

# 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.

# Module 6: Rocks

## Topic 1 Content: Igneous Rock Textures Notes

### Course-Grained

The screenshot shows an educational interface with a dark background featuring a lava flow. A white information box is centered, containing the text: "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." Below the text is a square image of a granite rock sample. The background also has the word "Grained" in red and "Glassy" in blue.

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#### Fine-grained

**Igneous Rock Textures**

**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.



The image shows a dark, fine-grained igneous rock sample, likely basalt, with a dense, interlocking crystalline texture. The rock is set against a black background. The overall image is framed by a grey border with a dark grey header and footer. The header contains the text 'Igneous Rock Textures' and the footer contains the word 'Glassy'. There are also some partially visible words like 'Cours' and 'Fro' on the left side and 'ED' on the right side.

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#### Glassy

**Igneous Rock Textures**

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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

Igneous Rock Textures



**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.

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