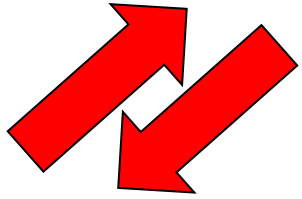


Transform (Boundaries) Faults

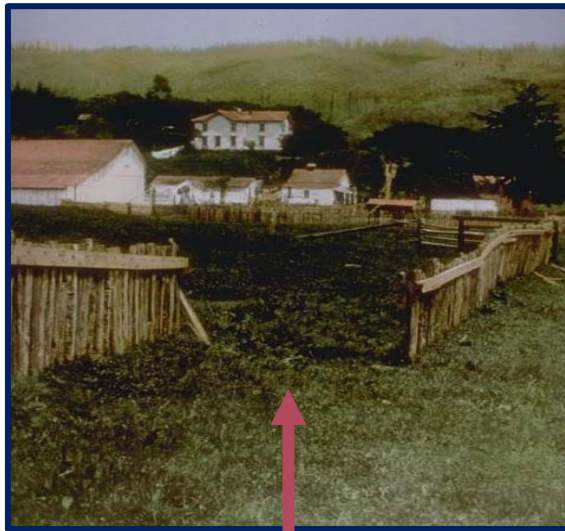
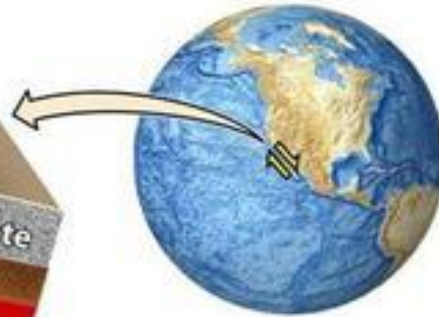
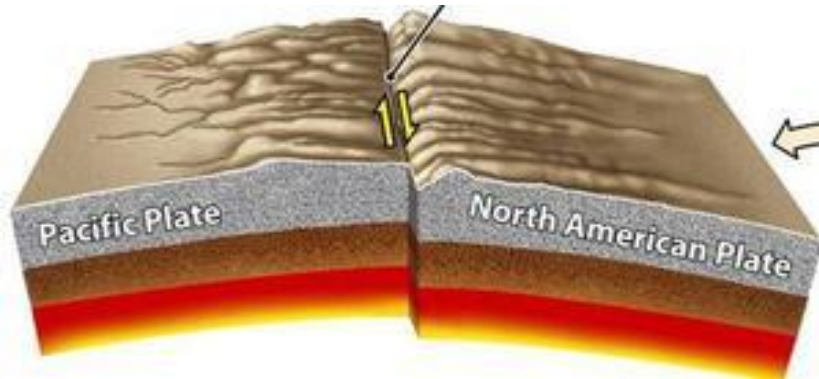


Plates slide past each other

- Commonly found **along mid-ocean ridges** (between ridge segments that are moving at different rates).
- Less common on land.
- Termed ***conservative boundaries***, since *rock is neither created nor destroyed but only shifted.*



San Andreas Transform Fault



Fence **offset** resulting from ground shift



What are the consequences of the tectonic plates' movement?

- Landscape formation
- Volcano formation
- Orogeny (mountain formation)
- Earthquakes
- Tsunami formation

