Walk On Water

St. Paul's C of E VA Primary and Nursery School

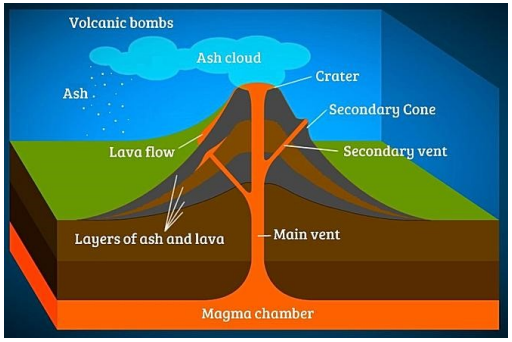
Knowledge Organisers

With God ALL THINGS ARE possible

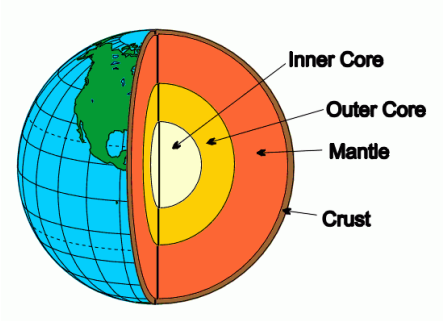
Geography	Year 4	Earthquakes and Volcanoes

Key Vocabulary

Earthquake	Shaking of the ground caused by movement of the Earth's crust
Volcano	Mountains from which lava, gas, steam and ash from inside the Earth sometimes burst.
Erupt	To start suddenly or violently with great force.
Dormant	Not active, but capable of becoming active in the future.
Collision	When one moving object hits another.
Magnitude	The size or scale of something.
Meteoric	Sudden and extremely strong.
Intensity	Magnitude.
Tsunami	A very large wave, caused by an earthquake.
Richter Scale	The scale to measure the magnitude.
Subduction	When a plate moves under another.
Plate tectonics	An explanation of how earthquakes, mountains, volcanoes and oceans are formed.
Fault lines	The boundaries of the plates. Movement along these lines causes earthquakes and volcanoes.



Key Information



◊ The Earth has an **inner** and **outer core**, a **mantle** and a **crust**.

◊ The **crust** is the rocky surface that makes up the surface of the Earth and floats on top of the **mantle**.

◊ The **crust** has 'cracks' in it and so it is actually in pieces. These pieces are called **plates**.

◊ The **plates** move very slightly – by no more than a few centimetres a year – and when they do, **earthquakes** occur and **volcanoes** form or **erupt**.

◊ The **plates** move in three different ways:

- away from each other, which forms ridges.

- towards each other, which causes **earthquakes** and forms **volcanoes** and **mountains**.

- side by side, which causes **earthquakes**.

The Pacific Ring of Fire

◊ The **Pacific Ring of Fire** is an arc around the Pacific Ocean .

◊ It is where most of the world's volcanoes and earthquakes are formed.

◊ About three-quarters of the world's dormant and active volcanos are here.

◊ The ring is 25,000 miles (40,230 km) long, and there are **452 volcanoes** on it.

◊ The Ring of Fire is a result of **plate tectonics** – the movement and collision of the plates that make up the Earth's crust.



Key Events

- 2004 Boxing Day tsunami
- 1906 San Francisco earthquake
- 79 CE eruption of Vesuvius