

# Year 6 Spring Term 1 Must Knows - Volcanoes

## Topic Vocabulary

**Active** - a volcano that has had at least one eruption during the past 10,000 years

**Dormant** - an active volcano that is not erupting, but is expected to erupt again

**Extinct** - a volcano which has not erupted in the past 10,000 years and considered by scientists unlikely to erupt again. (Also no longer near an active geologic hot spot)

**Pyroclastic flow** - a fast-moving current of hot gas and volcanic matter that moves away from a volcano about 100 km/h (62 mph) on average but is capable of reaching speeds up to 700 km/h (430 mph)

**Lava flow** - streams of molten rock that pour or ooze from an erupting vent. Lava is erupted during either nonexplosive activity or explosive lava fountains

**Magma** - hot fluid or semi-fluid material **below** or **within** the earth's crust from which lava is formed

**Lava** - hot molten or semi-fluid rock **erupted from a volcano** or fissure, or solid rock resulting from cooling of this.

**Mantle** - the layer of rock inside the Earth between the core and crust. (The thickest layer of the earth)

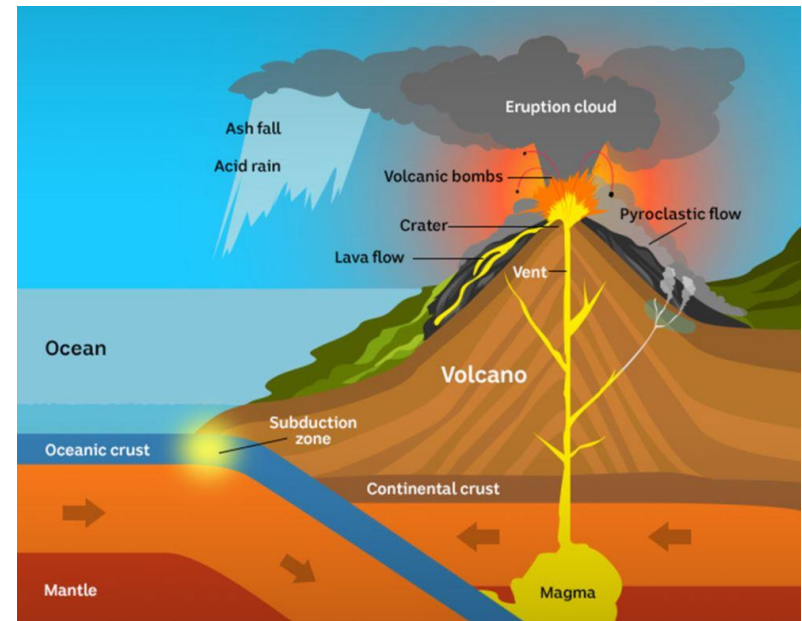
**Crust** - the outermost solid shell of the Earth

**Vent** - an opening in the earth's surface that allows volcanic material to erupt from within

**Cone** - a triangle-shaped hill formed as material from volcanic eruptions piles up around the volcanic vent


**Conduit** - the pipe that carries magma from the magma chamber, up through the volcano until it reaches the vent

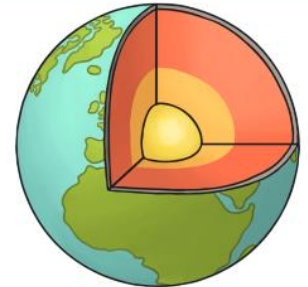
Pliny the Younger documented the eruption of Mount Vesuvius on 24<sup>th</sup> August 79 AD.



The Earth is made up of layers. The top layer, the Earth's crust, consists of large slabs of rocks, called plates. The plates move as the hot mantle flows beneath them. The movement of the plates causes earthquakes and leads to volcanoes erupting.

Key:

-  crust
-  mantle
-  outer core
-  inner core



tectonic plates



## Must Knows Year 6 - Volcanoes

### Key Facts

- The 3 states of volcanoes are active, dormant and extinct.
- Mount Vesuvius erupted on 24<sup>th</sup> August 79AD, destroying the Roman town of Pompeii.
- Active volcanoes are volcanoes that have had at least one eruption during the past 10,000 years
- Dormant volcanoes are active volcanoes that are not erupting, but are expected to erupt again
- Extinct volcanoes are volcanoes which have not erupted in the past 10,000 years and considered by scientists unlikely to erupt again
- The main parts of a volcano are mantle, crust, magma chamber, conduit, cone, vent and crater.
- Mt Vesuvius last erupted in 1944 (during WW2).
- Pyroclastic flow is a fast-moving current of solidified lava, pumice, ash and volcanic gases, including sulphur.
- The Earth is made up of layers; the crust, mantle, outer core and inner core.
- The movement of tectonic plates can cause volcanic eruptions.