

# Volcanoes

LO: To be able to describe key features of a volcano and understand how they are formed.

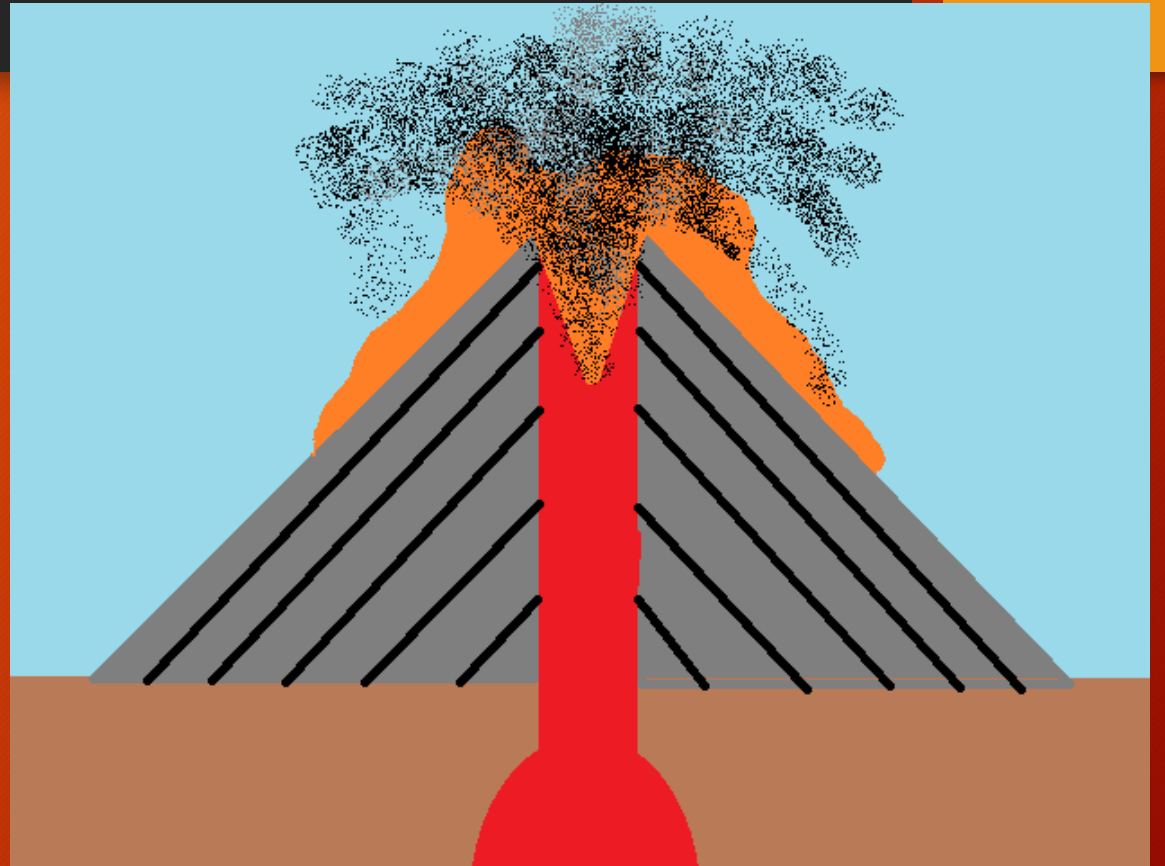
# What is a Volcano?

