2/19/2014	**Volcanoes & Plate Tectonics Notes**
Major Key Term	definition in own words
Key Term	• definition in own words • facts • pictures
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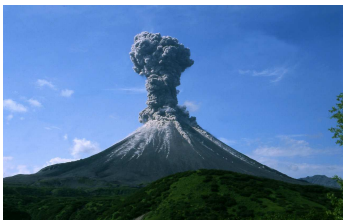
What's a Volcano?

- **Volcano**: weak spot in the crust where molten material (magma) comes to the surface

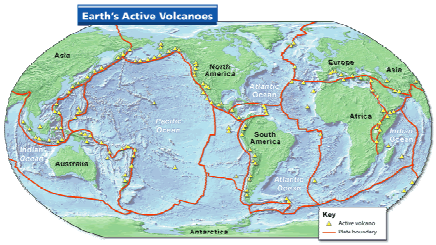


Magma vs Lava

- **Magma**: molten material including rock-forming substances, gases, and water from the mantle (it is underground)
- **Lava**: when magma reaches the surface. Lava can be molten (liquid) or rock (solid)

Volcanoes & Plate Boundaries

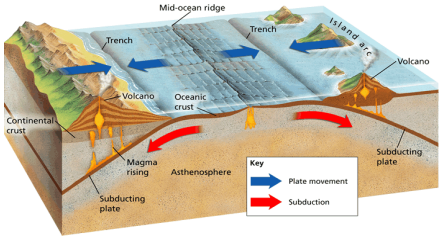
- Like earthquakes, volcanoes can form anywhere . . . but most form along:



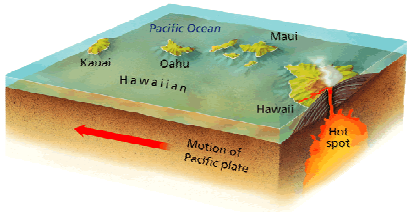
Ring of Fire: area of severe earthquakes and volcanoes surrounding the Pacific Ocean

Plate Boundaries

- **Divergent**: lava from the mantle erupts directly onto the surface (mid-ocean ridges, rift valleys)



- **Convergent**: forms volcanic belts and island arcs
  - Subducted plate melts in the mantle (including ocean water)
  - Magma rises through crust, melting and adding crustal rocks

Hot Spots

- **Hot Spot**: a spot where a plume of magma rises and burns a hole in the crust
  - Can form island chains (Hawaii)
  - Can form supervolcanoes (Yellowstone)