



2nd Grade: Adventure in a Bottle

Course Description: Over the course of three days, our educators will make the journey west all that much more fun by showing your students the science of magnetism, desert animal species, and even fire tornadoes.

Day 1: What is West? Directions are incredibly important when trying to follow a map. Students will learn about the four cardinal directions – North, South, East, and West – and some ways to determine the direction in which you are going. We will also explore magnetism and learn about the Earth’s magnetic field.

Demonstration: *Students will have the opportunity to build one of the best devices for telling which direction to go, a compass. Using a simple magnet, needle, and paper, students will learn how people in the 1930s used compasses to tell directions.*

Day 2: During this class, students will learn about some desert animal species. We will have a discussion about the important adaptations these animals have in order to survive in such a hot and dry environment and how well a human would survive under similar conditions.

Demonstration: *Students will have a chance to see up close and hold some of the amazing animals that Ruthie may have found in her travels west. They will even learn about a special insect that can change and mold landscapes throughout its life: the Superworm.*

Day 3: One of the most prominent weather features of the Midwest are tornadoes. Students will learn about how tornadoes form and what makes them so dangerous. They will also learn about fire tornadoes, which are the tornadoes that form when a tornado passes over the top of a wildfire and the fire is sucked up inside of the tornado.

Demonstration: *Students will observe what happens when a tornado from the Midwest hits a wildfire in the west. Using a simple, smoke-free, set up our educators will dazzle the students with this awesome display of weather.*