

Name _____

The Fiery Birth of Igneous Rocks: Unraveling the Magma Magic

Short Answer Key

1. Magma cools and solidifies as it loses heat energy, transforming into solid rock. The rate of cooling determines the texture of the resulting igneous rock.
2. Volcanic igneous rocks form quickly on the Earth's surface and have fine-grained textures, while intrusive igneous rocks form slowly beneath the surface and have coarse-grained textures.
3. Volcanoes are openings in the Earth's crust through which magma, ash, and gases can erupt. They play a significant role in igneous rock formation by allowing magma to cool rapidly on the surface.
4. One example is Hawaii, where volcanic igneous rocks form the islands. They are significant because they showcase ongoing volcanic activity and shape the islands' landscapes.
5. Magma is hotter in the mantle and cools as it rises toward the surface. This temperature change affects the rate of crystallization and the texture of the igneous rock formed.