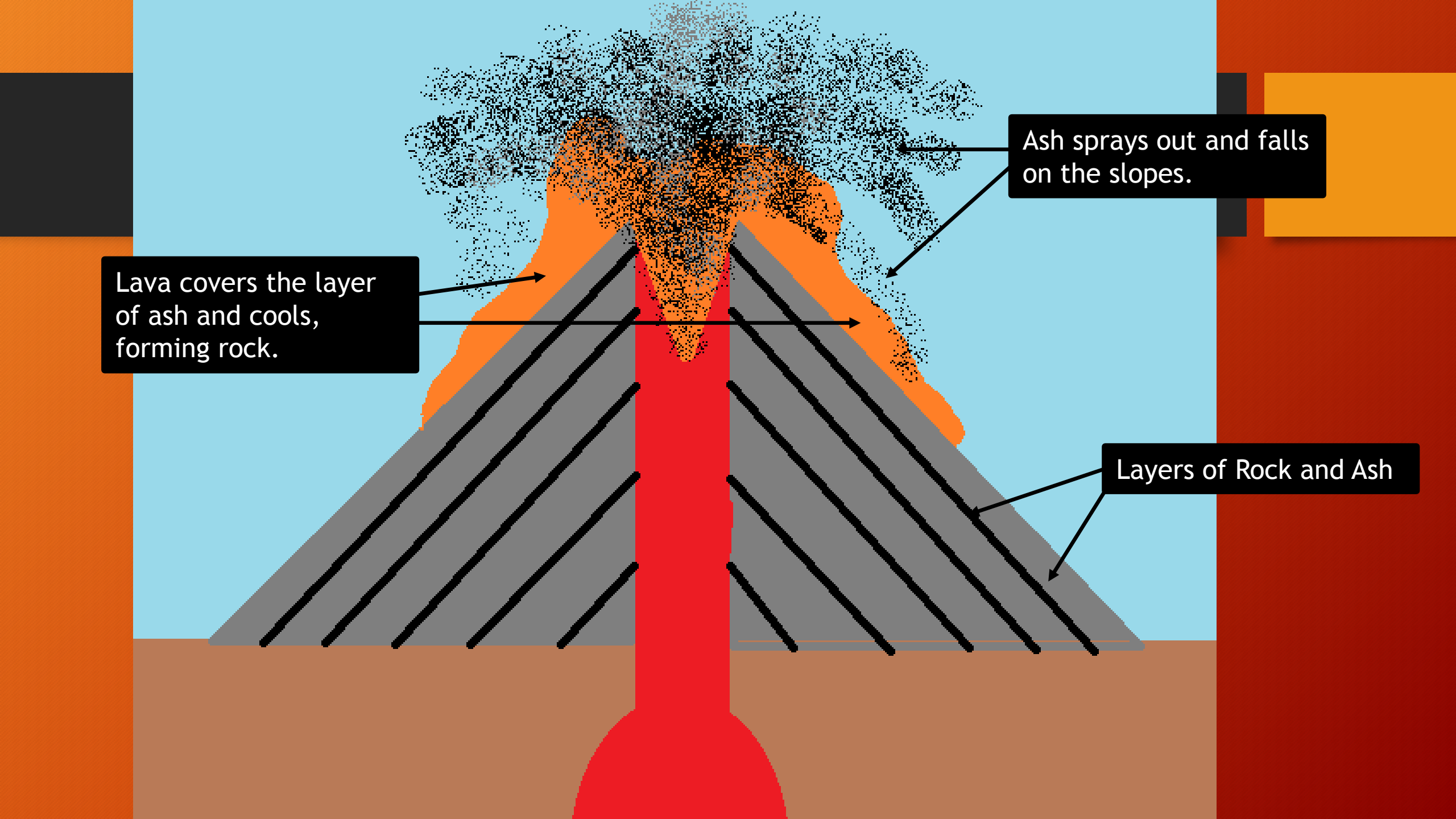
- A hill or mountain with a vent from which molten rock & ash erupts.



# Rock & Ash!

- A volcano is made from many layers of **Ash** and rock.
- When a volcano erupts it spews out molten rock - called: **Lava**. When this **Lava** cools it forms solid rock.
- The volcano also ejects a plume of ash as it erupts.
- The **Ash** and the **Lava** layer on top of each other and cool to form the outside of the volcano.





