

Name \_\_\_\_\_

## How Do Igneous Rocks Form?

Go to: [http://www.classzone.com/books/earth\\_science/terc/navigation/investigation.cfm](http://www.classzone.com/books/earth_science/terc/navigation/investigation.cfm), scroll down to chapter 6 and click on 'How Do Igneous Rocks Form?'

### Step 1: How Do Igneous Rocks Form?

Describe the texture of the four rock samples, use the proper terminology.

Sample #1 \_\_\_\_\_

Sample #3 \_\_\_\_\_

Sample #2 \_\_\_\_\_

Sample #4 \_\_\_\_\_

### Step 2: Describing Rock Textures

After clicking on each rock sample what are the descriptions for the following?

Coarse-grained texture-

Glassy texture-

Porphyritic texture-

Fine-grained texture-

In the fine-grained sample, what are vesicles?

### Step 3: Igneous Rock Textures

How is porphyritic texture related to the other two categories of texture?

### Step 4: Identifying Igneous Rock Textures

Identify the texture of each of the igneous rocks below as coarse-grained, fine-grained or porphyritic:

Sample #1 \_\_\_\_\_

Sample #4 \_\_\_\_\_

Sample #2 \_\_\_\_\_

Sample #5 \_\_\_\_\_

Sample #3 \_\_\_\_\_

Sample #6 \_\_\_\_\_

### Step 5: Igneous Rock Crystallization Animations

What occurs in the magma chamber? \_\_\_\_\_

What type of igneous texture is found in the pyroclastic flow? \_\_\_\_\_

What occurs in the lava illustration? \_\_\_\_\_

### Step 6: Igneous Rock Textures and Cooling Rates

Identify the cooling rate (fast, slow, or two-staged) and cooling environment (magma chamber, eruption from volcano, or deep cooling followed by eruption) of the rock in each image.

Sample #1 \_\_\_\_\_

Sample #4 \_\_\_\_\_

Sample #2 \_\_\_\_\_

Sample #5 \_\_\_\_\_

Sample #3 \_\_\_\_\_

Sample #6 \_\_\_\_\_