Weather & Erosion — Weather or Not, the Earth Changes

In this course, students explore the concepts of weathering and erosion through hands-on experimentation. Students answer the question "How does the Earth change without human interaction?" through observing major forces that move rivers, break apart roads, and create a constantly changing landscape.

At the elementary level, students sort the forces of the Earth, experiment with dunes of sugar, and create a story of how rocks have changed from boulders to pebbles. At the middle school level, students shake thing up to visualize weathering, erode candy, and explore what makes some of the Earth's biggest changes. At the high school level, students explore why boulders are found in the most interesting places, while experimenting with different forces' ability to change geology at a major level.

Grade: Elementary, Middle, High School

Standards Supported

Next Generation Science Standards:

2-ESS1-1. Use information from several sources to provide evidence that Earth events can occur quickly or slowly.
4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.
MS-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.

Ocean Literacy Principles:

Principle 2. The ocean and life in the ocean shape the features of Earth.
C. Erosion- the wearing a way of rock, soil and other biotic and abiotic earth materials—occurs in coastal areas as wind, waves, and currents in rivers and the ocean move sediments.