

Key Vocabulary

1	Cumulonimbus clouds	Large thunderstorm clouds.
2	Magma	Extremely hot liquid rock that flows in the earth's centre. It is 3000km thick!
3	Core	The centre of the earth, mostly made up of iron and nickel.
4	Erupt	To suddenly burst out causing lava to explode out of the earth's surface.
5	Tectonic plates	The earth's crust is made up of large areas called tectonics.
6	Ring of fire	Path along the Pacific Ocean where there are many active volcanoes and frequent earthquakes.
7	Magnitude	The great size or extent of something.
8	Richter scale	The scale used to measure the magnitude of an earthquake.
9	Seismologist	A scientist who studies earthquakes.
10	Volcanologist	A scientist who studies volcanoes.
11	Vegetation belt	the plant life as a whole within a certain area.
12	Engulfed	(of a natural force) sweep over (something) so as to surround or cover it completely.
13	Human geography	the branch of geography dealing with how human activity affects or is influenced by the earth's surface.
14	Physical geography	the branch of geography dealing with natural features.

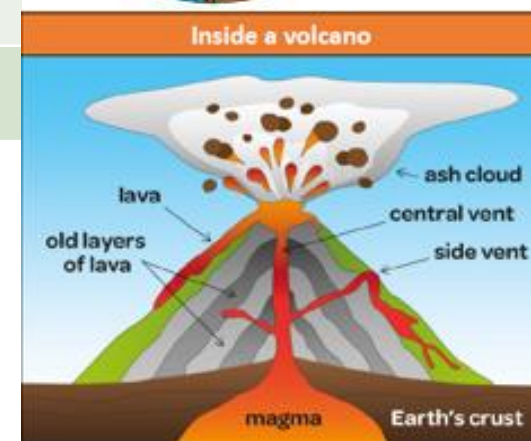
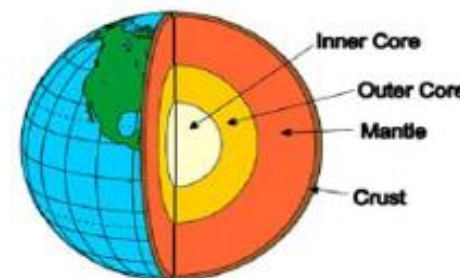
Key Facts

1	A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big cumulonimbus clouds.
2	The earth is made up of four different layers: The crust, Mantle, Inner core and Outer core.
3	The soil on our earth is made up of 4 different layers: Humus, topsoil, subsoil and bedrock.
4	Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing magma to sometimes erupt through it.
5	Active volcanoes have erupted in the last 10 000 years. Dormant volcanoes haven't erupted in the last 10 000 years but may erupt again.
6	Most tornadoes happen in Tornado Alley in America – more than 500 each year.
7	Earthquakes are caused when the earth's tectonic plates suddenly move. Most earthquakes occur near the tectonic plate boundaries.
8	A tsunami is a giant wave caused by a huge earthquake under the ocean. Tsunami is a Japanese word. It means 'Harbour Wave'
9	Hurricanes, cyclones and typhoons are all names for tropical storms. In the Atlantic and Caribbean Oceans and around the Americas they are called hurricanes. Around China and east Asia they are called typhoons and around India they are called cyclones.
10	Hurricanes have led to the death of around 2 million people over the last 200 years.
11	The largest, active volcano in the world is Mauna Loa in Hawaii. It is 13,677 feet above sea level. From its base below sea level to its summit, Mauna Loa is taller than Mount Everest.



Key Questions for the Topic

1	What is the best thing to do during an earthquake?
2	Where is the ring of fire located?
3	How would you feel if your house and belongings were destroyed by our own earth?
4	Which part of the volcano do you think has the biggest impact on its eruption?
5	Can you research a famous volcano that is still active in the world?
6	What is our world made of? Why do tectonic plates have such a big impact?





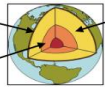
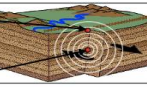
Prior Vocabulary

1	natural	existing in or derived from nature; not made or caused by humankind.
2	disaster	a sudden accident or a natural catastrophe that causes great damage or loss of life.
3	volcano	a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust.
4	molten	(especially of materials with a high melting point, such as metal and glass) liquefied by heat.
5	lava	hot molten or semi-fluid rock erupted from a volcano or fissure, or solid rock resulting from cooling of this.
6	Inner core	The inner core is the deepest and hottest layer of our planet.
7	Outer core	the layer surrounding the inner core of the earth
8	mantle	the mantle is the mostly-solid bulk of Earth's interior
9	crust	the outermost shell of a terrestrial planet.
10	climate	the weather conditions prevailing in an area in general or over a long period.
11	tornado	a mobile, destructive vortex of violently rotating winds having the appearance of a funnel-shaped cloud and advancing beneath a large storm system.
12	hurricane	a storm with a violent wind, in particular a tropical cyclone in the Caribbean.
13	tsunami	giant waves caused by earthquakes or volcanic eruptions under the sea.
14	mountain	a large natural elevation of the earth's surface rising abruptly from the surrounding level; a large steep hill.
15	earthquake	a sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action.

Prior Knowledge

1	Explore the natural world around them. (Reception – Earth and space)
2	Describe what they see, hear and feel whilst outside. (Reception – Earth and space)
3	Observe changes across the four seasons. (Y1 - Seasonal changes)
4	Observe and describe weather associated with the seasons and how day length varies. (Y1 - Seasonal changes)

Volcanoes & Earthquakes Vocabulary

volcano		crust		mantle
crater		core		magma
eruption		lava		
ash cloud		pyroclastic flow		
main vent		mud flow (or lahar)		
secondary vent		Ring of Fire		
volcanic bombs		landslide		
tectonic plate		tsunami		
fault line				
epicentre				
hypocentre				
liquefaction				

active – a volcano that is currently erupting**dormant** – a volcano which has not erupted recently**extinct** – a volcano that has not erupted for 10,000 years

Future Learning

1	Can they identify and explain the movement of the Earth and other planets relative to the sun in the solar system?
2	Can they explain how seasons and the associated weather is created?
3	Can they describe and explain the movement of the Moon relative to the Earth?
4	To know the effects of a volcanic eruption on the environment.
5	To know that volcanoes can be found on other planets
6	To understand the key features of an OS map including four and six-figure grid references
7	To understand about the structure of the earth and plate tectonics.
8	To understand that mountains can be formed in different ways.
9	To understand the role of plate tectonics in forming volcanoes.

