Name:_____ Date: _____ Period: _____

Classifying Igneous Rocks

Problem

What are the characteristics of igneous rocks?

Materials

- Eight igneous rocks: granite, basalt, rhyolite, gabbro, pumice, pegmatite, scoria and obsidian.
- Magnifying glass

Procedure

- Color: Examine each rock sample. Determine its color (light, dark or mixed) and then list the sample # and its color in the Data Table.
- Texture: Examine each rock sample. Determine the texture of the mineral crystals. The crystals can be large and visible, small and difficult to see or not visible at all. List the texture in the Data Table.
- List in the Data Table whether each rock is intrusive or extrusive.(Intrusive rocks have large crystals; extrusive rocks have small or no crystals.)

Conclusions

- Use page 6 of your ESRTs to determine the identity of the rock samples.
- Once you have identified the rock samples, determine the minerals present in each sample.

Data Table

Rock Number	Color	Felsic or Mafic	Density (High or Low)	Texture	Intrusive or Extrusive	Minerals Present	Rock Name

Name:_____ Date: _____ Period: _____

Critical Thinking and Application

1. What is an igneous rock?

2. Define and explain the difference between magma and lava.

3. Where do intrusive igneous rocks form?

4. Where do extrusive igneous rocks form?

5. Describe the size of the crystals you would expect to see in extrusive rocks and intrusive rocks.

6. What factors determine the crystal size in an igneous rock?

7. Why does molten rock material cool more slowly underground?

8. How can two different rocks have the same mineral composition?