li>• Why Arica in Chile is the driest inhabited place in the world.</li> <li>• Why Manaus in Amazonia is one of the wettest places in the world.</li> </ul>	<p><b>Describing:</b> giving an account of why climate is different across the UK.</p> <p><b>Selecting:</b> choosing the information most relevant.</p> <p><b>Reasoning/ speculating:</b> thinking and forming ideas about something without necessarily firm evidence to back it up.</p> <p><b>Synthesising:</b> bringing together a range of ideas and facts from climate graphs to show how this helps geographers compare one climate to another.</p> <p><b>Explaining:</b> showing understanding of how or why the Amazon rainforest is so wet and humid and the Arica forest is the driest place on earth.</p> <p><b>Empathising:</b> placing yourself in another's position to better understand how plants and animals are affected due to climate.</p>
<p><b>Sequence:</b> In key stage 1 and Autumn year 3, children will have learnt the term 'location'. They will also have learnt about the different continents of the world and they will have looked at maps previously and will be expanding this knowledge in year 3. They will have also learnt the term 'environment' from Key stage 1 when they learnt about the weather in year 2. In year 2 they have also learnt about desert areas (The Sahara) and will be expanding on that knowledge of habitat learnt in year 1.</p>		
<p><b>Vocabulary:</b> Weather, Climate, Biome, Distribution, Environment, Interdependence, Interaction, Location, Processes, Biodiversity, Ecosystem, Habitat, Pattern, Prevailing wind, Climate graph, Precipitation, Flora, Fauna, Rainforest, Desert, Convectional rain, Relief rain, Drought, Adaptation.</p>		