

Volcanoes can be:

- **Active:** erupted recently/are expected to erupt soon!
- **Dormant:** no eruption for a long time... but who knows!
- **Extinct:** They will likely never erupt again.

Volcanoes on Earth form from rising magma.

Magma rises in three different ways.

When this material escapes, it causes an **eruption**.

An eruption can be:

- **Explosive**, sending material **high into the sky** or
- **Calmer**, with **gentle flows** of material.

The erupted material can be **liquid rock**

("lava" when it's on the surface,

"magma" when it's underground), ash, cinders, and/or gas.

Magma can rise when:

1. Tectonic plates slowly **move away from each other**.

The magma rises up to fill in the space. **Underwater volcanoes** can form.

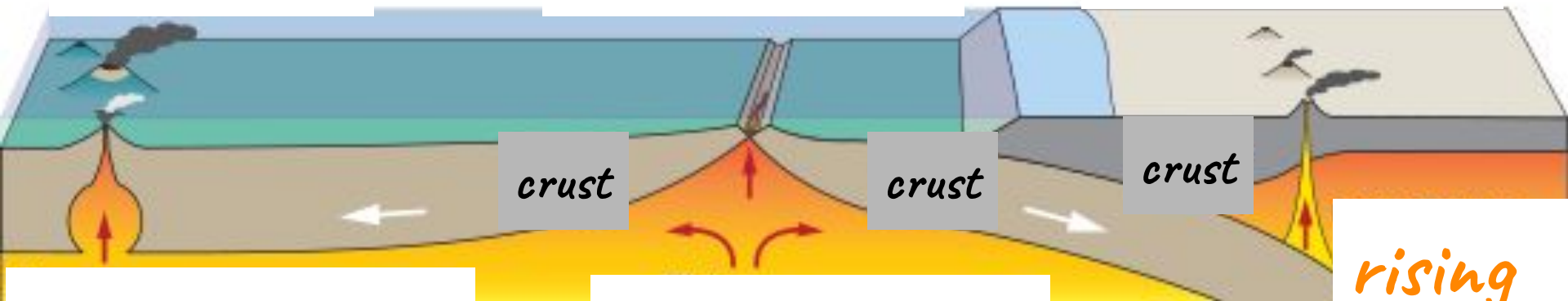
2. Tectonic plates **move toward each other**. And part of them can be forced deep into its interior. With the high heat and pressure **the crust melts and rises as magma**.

3. **Hot spots** - hot areas inside of Earth – form, heat up magma, which **becomes less dense and rises!**

*HOT SPOT
VULCANO*

*UNDERWATER
VULCANO*

*VOLCANO FROM
MELTED CRUST*



rising magma

rising magma

*rising
magma*