All About Rocks

Name:	Stacy Hurney (<u>hurney@gmail.com</u>)	Date:	December, 2005
School:	Flower Valley Elementary School	Grade:	First Grade
School District:	Montgomery County, Maryland		
Title:	All About Rocks		
Content Area:	Science		
Duration:	8 Days		

Overview and Description of the Unit

Overview/Description:

• Students will learn about different places to find rocks. Then, they will collect four rocks from these locations. They will use their rocks to learn about and identify different properties of rocks. Finally, students will learn about the different types and names of rocks. They will use what they have learned to identify the name of one of their rocks.

Enduring Understanding:

- Earth materials include rocks, sand, and soil.
- Earth materials can be classified by common properties.

Essential Questions:

- What are the physical properties of rocks?
- In what ways can you classify earth materials?

MCPS Outcomes:

2.1.1 observe and describe the physical properties of rocks, sand, and soil (e.g., color, size, texture) and changes that may occur.

2.1.2 classify rocks based on size and shape from boulders to grains of sand and even smaller.

1.1.11 classify objects, materials, concepts, and actions based on similarities and differences.

1.1.15 observe common objects and group according to a simple progressive pattern (e.g., large to small, darker to lighter).

1.1.23 use non-standard measurements to measure and collect information.

1.1.20 apply scientific concepts to make decisions.

Evidence of Learning

Pre-assessment:

• Given four rocks, students will observe and describe how they are similar and different.

Post-assessment:

- Given a rubric for their science journal, students will score a 3 or 4 on each assignment
- Students will correctly identify the name of a rock. They will explain their thinking in their science journal.

Plan Learning Experience and Instruction

Materials and Books:

For All Lessons: Computer with Internet access connected to a tv

Lesson 1: student journal

Lesson 2: outside location for each student to find four rocks, four labels (A-D) for each student

Lesson 3: student journal

Lesson 4: student journal, four labeled rocks per student

Lesson 5: student activity mat, student journal, rocks

Lesson 6: any resources which can help describe the three different types of rocks

(sedimentary, igneous, and metamorphic)

Lesson 7: student journal, rocks, resources to help students identify rocks

Let's Go Rock Collecting (By Roma Gans) Rocks and Minerals (FlashCharts Series)

Preparation:

- Connect a tv to the computer with an Internet connection
- Ensure you are able to login to *unitedstreaming*
- Make a copy of the student journal for each child
- Make labels a-d for each student
- Print a student activity mat for each child (Lesson 5)
- Gather any other resources you can find on rocks

Procedure:

- To begin each lesson, go to slide 2 and click on the appropriate lesson number.
- Read the directions with the students and view the videos for each day.
- Allow students time to complete work in their science journals
- Grade each assignment according to the rubric
- Read books about rocks