

Objectives

- Describe how igneous rocks form.
- Explain why igneous rocks formed at Earth's surface are different from those formed within Earth.
- List and describe the ways igneous rocks are classified.
- Recognize why silica content is important in classifying igneous rocks.

The BIG Idea

- Igneous rocks form from molten rock

Key Concepts

- Our world is built of rocks which form in a variety of ways.

Igneous rocks are formed by molten rock

1. What is molten rock? _____
2. How does molten rock form? _____
3. How does an igneous rock form from molten rock? _____
4. What three characteristics are used to classify igneous rock? _____

Igneous rocks are classified by their origin

5. Name and describe the two origins of igneous rock.
 - a. _____
 - b. _____

Igneous rocks are classified by their texture

6. Complete the following table. List the four textures. Then, for each texture, state its origin, the crystal size it forms, and provide an example of an igneous rock that will have that texture.

Texture	Origin	Crystal Size	Example of rock

Igneous rocks are classified by their mineral composition.

7. What mineral compound do scientists observe in igneous rocks? _____
8. The more _____ is in an igneous rock the _____ its color.
The less _____ is in an igneous rock the _____ its color.

Igneous rocks are classified by all three characteristics

9. Provide an example of two igneous rocks that have the same mineral composition but are not the same rock. Explain why they are classified differently. _____

10. Why can't a scientist classify an igneous rock only by just origin, just texture, or just mineral composition? _____

