Enquiry: *Why do some earthquakes cause more destruction than others?*

What the pupils will know

- What causes an earthquake?
- The distribution of earthquakes occurring around the world.
- Why earthquakes happen at some locations but not others.
- How the magnitude of an earthquake is measured.
- Why earthquakes with the greatest magnitude do not necessarily cause the most deaths and destruction.
- What causes a volcano?
- Why volcanoes and earthquakes often occur at the same locations around the world.
- The location of the 'Pacific Ring of Fire' and why it is a hot spot for earthquakes and volcanoes.
- The location, cause and effects of the Christchurch (New Zealand) earthquake of 2011

National Curriculum Coverage

Pupils should be taught about:

Locational knowledge

- Locate the world's countries, using maps to focus on Europe (Including the location of Russia) and North and **South America**, concentrating on their environmental regions, key physical and human characteristics, countries and major cities.

Human and physical geography

Describe and understand key aspects of:

- Physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, **volcanoes and earthquakes**, and the water cycle.

Geographical skills

- Use maps, atlases, globes 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 and the wider world.

Geographical techniques the pupils will learn and apply

Statistical representation:
Interpreting tabular data and drawing scatter graphs to indicate correlation, storyboarding

Mapwork - Interpreting and annotating thematic distribution maps:
Political, relief, population density, distribution of earthquakes and volcanoes, and constructing choropleth maps

Imagery
Terrestrial, aerial and satellite photographs and GIS *Google Earth Pro*

Disciplinary thinking skills the pupils will use to understand what they know

Describing	Giving an account of something
Selecting	Choosing the information most suitable and relevant
Sequencing	Arranging events or artefacts in their correct time order
Comparing and contrasting	Finding similarities and differences in how people lived at different times
Reasoning and speculating	Forming ideas about something without firm evidence
Synthesising	Combining a range of ideas and facts from different sources
Explaining	Showing understanding of how or why something happened
Empathising	Placing yourself in another's position to better understand their actions.

SEND

In line with our school policy, we ensure inclusion through constructing enquiries which are graduated in 'bite size' steps allowing for the setting of personalised targets, a broad range of learning and teaching strategies including questioning, working with additional adults where appropriate and a holistic approach to assessing achievement.

End Points of Learning

Pupils making a good level of progress will:

- **Describe and explain** what causes an earthquake.
- **Locate, describe and explain** the distribution of earthquakes occurring around the world.
- **Explain** why earthquakes happen at some locations but not others.
- **Describe** how the magnitude of an earthquake is measured.
- **Explain** why earthquakes with the greatest magnitude do not necessarily cause the most deaths and destruction.
- **Describe and explain** what causes a volcano.
- **Explain** why volcanoes and earthquakes often occur at the same locations around the world.
- **Identify and locate** the 'Pacific Ring of Fire' and **explain** why it is a hot spot for earthquakes and volcanoes.
- **The location, cause and effects** of the Christchurch (New Zealand) earthquake of 2011

Pupils working at greater depth will also:

Understand the concept of 'hazard' in Geography and how both natural and human events can cause hazards for people living in different parts of the world

Prior Learning

Earlier in Key Stage 1 pupils learned about:

- The causes and effects of the eruption of Vesuvius in AD 79 in History
- That the weather can sometimes cause natural hazards such as storms, floods and drought