



# Knowledge Organiser—Year 3

## Volcanoes and Earthquakes

### Vocabulary

**Volcano**— an opening or rupture in the Earth's crust through which lava, ash and gases escape.

**Magma**—a molten substance beneath the Earth's crust.

**Lava** — molten , hot rock flowing from a volcano.

**Crater**— the mouth of a volcano.

**Eruption**— a volcano erupts when it shoots out lava

**Molten**— hot, melted rocks.

**Earthquake**—a violent movement of parts of the Earth's surface.

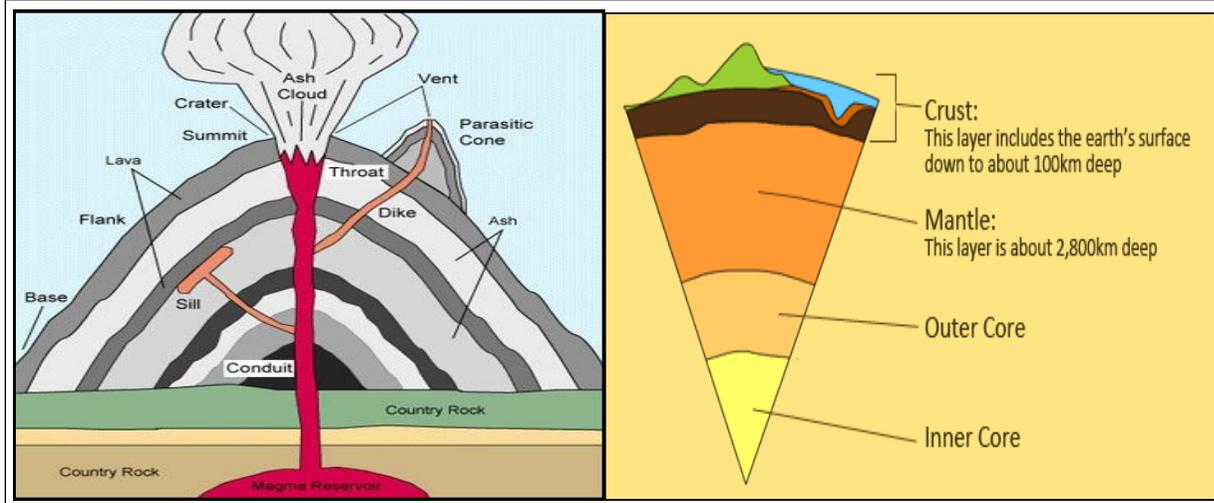
**Epicentre**— The point on the Earth's surface at the centre of an Earthquake.

**Earth's crusts**—the surface layer covering our planet. There are 2 types of crust -oceanic and continental .

**Earth's mantle**—under the crust is the mantle forming about half of the Earth.

**Earth's core** - the core is at the centre of the Earth. There is a solid inner core and outer liquid core of molten metal.

**Pompeii**—a famous Roman city destroyed by a volcano. In 79 AD.



### Key question: How are volcanoes and earthquakes created?

#### 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.

#### 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.

