

**Project FOCUS
Best Lessons
THIRD GRADE**

Title of Lesson: Discovering Rocks

Theme: Earth/Space Science

Unit Number: **Unit Title:** Rocks, Minerals, Soil and Fossils

Performance Standard(s) Covered (enter code):

S3E1. Students will investigate the physical attributes of rocks and soils.

a. Explain the difference between a rock and a mineral.

b. Recognize the physical attributes of rocks and minerals using observation (shape, color, texture), measurement, and simple tests (hardness).

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Rock
Mineral
Rock cycle
Hardness
Igneous rock
Metamorphic rock
Sedimentary rock

Learning Activity (Description in Steps)

Abstract (limit 100 characters): Students will observe and record characteristics of different rocks.

Details:

Before coming to class, prepare baggies of rocks for your class. Each baggie should have 2-4 different rocks. If you do not have enough rocks for every individual, students can pair off.

To begin the lesson, pass out a baggie of assorted rocks to each student (or pair). Instruct each student (or pair) to pick out one rock that they would most like to examine. Have them write down as many defining characteristics of the rock as they can think of. This can include the color, size, shape, texture, and more. Allow the students to think scientifically and remind them that there is no such thing as a stupid answer.

Next, ask the students to choose a second rock out of their bag. Have the students observe and record whether each of the characteristics they have written for the first rock could also be used to

describe their second rock. Ask them to predict whether this rock was formed the same way as the first rock.

Allow students to share their observations and predictions. If your rocks are from a labeled source or kit, you should take this opportunity to tell the students more information about their rocks and their formation.

Materials Needed (Type and Quantity):

- Different kinds of rocks (2-4 per student or pair of students)
- Magnifying glass
- Optional: simple supplies for scratch test (nails) and/or streak test (tiles), electronic gram balance

Notes and Tips (suggested changes, alternative methods, cautions):

- **Tip:** It would be helpful to have the students organize their information in a chart, word web, or Venn Diagram.
- **Optional:** Doing a scratch test and/or streak test would be another fun way for students to compare different rocks and their mineral components. Students could also record the weight of their rocks.

Sources/References:

- 1) Rock Hounds - Tammy Payton
- 2) Originally submitted by Karen Brown, edited by Jessica Valle (2010)
- 3)