

VOLCANO

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Volcano

- A **volcano** is a rupture in the crust of a planetary-mass object, such as Earth, that allows hot lava, volcanic ash, and gases to escape from a magma chamber below the surface.

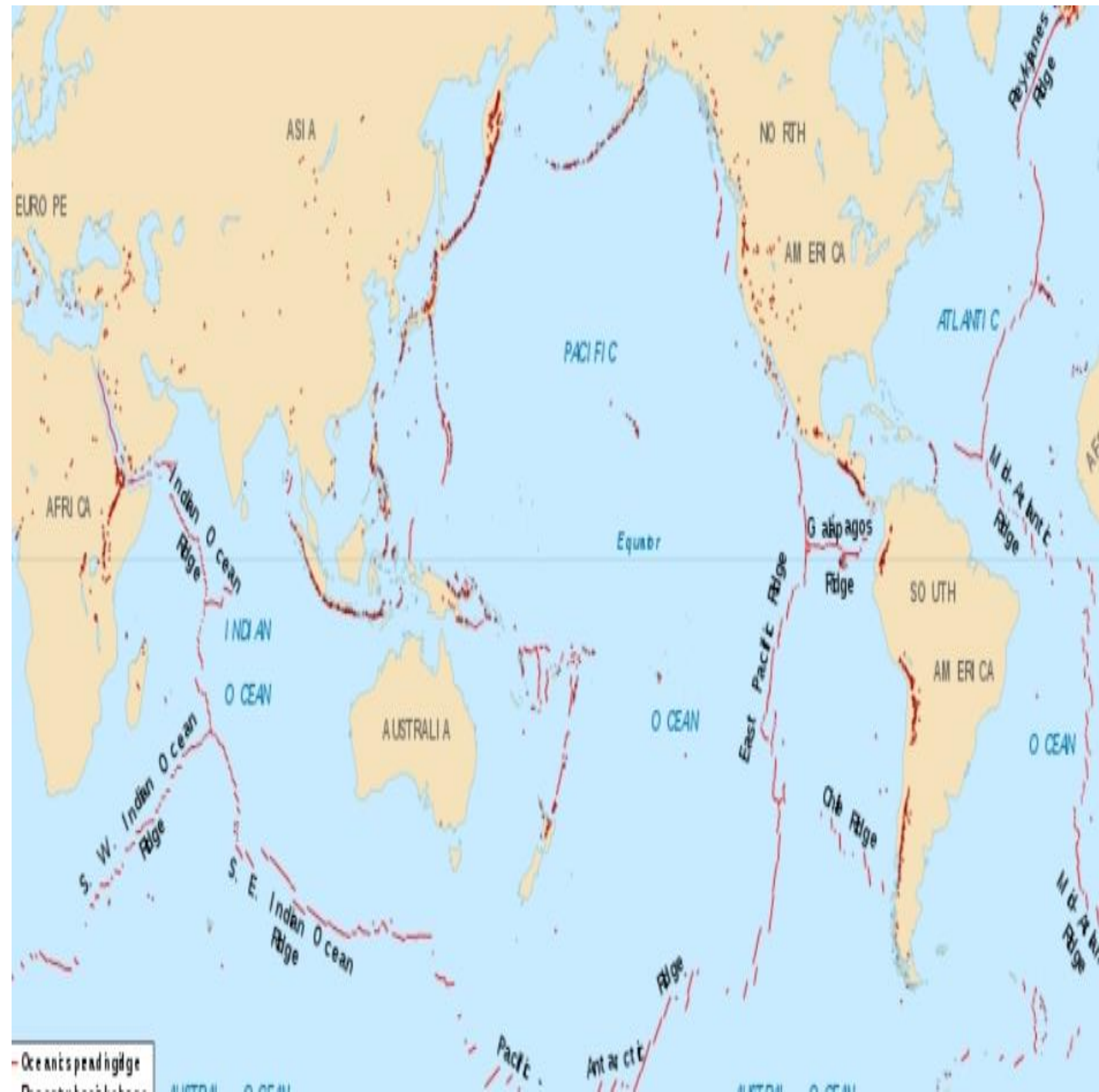


- On Earth, volcanoes are most often found where [tectonic plates](#) are [diverging](#) or [converging](#), and most are found underwater. For example, a [mid-ocean ridge](#), such as the [Mid-Atlantic Ridge](#), has volcanoes caused by divergent tectonic plates whereas the [Pacific Ring of Fire](#) has volcanoes caused by convergent tectonic plates. Volcanoes can also form where there is stretching and thinning of the crust's plates, such as in the [East African Rift](#) and the [Wells Gray-Clearwater volcanic field](#) and [Rio Grande rift](#) in North America.



Plate tectonics

- According to the theory of plate tectonics, Earth's [lithosphere](#), its rigid outer shell, is broken into sixteen larger and several smaller plates. These are in slow motion, due to [convection](#) in the underlying ductile [mantle](#), and most volcanic activity on Earth takes place along plate boundaries, where plates are converging (and lithosphere is being destroyed) or are diverging (and new lithosphere is being created).



