

Daily Routine

- Walk into the classroom with positive thoughts
- Walk to your seat quietly, and sit down at your assigned seat
- Take out your agenda and write down your homework
- Sharpen any pencils before class begins
- All electronic devices should be silenced and put away
- Put away any food that you have out

Types of Volcanoes

Plate Tectonics Shaping our Crust: Volcanoes and Earthquakes

Objective

1. Describe a volcano and explain where they are found on Earth's Crust
2. Describe the different properties of the three types of volcanoes

What are Volcanoes?

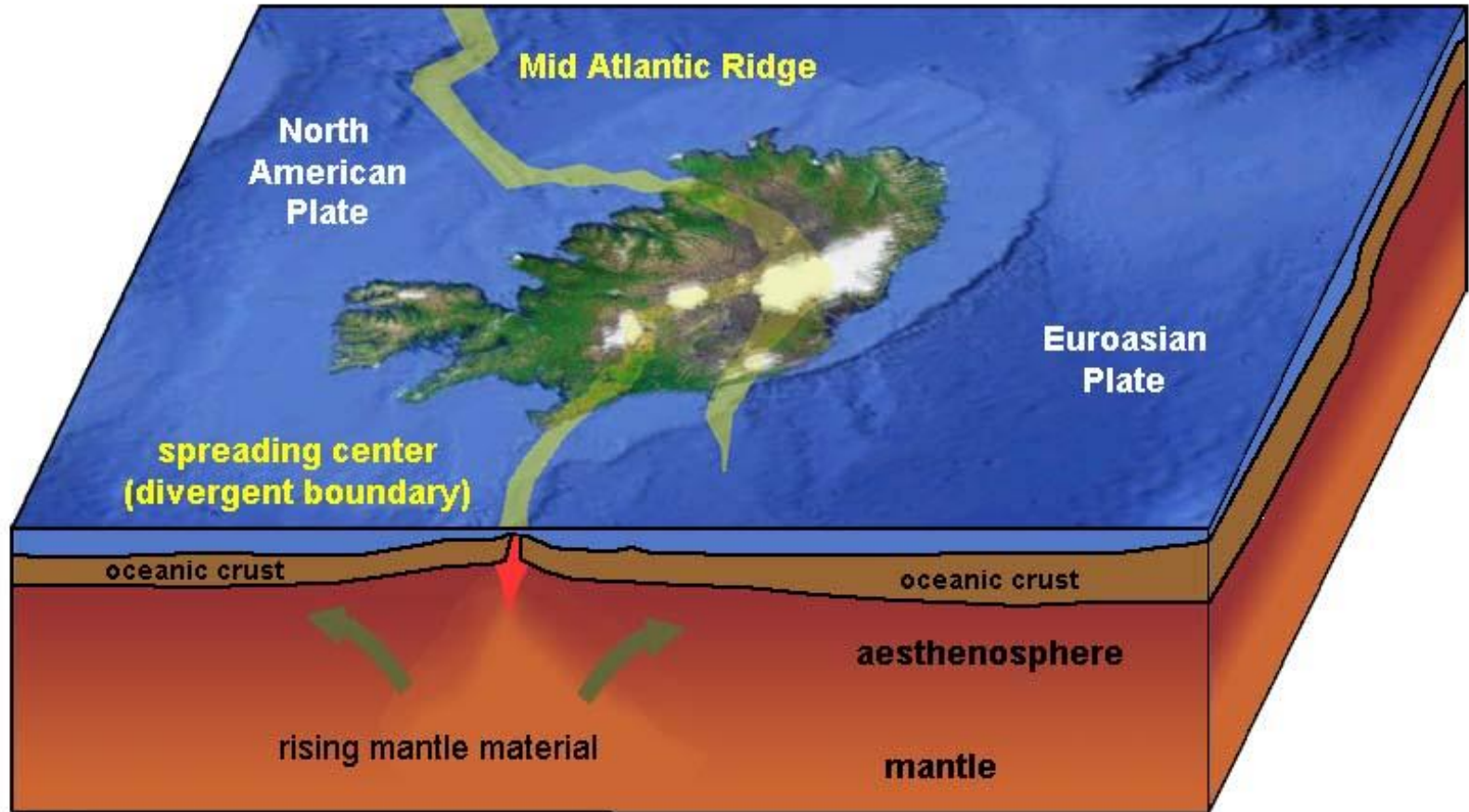
- A volcano is a **break in the Crust** that allows **hot lava, volcanic ash, and gases** to escape from a **magma chamber** below the surface.
- Volcanoes form the **build up from layers lava and ash** over the course of **several eruptions**.



