

Lesson Title:	Geological Experience: "Rock Detectives"
Grade(s):	6-8
Prepared by:	
Appropriate Science Areas:	Earth Science
Science Concept(s):	Geology, Direct observation
Lesson Objective:	<ol style="list-style-type: none"> 1. Develop inquiry techniques to ask questions about rocks and geologic features. 2. Appreciate the outdoors as a natural geologic laboratory. 3. Carefully observe objects such as rocks. 4. Make inferences based on observations. 5. Create art forms about geology using poetry.
Georgia QCC Standards:	<p>Grades 6, 7 & 8</p> <ul style="list-style-type: none"> • Scientific Inquiry Process: Uses process skills of observing, classifying, communicating, measuring, predicting, inferring, identifying, and manipulating variables. Also uses recording, analyzing, and operationally defining, formulating models, experimenting, constructing hypotheses and drawing conclusions. • Reference Skills: Selects and uses multiple types of print and nonprint sources for information on science concepts.
Background:	<p>Learning about the earth can be fun. "Rock Detectives" is an activity involving discovery and exploration of the earth's geology. Rocks are clues that help us unravel pictures of the earth's past. Geology is like detective work. The geologist examines rocks and fossils just as a detective examines footprints, tire marks, and fingerprints. Rocks, patterns in rocks, and fossils are examples of evidence that geologists use to develop theories of the earth. Such theories help to explain how rocks are formed. The following activity introduces students to the essence of geology by providing an opportunity for finding rocks, handling them, and relating geology to language arts.</p>
Materials:	<ul style="list-style-type: none"> • Before the lesson, scout a place where students will be able to find at least one rock. • Clipboards • Pencils
Preparation Time:	Time to scout the area.
Teaching Time:	One class period

Procedures:	<ol style="list-style-type: none"> 1. Take the students outside to the site that you have chosen. Tell the students that each of them is to find one rock. After a few minutes, gather students together and form a circle. Have the students observe their rock using their senses. To encourage good observations, ask questions such as: <ul style="list-style-type: none"> • What colors do you see in your rock? • What does your rock smell like? • How big is your rock? • How heavy is your rock? 2. Tell students to form a circle so that they can play a game called "Find Your Rock." Have each person pass his or her rock to the left. Have them continue passing the rocks, one at a time. After 3 or 4 passes, have everyone in the change positions. Then tell the group that the object of the game is for each person to find his or her own rock, but they are not allowed to look at the rocks as they are passed. Have students continue passing rocks. As they identify their rocks, they should remove themselves from the circle. The game ends when everyone has their original rock. 3. On their clipboards, students should make a list of as many observations of their rocks as they can. Then have them use the data to write a rock syntu. A rock syntu is a five-line Japanese poem. The lines are written according to five simple rules: <ul style="list-style-type: none"> Line 1- Name the object Line 2- Identify an observation of the object Line 3- Identify a feeling about the object. Line 4- Identify another observation about the object. Line 5- Close with a synonym for the name of the object.
Key Questions:	See above.
Student Evaluation:	Have students experiment with the writing syntus about their rocks, and have them write their final poems on construction paper for classroom display.
Helpful Hints:	Have students spend some time silent, possibly with their eyes closed, "getting to know" their rock.