

# Volcanoes

The word 'volcano' comes from the island 'Vulcano', which is a volcanic island in Italy. The island got its name from the Roman god of fire - Vulcan.



- There are over 1500 active volcanoes on the Earth.
- There are more than 80 volcanoes under the ocean, although these are just the ones that have been discovered.

## What is a volcano?

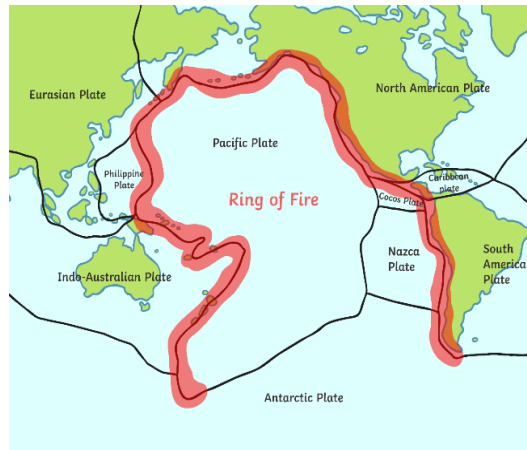
- A volcano is a mountain which opens down to a pool of molten rock below.

## How are volcanoes formed?

- Volcanoes are formed when magma at the centre of the Earth pushes its way upwards.
- When magma travels through the Earth's crust and reaches the Earth's surface, it cools and hardens into a pile of rock.
- As the volcano erupts again, the pile of rock gets bigger.

## The Ring of Fire

- An area of the Pacific Ocean which is home to 75% of the world's volcanoes.



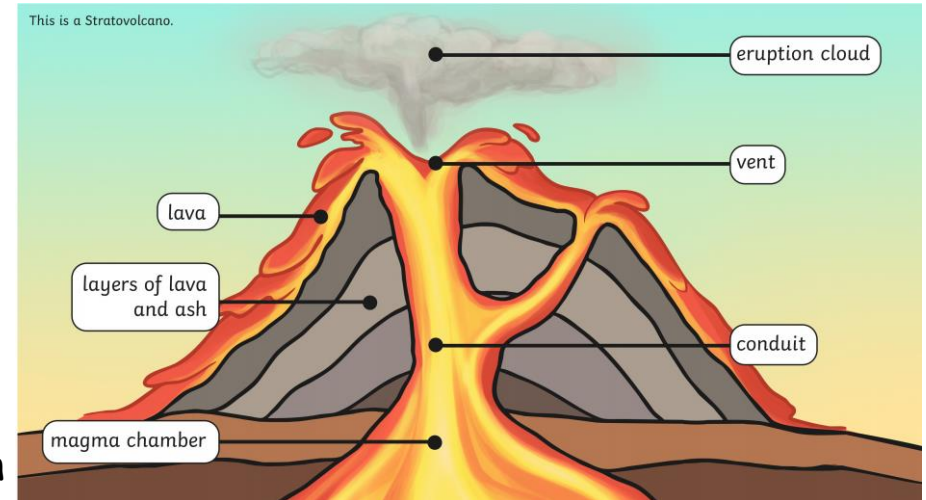
- It contains a string of 452 volcanoes.

## Vocabulary

<b>Magma</b>	Molten (liquid) rock beneath the Earth's surface.
<b>Ash</b>	Tiny pieces of rock or lava blasted into the air during a volcanic eruption.
<b>Lava</b>	Molten (liquid) rock that flows out of a volcano during an eruption.
<b>Magma chamber</b>	A large pool of magma beneath the Earth's surface.
<b>Vent</b>	Part of the Earth's crust where gases and lava erupt from the volcano.
<b>Tectonic plates</b>	Huge slabs which make up the Earth's crust and fit together a bit like a jigsaw.
<b>Earth's crust</b>	The outer layer of the Earth - the part we live on.
<b>Mantle</b>	The second layer of the Earth. It is made up of magma and is approximately 2897km thick. This is what comes out of a volcano when it erupts.
<b>Active</b>	A volcano that has erupted recently and is likely to erupt again.
<b>Dormant</b>	A volcano which has not erupted recently but could still erupt again.
<b>Extinct</b>	A volcano that hasn't erupted recently and will probably not erupt again.

## What causes volcanoes to erupt?

- Tectonic plates sometimes move in different directions and at different speeds, which causes friction.
- When two plates collide, magma is squeezed up between them and bubbles of gas form inside it.
- Runny magma erupts through vents in the Earth's crust, then flows onto the surface as lava.
- If magma is thick, pressure builds up as the magma rises. When the pressure is too much, an explosive eruption can happen.



## Some volcanoes around the world

### Mount Fuji

- Mount Fuji is located in Japan.
- Its highest point is 3776m high.
- Fuji last erupted in 1707.
- It is the highest volcano and is considered one of the three holy mountains.
- More than 200,000 people climb to the top every year.



### Mount Etna

- Mount Etna is located in Sicily, Italy.
- Its highest point is 3330m high.
- It is Europe's highest and most active volcano.
- It last erupted in 2018.
- Mount Etna has the longest recorded history of eruptions; they have been documented since 1500BC.



### Mount Loa

- Mount Loa is one of five volcanoes that form the Island of Hawaii in the Pacific Ocean.
- Its highest point is 4170m high.
- Mount Loa rises from the sea floor and its height from base to summit is 9170m, making it the world's largest active volcano.
- It last erupted in 1984.

