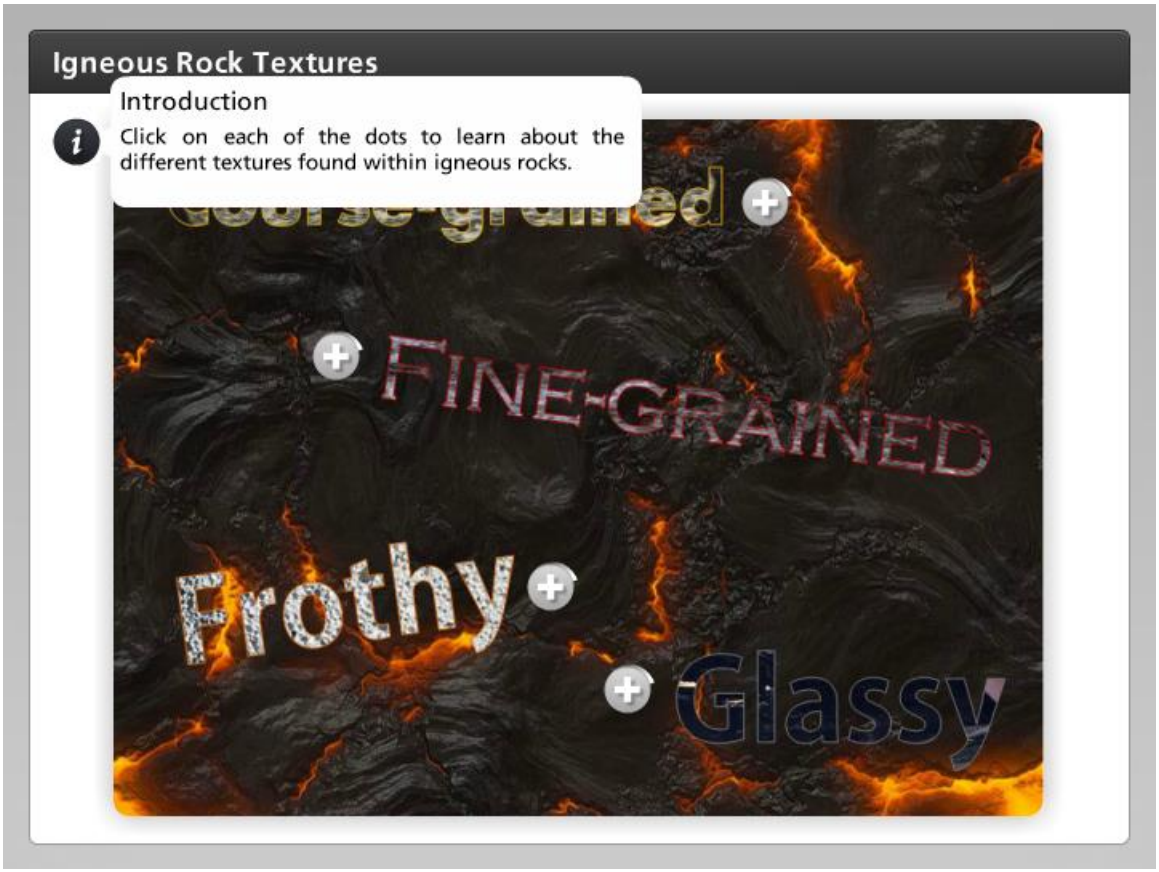
Module 6: Rocks
Topic 1 Content: Igneous Rock Textures Notes

Introduction



Click on each of the dots to learn about the different textures found within igneous rocks.

