

# The Rock Cycle: An Interactive Exploration

## Overview

In this one-class-period activity from Lab-Aids, students explore relationships between different rock types and the forces that change one into another (the rock cycle). Students take on the role of a rock or part of a rock and move among stations. At each station is a spinner that randomly describes things that can happen to the rock and directs students to other stations. In analyzing their movement among the stations, students learn about the conditions that change the rock and the vast amount of geologic time involved. The activity itself takes about 25 minutes, and debriefing will take the remainder of the class period.

## North Carolina Essential Science Standards

6.E.2.3 Explain how the formation of soil is related to the parent rock type and the environment in which it develops.

## Materials for the whole class

- 1 Lab-Aids Teacher's Guide for The Rock Cycle: An Interactive Exploration
- A set of 8 spinner stations.

## Materials for groups of 2

- 1 copy of The Rock Cycle: An Interactive Exploration Student Worksheet and Guide.

Here is a link to the LabAids web page about this activity: <https://store.lab-aids.com/kits-and-modules/details/ROCK-CYCLE-INTERACTIVE-EXPLORATION-GEOLOGIC-TIME>

## Preparation

- Place the 8 spinner stations around the room with enough space between them to avoid crowding.
- Have enough copies of the Student Worksheet and Guide ready, one per pair of students.

## Procedure

1. Follow the directions in the Teacher's Guide for Getting Started and doing the Activity. After reviewing the rock types, the Guide directs you to give each team a Student Worksheet and Guide, and have teams count off by 8s to assign each team a starting point. The activity takes about 25 minutes.
2. As needed, go through the procedure on the Student Worksheet and Guide with the class before they begin.

## **Reflection/Discussion**

North Carolina Essential Science Standard 6.E.2.3 focuses on how soil develops from parent rock and the environment in which that soil develops. Direct students' attention to weathering, sediment, and the formation of soil. Explain that topsoil forms incredibly slowly. It takes 500-1000 years to form an inch of top soil.