

## Anatomy of a Volcano

Lava erupts through a vent

Vent= opening in earth's crust.

As lava flows onto surface, it cools and gets hard around the vent.

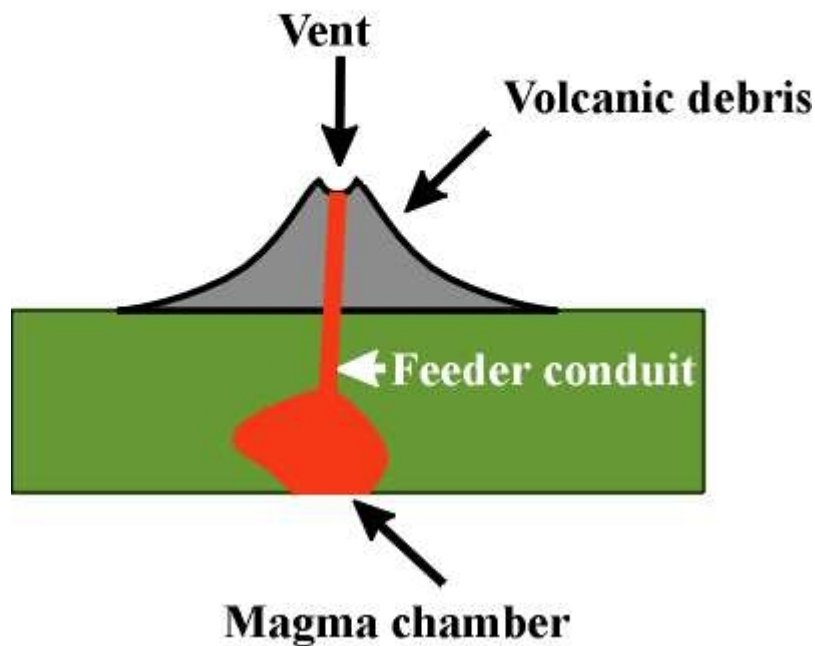
Over time, lava can form a mountain known as a volcano.

Top of volcano is called crater (bowl shaped depression).

Craters < 1 km in diameter.

Larger depressions are called calderas < 50 km.

## **Anatomy of a volcano**



## Types of Volcanoes

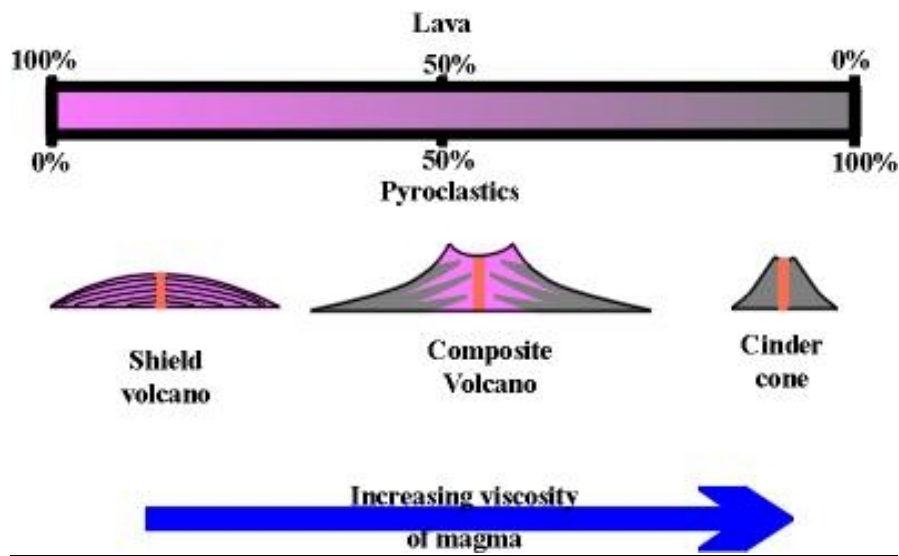
Appearance depends on two factors: 1) type of material and 2) type of eruption.

