Lawn Primary School

Geography

Year	3	Topic	Angry Earth

This topic builds upon children's prior knowledge of the United Kingdom taught in year two and weather taught in year one by increasing in complexity and expanding into new learning based on Europe and, eventually, the wider world. Children will learn the features of a volcano, what happens to cause an earthquake and the impact extreme natural events can have on a place and its inhabitants. Introducing children to new vocabulary such as *tectonic plates*, *crust*, *mantle* and *core* will enable them to explain with increasing confidence how an active volcano erupts and how earthquakes change the physical geography of a location.
Children will develop their skills in using maps and Google Earth to locate places of interest, using positional and geographical vocabulary with increasing complexity to describe the human and physical features of a place.

Prior Learning	Future Learning
Locational and Place knowledge: -Know the names of and locate the seven continents in the world on a globe or map. (Y2) -Know the name of and locate the five oceans on a globe or map. (Y2) -Know main differences between a place in England and that of a small place in a Non-European country. (Y2) **Human and Physical Geography:** -Explain some of the advantages and disadvantages of living in a city or a village. (Y2) **Skills and fieldwork:** -Know and use: left, right, below and next to (Y2). -Know which is North, East, South and West on a compass (Y2).	**Locational and Place knowledge:** -Know the names of and locate at least 8 major capital cities across the world. -Know, name and locate the main rivers in the UK. **Human and Physical Geography:** -Know and label the main features of a river. -Know the name of and locate a number of the world's longest rivers. -Explain the features of the water cycle. -Know why most cities are located by a river. **Skills and fieldwork:** N/A

National Curriculum Links
Locational knowledge: -Know the names of and locate at least eight European countries. -Know the names of a number of European capitals.

Place knowledge:
-Know at least 5 differences between living in the UK and a Mediterranean country.

Human and Physical Geography:
-Know what causes an Earthquake.
-Label the parts of a volcano.

Skills and fieldwork:
-Use maps to locate European countries and capitals.
-Know and name the eight points of a compass (N, S, E, W, NE, NW, SE, SW).

Key Vocabulary
Volcano, active, extinct, dormant, Europe, capital city, Mediterranean, earthquake, tsunami, tornado, relocate, climate, mountain range, contour lines, crust, mantle, core, tectonic plates, Pangaea

Recommended Texts & Web Links
Earth Shattering Events by Sophie Williams; The Pebble in my Pocket by Meredith Hooper; Volcano and Earthquake by DK; Journey to the Centre of the Earth by Sarah Courtauld; DK Find Out! Volcanoes; Volcanoes and Earthquakes KS2 Geography by CGP; Earth Shattering Earthquakes by Anita Ganeri; Violent Volcanoes by Anita Ganeri.

What pupils need to know or do to be secure	
Key Learning	**Activities / Application of knowledge / Possible Evidence**
What is Europe? -Know the names of and locate at least eight European countries. -Know the names of a number of European capitals. -Use maps to locate European countries and capitals.	Plot data using a pictogram or graph to measure strength of earthquake/tsunamis.

-Children will use maps to locate Europe and identify key European countries and their capitals. -Children will build upon their prior learning and will be able to identify which hemisphere these countries are in and their climate based on the equator. **Why do people relocate to Spain?** -Know at least 5 differences between living in the UK and a Mediterranean country. -Children will learn the differences between the UK and Spain in terms of climate, lifestyle etc. -Children will compare the physical and human characteristics of a location in the UK and a location in Spain. -Children will understand that many people relocate to Spain from the UK is because of the cold weather in the UK. **What are the names of the mountains in Europe?** -Know and name the eight points of a compass (N, S, E, W, NE, NW, SE, SW). -Children will learn how mountains are formed. -Children will use maps to locate mountains in the UK and Europe and will learn how we can use contour lines on a map to understand how tall a peak is. -Children will be able to label a blank map to show where mountain ranges are in Europe. **Why don't we have serious earthquakes in the UK?** -Know what causes an Earthquake. -Children will study the structure of the Earth: crust, mantle and core and will understand that the Earth's mantle is almost solid and is churned around by heat from the core. -Children will understand that the continents that make up our planet were once joined as one supercontinent, Pangaea, and that fossil evidence from 280 million years ago means scientists can prove the continents were once joined. -Children will understand that the crust is made up of plates that are constantly moving. -Children will know that an earthquake is caused when two plates get stuck and pressure that builds up is released. -Children will understand that a major earthquake can sometimes cause a tsunami and the devastating consequences this can have on coastal regions. -Children will be able to explain how to stay safe in an earthquake. **Are all mountains volcanic?** -Label the parts of a volcano. -Children will understand that a volcano happens when magma rises up and erupts through the crust. Pressure builds beneath the surface. The collection of magma beneath the surface is called the 'magma chamber'. Where the surface is weak and there are gaps through the tectonic plates that cover the Earth, the magma explodes causing a volcanic eruption. The main outlet is called the 'main vent.' Sometimes other outlets are found too and these are 'secondary vents'. The lava	Label maps to show mountain ranges. Film/do a class presentation about how to stay safe in an earthquake/tsunami. Label the parts of a volcano. Write a short explanation about what happens when a volcano erupts.

cools to form new crust and over time, as this process is repeated, a volcano is formed. The crater is formed when an eruption blows off the top of the volcano. Where this happens under the ocean, it can produce new land. -Children will understand that most volcanoes are located where plates of the Earth meet. -Children will understand the impact a volcanic eruption has on humans, plants and the weather. -Children will learn the vocabulary: active, dormant and extinct. -Children will study the different ways in which islands are formed with a focus on the island of Surtsey - formed by an under-ocean volcano in the 1960s. **Where is the angriest place on Earth?** -Children will learn about tornadoes and the effects these can have upon a place. -Children will compare data of hurricanes, tornados, earthquakes and tsunamis around the world, recording this information in a simple graph in order to help them come to a conclusion about the 'angriest' place on Earth.	

