

Title: Good Morning, Rock

Objective: Identify properties of rocks using descriptions of color, texture, luster, shape, and pattern.

Time: 10 minutes

Materials Needed: One rock per student (collected by students or teacher).

Greeting

Theme: Geology

Topic: Properties of Rocks

Suggested Grade Level: K-4

Indoors or Outdoors: Either

Directions:

1. Discuss the five physical properties of rocks: color, texture, luster, shape, and pattern.
2. Using sense of sight and touch, ask students what words could they use to describe characteristics or **properties** of rocks. Record the student list and enhance it with words from the list of properties contained in the **Background Information** section on the back of this card.
3. Students will get a rock, either one they collected or one provided by the teacher. (Teacher note: in addition to gravel, try to provide a variety of rocks with crystals, layers, fossils, or sand grains.)
4. Tell the students that they will greet a classmate by looking at their classmate's rock and using an adjective to describe the rock. They should greet the other child by saying: "*Good morning, _____ Rock*".
5. After several greetings, students should trade rocks with a partner to examine and discuss similarities and differences.
6. Teacher leads full group discussion of students' observations and discoveries about similarities and differences of their rocks.

Discussion Questions:

1. How are your rocks different? How are they the same? Compare and contrast.
2. What did you find interesting about your rock or your partner's rock?
3. Where do you think these rocks were found? Explain your answer. (Found in backyards, on a beach, in a rock pile, etc.)
4. What do you think caused these rocks to exhibit these characteristics?

Science and Engineering Practices:

4. Analyzing and interpreting data; 7. Engaging in argument from evidence.

Crosscutting Concepts:

1. Patterns; 3. Scale, proportion, and quantity.

Disciplinary Core Ideas:

Earth and Space Sciences: ESS 2: Earth's systems.

Background Information:

- Describing rocks using the senses of sight and touch. A sandy rock may even produce sound when rubbed.
- **Property:** is a word that describes a characteristic or a trait that can be observed through the senses.
- The five physical properties of rocks are color, luster, shape, texture and pattern. These are some words to describe properties of rocks:
 - **Texture and Shape:** Gritty, grainy, sandy, crumbly, flat, squared, sharp-edged, round, smooth, hard, soft.
 - **Luster:** dull, sparkly, shiny, glassy, milky.
 - **Color and patterns:** dark, light, speckled, spotted, striped.

Additional Resources:

- *Everybody Needs a Rock* by Byrd Baylor
- *If You Find a Rock* by Peggy Christian
- Five properties of rocks: <https://www.reference.com/science/five-properties-rocks-b95d53ee9301702c>
- *Let's Go Rock Collecting* by Roma Gans

Correlates with:

Activity - Rock Property Sort (p. 64)

Interdisciplinary Lesson - Building a Rock Tower (p. 84)