Geology 12 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Blk: \_\_\_

***Igneous Unit Summative Assessment***

***Part 1* – Rock Identification Lab Quiz**

- Quiz on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Good luck! Study from your Lab Sheet!*

***Part 2* – Applying Understanding (Volcano Project)**

- Project due \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-We will present and erupt all of our volcanoes that day!

**Create a Working Model of a Real Volcano!**

* In groups of 1-3, research, design, and build a working volcano.
* Select a volcano from the list.
  + Research your volcano, filling in the Design Guide below.
  + Plan how you will build and erupt your volcano.
  + Create a report to teach about your volcano.
* Consider:
  + **Magma type**

*(felsic/int/mafic/how they can change…)*

* + Igneous **rock types**
  + Igneous rock **textures**
  + **Type of eruption**
  + **Igneous structures**
* *Intrusive* – how did the magma get to the volcano?
* *Extrusive* – volcano type?
  + **Volcano Information**
* Type of volcano and current status *(active, dormant, extinct)*
* Location in the world
* Plate Tectonics location and formation
* Cultural connections
* Potential dangers
* Previous eruptions, casualties, damage
* Is this currently a dangerous volcano?
* Reference List – with sources in APA format

**Design Guide**

|  |  |
| --- | --- |
| *Partner Names:* | |
|  | |
| **Real world volcano**: | |
| **Type of Volcano:** *(Stratovolcano/Composite, Shield, Cinder, Dome, Lava Plateau, Underwater…)* | |
| So this means the **type of magma** that formed it is: *(felsic/intermediate/mafic/ultramafic)* | |
| The **type of eruption** that occurs at your volcano is:  **Because**: *(talk about the science! - Minerals and Bowen’s Reaction Series)* | |
| **Rock types** at your Volcano are: | And their **textures** are: |
| *Intrusive:* |  |
| *Extrusive:* |  |
| Possible **Igneous Structures** in your Volcano: | |
| *Intrusive:* | *Extrusive:* |
|  | |
| **Preliminary Design Sketches of your Volcano!**  - Include labels and different views - | |
| **Explain how will you make your Volcano erupt!** | |