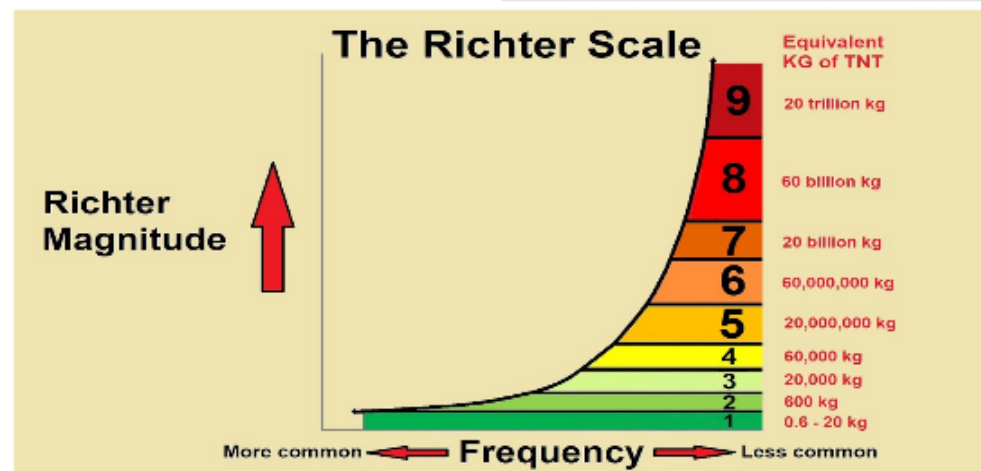


## Earthquakes & Volcanoes

Year 4 Spring 2

|                                | Prior Knowledge  | New Knowledge  | Future Knowledge   |
|--------------------------------|--|--|--|
| <b>Geography</b>               | Physical geography, including coasts, rivers, hills, mountains and the water cycle. (Y3)   | Describe and understand key aspects of:<br>• Physical geography including volcanoes and earthquakes and describe the characteristics of these.   | Physical geography including climate zones (locating the hot and cold areas of the world), biomes and vegetation belts and describe the characteristics of these. (Y6)   |
| <b>Design &amp; Technology</b> | Investigate similar products to the one to be made to give starting points for a design.<br>Draw/sketch products to help analyse and understand how products are made.<br>Plan a sequence of actions to make a product.<br>Record the plan by drawing (labelled sketches) or writing. (Y3) | To research, develop and design structures intended to withstand earthquakes.<br>Think ahead about the order of their work and decide upon tools and materials.<br>Develop more than one design or adaptation of an initial design.<br>Propose realistic suggestions as to how they can achieve their design ideas.<br>Create shell or frame structures, strengthen frames with diagonal struts. | Use appropriate tools with increasing accuracy.<br>Join materials using appropriate methods.<br>Cut accurately and safely to a marked line.<br>Join and combine materials with temporary, fixed or moving joinings. (Y5) |

| Key Questions   | Key Individuals  | Key Vocabulary  |
|---|--|---|
| What causes earthquakes and volcanoes?<br>What safety measures can be taken before an earthquake or volcano?<br>What do rescue teams do following an earthquake or volcano?<br>What aid is provided to support countries after a natural disaster?<br>What is the difference between an active, dormant or extinct volcano? | <b>Pliny the Younger</b> (61-113) a lawyer and author in ancient Rome; he wrote many famous letters about the eruption of Mount Vesuvius.<br><b>Mother Teresa</b> (1910-1997) was a humanitarian. Her entire life was fully devoted to helping the poor, the sick, the needy, and the helpless, including survivors of an earthquake in Armenia.<br><b>John Milne</b> (1850-1913) was a British geologist. He invented seismographs to detect and measure the strength of earthquakes. | <b>Focus (Hypocentre)</b> - the point inside the Earth where an earthquake originates.<br><b>Magnitude</b> - the most common measure of an earthquake's size.<br><b>Tremors</b> - a shaking motion of the earth during an earthquake.<br><b>Richter scale</b> - a scale of numbers used to tell the size of earthquakes.<br><b>Lava</b> - hot, liquefied rock that flows from a volcano.<br><b>Magma</b> - molten, or hot liquefied, rock located deep below the Earth's surface. |



Curriculum Leaflet

Year 4 Spring 2

Year 4 will be exploring the topic: 'Earthquakes and Volcanoes'. This unit of work will have a specific focus on developing the children's knowledge, skills and understanding in Geography with a focus on how and why volcanoes erupt and earthquakes occur.

| Maths   | English   | Home   |
|---|---|--|
| <p><b>Maths Unit</b></p> <p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>To understand the whole</li> <li>To count beyond 1</li> <li>To partition a mixed number</li> <li>To use number lines with mixed numbers</li> <li>To Compare and order mixed numbers</li> <li>To understand improper fractions</li> <li>To convert mixed numbers to improper fractions</li> <li>To convert improper fractions to mixed numbers</li> <li>To find equivalent fractions on a number line</li> <li>To know equivalent fraction families</li> <li>To add two or more fractions</li> <li>To add fractions and mixed numbers</li> <li>To subtract two fractions</li> <li>To subtract from whole amounts</li> <li>To subtract from mixed numbers</li> </ul> <p><b>Decimals</b></p> <ul style="list-style-type: none"> <li>To understand tenths as fractions and a decimals</li> <li>To use tenths on a place value chart</li> <li>To use tenths on a number line</li> <li>To divide a 1-digit number by 10</li> <li>To divide a 2-digit number by 10</li> <li>To understand hundredths as fractions and decimals</li> <li>To use hundredths on a place value chart</li> <li>To divide a 1- or 2-digit number by 100</li> </ul> | <p>We will be studying:</p> <p><b>Escape from Pompeii, Christina Balit</b></p> <p><b>Writing focus</b></p> <p><b>Narrative</b><br/>With a focus on text, the children will write a narrative focussing on witness recounts of the eruption. The children will use inverted commas for speech and key vocabulary from Geography in their writing.</p> <p><b>Play Script</b><br/>Children will learn the features of a play script before they adapt and write their narrative into their own play script, which will be performed to an audience.</p> <p><b>Letter</b><br/>Using a primary source of evidence the children will write a letter from the perspective of Pliny the Younger who was an eyewitness to the eruption of Mount Vesuvius. They will further extend their use of expanded noun phrases.</p> | <p>Families can support learning in the following ways:</p> <ul style="list-style-type: none"> <li>Research volcanoes and earthquakes, read information texts and books on them.</li> <li>Research active volcanoes in the world, what countries have active volcanoes currently.</li> <li>Use google to find out interesting facts about natural disasters and the effects of natural disasters.</li> <li>Accessing weekly home learning tasks via Google Classroom</li> <li>Supporting the development of times tables skills via regular practice on Times Tables Rock Stars</li> <li>Reading daily at home</li> <li>Accessing MyMaths for weekly maths homework (KS2)</li> </ul> |