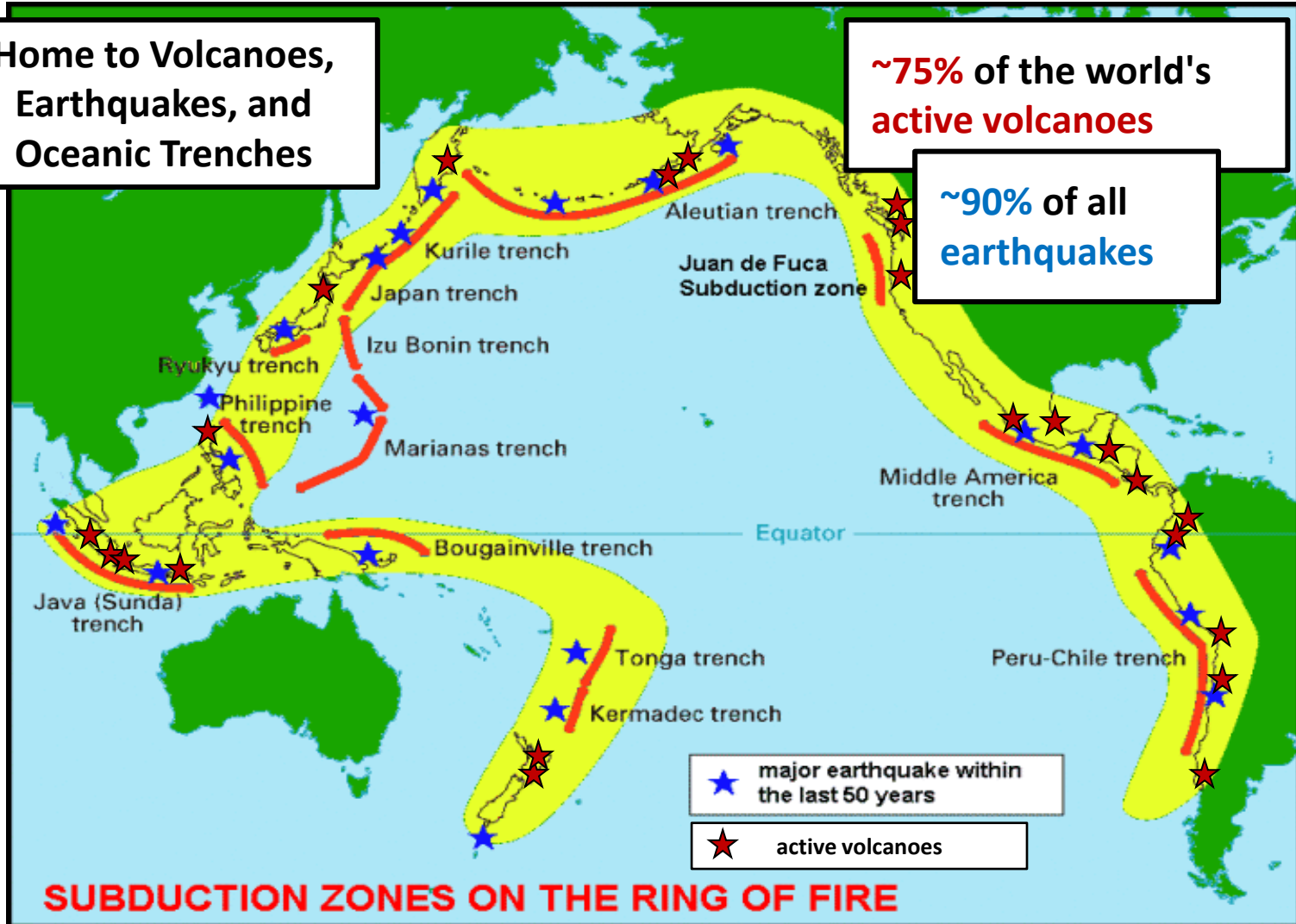


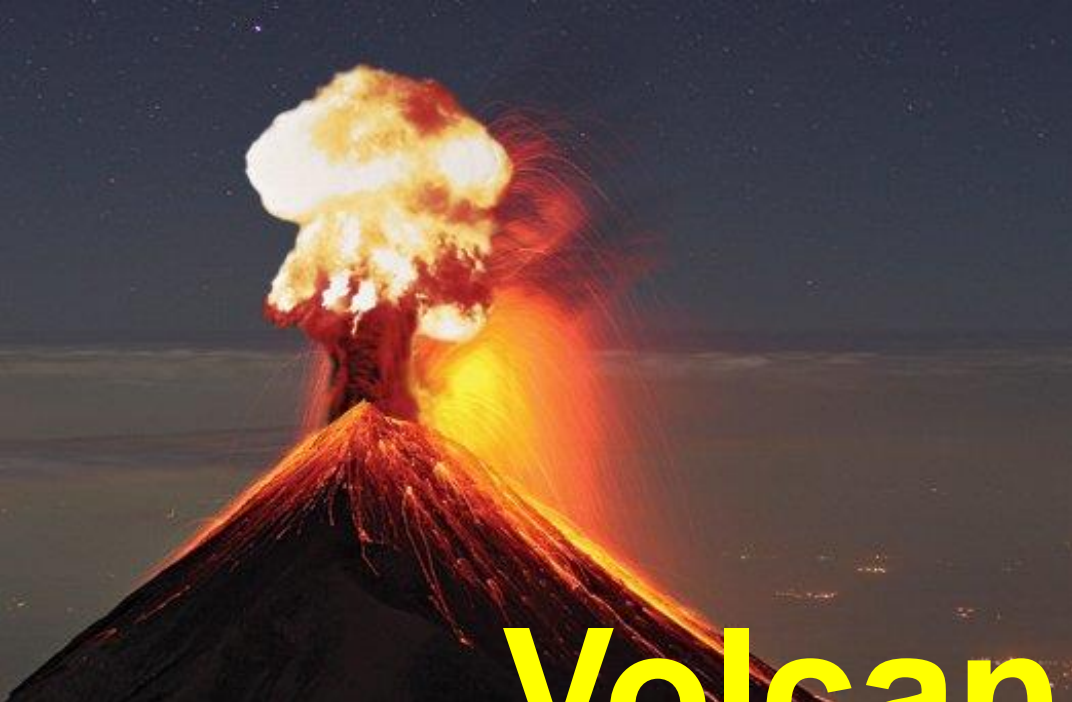
The Pacific Ring of Fire

Home to Volcanoes,
Earthquakes, and
Oceanic Trenches

~75% of the world's
