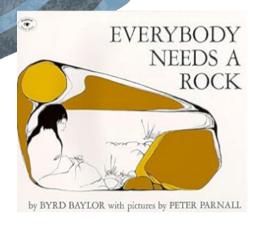
ADVENTURE BEGINS | THIRD GRADE | S3E1. PHYSICAL ATTRIBUTES OF ROCKS

# **CONNECTIONS TO SCIENCE GUIDES**

GEORGIA YOUTH SCIENCE & TECHNOLOGY CENTERS, INC.



CAN'T FIND THE BOOK? READ-ALOUDS ARE AVAILABLE ON YOUTUBE.



### **ASK**

- What is an attribute?
- What are some physical attributes that can be used to classify rocks and minerals?
- How do physical attributes relate to a rock's uses?
- Have you ever thought about being a petrologist??

## **EXPLORE**

### **TESTING PROPERTIES OF ROCKS & MINERALS**

#### **Materials:**

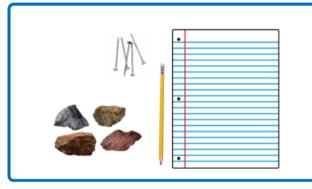
- Rocks (at least three)
- Nail
- Paper
- Pencil

#### **Directions:**

- Begin by creating a 4 x 5 chart on your piece of paper.
- In the first column going down, label the boxes Rock Samples, A, B, and C.
- In the first row going across, label the boxes Color, Texture, Shape, and Hardness (Scratched by a Nail).
- Pick a rock to start with this will be Rock Sample A. Observe the color, shape, and texture of the rock. Record your observations in your chart.
- For hardness, try to scratch the rock with the nail. Write yes if the nail was able to scratch the rock and no if it did not.
- Repeat the above steps for Rock Samples B & C.
- As you are experimenting, think about:
  - Knowing what I know about the my rocks' physical attributes, what could they be used for?

#### **Fun Facts:**

- You use rocks and minerals at home every day in things like batteries, soap. and toothpaste.
- Georgia's state mineral is staurolite, a dark red or black crystal. Sometimes called "fairy crosses" for its cross-shaped formation, staurolite is often kept as a good luck charm.

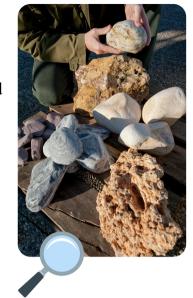




## **EXPLAIN**

### **PHYSICAL ATTRIBUTES OF ROCKS**

Rocks are natural objects that are made of a mixture of minerals. They have different attributes that are used to describe them including color, texture, luster, and hardness. The color of a rock depends on the minerals found in the rock. The texture refers to how the rock feels on the surface. The luster of a rock refers to its sparkle and shine. The hardness describes the stiffness of a rock.



# **EXTEND**STONE MOUNTAIN PARK



Stone Mountain Park in Stone Mountain, Georgia is the largest piece of exposed granite in the world. 7,645,700 cubic feet of granite has been removed from this mountain and used all over the world.

# STEM CAREER PETROLOGIST

A petrologist is a scientist who studies the composition, structure, and overall distribution of rocks. At work, petrologists can analyze rocks in a lab, determine a rock's composition, and determine how to best extract valuable minerals and natural resources from them. If you are interested in rocks, being a petrologist might be for you!





## **BACKGROUND**

The Georgia Youth Science and Technology Centers, Inc. provides quality programs for teachers of STEM subjects that improve the teaching and learning process at the kindergarten through eighth grade levels. We present programs that change students' perceptions and inspire an appreciation for science, technology, engineering, and mathematics subjects.

## **ABOUT US**

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