Where Do Volcanoes Form?

- Mid Ocean Ridge – divergent boundaries where plates pull apart allowing magma to rise up to fill the gap between plates
- Subduction Zone – convergent boundary where one plate goes under another where the plate melts, mixes with sea-water, and rises up to reach the surface
- Hot Spot – either a hotter spot in the Mantle or a weak area in the Crust

1. Mid Ocean Ridge



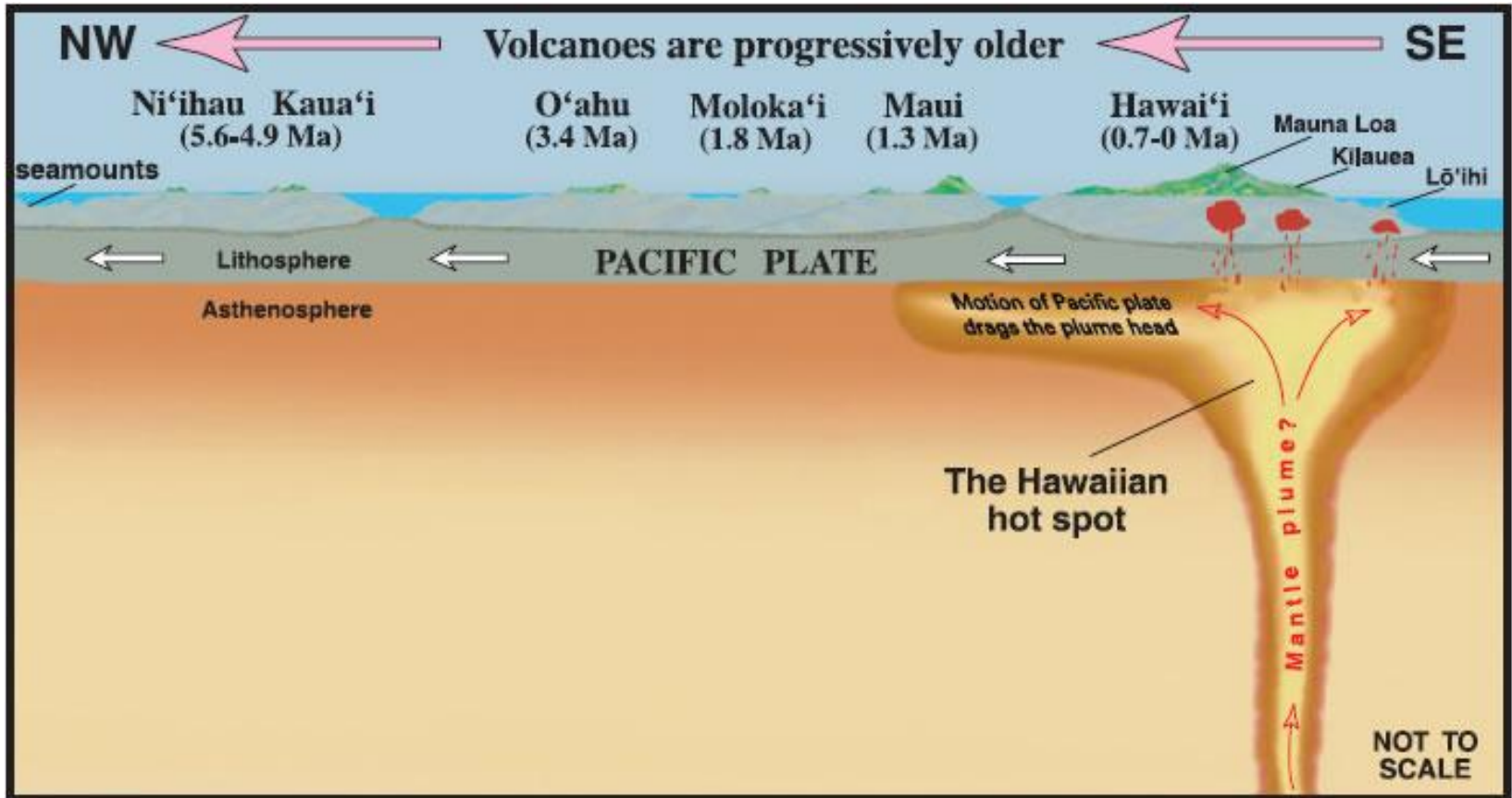
Iceland and Mid Atlantic Ridge

2. Subduction Zones



Ring of Fire

