USGS
science for a changing world

Ores to Minerals

Lesson 1
Rocks Versus Minerals

STUDENT WORKSHEET

Name: _____

Date: _____ Class: _____

Guiding Questions

Can you tell a rock from a mineral by looking?

What are the differences between a rock and a mineral?

Descriptions

Minerals have distinctive chemical and physical properties, composition, and atomic structure. They may be found in soil, rocks, rivers, lakes, or oceans. Plants and animals take up essential minerals essential for life.

Rocks are generally made up of two or more minerals, mixed together during a geological process when they formed. New rocks are made from cooled lava, compressed sediment, or by transforming other rocks into new forms.

Instructions

1. Examine the samples provided by your teacher, and/or view the slides that contain images of rocks and minerals.
2. Think about how rocks and minerals are different and how they are classified.
3. In the table below, label R for rock or M for mineral.
4. Answer the conclusions questions.

Formation	Rock (R) or Mineral (M)?	Formation	Rock (R) or Mineral (M)?
(Native) Gold		Pumice	
Basalt		Obsidian	
Granite		(Native) Silver	
Quartz		Gypsum	
Pyrite		Malachite	
Limestone		Galena	
(Native) Copper		(Native) Sulfur	
Calcite		Slate	
Sandstone		Marble	
Hematite		(Native) Diamond	
Fluorite		Talc	

Conclusion Questions

What are native elements?
How can you tell a rock from a mineral?
How have you encountered any of these rocks or minerals in your life?