

Minerals:  
Building Blocks of Rocks - Chapter 2

**Overview of the Chapter:**

1. Before reading or looking at the chapter, write down what you know about Minerals - from prior experiences
2. Write down 3 questions of your own that you want to know about Minerals
3. Look through the chapter and find 5 figures that capture your interest and briefly describe your each figure.
4. Write a question (before you read each paragraph) for various paragraph headings in which you want to know the answer.

**Chapter Questions**

1. What are minerals (5-part definition of a mineral) and briefly explain how minerals are different than rocks.
2. Given the "5-part definition" of a mineral, circle the following materials that are **NOT** minerals and provide a brief explanation why they are not considered a mineral.

Gasoline	paper
Table salt	water
Gold coin	ice
Quartz	glass
Tree	man made diamond
3. Draw a diagram illustrating the typical model of an atom and label the sub-atomic parts
4. How is the atomic number used to define the nature of an element?
5. Explain what dictates the crystalline shape of a mineral. In other words, why are some minerals cubic and others take on the shape similar to a parallelogram (Rhombohedral)?

6. When identifying minerals, one uses a combination of physical properties to classify the mineral. Describe each physical property.

Crystal form	hardness
Luster	cleavage
Color	specific gravity
Streak	fracture

7. List the most abundant elements found in the Earth's crust and identify the 2 most common elements.
8. The biggest class of minerals is known as the \_\_\_\_\_. Draw the silicon-oxygen tetrahedron and briefly explain how the silicon-oxygen tetrahedron relates to the silicate group of minerals.
9. Briefly describe the impact of man's mining practices on the environment.
10. Read page 58 (visualizing earth science - amazing places). What geologic conditions must have been in place in order to produce this spectacular display of large crystals?

Use the vocabulary template described in class and define the following vocabulary words:

element  
compound  
chemical bond  
density  
ore deposit