active volcanoes

~90% of all
earthquakes



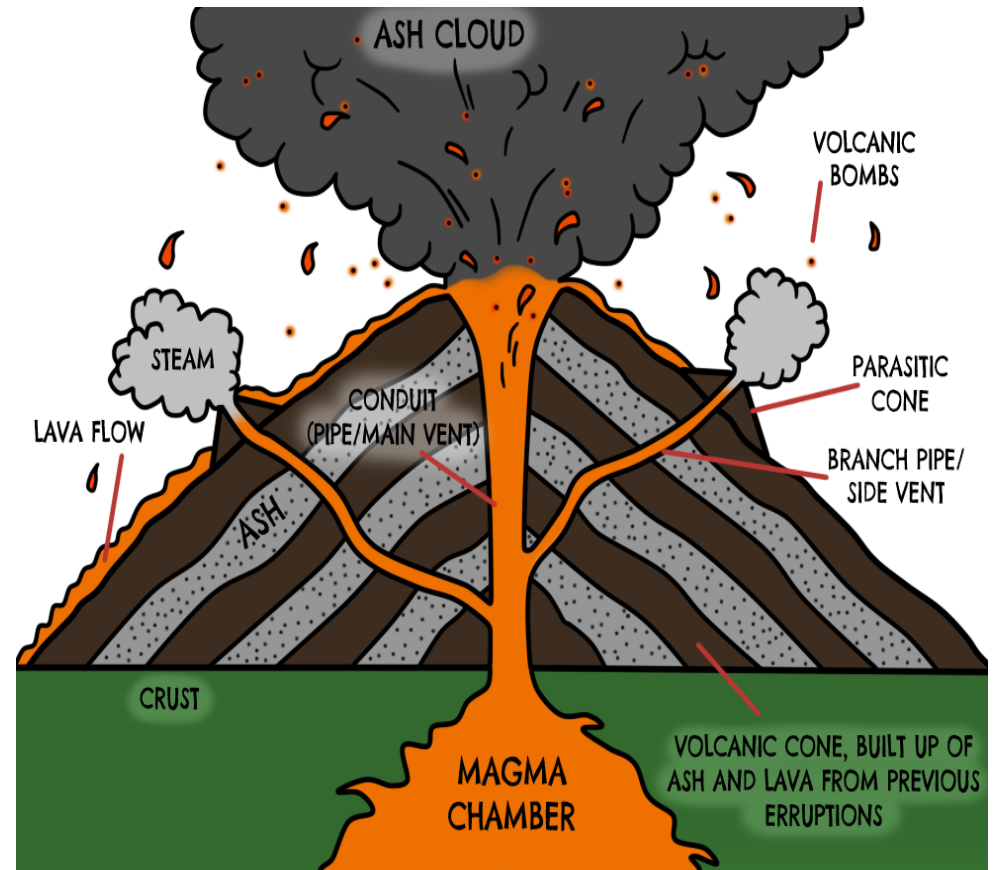


Volcanism



A **Volcano** is a mountain that forms when **magma reaches the Earth's surface.**