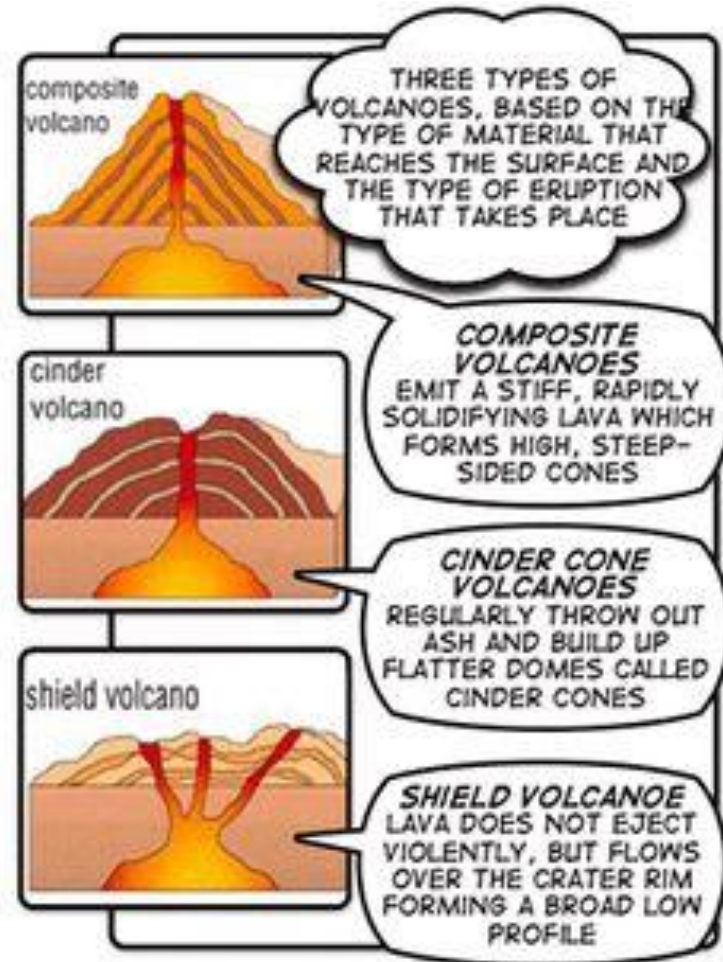
3. Hot Spots



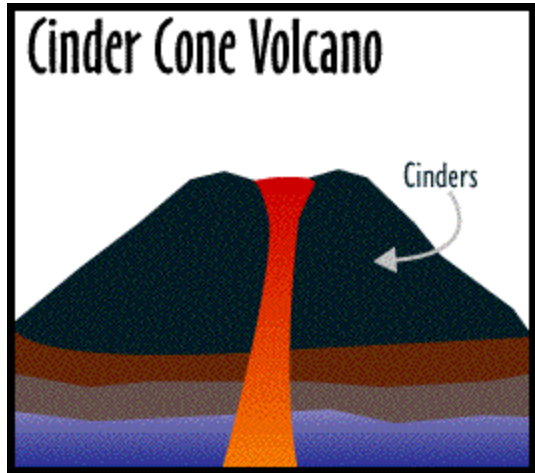
Hawaiian Islands

Types of Volcanoes

- Cinder Cone
- Shield
- Strato-volcano or Composite

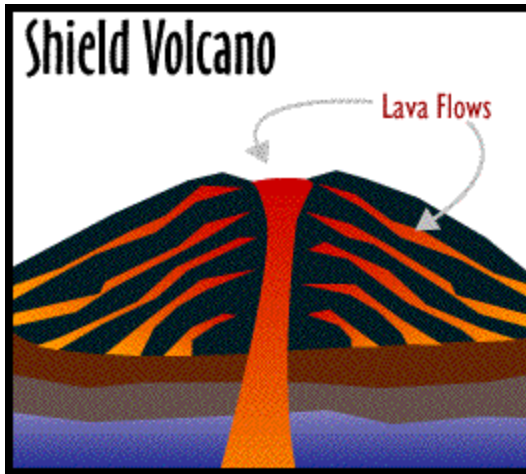


Cinder Cone Volcano



- Size: small
- Shape: cone
- Slope: steepest
- Eruption Style: med-explosive
- Type of Lava: basaltic (iron rich and dense)
- Special Properties: forms around larger volcanoes and made of little lava rock pieces (cinders)
- Examples: Sunset Crater