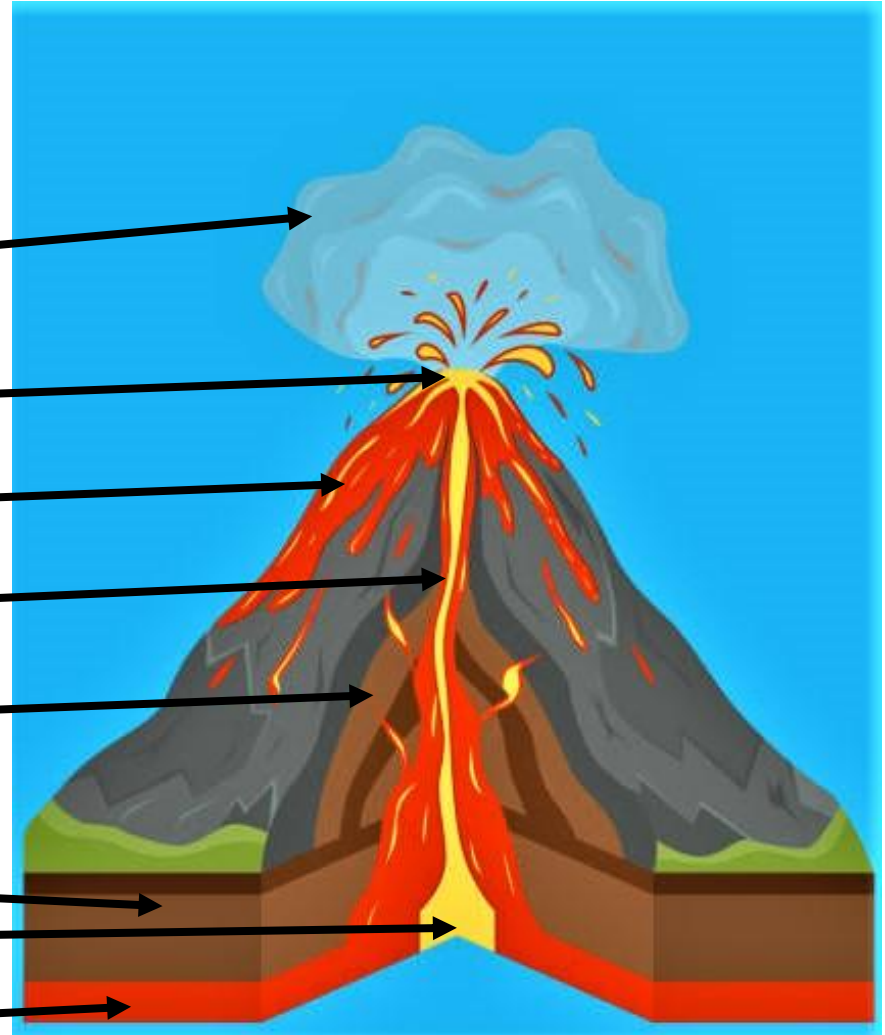
Lava covers the layer of ash and cools, forming rock.

Ash sprays out and falls on the slopes.

