



European Path (e)Motion – Secondary School of Giardini Naxos

Work Sheet 2: Physics - Volcanic Eruption

Name: Date:

- **How is a volcano formed?**

Usually a volcano (terrestrial or underwater) has a conical shape and it is able to erupt lava. A volcano is technically an opening in the Earth's crust of different shapes and dimension.

- **What are the parts of a volcano?**

A volcano is made up of different parts hardly identifiable:

- The lava vent;
- The secondary vent;
- The crater;
- The magma chamber;
- Lateral fissures.

Active volcanoes can be incredibly dangerous, especially to those who live nearby, but how do you get close enough to observe one in action?

Matthew Watson explains how volcanoes are dangerous human lives: "Volcanoes are intractable, majestic and enigmatic and there is something both primal and terrifying about watching them erupt, even at a safe distance."

- **Why do volcanoes erupt?**

A volcanic eruption occurs when hot materials (lava, rocks, dust and gas) from the earth's interior are thrown out of a volcano.

Eruptions can come from side branches or from the top of the volcano. Some volcanoes may show only one type of eruption during a period of activity, while others may show a range of types in a series.

Volcanoes are set on Earth's crust faults which are made of the so called **Plates**. The movement of these causes friction and release of energy producing earthquakes, consequently volcanoes erupt when their magma chamber moves. After the magma goes up and finds an exit pushed by the increase of pressure.

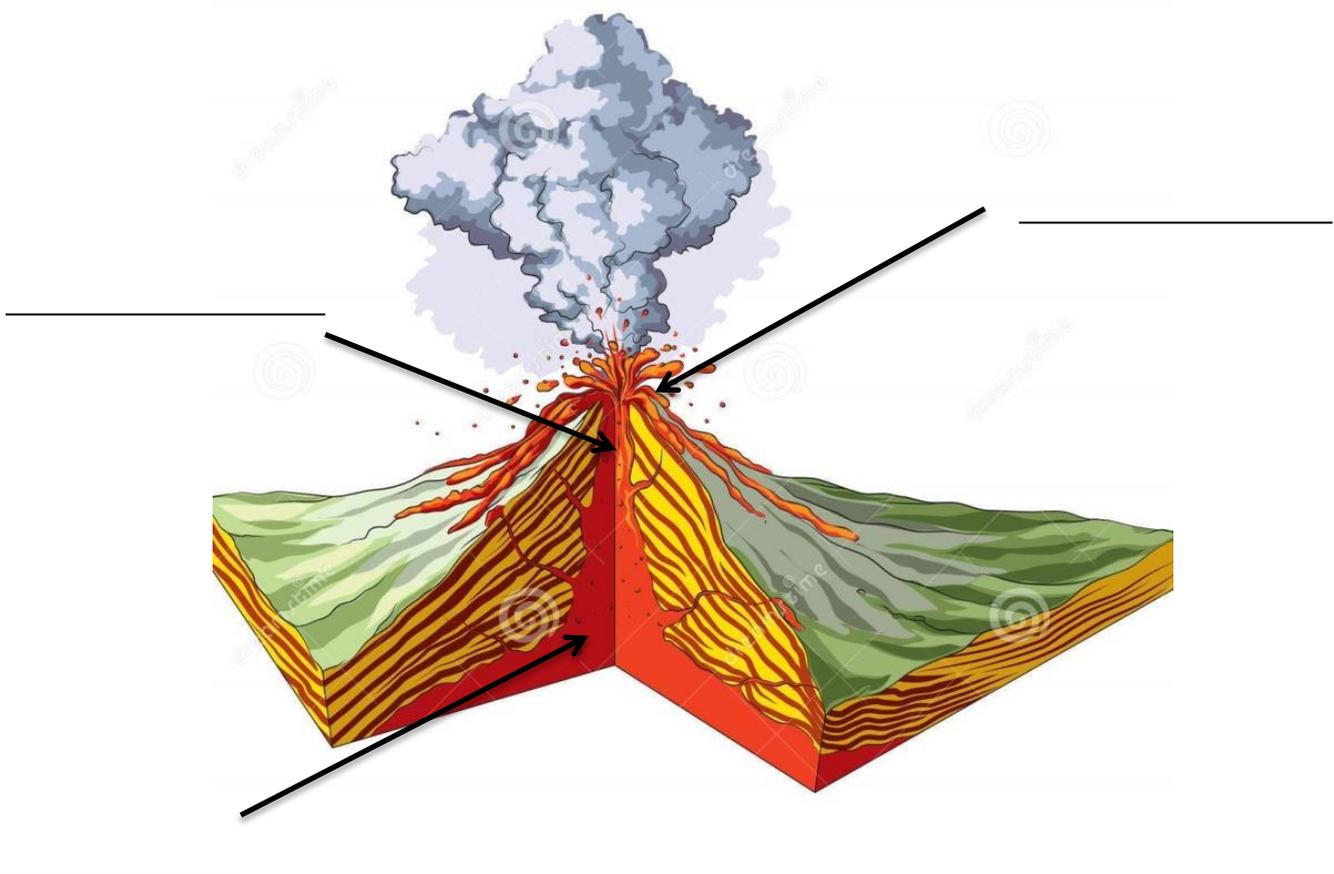
EXERCISES

1. Fill the gaps with the words in the box.

LAVA VENT;

MAGMA CHAMBER;

CRATER;



2. Put the tick in the correct box.

- What is a Volcano?
 - A mountain full of lava
 - An opening in the Earth's crust
 - A Crater

- What does come out from a Volcano?
 - Lava
 - Magma
 - Dirty water

- Can the eruption happen underwater?
 - Yes
 - No