

Name

Date

Block

Igneous Rock Clues

Lab Preview

Directions: *Answer these questions before you begin the Lab.*

1. Why does this lab have a sharp objects safety symbol?

2. According to what characteristics will you arrange the rocks in this lab?

3. What are the characteristics of an extrusive igneous rock?

4. What are the characteristics of an intrusive igneous rock?

You've learned how color often is used to estimate the composition of an igneous rock. The texture of an igneous rock describes its overall appearance, including mineral grain sizes and the presence or absence of bubble holes, for example. In most cases, grain size relates to how quickly the magma or lava cooled. Crystals you can see without a magnifying lens indicate slower cooling. Smaller, fine-grained crystals indicate quicker cooling, possibly due to volcanic activity. Rocks with glassy textures cooled so quickly that there was no time to form mineral grains.

Conclude and Apply

1. **Infer** which rocks are granitic based on color.

2. **Infer** which rocks cooled quickly. What observations led you to this inference?

3. **Identify** any samples that suggest gases were escaping from them as they cooled.

4. **Describe** Which samples have a glassy appearance? How did these rocks form?

5. **Infer** which samples are not volcanic. Explain.

Communicating Your Data

In Paragraph form (3 - 5 sentences), what did you learn about igneous rocks from this lab?
(Remember to have a topic sentence, supporting details, & a conclusion.)

