

Minerals

1. Definition of a mineral.

2. What are the defining criteria for a mineral?

3. What are the defining criteria for a rock?

4. - What is an atom? What is its basic structure?

- 5.- What are the three most important subatomic particles? How do they differ in their characteristics?

6. - What controls the atomic number of an atom?

7. What controls the atomic mass?

- 8.- How does an atom differ from an ion?

- 9.- What are the two types of ions and how are they different?

- 10- What are the two most common types of atomic bonds? How do they differ in their characteristics?

- 11- What are isotopes? What are some examples?

- 12- What are the physical properties used to identify minerals?
- 13- What is cleavage, fracture?
- 14- What are the approximate numbers on the Mohs hardness scale of the major tools?
- 15- Give examples of minerals with good cleavage in 1 direction,
2 directions,
cubic,
rhombohedral,
4 directions
16. - What is streak and which mineral has a distinctive reddish brown streak?
- 17- What are the distinguishing characteristics of quartz,
calcite,
gypsum,
galena,
graphite?
- 18- What are the common rock-forming minerals?
- 19.- What are the major classes of minerals and the anions that define each class?
- 20- What is the atomic structure of a silicon-oxygen tetrahedron (shape and how many Si, O)?
- 21- How is atomic structure related to major groups of silicate minerals?
- 22- What are uses of some major rock forming minerals?