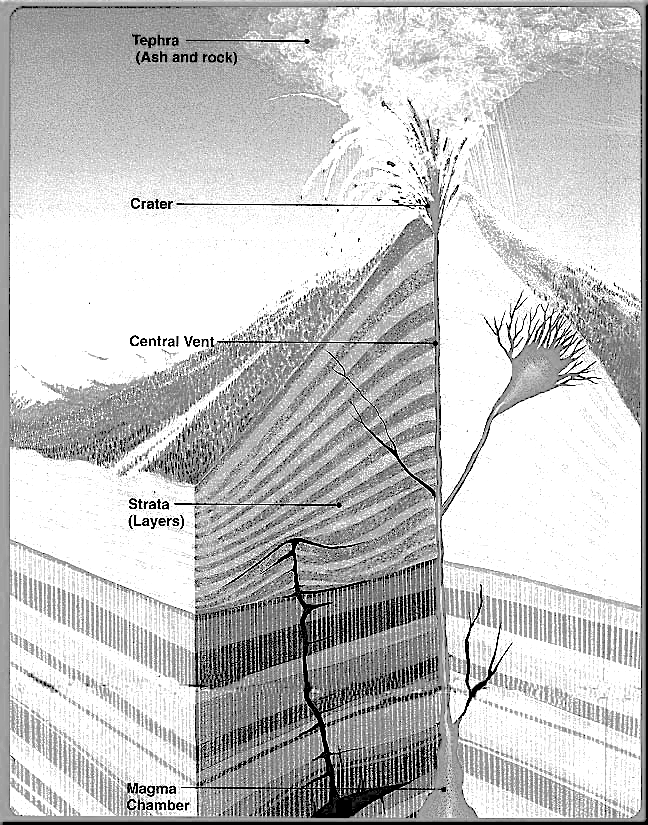
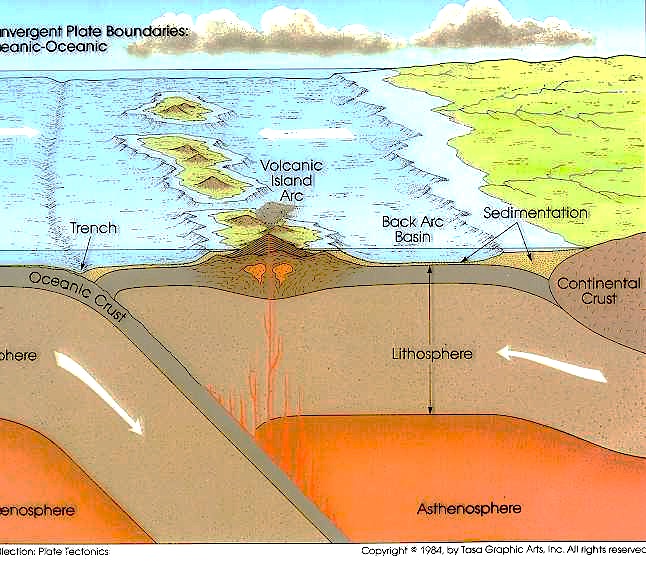
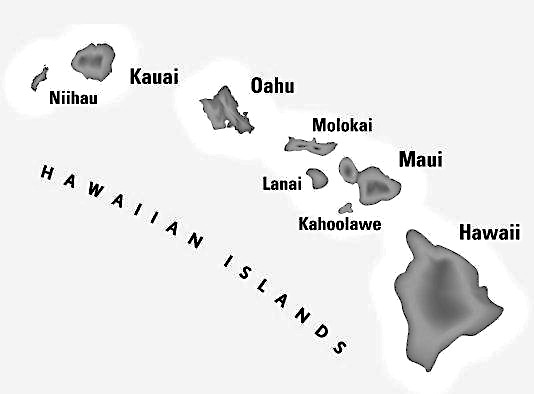
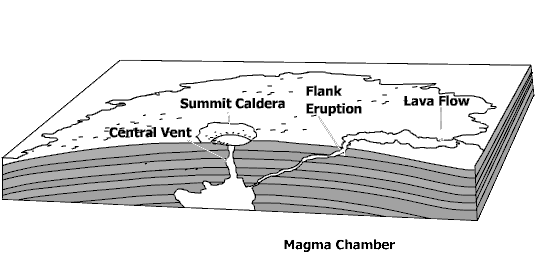
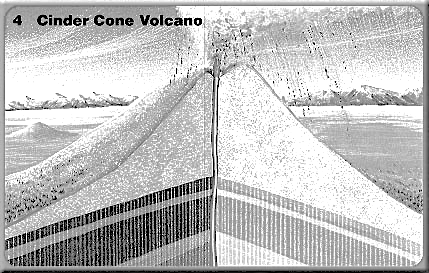
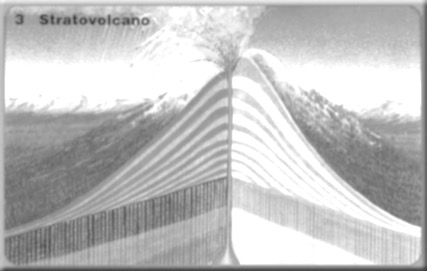
**Volcanoes and Earth’s Moving Plates**

