

# From the Earth

## Grades 1-3 Teacher Guide

OAS

Science Practices: 1, 2, 4, 6, 8; Core Ideas: ESS3

### Program Overview

Natural resources are things we use every day! What kinds of things do you use and where do they come from. Get ready to find out in this interactive Discovery Room Session.

### Objectives

After participating in this program, students will be able to:

- Understand the difference between minerals and rocks;
- Explain the process of forming a sedimentary rock;
- Explain the process of erosion;
- Understand the importance of natural resources and fossil fuels in our everyday lives;
- Compare and test the porosity of certain rocks, including pumice, sandstone, and shale.
- 
- 

### Background

Geologists study the Earth for a number of reasons, including to predict potential major and minor changes in the Earth and to understand the best uses of certain rocks and minerals.

Many rocks, minerals, and fossil fuels are collected from the Earth and are produced into manufactured products that people use in everyday life. For example, once oil is drilled and collected it is then processed into different materials like plastic, nail polish, and ink.

## At the Museum

### Hall of Ancient Life

As your class visits this gallery, read over the "Oklahoma Petroleum" panel that explains how oil, a natural resource, was created millions of years ago. Discuss how and why the caprock kept the oil from reaching the surface and how people can reach the oil beneath the hard caprock. After this discussion, ask your students if they can name different manufactured products that are made from oil.

### Hall of Natural Wonders

Explore this gallery together and challenge your students to find different types of natural resources. Discuss what manufactured products can be made from these natural resources.

## Vocabulary

<b>Caprock</b>	a rock type that may trap oil, gas or water; shale is one example
<b>Erosion</b>	the process that breaks things down
<b>Geology</b>	the study of rocks, minerals and things that come from the Earth
<b>Manufactured Products</b>	products that humans make
<b>Mineral</b>	solid, naturally occurring, chemical substances found in the Earth's crust; each has a definite chemical makeup and structure
<b>Natural Resources</b>	something of value that people get from the environment
<b>Porosity</b>	the ability to absorb fluids
<b>Rock</b>	two or more minerals that have been combined using heat and pressure from the Earth; they cannot be defined by a definite chemical makeup
<b>Sedimentary Rock</b>	rocks that are formed by sediment (small grains of minerals, rocks or organic material deposited by water)