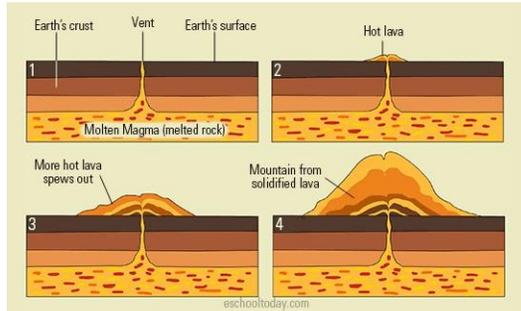


## Topic: Volcanoes and earthquakes

## KS2 – Year 3

- The seven **continents** and five **oceans** of the world.
- The **location** of some countries, including the UK.
- What **climate** means and how it effects the **vegetation** in an area.

- A **volcano** is a very deep hole in the Earth's top **layer** that can let out hot **gasses**, ash and **lava**. Many **volcanoes** are also **mountains**.
- **Volcanoes** have long **vents** that go all the way down through the Earth's first **layer**, the **crust**, to **magma** in between the **crust** and the **mantle** (the Earth's second **layer**). It's so hot there that rocks **melt** into liquid. This is called **magma**, which travels up through **volcanoes** and flows out as **lava**.
- There are three ways to describe a **volcano** and explain what it's doing – **active**, **extinct**, and **dormant**
- When a **volcano erupts**, **magma** comes up and out through the **vents**. **Magma** is called **lava** when it's outside the **volcano**.
- Some **volcanoes** are underwater.
- There are no **volcanoes** in the UK. The largest **volcano** in Europe is Mount Etna in Sicily (Italy).



### Mountains

- When two **tectonic plates** of the earth's **crust** grind into each other the land can be pushed upwards, **forming mountains**.
- Many of the greatest **mountain** ranges of the world have **formed** because of enormous collisions between the **tectonic plates**.
- This is how some volcanoes are formed. The ring of fire lies on the boundaries of very active moving plates which cause the quantity of volcanoes in the area.

### Earthquakes

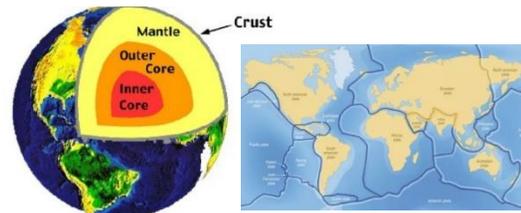
- The **tectonic plates** have edges and sometimes the edges, which are called **fault lines**, can get stuck, but the **plates** keep moving.
- **Pressure** slowly starts to build up where the edges are stuck and, once the **pressure** gets strong enough, the **plates** will suddenly move causing an **earthquake**.

### Vocabulary

active	An <b>active volcano</b> has <b>erupted</b> recently or is expected to <b>erupt</b> quite soon
ash	Volcanic ash is a mixture of rock, mineral, and glass particles expelled from a volcano during a volcanic eruption.
climate	the general weather conditions that are typical of a place
continent	a very large area of land that consists of many countries. Europe is a <b>continent</b> .
core	the central part of the earth, beneath the <b>mantle</b>
crust	The Earth's <b>crust</b> is its outer <b>layer</b>
dormant	not <b>active</b> but is capable of becoming <b>active</b> later on
earthquake	a shaking of the ground caused by movement of the Earth's <b>crust</b>
erupt	When a <b>volcano erupts</b> , it throws out a lot of hot, melted rock called <b>lava</b> , as well as ash and steam
extinct	<b>(of a volcano) not having erupted in recorded history</b>
fault lines	a long crack in the surface of the earth. <b>Earthquakes</b> usually occur along <b>fault lines</b>
form	move or arrange
gas	something that is neither liquid nor solid. A gas rapidly spreads out when it is warmed and contracts when it is cooled.
lava	the very hot liquid rock that comes out of a <b>volcano</b>
layers	If something has many layers, it has many different levels or parts
location	the place where something happens or is situated
magma	<b>molten</b> rock that is formed in very hot conditions inside the earth
mantle	the part of the earth between the <b>crust</b> and the <b>core</b>
melt	to change from a solid to a liquid state through heat or <b>pressure</b>
molten	<b>Molten</b> rock, metal, or glass has been heated to a very high temperature and has become a hot, thick liquid
mountain	a very high area of land with steep sides
Natural	Occurs within nature without human intervention
pressure	force that you produce when you press hard on something
tectonic plates	any of the several segments of the Earth's <b>crust</b> that move
vegetation	plants, trees and flowers
vent	the part of a <b>volcano</b> through which <b>lava</b> and <b>gases</b> erupt
volcano	a <b>mountain</b> from which hot melted rock, <b>gas</b> , steam, and ash from inside the Earth sometimes burst.

