

Mighty Minerals

What is a mineral?

0. All natural earth materials are made of minerals or a combination of minerals
 1. Minerals are the building blocks of rocks
 2. To be called a mineral it must have the following 5 characteristics:
 - 1. Mineral characteristic #1 - occurs naturally**
 2. not artificial or man-made
 - 3. Mineral characteristic #2 - Solid**
 - a. not a liquid or a gas
 - 4. Mineral characteristic #3 - Definite chemical composition**
 - i. Some minerals like gold or silver are made of only one element.
(A substance such as iron, oxygen, and gold which cannot be separated or broken down by ordinary chemical methods)
 - ii. Other minerals, like quartz and calcite, are combinations of two or more elements.
 - 5. Mineral characteristic #4 atoms arranged in an orderly pattern or crystals**
 - a. Minerals are usually solid crystals. They have a number of flat surfaces in an orderly arrangement. For example, a crystal of quartz is always hexagonal because of the way the atoms of silicon and oxygen join together.
 - 6. Mineral characteristic #5 - Inorganic - not alive and never alive**