

Daily Routine

- Sit in your appropriate seat quietly
- Have all necessary materials out
- All back packs on the floor
- All cell phones on silent and away in backpacks
- All iPods off and headphones out of your ears
- No food or drink except for water

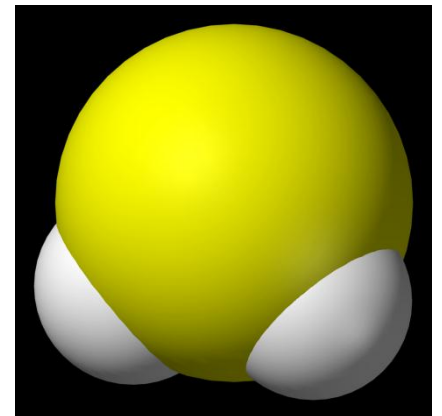
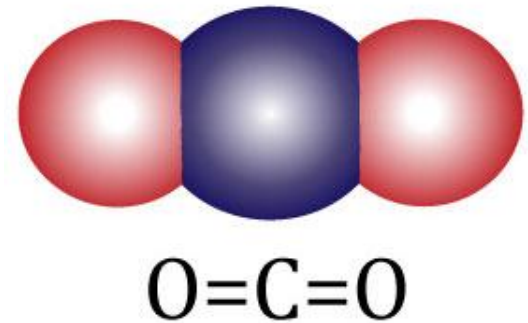
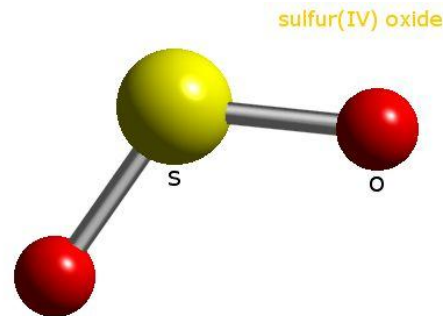
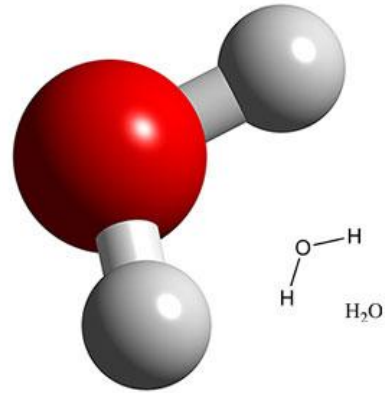
Bell Work

- Compare and contrast the three types of volcanoes?
- Are there any volcanoes on other planets or moons? Where?

Lava Properties

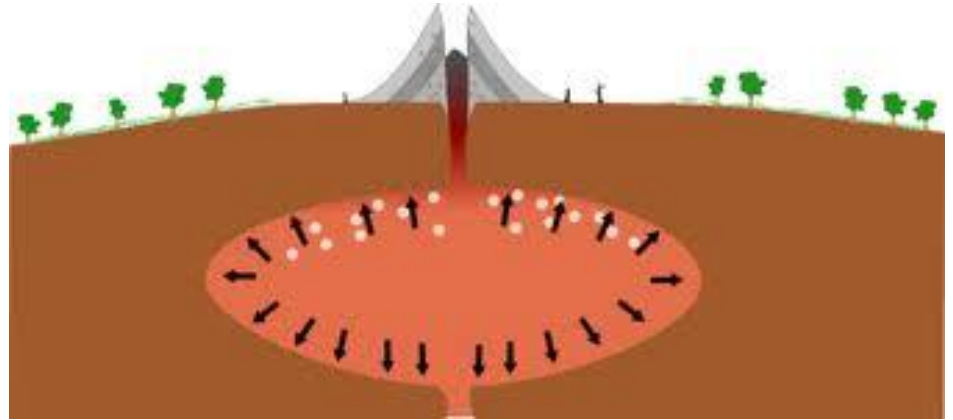
What gases are in lava

- Four main gases in lava:
 - Water Vapor
 - Carbon Dioxide
 - Sulfur Dioxide
 - Hydrogen Sulfide



