Lesson 4: Resource Sheet 1

Volcanoes

Volcanoes, both active and inactive, are found all over the world. Figure show the Volcanoes of Bromo National Park, in Indonesia, one of Australia's closest neighbours.

As we discovered in Lesson 1, the Earth's interior is made up of very hot, melted rock called magma. From time-to-time, this magma escapes through openings on the Earth's surface. These openings are called volcanoes and they are sometimes very dangerous.

Figure 1: The Volcanoes of Bromo National Park, in Indonesia



Figure 2: Volcanic eruption and lava flow



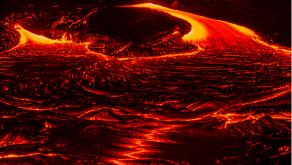
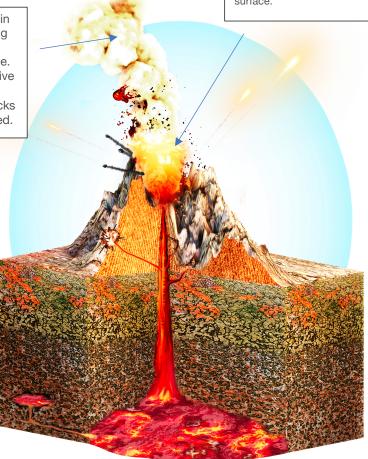
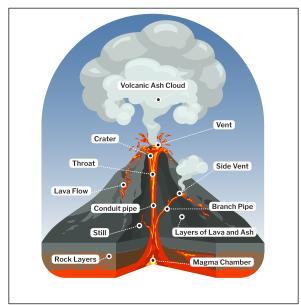


Figure 3: Key features of a volcano

A **crater** is formed when the volcano 'blows its top'. The escaping lava and gas pushes away anything on the Earth's surface.

Over time, pressure builds in the magma chamber forcing magma up through the cracks in the crust's surface. This can occur with explosive force. As a result, an **ash cloud** made up of dust, rocks and other particles is formed.





Well below the surface of the Earth, magma is held within a vast **magma chamber**. Also present are gasses that start to build up pressure over time. When the pressure becomes too great, the magma is pushed out through what is called a **vent** – a type of pipeline that the magma travels through in order to escape.