**Shield Volcano**: Mountain with broad gently sloping sides.

**Cinder-Cone Volcano**: material ejected high into atmosphere and falls back down. Have steep sides.

**Composite Volcano**: layers of volcanic fragments alternate with lava.

## Classification of volcanoes



## Volcanic Material

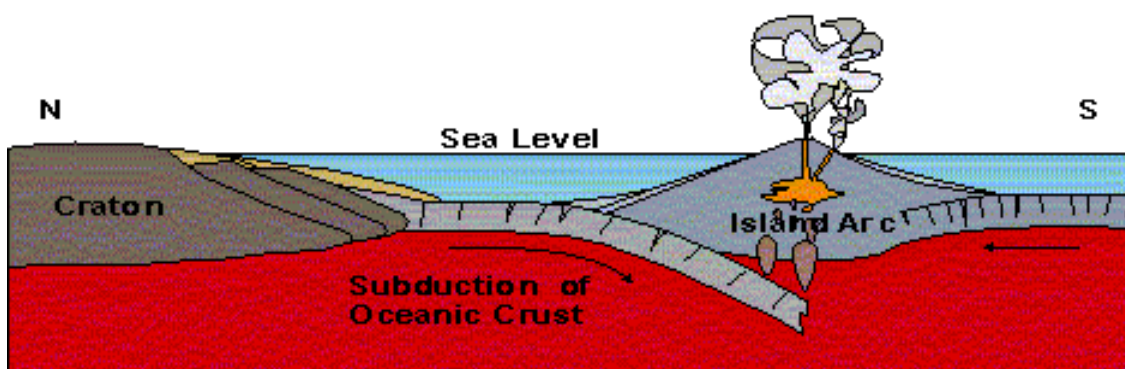
Rock fragments thrown into air during eruption are called tephra.

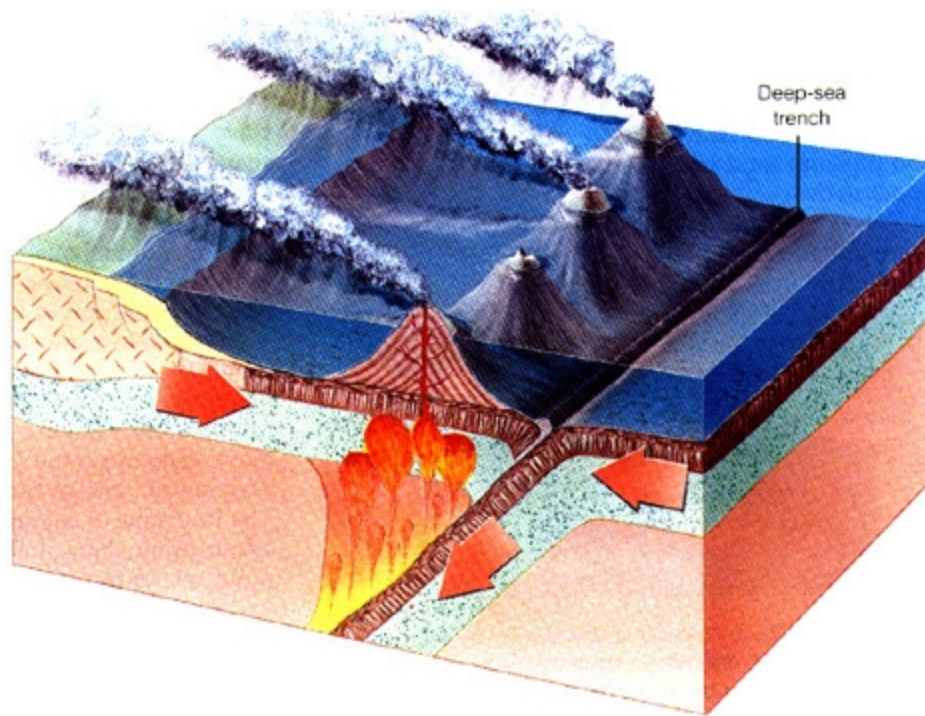
Volcanic eruption can send clouds of gas, ash and tephra down a slope at very fast speeds (pyroclastic flow).

## Where do volcanoes occur?

Most are found at plate boundaries.

80% of volcanoes found along convergent boundaries.





## Hot Spots

Volcanoes located away from plate boundaries.