

Previous and upcoming learning-

Maps of the World

My World and Me

Countries of the World

Extreme Earth

How are volcanoes formed?

1. Magma rises through cracks or weaknesses in the Earth's crust.
2. Pressure builds up inside the Earth.
3. When this pressure is released, e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption.
4. The lava from the eruption cools to form new crust.
5. Over time, after several eruptions, the rock builds up and a volcano forms.

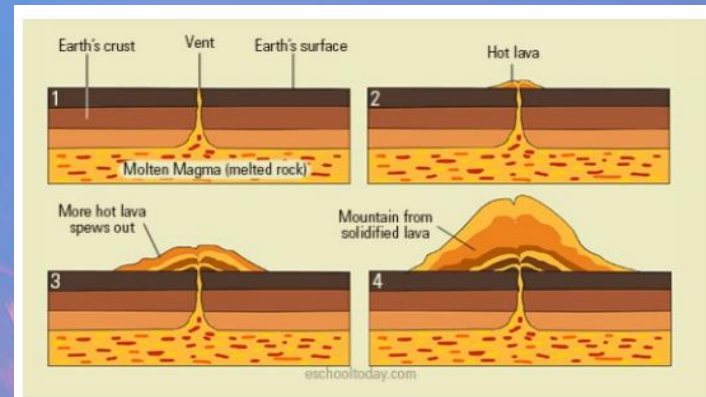
Where are some of the world's most famous volcanoes?

1. Mount Vesuvius, near Naples, Italy
2. Krakatoa, Indonesia
3. Mount St. Helens, Washington, USA
4. Mount Tambora, Indonesia
5. Mauna Loa, Hawaii
6. Eyjafjallajökull, Iceland
7. Mount Pelée, Martinique

What causes an earthquake?

An **earthquake** is the shaking and vibration of the Earth's crust due to movement of the Earth's plates (plate tectonics). Earthquakes can happen along any type of plate boundary.

Earthquakes occur when tension is released from inside the crust. Plates do not always move smoothly alongside each other and sometimes get stuck. When this happens pressure builds up. When this pressure is eventually released an earthquake tends to occur.



volcano is a very deep hole in the Earth's top **layer** that can let out hot **gasses**, ash and **lava**. Many **vol-**

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**, **erupting**, and **dormant**

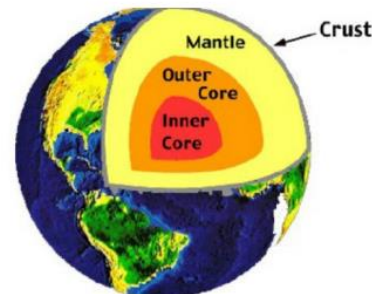
When a **volcano erupts**, **magma** comes up and out through the **vents**. **Magma** is called **lava** when it's out-

Some **volcanoes** are underwater.

There are no **volcanoes** in the UK. The largest **volcano** in Europe is Mount Etna in Sicily (Italy).

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



Subject Specific Vocabulary

Core	The Central part of the earth
crust	The earth's crust is its outer layer.
dormant	Not active by capable of becoming active later on.
vent	The part of the volcano through which
eruption	When a volcano erupts it sprays out lots of hot molten rock called lava as well as
gas	Something that is neither liquid or solid. A gas rapidly spreads out when it is warm
lava	The very hot liquid rock that comes out of
layers	If something has many levels it has many
magma	Molten rock that is formed in very hot
mantle	The part of the earth between the crust
Molten	Molten rock, metal or glass that has been heated a very high temperature and has
magnitude	Something of great size.
landslide	Movement of a mass of rock, debris, or
Tectonic plates	Pieces of earth's crust and uppermost
saturated	Holding as much water or moisture that