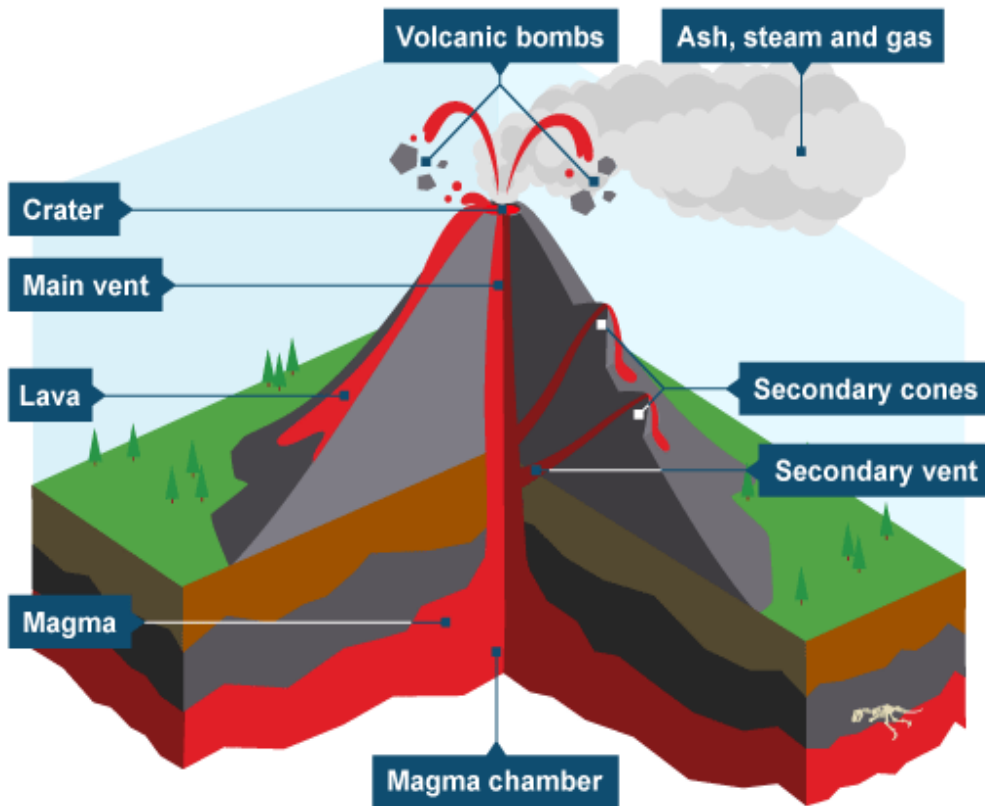
- Magma develops and collects in areas called **magma chambers.**
- Magma is less dense than the solid rock around it.
- Magma can also easily migrate (flow) if a structural zone allows movement.



- When a rupture on the crust is present, **magma rises to the surface and escapes**, resulting in **volcanism.**