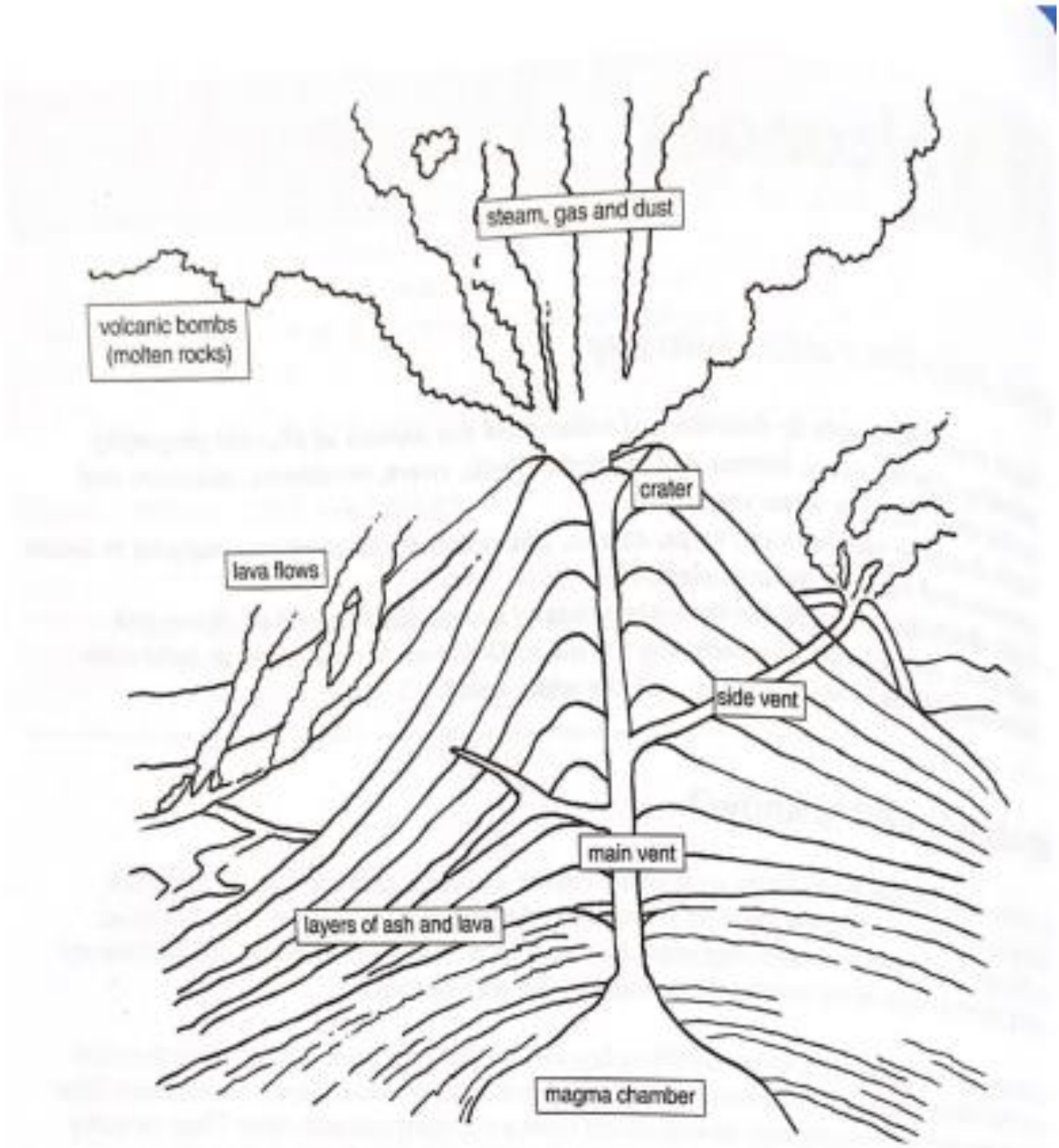

Figure 21: Volcanoes are structured around a vent which leads from underground magma to the surface

Volcanoes fall into two main types:

Shield volcanoes: These have low sloping sides and emit thin, runny lava. They tend to have frequent but relatively gentle eruptions. Over long periods of time, shield volcanoes can grow to a great height. Mauna Kea and Mauna Loa in Hawaii, for example, rise nearly 9km above the sea floor.

Composite volcanoes: These are made of alternate layers of lava and ash. They sometimes erupt violently and create what is known as a pyroclastic flow made of a mixture of hot steam, ash, rock and dust. It was a pyroclastic flow that engulfed Pompeii in 79 AD when it hurtled down the slopes of Mount Vesuvius.

Appendix 1: