

WALT: Understand the how a volcano is composed.

I can label the parts of a volcano.

I know the different types of volcanoes.

I can compare different volcanoes

What is a Volcano?

A volcano is a mountain or hill, which has a crater or vent at the top. Lava (magma), rock fragments, hot vapour and gas travel through the vent which has erupted from the Earth's crust. Its name comes from the Roman God of Fire, Vulcan.



Crater/Vent



Lava (magma)



Rock
Fragments



Hot vapour

Different types of Volcanoes

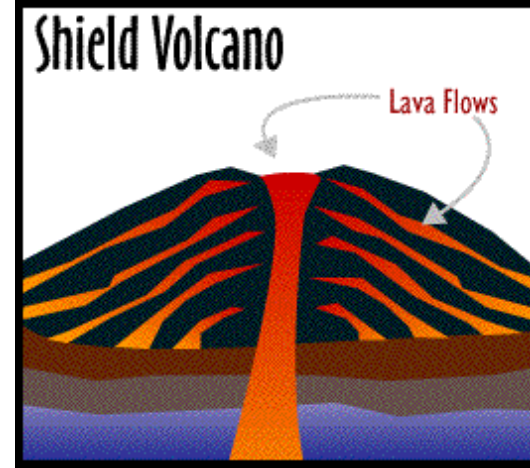
Volcanoes are often **cone-shaped**, but they can take other shapes too: shield or composite.

They are formed when molten, sticky rock called magma, forces its way through a crack in the Earth's crust.

The melted rock that spills out of the crater on the top of the volcano is called lava. The lava destroys everything in its path because it is very, very hot!

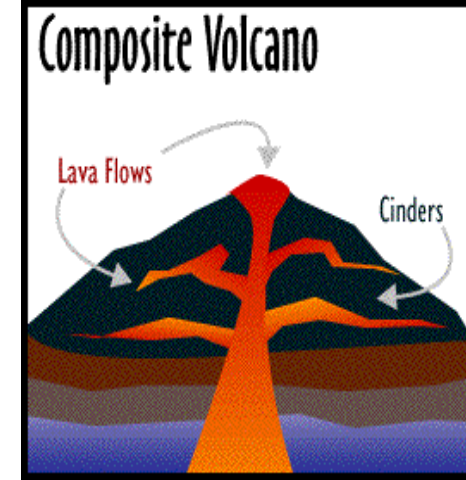
Shield Volcano

- Shield Volcanoes are made mostly of fluid lava flows
- It is the calmest of the eruption types
- Shield volcanoes are the largest volcanoes on Earth but are not very steep
- The Hawaiian Islands are composed of chains of shield volcanoes.



Composite (Stratovolcano)

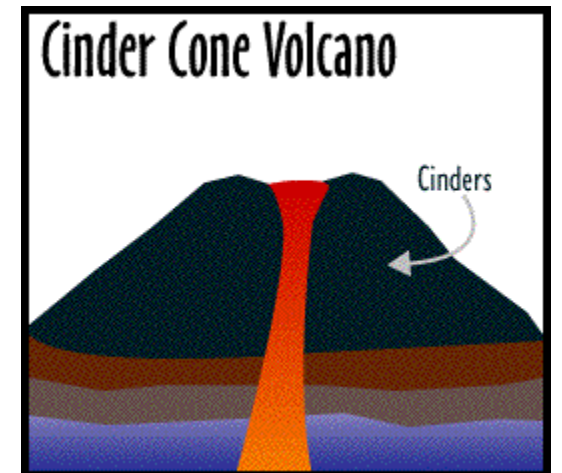
- These volcanoes are typically tens of miles across and 10,000 or more feet in height
- they have moderately steep sides
- Volcanologists call these "strato-" or composite volcanoes because they consist of layers of solid lava flows mixed with layers of sand- or gravel-like volcanic rock called cinders or volcanic ash.
- Vesuvius (destroyed Pompeii) & Mount St. Helens (in Washington State)



Mt. Vesuvius as seen in Naples, Italy

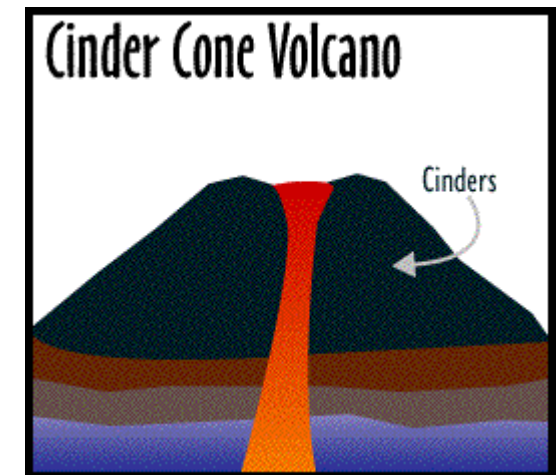
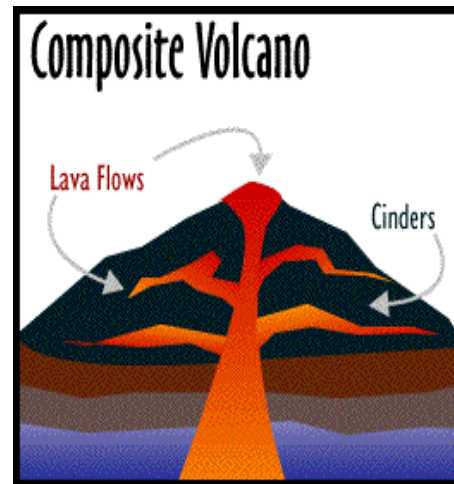
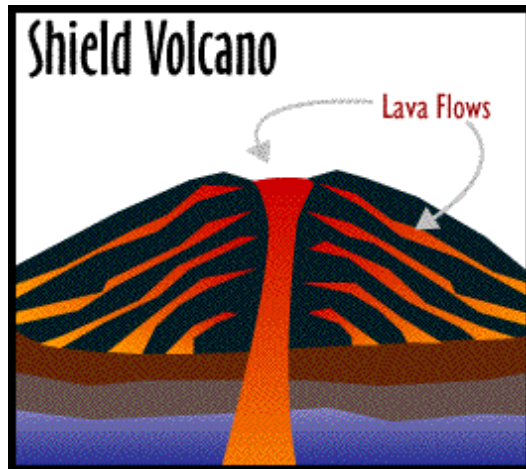
Cinder Cone Volcano

- These are small volcanoes, usually only about a mile across and up to about a thousand feet high, grainy cinders and almost no lava.
- They have very steep sides and usually have a small crater on top.



Compare the three types of volcanoes

- Draw the three examples and answer this question:
 - How are they similar and what is different?



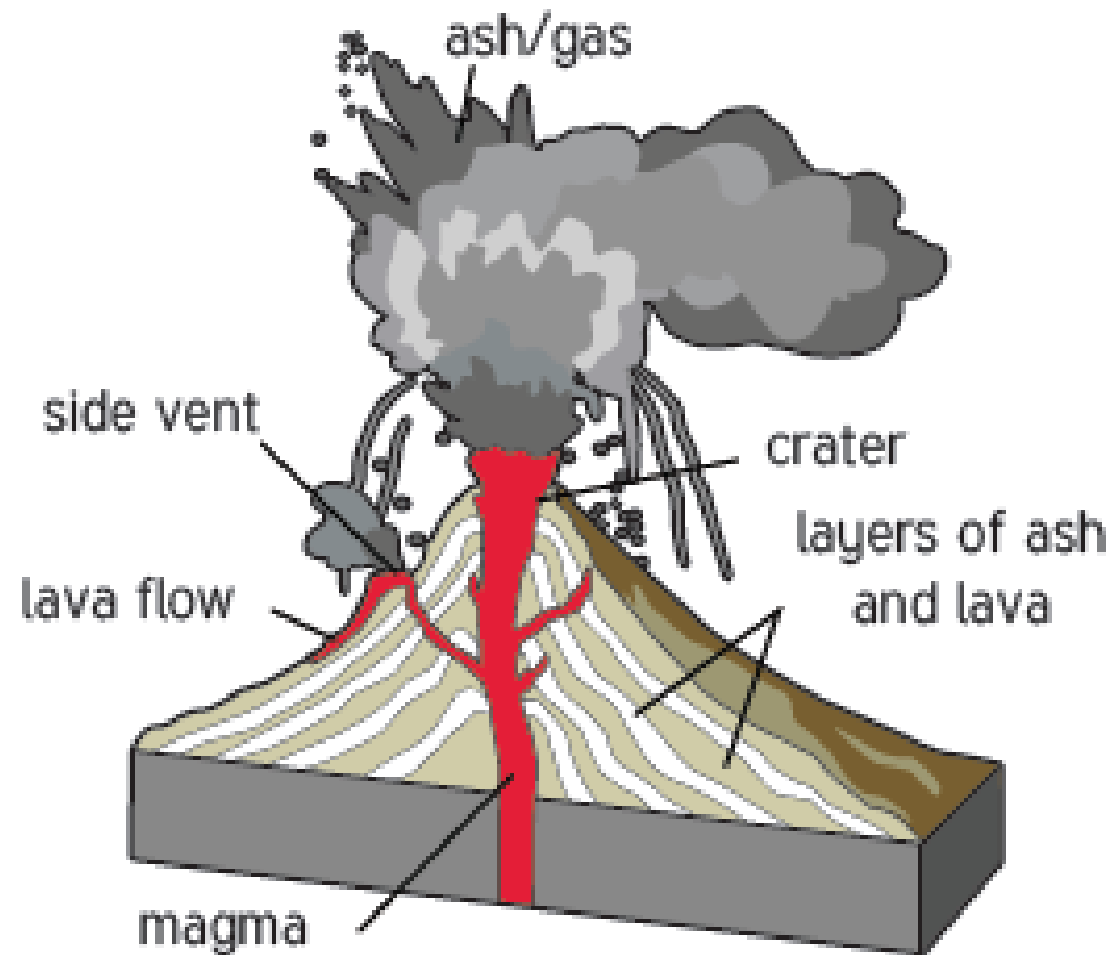
Types of volcano

Volcanoes can be active, dormant or extinct.

- A volcano is active, or alive, when it erupts often.
- When a volcano is dormant, or sleeping, it has not erupted for a long time – but it might in the future.
- A volcano is extinct, or dead, when it hasn't erupted for at least 100,000 years.



What makes a Volcano?



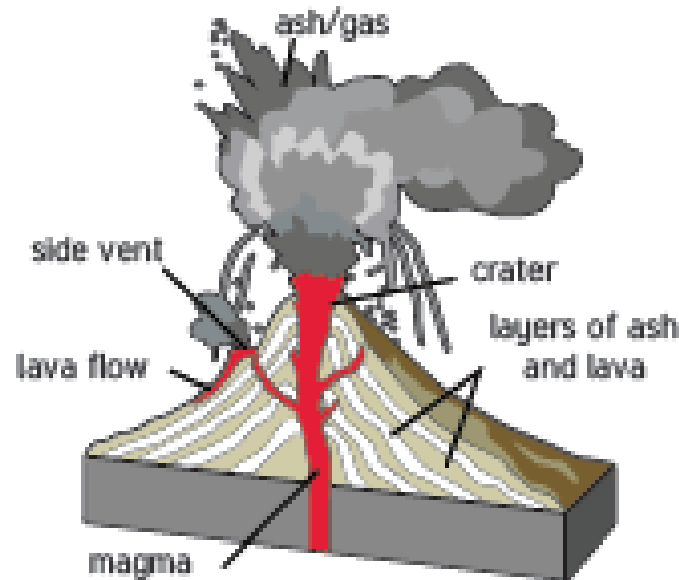
Parts of a Volcano?

Ash/Gas

This is created when volcanoes explode.

Lava/Magma

Lava is also known as magma, this is the hot liquid rock which is hidden under the Earth's surface. Once it comes out of the volcano, it is called lava.



Vent

Volcanic materials escape through the vent, it is an opening in the Earth's surface.

Crater

This is where the eruption takes place, it is a large hole surrounding the vent.