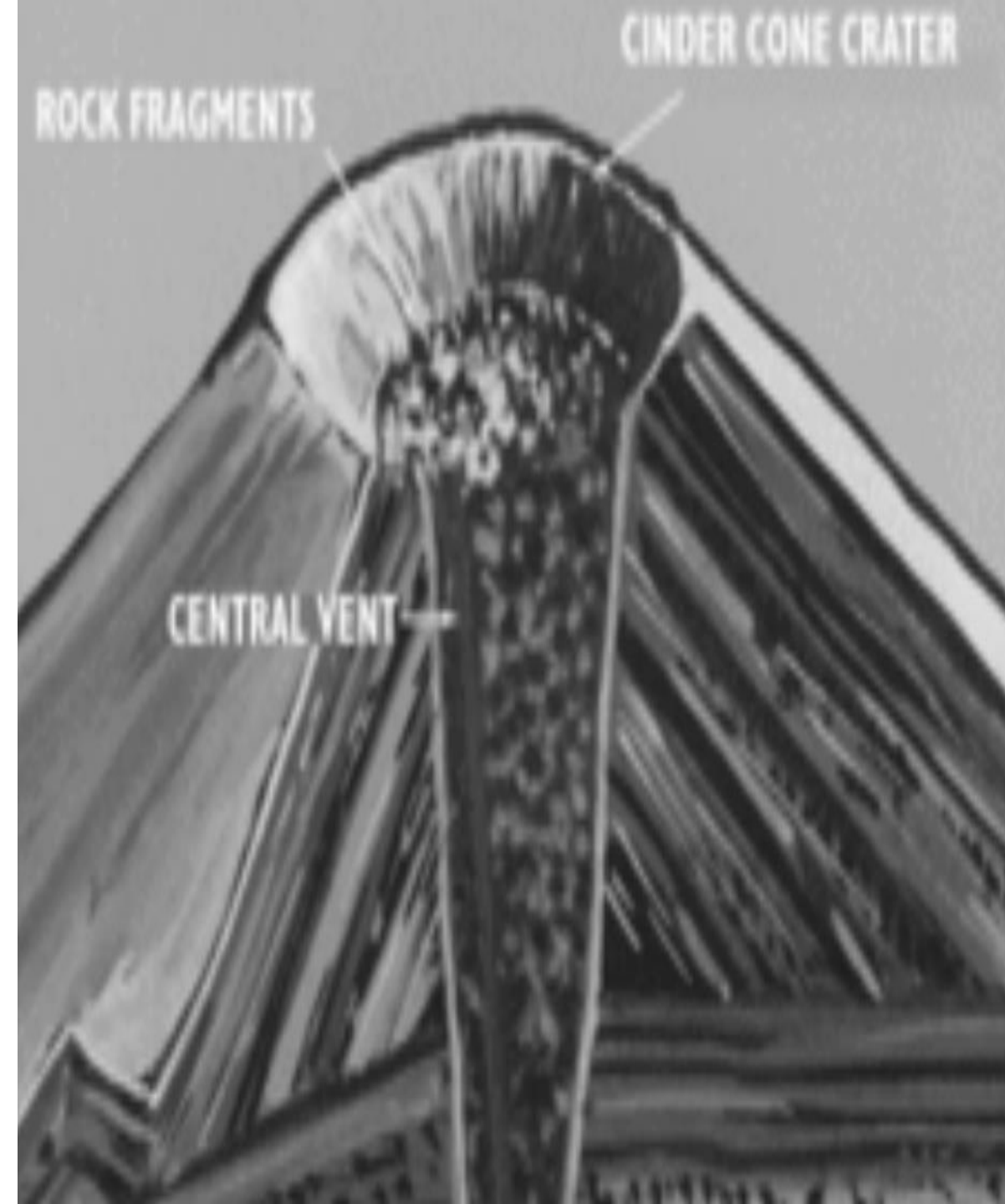
Erupted material

- The material that is expelled in a [volcanic eruption](#) can be classified into three types:
- [Volcanic gases](#), a mixture made mostly of [steam](#), [carbon dioxide](#), and a sulfur compound (either [sulfur dioxide](#), SO_2 , or [hydrogen sulfide](#), H_2S , depending on the temperature)
- [Lava](#), the name of magma when it emerges and flows over the surface
- [Tephra](#), particles of solid material of all shapes and sizes ejected and thrown through the air



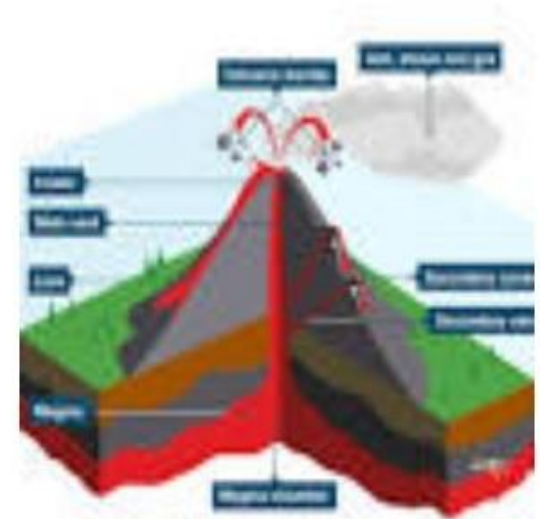
Interior Structure of a Volcano

- **All volcanoes contain a central vent underlying the summit crater of the volcano. The volcano's cone-shaped structure, or edifice, is built by the more-or-less symmetrical accumulation of lava and/or pyroclastic material around this central vent system.**



Internal Parts of the Volcano

- **Magma.** - Molten rock beneath Earth's surface.
- **Parasitic Cone.** - A small cone-shaped volcano formed by an accumulation of volcanic debris.
- **Sill.** - A flat piece of rock formed when magma hardens in a crack in a volcano.
- **Vent.** ...
- **Flank.** ...
- **Lava.** ...
- **Crater.** ...
- **Conduit.**



- SOURCES:
- <https://sciencing.com/main-parts-volcano-5431616.html>
- <https://en.m.wikipedia.org/wiki/Volcano>
- http://ete.cet.edu/gcc/?/volcanoes_types/
- Students:
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