

**Title of Rubric: KS/curriculum area/topic KS3 Geography - Restless Earth- Earthquakes and Volcanoes**

**Key stage 3 Year 1 of cycle.**

This will teach your class about the destructive powers of nature, from volcanoes and earthquakes to tsunamis and tornadoes. Through discussion and practical tasks, children will learn about how and why these natural phenomena occur, and the ways in which they affect people and the environment.

	<u>P5-6</u>	<u>P7-8</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	
<b>Key learning: Where earthquakes and volcanoes are found. Characteristics</b>						
<b><u>Subject specific knowledge</u></b>	<p>Can explore pictures of different volcanoes</p> <p>Can identify a similarity and a difference</p> <p>Shows an awareness of place in the outside environment</p> <p>Identify/explore passports using symbols and key words.</p>	<p>Can name different places.</p> <p>Can identify similarities and differences</p> <p>Pupils can use single words to comment on physical features of environment; volcanoes and earthquakes.</p> <p>Pupils can use the words volcano and earthquake in context.</p>	<p>Can name the key parts of a volcano;</p> <p>Can describe different places and environments</p> <p>Can use simple geographical language to communicate their ideas about volcanoes and earthquakes</p> <p>Can describe the properties of the Earth's layers;</p>	<p>Pupils use key geographical vocabulary as part of full sentences in relation to topic: plate tectonics/boundaries, crust, mantle, outer core, inner core.</p> <p>Can ask geographical questions to find out about earthquakes and volcanoes and begin to give meaning</p>		
<b><u>Subject specific skills</u></b>	<p>Pupils use symbols to label a pictorial diagram.</p> <p>With adult support pupils can make models of volcano and use single words / symbols to describe physical features.</p>	<p>Identify pictures of places where earthquakes and volcanoes would be found from choice of 2-3.</p> <p>Pupils can use symbols to represent understanding of environment.</p> <p>Can ask simple geographical questions.</p> <p>Pupils can sequence up to 3 pictures showing their understanding.</p> <p>Pupils use simple geographical vocabulary in relation to topic.</p>	<p>Can use a map to find active tectonic areas</p> <p>Pupils use key geographical vocabulary; to comment on physical features of environment relating to volcanoes and earthquakes.</p> <p>Pupils can answer simple questions about the features of volcanoes and earthquakes</p> <p>Pupils can label simple diagram of layers of earth and a volcano with key words.</p>	<p>Pupils can draw and label a diagram of volcano / earthquake from a choice of keywords (word bank).</p> <p>Can locate earthquake and volcanic zones on a map and relate to plate tectonics</p> <p>Can compare the structure of the Earth to a common object;</p>		
Key Learning- Cause and effects of earthquakes and volcanoes, benefits of living in an active area						

<p><b><u>Subject specific knowledge</u></b></p>	<p>Pupils can explore positive and negative images of tourism</p> <p>Pupils can use symbols to show an understanding of what a volcano and earthquake is</p>	<p>Pupils can name the key parts of a volcano;</p> <p>Pupils know that we are not in danger from earthquakes and volcanoes in the UK</p> <p>Pupils know that some earthquakes and volcanoes can cause lots of damage</p>	<p>Pupils can identify some positive and negative aspects of living in area of tectonic activity.</p> <p>Pupils can explain how a volcano is formed;</p> <p>Pupils can describe what happens when a volcano erupts;</p>	<p>Pupils can explain the impact of volcanoes on people and the environment;</p> <p>Pupils can identify why it is bad / dangerous to live in area of volcanic activity.</p> <p>Pupils can identify some benefits of living in area of volcanic activity.</p> <p>Pupils can use key vocabulary to describe activity at plate boundaries.</p> <p>Pupils can categorise volcanoes as extinct, dormant or active</p> <p>.</p> <p>.</p>
<p><b><u>Subject specific skills</u></b></p>	<p>Can respond to geographical questions</p> <p>With support pupils can sequence up to 3 pictures showing cause and effect of volcanoes / earthquakes.</p> <p>Pupils show engagement when observing effects (video / model volcano).</p>	<p>Pupils can answer a range of geographical questions.</p> <p>With adult support make a choice from 2-3 options (using symbols) about why people might want to live in area of volcanic activity.</p> <p>Pupils can sequence up to 3 pictures showing cause and effect of volcanoes / earthquakes.</p> <p>Pupils can identify key features when observing effects (video / model volcano).</p> <p>Can answer simple geographical questions.</p>	<p>Pupils can ask and answer a range of geographical questions.</p> <p>Pupils can use key word / symbols and up to 6 pictures showing causes and effects.</p> <p>Pupils can explain how to keep safe during an earthquake</p>	<p>Pupils can ask and answer a range of geographical questions and give reasoning when answering key questions.</p> <p>Pupils make observations about how tectonic activity affects people living within close proximity.</p> <p>Pupils can make simple observations after watching video clips about response and management.</p> <p>Pupils can compare the strength of earthquakes</p> <p>Pupils should be able to show empathy with people in disaster situations</p> <p>.</p>
<p><b><u>Personal development</u></b></p>	<p>Team work          Problem solving          Communication skills          Self-belief          Self-management          Respect</p>			

Self-awareness  
IT skills

### **Suggested activities**

Ask pupils to brainstorm a response to the enquiry question. Classify pupil responses by grouping/linking, eg volcanic eruption or earthquake, cause/effect, named case study. Ask pupils what criteria they used for classification.

Ask the pupils to research earthquake and volcano locations using the internet (provide appropriate websites on screen). Plot the locations on a world outline map using an atlas - consider how to distinguish between earthquakes and volcanoes in the key.

Discuss with the pupils the pattern of earthquakes and volcanoes and whether there are relationships with the world map showing the 'active zones'. What does this suggest?

Arrange for pupils to watch video footage of volcanoes and volcanic activity. Discuss the geographical vocabulary used and identify key words for pupils to define and learn.

Make a mock volcano that erupts when you mix baking soda and vinegar.

Demonstrate earthquake activity using two sheets of rough sandpaper, a wooden block and an elastic band. Cover the block with one piece of sandpaper, attach the elastic band to one end and place the block on the second piece of sandpaper. Pull the elastic band and observe what happens as the tension increases. Ask pupils to choose appropriate words to describe what happens. Discuss with them the adjectives which might describe the sensation of experiencing an actual earthquake.

Read a poem, eg 'After the Earthquake' by Angela Topping, or text, eg 'Tomorrow is a great word' by Janeen Brian

Ask pupils to reflect in silence on the impact of the earthquake on its victims. How would they feel? Ask them to use coloured markers to identify, on an extract of the text, words and phrases which involve feelings and then to add notes to show how the effect was achieved.

Make or colour earthquake warning/advice posters

### **Online resources**

, <http://www.bbc.co.uk/learningzone/clips/volcano-erupts-in-chile/6356.html> , [http://news.bbc.co.uk/cbbcnews/hi/find\\_out/guides/tech/volcanoes/newsid\\_1768000/1768619.stm](http://news.bbc.co.uk/cbbcnews/hi/find_out/guides/tech/volcanoes/newsid_1768000/1768619.stm) ,  
<http://www.weatherwizkids.com/weather-volcano.htm>

### **Evidencing Work**

Work sheets

Photographs

PowerPoints