**Unit 4- Volcanoes and Other Igneous Activity**

**Objectives and Vocabulary**

**Objectives:**

* Explain the factors that determine the type of volcanic eruptions that occur
* Describe the various types of volcanic materials that are ejected from volcanoes
* List and differentiate between the three main types of volcanoes
* Distinguish how the different types of volcanic landforms form
* Classify intrusive igneous features
* Describe the major intrusive igneous features
* Describe the origin of magma
* Predict and justify he effect of a decrease in confining pressure on the melting temperature of rocks in the upper mantle
* Differentiate between a sill and a dike
* Explain the relationship between plate tectonics and volcanism
* Explain where intraplate volcanism occurs
* Explain the term Ring of Fire
* Differentiate between volcanic island arcs and continental volcanic arcs
* Predict and justify whether it would be more likely for a major explosion to occur at an ocean ridge or at a convergent ocean-continental boundary

**Vocabulary:**

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| Viscosity | Vent | Pyroclastic material | Volcano | Crater |
| Shield volcano | Composite cone | Cinder cone | Caldera | Neck |
| Pipes | Pluton | Sill | Laccolith | Dike |
| Batholith | Geothermal gradient | Decompression melting | Intraplate volcanism |  |