

The Rock Cycle

Objective:

To understand early geologic processes and how rocks are formed.

Vocabulary:

igneous, metamorphic, sedimentary

Materials:

- Rock for each student (have representatives of each of the three types of rocks if possible)
- The Rock Cycle song
- Rock Cycle Diagram
- Everybody Needs a Rock by Byrd Baylor
- Rock cycle transparency

Check for Understanding:

Have students list the three types of rocks and draw or describe how they are formed.

Extensions:

• Write an obituary of a rock.

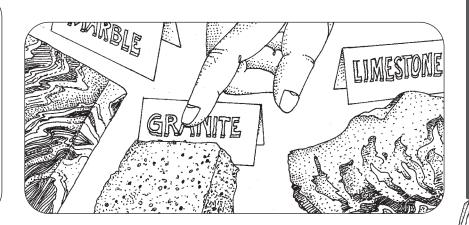
Peter Pyrite

Pyrite, one of the world's most famous frauds, is no longer among us. He was a hard character, with an unmagnetic personality. A pale, brassy fellow, he also had a bad odor, a real rotten egg. His demise was mourned by hucksters worldwide.

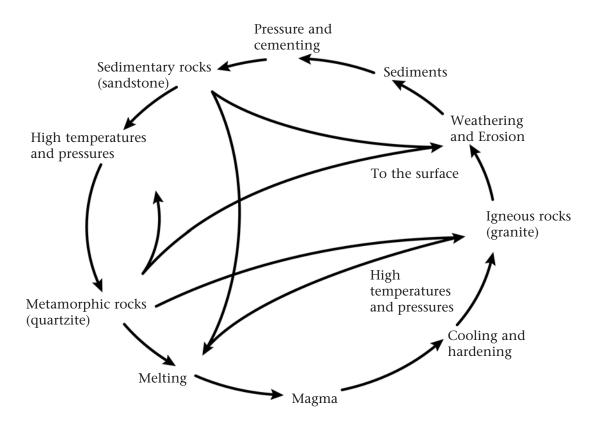
-Rob Morris

Procedures:

- 1. Ask the students the following questions:
 - How are rocks and mineral resources formed?
 - Have you wondered how rocks change over time?
- 2. Discuss with students the three different types of rocks: igneous—formed from volcanic activity, metamorphic—formed from either igneous or sedimentary rock that has changed due to tremendous pressure or temperature, sedimentary—formed from sediments. Show transparency of the rock cycle diagram. Have students take notes as you review the cycle with them. Refer back to the first two questions you asked as you proceed.
- 3. Play *The Rock Cycle* song and have students sing along to further review how rocks are formed.
- 4. Have students select a rock that appeals to them.
- 5. Have students become the "voice" of that rock as they make up a brief first person story or poem, speaking as that rock. Possibly include: How old you might be; When you were born; What your childhood was like; How you were formed; What things happened to you to give you your color(s), shape, and texture; What your contributions or uses are. (Could read *Everybody Needs a Rock*, by Byrd Baylor, to the students before giving them their assignment.)
- 6. Have some students share their stories about life as a rock with the rest of the class.



The Rock Cycle



The diagram of the rock cycle illustrates the many ways that rocks are changed. Igneous rocks beneath or on the earth's surface are constantly subjected to physical and chemical conditions that change them. As a result of these changes, sedimentary rocks, metamorphic rocks, or new igneous rocks are formed. The continuous changing of rocks from one type to another is called the rock cycle.