Parts of a Volcano

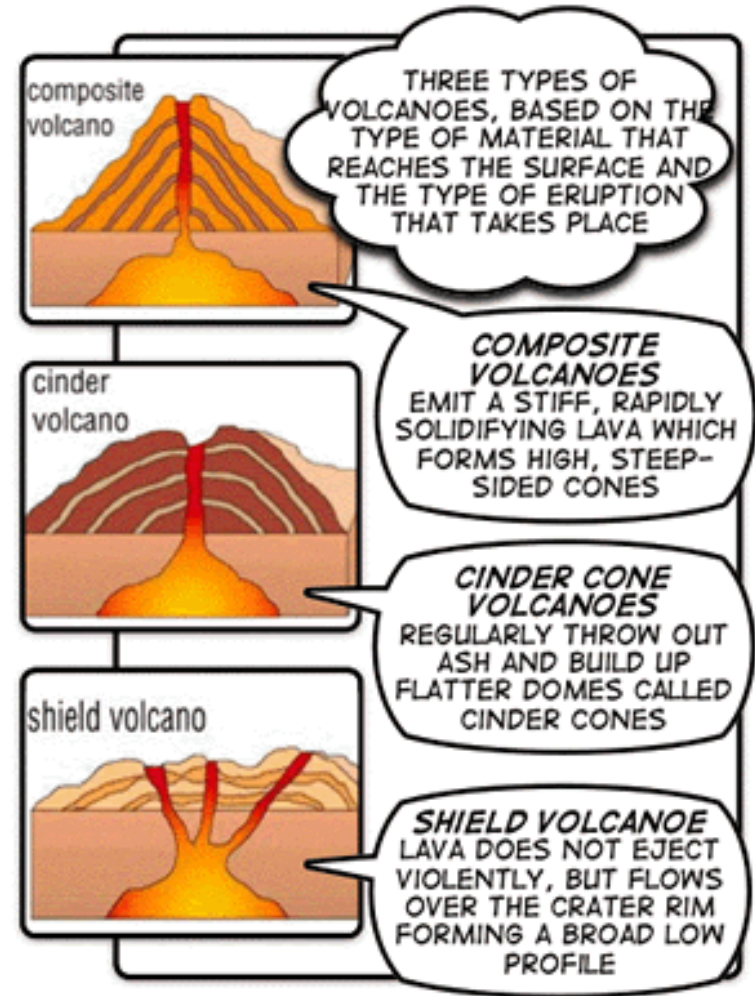
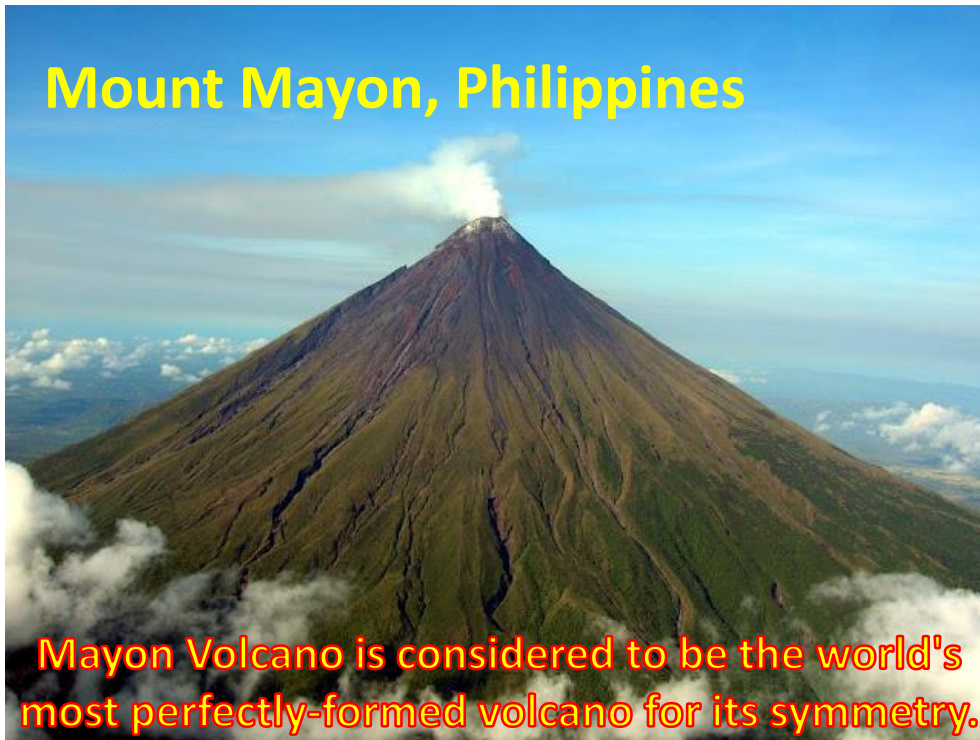
1. VENT - the vent is the opening from which **lava** flows.



- A volcano can have **several vents**.
- **Dust, ash, and rock particles** can also be thrown out of the vent!

Parts of a Volcano

2. VOLCANIC CONE - the pile of lava, dust, ashes, mud, and rock around the vent.



It can be found in different shapes!

