

MINERALS

MINERALS Section 1

- Identify the four characteristics of minerals.
 - Define naturally occurring.
 - Identify when a substance is inorganic.
 - Recognize the chemical composition of a mineral.
 - Point out the six basic crystalline solid shapes.
- Describe the factors affecting how minerals form from magma.
- Share the two ways minerals form from a solution.
- Identify how minerals are classified by their composition; explain the role of silicon and oxygen in this classification.

MINERAL IDENTIFICATION Section 2

- Articulate how color and appearance are important but insufficient to identify most minerals.
- Explain how hardness is tested and how it identifies minerals; describe how the Mohs scale works.
- Describe a mineral's luster as metallic or nonmetallic (nonmetallic can be dull, pearly, silky, and glassy).
- Be able to calculate a mineral's density (or specific gravity).
- Explain what a streak test is.
- Compare the strength bonds between atoms between minerals that break with cleavage and those with fracture.
- Share how some minerals have specific properties that involve light or magnetism.

USES OF MINERALS Section 3

- Define and identify a gem.
- Describe how some gems have industrial uses.
- Define and identify an ore.
- Know what refinement is.
- Share the example of titanium and how it obtained from ilmenite and rutile.