Layers of Rock and Ash

# Parts of the Volcano

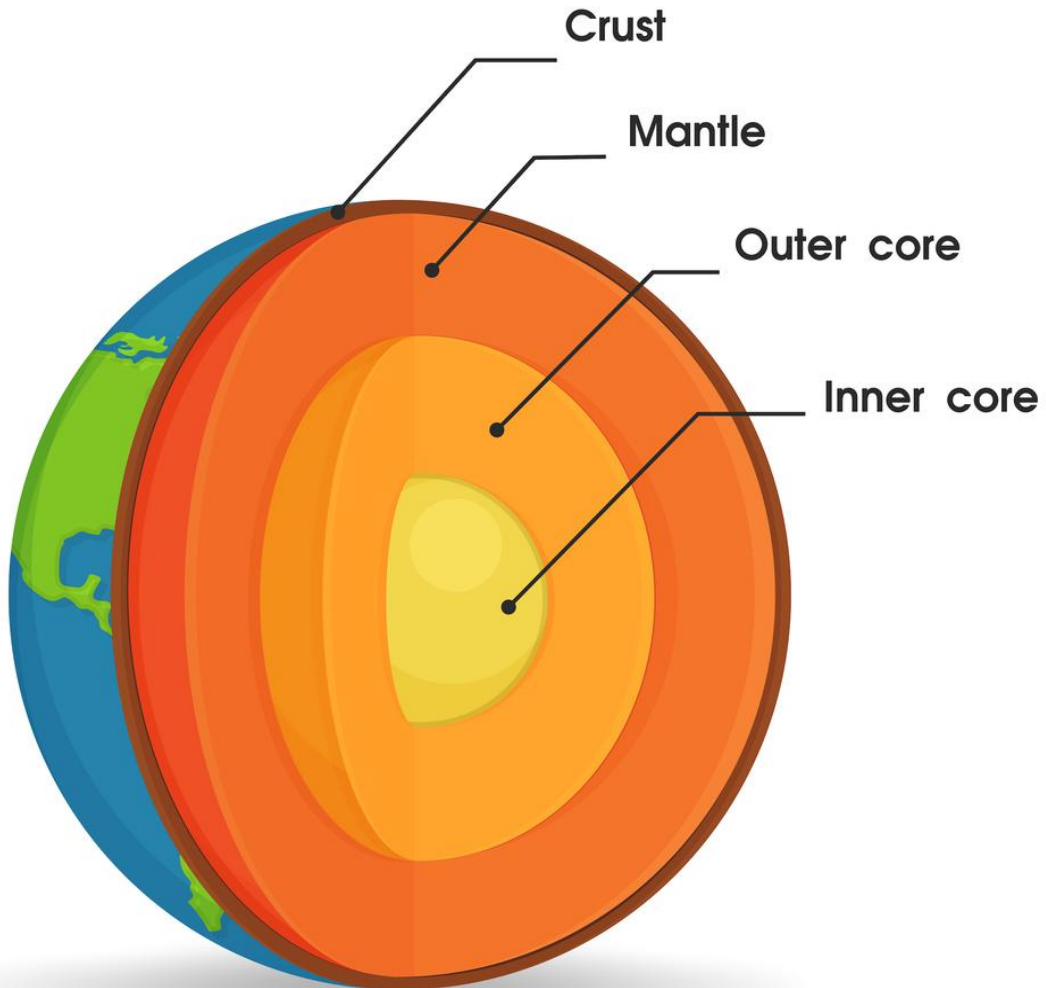
- Ash cloud
- Crater
- Lava
- Vent
- Ash layers
- Crust
- Magma
- Mantle



# Where does the molten rock come from?

- To answer this question we need to look at what our planet: Earth, is made up of.
- The Earth is broken into different parts called:
  - The Crust
  - The Mantle
  - The Outer Core
  - The Inner Core

# Inside The Earth



- The crust is made up of big jigsaw like pieces of rock called tectonic plates.
- The mantle is made up of very hot molten rock the thickness of caramel.
- The outer core is a sphere of even hotter liquid metal.
- The inner core is a solid sphere of extremely hot metal.
- We're interested in the Mantle. This is where we find what is coming out of our volcanoes. The molten rock we call:
- **Lava** right?

Hold on! This is Magma!

There are two names for molten rock: Lava and Magma! *Lava* is *outside* the earth and **Magma** is **inside** the earth!





# Recap

- A volcano is formed by Magma moving through an opening in the Earth's Crust.
- The Magma turns to Lava flow and eventually builds higher and higher into layers of Ash and cooled Lava, forming a large hill or mountain with a vent.

Watch this video from BBC Bitesize:

1. [Volcanoes - BBC Bitesize](#)



# Now have a go at Activity 1

- See if you can name all the different parts of a volcano!
- Good luck!