

37. ROCK HOUNDS

Overview: This activity will give students an opportunity to observe rocks.

Objective: Students will classify rocks using attributes such as texture, size, color, hardness, etc.

Time needed: 1-2 hours

Group Size: 4-6

Age appropriateness: any

Site: any

Background: Geologists use a number of methods to classify rocks. Color, texture, weight, hardness, and location and other criteria are used to determine types of rocks.

Materials:

Provided at the Garden

Laminated 10 cm grid

Wipe-off markers

Eyedroppers

Rulers

Clipboards

Nails and pennies

Buckets

Provided by the classroom teacher

Vinegar

Scales

Pencils

Observation Sheets

Preparation: Make copies of Observation Sheet.

Pre Activity: Students need practice sorting, describing attributes, measuring and weighing items. Students should also know some general information about rock formation and what they are made of. Read The Magic School Bus Inside the Earth. Practice classifying some sample rocks in the classroom.

Procedure:

1. Discuss safety and the importance of leaving the environment as intact as possible and discuss what areas they can collect their rock specimens.
2. Divide the class into groups.
3. Have each group find a unique rock that is about the size of a fist and return to a central location.
4. When all students are gathered, assign each group to a materials center and explain that they are going to complete the Observation Sheet for their rock.
5. After the sheet is filled in, have students draw the rock on the back.

6. Have students graph the actual rocks on a grid pre-made by the teacher using selected criteria, one at a time.
7. Discuss each graph.
8. Return rocks back to where they were found.

Modifications: Younger students will create graphs using simple attributes such as size, color or texture. Older students will use attributes such as hardness or mineral content.

Extensions:

1. Use information to make a class book.
2. Make venn diagrams using the attributes.
3. Make the picture graphs into bar graphs.
4. Use rock attributes and write descriptive paragraphs.
5. Write a creative story pretending you are a rock.

Reference List:

Rock, Rocks Big and Small, by Joanne Barken. Silver Press, 1990.
Rock Collecting, by Roma Gans. Harper Trophy, 1989.
Rocks and Minerals by Illa Pondendorf. Childrens Press, 1990.
Rocks and Soils. Teacher Created Materials, Inc. 1992.
Frog Math. GEMS
Byrd Bayler Books

Time of Year: any

****This activity was adapted from Rocks and Soils. Teacher Created Materials.**

Rock Hounds Observation Sheet

Check the correct boxes that describe your rock.

Shiny Dull Hard

Soft Sparkly Not sparkly

Little Big Rough

Smooth

Use your rock to make the following observations.

	Length	Weight	Hardness	Acid	Floats
	Measure with a ruler.	Measure with a scale	Which will scratch your rock. Nail, Penny, fingernail	Does your rock bubble when vinegar is dropped on it?	Does your rock float or sink?
Prediction					
Results					