



2nd Grade: Changing Land

Course Description: The Earth is always changing. Over the course of three days, our educators will show how some of those changes, like erosion, take place by having the students perform hands-on experiments that they can then take home with them.

Day 1: Students will be given a short description of how erosion works and how different sizes of sediment will move differently.

Demonstration: *Using various sized pebbles, rocks and other supplies, students will first build a mountain. They will then use their breath, a hair dryer, and a small fan to try to erode their mountain away, all the while exploring how particles of different masses are affected by different wind speeds. The lesson will end with the most amount of wind our educator can create: the wind from a leaf blower.*

Day 2: Students will learn how glaciers were formed and how they can shape the land around them. Students will learn that it is possible for both glaciers to grow and shrink over time and that ice can stretch and break under enough pressure.

Demonstration: *Students will learn how glaciers can shape the land around them by making a substance called GAK, a slime-like material with unique slow-moving properties that mimics the motion of glaciers. Students will learn that glaciers stretch and break under enough pressure – just like GAK. They will have to prevent the GAK from reaching their city on the outskirts of a glacier.*

Day 3: This class will focus on teaching the students how sea levels can rise if the ice we have all over the world melts. They will look at how different levels can result in the loss of different areas of land by observing maps of nearby places and how they would be changed if sea levels rise.

Demonstration: *Students will perform a simple experiment using ice cubes, water, and rocks to show that melting land ice, not sea ice, is the real causative agent behind rising sea levels.*