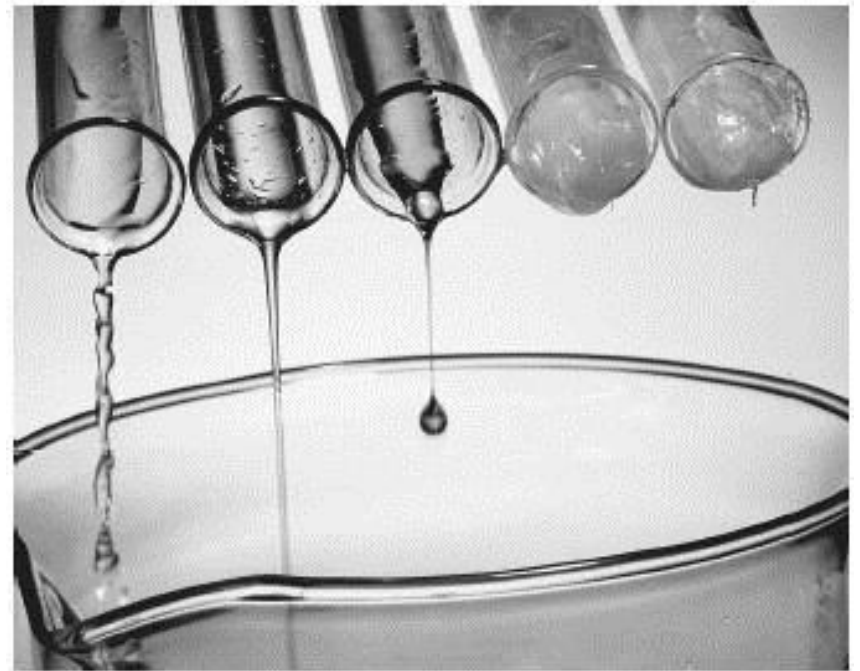
What is the Gas Relationships of Lava

- Pressure increases due to depths and confinement of space, which increase temperatures and explosive nature of eruption



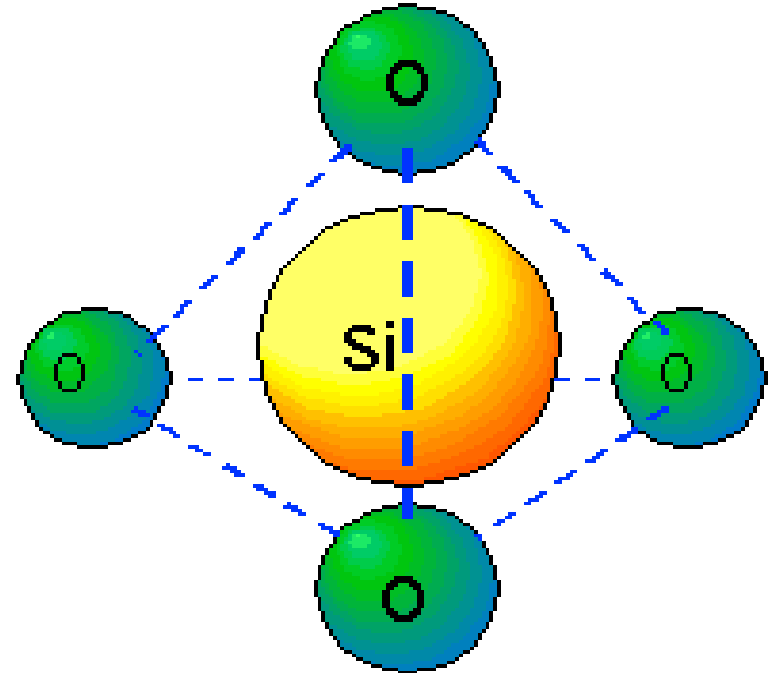
What is viscosity?

- The physical property that describes a materials resistance to flow



Viscosity is dependent on which chemicals?

- Viscosity is dependent on many chemicals
- The two main chemicals that affect viscosity...
- Silica (Silicon and Oxygen)
- Iron content



Lavas and Viscosity

- Magma/lava that has a **HIGH** viscosity, moves **SLOWLY** and form **EXPLOSIVE** eruptions
- **BECAUSE THEY HAVE A HIGH SILICA CONTENT**
- **SILICA IS STICKIER!**
- Magma/lava that has a **LOW** viscosity, moves **QUICKLY** and form **QUIET** eruptions
- **BECAUSE THEY HAVE A HIGH IRON CONTENT**
- **IRON IS RUNNY!**

Magma Composition

Rhyolitic Magma = Explosive Eruptions

- Rhyolitic Felsic magma
- high in silica
- has a high viscosity (thick)
- traps gases
- producing violent explosive eruptions



Basaltic Magma = Non-Explosive Eruptions



Magma Composition

- Basaltic Mafic (dark color)
- magma is low in silica
- low viscosity
- releases gases producing quiet non-explosive eruptions

Rhyolitic Magma = Explosive Eruptions



Basaltic Magma = Non-Explosive Eruptions