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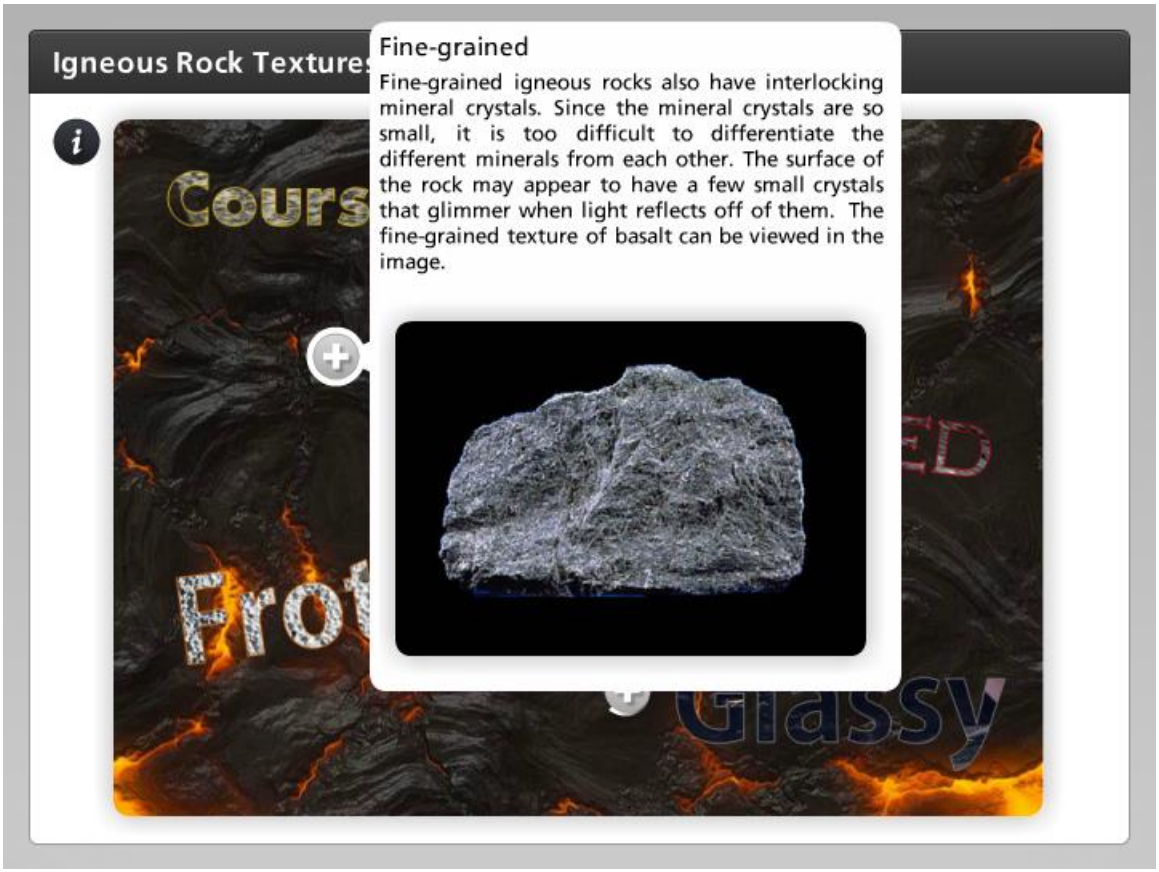
Course-Grained

Coarse-grained igneous rocks have large, individual mineral crystals that fit together perfectly like puzzle pieces. The resulting rock has few to no gaps between mineral crystals. This is referred to as interlocking crystals. Some of the minerals, such as muscovite mica, will appear "glittery" due to light reflection. The coarse-grained texture of granite can be viewed in the image.

Fine-grained



Fine-grained igneous rocks also have interlocking mineral crystals. Since the mineral crystals are so small, it is too difficult to differentiate the different minerals from each other. The surface of the rock may appear to have a few small crystals that glimmer when light reflects off of them. The fine-grained texture of basalt can be viewed in the image.

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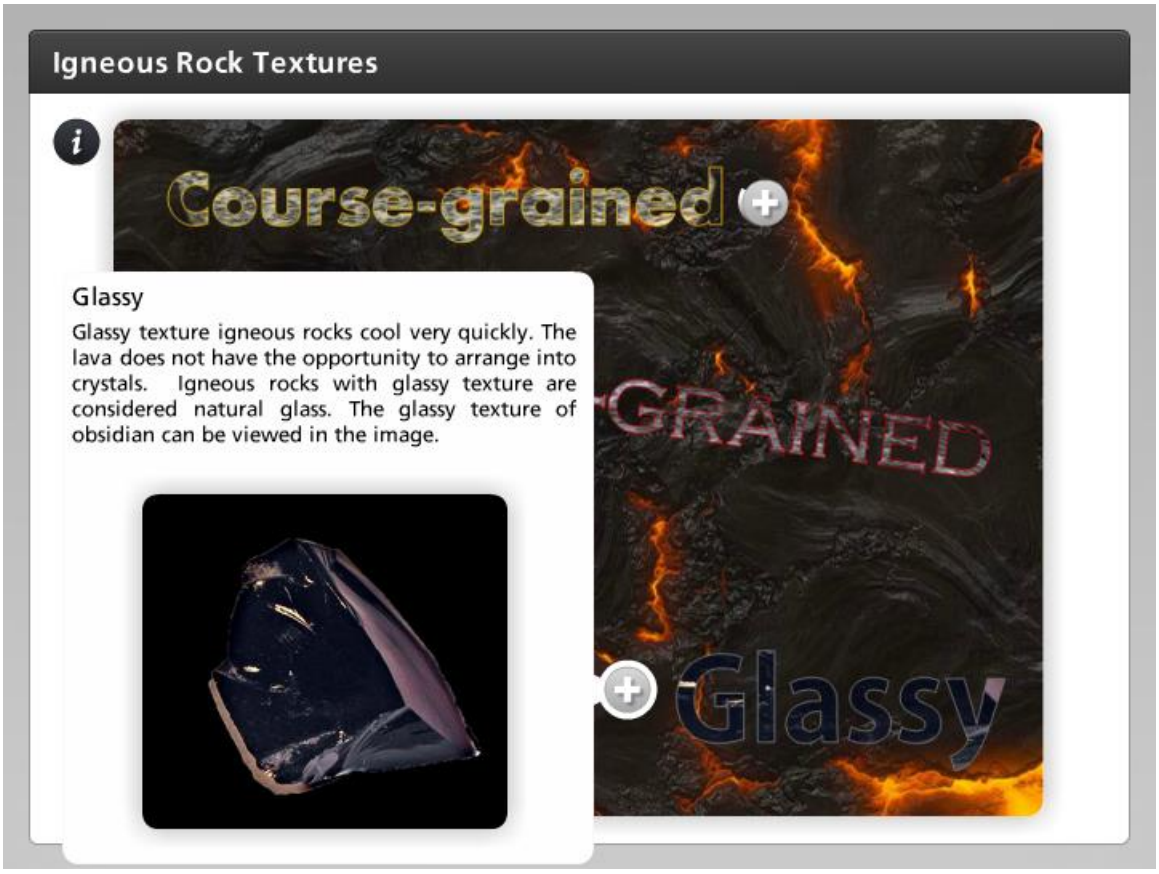
Glassy



