

# VOLCANOES

## Eruption of Vesuvius



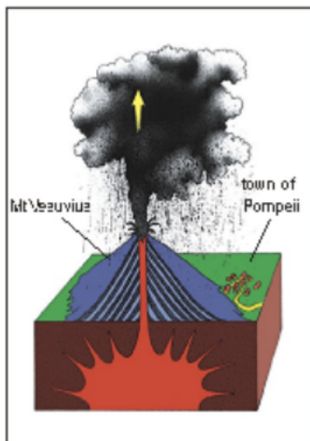
Not far under the surface of the Earth, it is hot. The further down you go inside the Earth, the hotter it becomes. Deep, deep down below our feet, it is so hot that even the rock melts and is nine times hotter than boiling water. In places where the Earth's surface is weak, this liquid rock can bubble up and burst through. These weak spots are the world's volcanoes.

Volcanoes fall into three groups, depending on how active they are. Volcanoes which are erupting are called **active**. Volcanoes which show no signs of eruption are known as **dormant** or sleeping and, if they remain dormant for tens of thousands of years, they may be described as **extinct**.

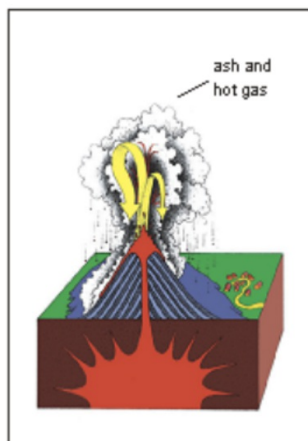
When we hear of a volcano erupting, we think of a tall cone-shaped mountain sending out clouds of ash and liquid rock called **lava**. In fact, volcanoes can be of different types: some are broad and flat, many are under the sea, some pour out streams of red-hot lava, some create an explosion that can be heard thousands of miles away, while others are quieter and 'gentler'.

There are some volcanoes that can cause massive destruction although they produce little or no lava at all. The most well-known of this type is Mount Vesuvius in Italy. This is what happened in the famous eruption of Vesuvius, which destroyed the town of Pompeii over 1900 years ago.

## The Eruption of Vesuvius, AD 79



At midday on 24th August, Vesuvius erupted, sending a cloud of ash, pumice and other rock 20 kilometres into the air. This covered Pompeii in 2 metres of rubble but it did not kill anyone.



After midnight, the cloud collapsed. It sent a surge of ash and hot gas mainly down the western slope of the mountain, at a speed of 160 kilometres per hour.



Early the next morning another surge of blistering ash and rock swept down the slopes. This time it covered the town of Pompeii and burnt and suffocated everyone there.

## Questions

1. *'Liquid rock can burst through...'* What does the word *'burst'* tell us about the movement of the lava? (2 Marks)
2. Find and Copy a word which tells you that the ash was dangerously hot. (1 Mark)
3. Find and copy a phrase that tells you that not all volcanoes are as dangerous as each other.
4. Read the first paragraph. How can you tell that volcanoes are dangerous? (1 Mark)
5. Why might so many people have died at Pompeii given that the volcano had already erupted days before. (2 Marks)