Big Question:

What causes a volcano to erupt?

Key Vocabulary:

Earthquake: *The shaking, rolling or sudden shock of the earth's surface.*

Lava: *Hot, liquefied rock that flows from a volcano.*

Magma: *Extremely hot liquid and semi-liquid rock located under Earth's surface.*

Natural disaster: *A natural disaster is a major event caused by natural processes of the Earth.*

Tectonic Plates: *Pieces of land connected together on the Earth's surface that bump together and move.*

Volcano: *A volcano is a landform (usually a mountain) where molten rock erupts through the surface of the planet.*

Igneous Rock: *Rocks that have formed by the cooling and hardening of molten lava or magma.*

Metamorphic Rock: *Formed when other rocks are affected by great temperatures and pressures.*

Sedimentary Rock: *Formed from sediment grains deposited by water, wind or ice.*

Knowledge from Y1 that will help me answer the big question:

Natural materials are dug out of the ground, grown or taken from a living thing, such as rocks, sand, water, soil or clay.

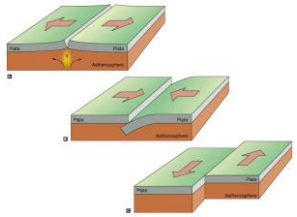
Knowledge from Y2 that will help me answer the big question:

A physical feature is one that forms naturally, and can change over time due to weather and other forces.

A significant place is a location that is important to a community or society. Significant places can include monuments, such as the Eiffel Tower, or natural landscapes, such as the Great Barrier Reef

New knowledge that will help me answer the big question:

Volcanic eruptions and earthquakes happen when two tectonic plates push into each other, pull apart from each other or slide alongside each other.



The centre of the earthquake is called the epicentre. Over three-quarters of the world's earthquakes and volcanic eruptions happen along the Ring of Fire. The Ring of Fire runs around the edge of Pacific Ocean and this is where there are lots of plate boundaries.

New knowledge that will help me answer the big question:

The Earth has four layers – the crust at the very top, then the mantle, then the outer core and then the inner core at the very middle of the planet.

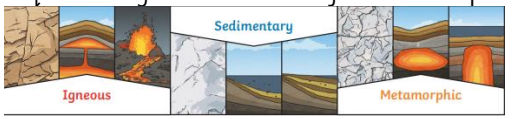
The Earth's crust is made up of huge slabs called tectonic plates, which fit together like a jigsaw puzzle. These tectonic plates slowly move over a long period of time.

New knowledge that will help me answer the big question:

Igneous rocks are formed when molten magma from a volcano cools down.

Sedimentary rocks are formed from sediment that settles in water and becomes squashed over a long period of time.

Metamorphic rocks are formed when existing rocks are heated by magma under the Earth's crust or squashed by the movement of the Earth's plates.



New knowledge that will help me answer the big question:

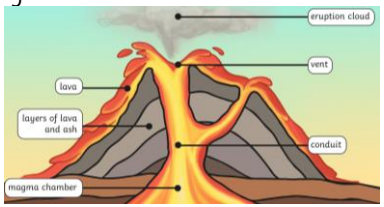
A volcano is an opening in the Earth's crust that allows magma, hot ash and gases to escape.

Volcanoes are usually found at meeting points of the Earth's tectonic plates.

Volcanoes are made when pressure builds up inside the earth.

When a volcano erupts, liquid magma collects in an underground magma chamber. Then magma pushes through a crack called a vent and bursts out onto the Earth's surface.

Magma is molten rock - rock that is so hot it has turned into liquid. When magma reaches the surface of the Earth it is called lava and comes out of the volcano as a volcanic eruption, along with gases and ash.



Mount Vesuvius in Italy is a significant volcano.

As a Geographer, the essential knowledge I need to answer the big question is:	**Date**
The Earth is made of four different layers. The inner core is made mostly of hot, solid iron and nickel, and the outer core is made of liquid iron and nickel. The mantle is made of solid rock and molten rock called magma. The crust is a thin layer of solid rock that is broken into large pieces called tectonic plates. These pieces move very slowly across the mantle.	
A volcano is an opening in the Earth's surface from which gas, hot magma and ash can escape. They are usually found at meeting points of the Earth's tectonic plates. When a volcano erupts, liquid magma collects in an underground magma chamber. The magma pushes through a crack called a vent and bursts out onto the Earth's surface.	
Volcanic eruptions and earthquakes happen when two tectonic plates push into each other, pull apart from one another or slide alongside each other. The centre of an earthquake is called the epicentre.	
The Ring of Fire runs around the edge of the Pacific Ocean and is where many plate boundaries in the Earth's crust converge.	
There are three main types of rock found in the Earth's crust. - sedimentary, igneous and metamorphic.	