Glassy texture igneous rocks cool very quickly. The lava does not have the opportunity to arrange into crystals. Igneous rocks with glassy texture are considered natural glass. The glassy texture of obsidian can be viewed in the image.

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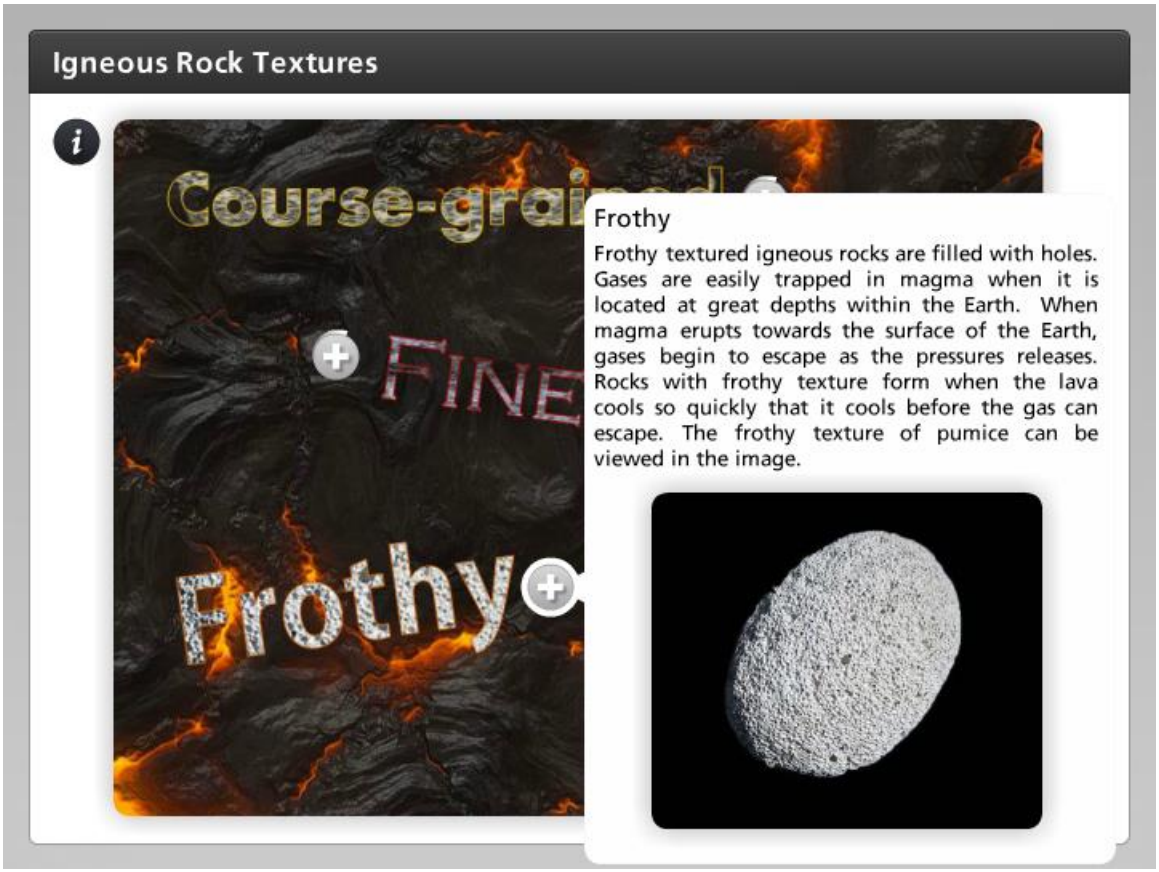
Frothy



Frothy textured igneous rocks are filled with holes. Gases are easily trapped in magma when it is located at great depths within the Earth. When magma erupts towards the surface of the Earth, gases begin to escape as the pressures releases. Rocks with frothy texture form when the lava cools so quickly that it cools before the gas can escape. The frothy texture of pumice can be viewed in the image.