Name Date

# Vocabulary

STUDENT RESOURCE **3.1**
INFORMATION SHEET

**basalt** a dense, hard rock formed when molten rock reaches Earth's surface and cools rapidly

Basalt has very small crystals that often can be seen with a magnifier. Basalt is the densest volcanic rock.

**granite** a dense rock that forms when molten rock cools slowly, leaving visible crystals of different minerals

Granite cools very slowly, deep inside Earth's crust. The crystals in granite are big enough to see.

**igneous rock** rock that forms when molten (melted) rock cools and hardens

The type of igneous rock that forms depends on how quickly molten rock cools. When molten rock cools slowly it forms large crystals. When it cools quickly, it forms small crystals. When molten material cools almost instantly, it forms a kind of natural glass. This can happen when molten rock is thrown from a volcano.

**obsidian** a natural glass that forms when lava cools very quickly

Obsidian is black and it looks just like glass. It breaks easily, leaving curved surfaces and sharp edges. Because it is easy to chip into a sharp point, obsidian has been used by Native Americans for arrowheads and other tools.

**pumice** a very light (not dense) rock formed when molten rock from a volcano cools before it reaches the ground

Pumice forms instantly when frothy, molten rock cools in midair. Hot gases are mixed with the molten rock, leaving behind air holes after the rock has cooled. Therefore, pumice is often less dense than water and can float.

**scoria** an upper layer of basalt that cools rapidly and is full of holes created by gases that escape during cooling

Scoria has many holes but the minerals it contains are heavier (denser) than pumice so it does not float. Scoria is sometimes used as "lava rock" in gas grills.