### The Earth

- The Earth has three **layers** – the **crust** at the very top, then the **mantle**, then the **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.



### Geographical Skills and Fieldwork

- Describe the **layers** of the earth using key vocabulary.
- **Locate tectonic plates** on a map.
- **Locate volcanoes** around the world.
- **Locate** where **earthquakes** have happened.
- Discuss what you notice about the **location** of **volcanoes** and **earthquakes** and the edges of **tectonic plates**. Compare human and physical features of a region in Italy to that of Wiltshire (UK). Compare climate features of a region of Italy to that of Wiltshire (UK).

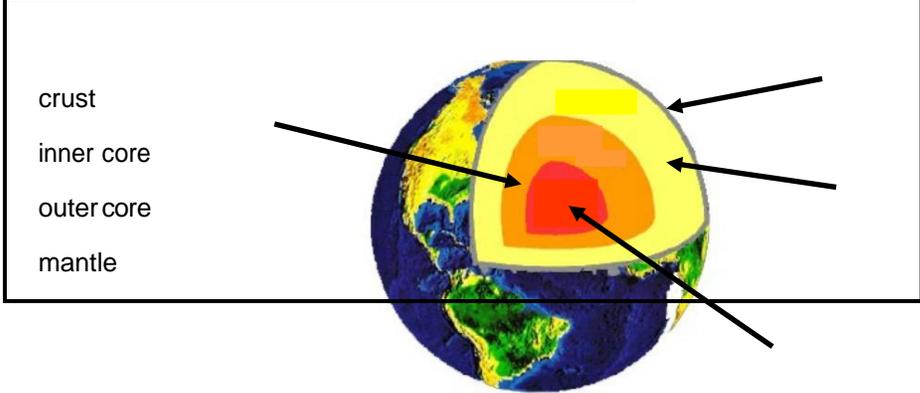
Question 1: What is the difference between magma and lava?	
Start of unit:	
End of unit:	

Question 2: Where on Earth are most volcanoes found?	
Start of unit:	
End of unit:	

Question 3: What is a volcano that could erupt soon called?	Start of unit:	End of unit:
an active volcano		
a dormant volcano		
an erupting volcano		
an earthquake		

Question 4: The highest point of a volcano is called a...	Start of unit:	End of unit:

Question 5: Label the different layers of the Earth.	Start of unit:	End of unit:
Magma chamber		
vent		
crater		



Question 6: The Earth's crust is divided into sections called...	Start of unit:	End of unit:
tectonic plates		
mountains		
volcanoes		

Question 7: When magma comes up from under the core and shoots out from the top of a volcano, this is called...	Start of unit:	End of unit:
an earthquake		
a volcanic eruption		
a tectonic plate		

Question 8: The movement of tectonic plates have caused (tick all that apply)	Start of unit:	End of unit:
earthquakes		
the formation of mountains		
the formation of volcanoes		

Question 9: This is the Ring of Fire in the Pacific Ocean. Explain why there are so many volcanoes along the tectonic plate boundaries.

Start of unit:
End of unit:



Question 10: Describe what an Earthquake is...

Start of unit:
End of unit:

