



Fernbank Science Center

Title: Large Group Presentation: Local Rocks and Minerals (4317)

Type: Outreach

Level: 3rd Grade

Length: 55 to 80 minutes

Location: Local School

Limit: Full-Grade Level

Program Description

This is an assembly-style alternative to Local Rocks and Minerals (4316) that is designed to accommodate between 60 and 200 students. The presentation reviews the definitions of geology, geologist, minerals, and rocks. Using large samples, most of which may be passed from student to student, guided through the properties used to identify the most common rocks in DeKalb County. Students are then shown a separate suite of samples and two groups of photographs (hand samples and outcrops) to self-evaluate their ability to recognize those rocks.

The relationship of the rocks to the building of the Appalachian Mountains is introduced.

Time permitting, students review the layers of the Earth (core, mantle, crust) and have the opportunity to examine samples of ocean crust, upper mantle, deep mantle (with diamonds). Iron-nickel meteorites are examined as representatives of the core.

Standards

S3E1(a) explain the difference between a rock and a mineral

S3E1(b) recognize the physical attributes of rocks and minerals using observation (shape, color, texture), measurement, and simple tests (hardness).

Vocabulary

granite	gneiss	schist	amphibolite
igneous	sedimentary	metamorphic	quartz
feldspar	rock	mineral	hornblende
pegmatite	mica	clay	

Pre-Visit Activities

Collect at least three rocks from near your home. Bring them to identify and discuss with the geologist.

Post-Visit Activity

Attached.

Resources

HSP Georgia Science III, Chapter 2, Lesson 2, "What Are the Types of Rocks?"

Local Rocks & Minerals

Name _____

Post-Presentation Review

I. Name each rock illustrated below.

A. _____



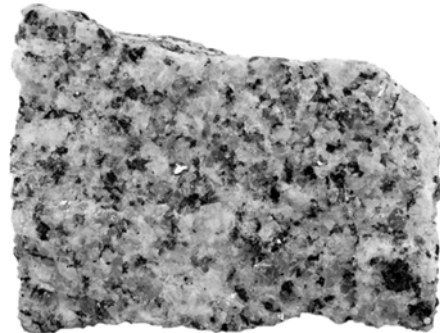
B. _____



C. _____

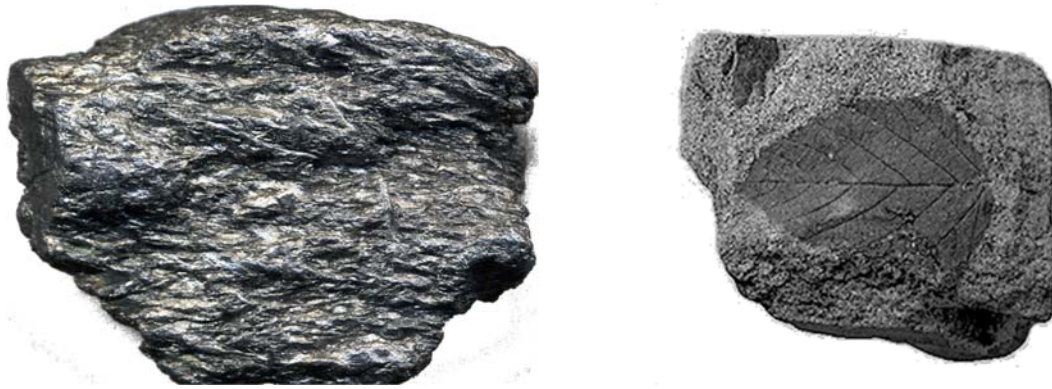


D. _____



E. _____

F. _____



II. Is each rock above igneous, sedimentary, or metamorphic?

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____

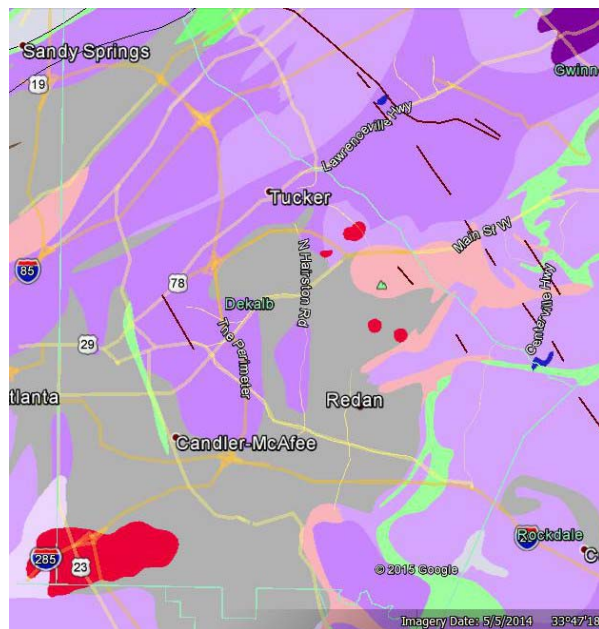
III. Which of the rocks above does **NOT** occur in DeKalb County? _____

IV. Open the following link in Google Earth: <http://mrddata.usgs.gov/geology/state/kml/gageol.kmz>

Zoom to DeKalb County, Georgia.

Print a copy of the Geologic Map for DeKalb County.

Place the letter for each rock above on the map in the correct colored rock unit.



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