The Great Rock Sort

Summary
Students will learn to describe and sort rocks by their physical properties.

Main Core Tie
Science - 2nd Grade
Standard 2 Objective 1

Time Frame
1 class periods of 45 minutes each

Group Size
Pairs

Life Skills
Communication

Materials
- rocks
- magnifying glasses
- egg cartons
- paper
- pencils
- *Sylvester and the Magic Pebble*
  by William Steig

Intended Learning Outcomes
- Display a sense of curiosity.
- Participate with others when making decisions and solving problems.
- Observe, sort, and classify objects.
- Share ideas using communication skills.

Instructional Procedures
1. Read the book *Sylvester and the Magic Pebble*. Discuss the various attributes of Sylvester's pebble.
2. Ask students to write what they know about rocks. What do they look like? What are their characteristics? Where do they come from?
3. Encourage students to bring at least ten different rocks to class. Students are usually very eager to bring collections to school; however, you will need to have a supply of different types of rocks on hand for those students who forget to bring their rocks on the appointed day.
4. Have the students work with a partner. Give an egg carton and magnifying glass to each pair. Have the students pool their rocks so each pair of students has 20 rocks. Give them rocks if necessary.
5. As pairs, have the students observe, discuss, and write about the different characteristics of their rocks. Instruct students to make a list of the different characteristics of their collected rocks.
6. Using the egg carton, have the pairs organize and classify their rocks into self-selected categories (such as: large/small size, dark/light colored, dull/shiny luster, single/multi-colored, rough/smooth...
7. Have each pair discuss their findings with a neighboring pair.
8. Have each student make an illustration of one of their rocks that shows two different characteristics. They should also write a description of one of their rocks. Encourage students to share their illustrations and written description with their partners.
9. Instruct your students to write questions about rocks. What are some other things they would like to know about rocks? What would they like to learn about the rocks they collected?

Strategies for Diverse Learners
As students suggest properties for sorting rocks, write a label card and mount a rock sample with that attribute on the card. Create a display titled "Descriptive Words for Rocks" using the labeled, mounted rock samples. Invite students to add to the display as they think of new descriptive words. Adjectives may be difficult for students with low expressive vocabularies. The display provides the needed scaffolding to enable these students to learn and use descriptive words with greater confidence.

Extensions
Make rock people or animals by gluing rocks together and painting them with tempera paints. Add eyes, spots, stripes or other features with permanent markers.

Assessment Plan
Students' learning can be observed through performance assessment of written descriptions of rocks and classification of rocks in egg carton.

Rubrics
Assessing Classification Skills

Bibliography
Adapted from an original lesson created by Patricia Russell
- My Little Book of Rocks
  (Teacher Created Materials, Inc., 1993)
- Whole Language Units for Science
  (Teacher Created Materials, Inc., 1993)
- Sylvester and the Magic Pebble
  by William Steig

Authors
Julie Cook
Elasha Morgan