Lesson 2 Classifying Rocks

1. What characteristics do geologists observe when studying a rock sample?

They look for the rock's mineral composition, color and texture.

2. Name the three major groups of rocks and describe how each forms.

Igneous rock forms when magma or lava cools.

Sedimentary rock forms when small particles of rocks or the remains of plants and animals are pressed and cemented together.

Metamorphic rock forms when a rock is changed by heat or pressure, or by chemical reactions.

Fill in the missing information in the table below.

Grain Property	Description	Texture
Size	Large, easy to see	3
Size	4.	Fine-grained
Shape	Mineral crystals	Crystalline
5.	Rock fragments	Rounded or jagged
6.	Layered or random grains	Banded or nonbanded

Lesson 3 - Igneous Rocks

How are igneous rocks classified?

Igneous rocks are classified by their origin, texture, and mineral composition.

2. What is the most common type of extrusive rock?

Basalt

3. What is the most common type of intrusive rock?

Granite

4. Explain how the silica content of molten material affects the color of igneous rocks.

Lava that is low in silica usually forms dark-colored rocks; magma that is high in silica usually forms light-colored rocks.

5. What qualities of igneous rocks have long made them useful for tools and building materials?
Igneous rocks are hard, dense, and durable

Describe one use each for the igneous rocks granite, obsidian, and pumice.

Granite – building material. Obsidian – cutting tools Pumice – as an abrasive in polishing

Fill in the missing textures in the table below.

Origin of Igneous Rock	Resulting Texture
Slow cooling of magma far beneath Earth's surface	7. coarse grained
Rapid cooling of lava in which tiny crystals form	8. fine-grained
Extremely rapid cooling of lava in which no crystals form	9. glassy

Building Vocabulary

Fill in the blank to complete each statement.

- Igneous rock formed from lava that erupted onto Earth's surface is called **extrusive** rock.
- Igneous rock that formed when magma hardened beneath the surface of Earth is called

Intrusive rock