1. **Volcano –** a mountain built from the products of eruption with a central vent
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ - an opening in earth’s surface which molten rock is released
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ - molten rock that has extruded onto the Earth’s surface
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ - molten rock below the Earth’s surface
5. Volcanoes can kill people, destroy property, and disrupt the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Lava and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ flows can bury cities and towns in their paths.
7. Sulfurous gases from volcanoes can create \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which can kill organisms and pollute water.
8. Parts of a Volcano
9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - open space that contains a large quantity of magma.
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - circular depression at the top of the mound
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - pyroclastic debris cloud
12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    * 1. Forms when volcano stops erupting
      2. Magma hardens in vent
      3. Cone erodes
      4. Example: Devils Neck in Wyoming

Where do Volcanoes form?

1. At \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Boundaries
   1. Plates are moving \_\_\_\_\_\_\_\_\_\_\_\_, forming rifts. Lava flows from these rifts and cools quickly by sea water
   2. Forms \_\_\_\_\_\_\_\_\_\_\_\_\_ seafloor or can build up to form Islands
   3. Example: Mid Atlantic Ridge
2. At \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Boundaries
   1. Plates are moving together
   2. Magma forms when another plate subducts and melts
   3. Magma is forced \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Tend to be more violent
      1. Example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chain of volcanoes over the Pacific ocean
   5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are volcanic islands that form parallel to ocean trenches in subduction zones.
3. At \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Not formed at plate boundaries
   2. Some areas between Earth’s mantle and core are usually hot
   3. Hot Rock at these areas is forced towards crust
      1. Example: Hawaiian Islands
   4. Why are Hawaiian Islands in a row?

**Types of Volcanoes**

1. The amount of water vapor and other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ present is one factor that determines whether a volcanic eruption will be quiet or explosive.
   1. Gases can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in magma by pressure surrounding magma and rock; eventually they will cause an explosive eruption.
   2. Magma at convergent plate boundaries can contain a lot of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that can cause explosive eruptions.
2. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of magma is a second factor affecting the nature of a volcano’s eruption.
   1. Low-silica magma, called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, is fluid and produces a quiet, non-explosive eruption.
      1. Pahoehoe lava runs down the side of a volcano.
      2. Aa lava is a stiff, slow moving lava.
   2. High-silica magma called granitic and intermediate silica magma called andesitic produce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ eruptions.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Volcano
   1. Broad Volcano with gently sloping slides
   2. buildup of layers of basaltic \_\_\_\_\_\_\_\_\_\_\_
   3. Example: Hawaiian Islands
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Volcano
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_ cone shaped volcanoes
   2. Forms from explosive lava that falls back to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and hardens
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Volcano
   1. Also called stratovolcano
   2. Found mostly at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ boundaries
   3. Most explosive
   4. Steep sides

**Igneous Rock Features**

1. Many intrusive igneous features form underground and are later exposed.
   1. **Batholiths –** rock bodies formed when magma bodies that are forced upward from inside Earth cool \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and solidify before reaching the surface
   2. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**-magma that hardens after being forced into a crack cutting across rock; **sill-**magma that hardens after being forces into a crack \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to rock layers
2. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forms when the cone is eroded away, leaving the solid igneous core.
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-large depression formed when the top of a volcano collapses
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and erosion wear down surface rock and expose igneous rock features.