

Ch 4 Types of Minerals: Section 2 Guided Reading

Predict what you will learn in Section 2. Read the title of the section. Write three ways that you might be able to identify a mineral.

1. _____
2. _____
3. _____

Use your text to define each term.

Chemical Bond _____

Silicates _____

Tetrahedron _____

Ore _____

Gem _____

SYNTHESIZE

Compare and contrast minerals and elements.

Organize information about mineral identification by completing the outline below. Pages 90-95

I. Luster

A. Caused by _____.

B. Described as _____ or _____.

II. Hardness

A. Defined as _____.

B. Measured according to _____.

III. Cleavage and Fracture

A. Determined by _____.

1. A mineral has cleavage if _____.

2. A mineral has fracture if _____.

IV. Streak

A. Defined as _____.

B. Used only if _____.

V. Color

A. Caused by _____.

B. Milky appearance can be due to _____.

VI. Special properties

A. Defined as _____.

B. Described as _____, _____, _____, _____, or _____.

VII. Density and Specific Gravity

A. Density is a ratio of _____.

B. Density is useful because _____.

C. Specific gravity is ratio of _____.

Draw three ways that silicon-oxygen tetrahedra can combine. Circle the diagram that shows how mica, which splits easily into sheets, would bond.

Identify why gems are more valuable than other kinds of minerals.

Describe what factors would have to change for a mineral to be considered an ore.
