

Can You Identify Me?

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Grades 5-8
Science

Time: 1-2 Class periods

Objectives: To identify the three types of rocks (pictures and definitions can be found at the attached websites).

a. Igneous

http://interactive2.usgs.gov/learningweb/explorer/topic_rocks_igneous.htm

b. Sedimentary

http://interactive2.usgs.gov/learningweb/explorer/topic_rocks_igneous.htm

c. Metamorphic

http://interactive2.usgs.gov/learningweb/explorer/topic_rocks_metamorphic.htm

Summary: Students will be given twenty labeled rocks. Students will utilize websites to sort rocks according to the way they were formed.

Materials needed:

1. Assorted and labeled rocks
2. Rock identification chart (see attached)
3. Pencils
4. Hand lens or magnifying glass
5. Vial of vinegar
6. Nail for scratching
7. Digital cameras
8. Rock identification book, *Rock and Minerals a Guide to Field Identification (Martins Press)*

Teacher:

1. Will review the three major rock groups.

Discussion Questions:

1. What are the differences in the rocks you can see?

2. Are some rocks harder than others? Can you scratch it with your nail or fingernail?
3. Does the rock leave a streak on your paper?
4. Are there crystals or layers in the rocks?
5. Have you seen this rock used in our area? For instance the steps going into the courthouse or the statue by the courthouse, foundation of your house?
6. When vinegar is applied, does it bubble?

Activity:

The students will review the three types of rocks found in our area. They will observe the rocks looking for likeness and differences, test for hardness, streaks, crystals and layers, and test for the presence of calcite (using vinegar).

The students will work in groups of three or four to classify these rocks as igneous, sedimentary, or metamorphic rocks.

Optional Activity:

1. Plan a walking field trip to Grant-Kohrs Ranch NHS, (or your park) to find and identify the three types of rocks.
2. Discuss and review park etiquette. Reminding students to return rocks where they were found, you may not remove rocks from the park.
3. Since students are not able to take the rocks from the park, students will take six different pictures with digital cameras. After returning to school students will identify their rocks using the information learned in the previous activity.
4. Permits to collect rocks are available from the park service.

Application:

Organize a walking field trip to Grant Kohrs Ranch NHS, to locate the three types of rocks. Students will work in groups of three to take pictures of the rocks. The students will return to class to download, classify and group the rocks. Students will then share their pictures and information with the class.

Grade 8

Content Standards: Science: #4

Benchmark 1&2

