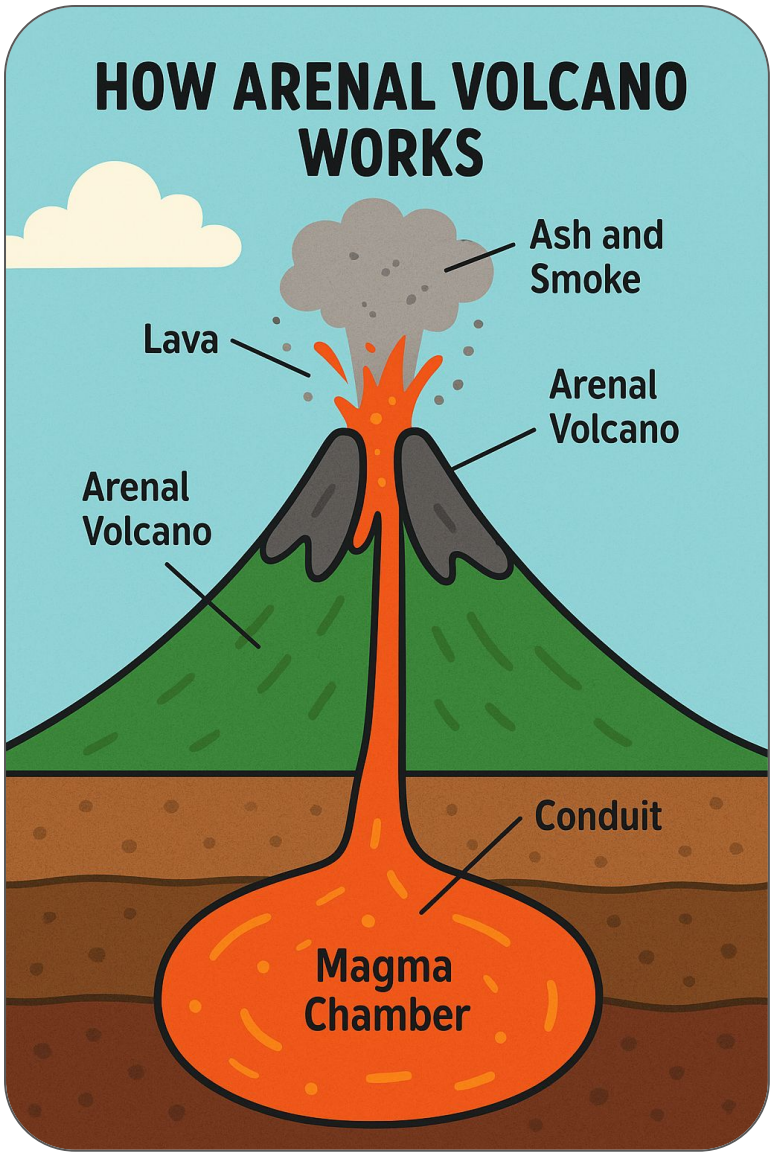

Why do Volcanoes erupt?

Have you ever shaken a soda bottle? When you open it, all the built-up pressure causes it to fizz out suddenly!

Volcanoes suddenly erupt when the pressure inside builds up too much for the Earth's crust to contain. Here's why this happens:

- **Magma Accumulation** – Molten rock (magma) rises from deep inside the Earth, filling the magma chamber beneath the volcano.
- **Gas Pressure Increases** – Gases trapped in the magma expand as they move toward the surface.
- **Blockage Gives Way** – If the volcano is blocked by hardened lava or rock, pressure keeps building until it finally breaks through.
- **Earthquakes & Crust Movement** – Shifts in the Earth's crust, can trigger an eruption by cracking open the volcano.

History of Arenal Volcano

Arenal Volcano formed thousands of years ago and remained mostly dormant for a long time.

After centuries of inactivity, Arenal erupted violently on July 29, 1968, destroying nearby villages and killing 87 people.

For over 40 years, Arenal continued to erupt regularly, producing lava flows, ash clouds, and explosions.

By late 2010, it entered a resting phase with no major eruptions.

Today – Arenal is still considered an active volcano, and scientists monitor it closely. The surrounding area is a major ecotourism destination, though nobody is allowed too close to the volcano!

Costa Rica has 200 volcanoes and 6 are active!

Something to talk about…

1. When you visit Arenal Volcano, how do you think you might feel? Excited? Nervous?
2. What signs might scientists look for to know if Arenal will erupt again?
3. What are some good things and bad things about living near a volcano?
4. What are some ways we can stay safe around volcanoes?
5. How do you think volcanoes can be used to create electricity?
6. How would you describe a volcano to your friend?