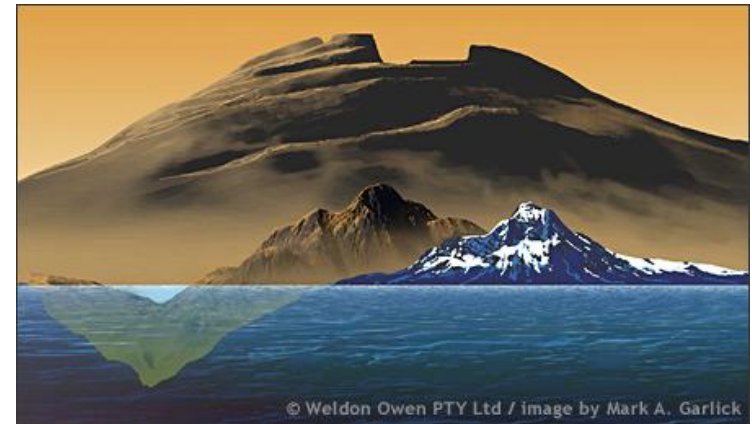
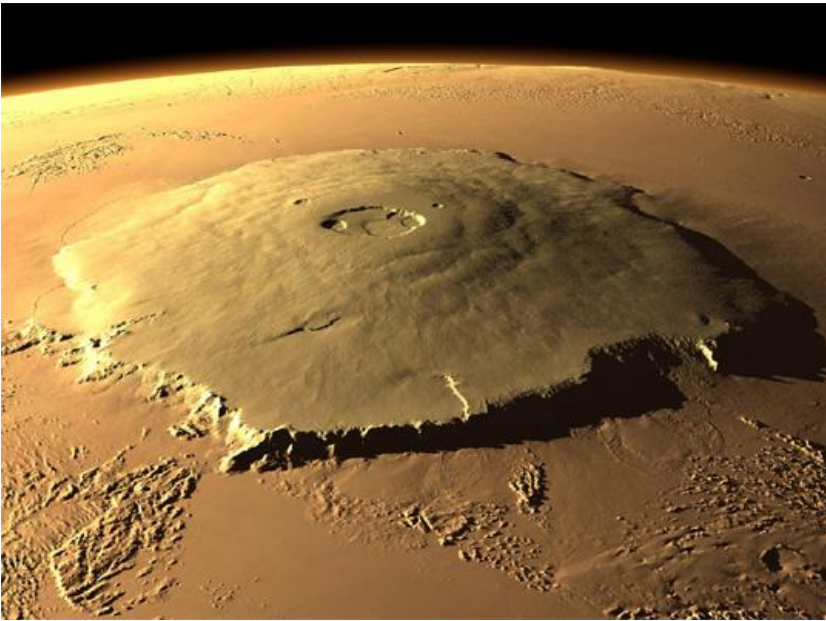
Shield Volcano



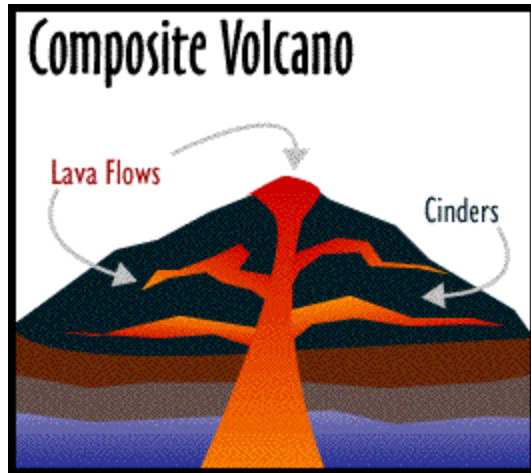
- Size: largest
- Shape: shield
- Slope: gradual or flattened
- Eruption Style: quiet
- Type of Lava: basaltic (iron rich – dense)
- Special Properties: made of many flatten lava flows
- Examples: Hawaiian Islands and Mount Olympus (Mars)



Olympus Mountain



Strato-Volcano



- Size: large
- Shape: conical
- Slope: steep
- Eruption Style: explosive
- Type of Lava: rhyolitic (silica rich)
- Special Properties: Made of many layers of lava and ash
- Examples: Mt. Shasta, Mt. St. Helens, Mt. Vesuvius, Mt. Fuji