Parts of a Volcano

3. CRATER - the top of the volcano.

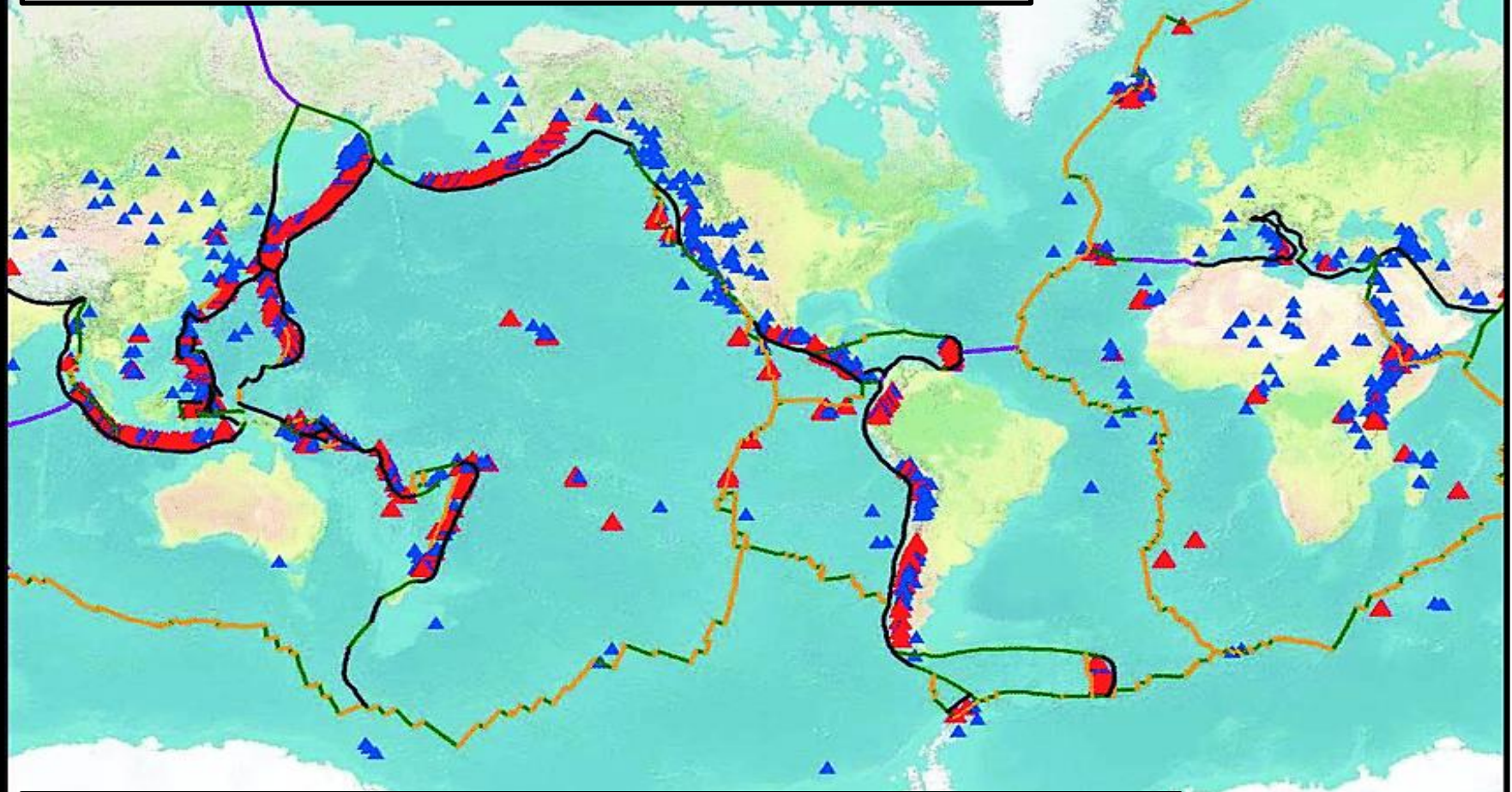


This **funnel-shaped pit** is formed when the material is ejected out of the vent!



Volcano Distribution

during the current geological epoch



△ Activity since 1900, △ Activity since ~11700 YA

0 5,000 km