



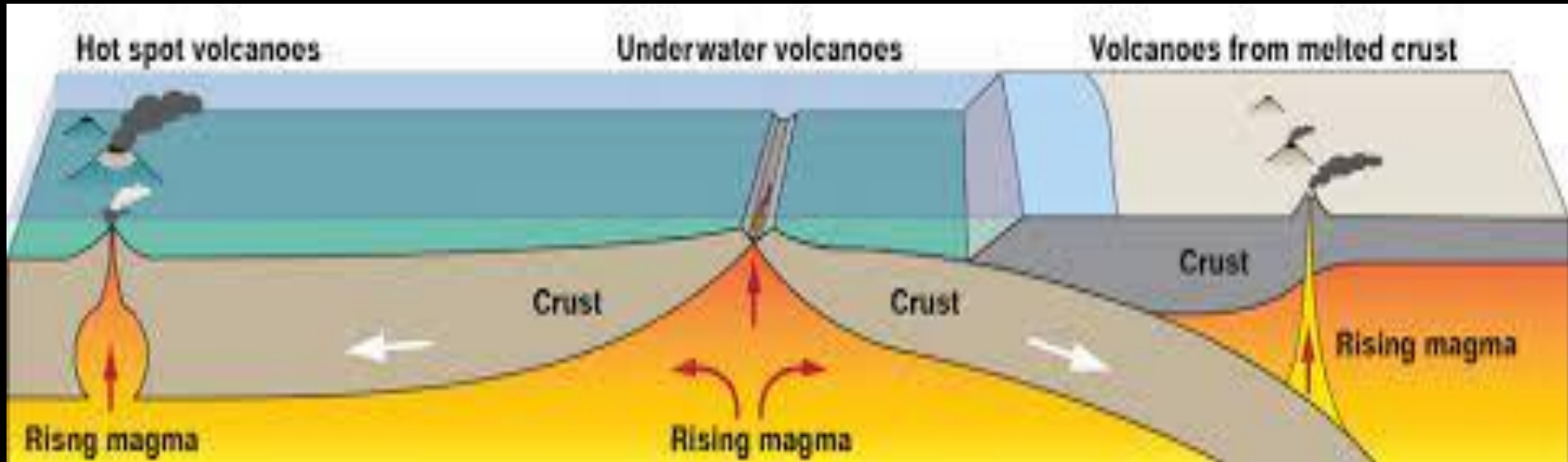
# Volcanoes!

Sakeric, Idris, and Anyah

[https://slabeeber.org/blog/idris\\_all-young\\_natural\\_disaster-s](https://slabeeber.org/blog/idris_all-young_natural_disaster-s)

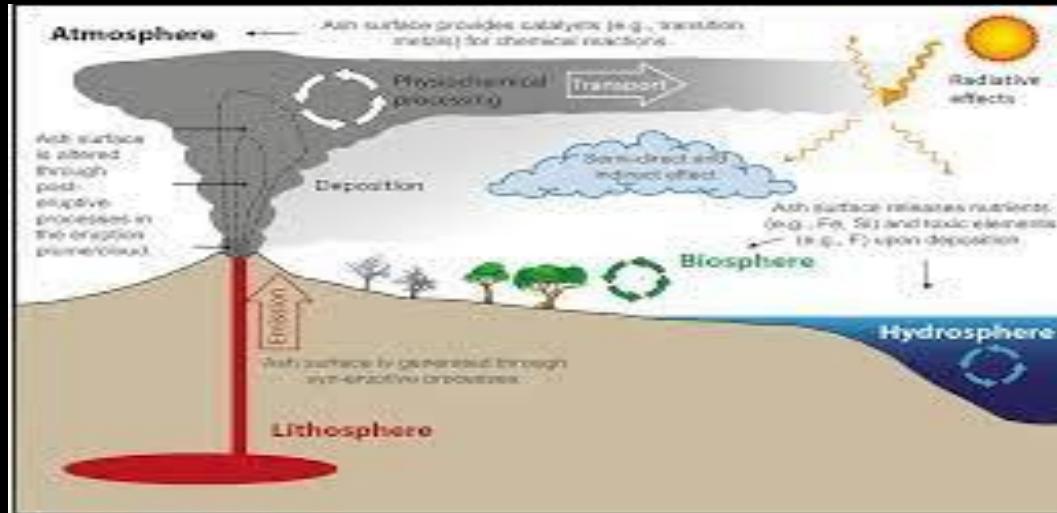
## What are the main causes volcanoes?

- Volcanoes are formed by lava and ash eruptions caused by earth's interior rising through cracks or weak spots in the Earth's crust. A formation of stress in the earth is released by events such as plate movement, which causes molten rock to explode into the air, resulting in a volcanic eruption.



# How do volcanoes affect the earth's system?

- The gases and dust particles emitted into the atmosphere during volcanic eruptions have an impact on climate. Volcanoes have also caused global warming over millions of years during periods in Earth's history when extreme amounts of volcanism occurred, releasing greenhouse gases into the atmosphere.



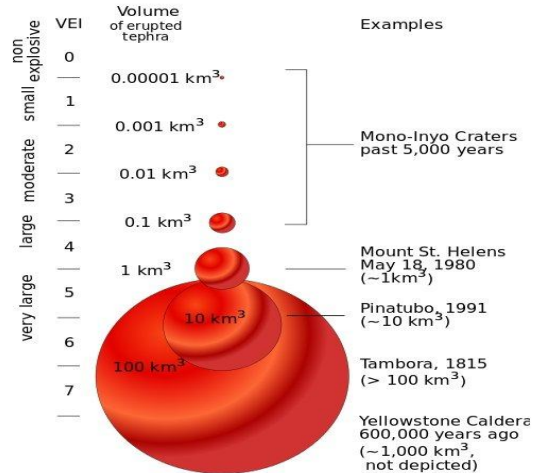
# How do volcanoes affect the 4 systems?

- Volcanoes have an impact on the:
  - Biosphere: By releasing gas and ash into the atmosphere that affect our air quality. This kills plants and animals, which affect the balance of the animals population.
  - Atmosphere: The release of ash and gases into the atmosphere has an impact on climate and weather conditions.
  - Hydrosphere: The ash gets into the water and makes it too toxic to drink.
  - Geosphere: by releasing huge amounts of carbon dioxide into the air, the plants are affected.

# How are Volcanoes Measured

- Volcanoes are measured with a scale called the VEI, the Volcanic Explosivity Index. It measures how much material goes up into the atmosphere, how long the eruption last, and the amount of volcanic material that is ejected out

## Classifying volcanic explosivity



Volcanic explosivity is measured using the VEI scale (Volcano Explosivity Index) which is a measurement of the volume of erupted material.

Each volcano does not have a characteristic mark on the scale. Instead each individual eruption is given its own point on the scale.

Hawaiian and Icelandic eruptions are commonly found near the bottom of the VEI scale, while supervolcanic eruptions are up to VEI 8, e.g. the Yellowstone eruptions.