

Surrounded by Rocks and Minerals: Scavenger Hunt

GRADE LEVELS	2 nd -6 th ; California Content Standards for 2 nd , 4 th and 5 th
SUBJECTS	Earth Sciences, Investigation and Experimentation
DURATION	Preparation: 10 minutes Activity: 45 minutes
SETTING	<i>Islands of Evolution</i> exhibit and <i>Earthquake</i> exhibit at the California Academy of Sciences

Objectives

Through this scavenger hunt, students will:

1. learn about the different types of rocks.
2. observe differences in rock and mineral characteristics.
3. be introduced to the layers of Earth and the types of crust.

Materials

Surrounded by Rocks and Minerals Scavenger Hunt (one copy per student)

pencils (one per student)

optional: clipboards (one per student)

Vocabulary

- ❖ sedimentary: formed from the accumulation of small particles deposited by wind or water.
- ❖ volcanic: formed by or originating from a volcano.
- ❖ igneous: produced under conditions of intense heat, as with volcanic rocks or rocks from molten magma.
- ❖ metamorphic: rock changed by the action of extreme heat or pressure.

Teacher Background

The California Academy of Sciences doesn't currently have an exhibit dedicated to geology; however, rocks and minerals are all around if you know where to look! This scavenger hunt will guide students through exhibits and have them carefully observe rocks and minerals in unexpected places. It will also get them thinking about the composition of the Earth's layers.

Activity

Preparation

1. Make copies of the *Rocks and Minerals Scavenger Hunt* and distribute to each student.

Introduction

- ❖ Explain and discuss the vocabulary. These are terms the students will see in the exhibit texts or will be helpful in their explanations.
- ❖ Explain that you will be visiting different exhibits and that you will be gathering bits and pieces of geology related information from these exhibits.

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- ❖ Go over the questions on the scavenger hunt with your students and chaperones and make sure they understand what they will be doing. Most of the questions focus on making observations.

Procedure

1. The Rocks and Minerals Scavenger Hunt sequence has been designed for ease of travel between exhibits. You don't have to complete the hunt in this order, but the following procedure explains the most straightforward route.
2. Start in the *Islands of Evolution* exhibit, located on the main floor behind the Planetarium. On the back wall is a timeline of Earth's history, where the fossils and the moon rock can be found.
3. Head out to the East Gardens to find the famous sculpture in stone.
4. The next stop is the *Earthquake* exhibit, where you'll learn about Earth's layers, view beautiful mineral specimens, and touch two types of crust.
5. Lastly, you can challenge students to ask a question to either a Docent or a staff member in the Level 3 Naturalist Center.

Wrap-Up

- ❖ Discuss the different kinds of rocks and how their formation and characteristics differ.
- ❖ What were some of the observations they made about specific rock specimens?
- ❖ What did they learn about the composition of the Earth?
- ❖ Was there anywhere they found rocks that surprised them?

Correlated California Content Standards

Grade Two

Earth Sciences

- 3a. Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals.

Grade Four

Earth Sciences

- 4a. Students know how to differentiate among igneous, sedimentary, and metamorphic rocks by referring to their properties and methods of formation (the rock cycle).
- 5a. Students know some changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes.

Grade Five

Investigation and Experimentation

- 6a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.