

# American Outdoor Schools



American Outdoor Schools' curriculum is designed to reinforce science concepts learned at school through experiential education, since studying the natural environment cannot always occur within the classroom setting. Students can increase their knowledge of the outdoor world through direct observation and exploration.

The Investigators curriculum is centered on collecting and analyzing data about the natural world, and considering the students' role in being good stewards.

## 7th GRADE "INVESTIGATORS"

**Interdependence/Land Use Study:** Students will become part of a research team, and will begin by learning characteristics that are important for teamwork. By using a variety of problem-solving games, the students will learn to work together to find solutions. These activities also serve to emphasize interdependence, both in the human community and in the natural ecosystem. Student groups will be introduced to a land use study, developing ideas for utilization of the natural community. CA Science Standards, 7a, 7c, 7d

**Water You Know:** This class involves an in-depth study of water as an essential component of the ecosystem. By measuring the quality of the available water supply with various chemical tests, and examining the diversity of life in and around the water, students will realize the importance of water to the ecosystem, and how humans can influence the quality and availability of the water supply. CA Science Standards 7c

**Investigating the Night Sky:** The amazing subject of astronomy introduces the students to the basic components of our universe. Students will learn the characteristics of stars, and learn to identify some constellations. The class will involve extensive observation of constellations and other heavenly bodies that are visible (weather permitting). CA Science Standards 7c

**Probing Producers:** Focusing on plants as a vital member of the natural community, students will examine the life cycles of plants, emphasizing pollination and seed development. Observing the structural diversity among plants, students will learn to classify some of the indigenous plants using appropriate field guides. CA Science Standards 3d, 5a, 5f

**Investigation Foundations:** Students will conduct a detailed analysis of soil, measuring characteristics such as texture, structure, and compaction. Activities include a series of physical and chemical tests, and use of models to evaluate the quality and use of the soil. CA Science Standards 7a

**Analyzing Animals:** This class will focus on the needs of animals, and how human and environmental factors affect their survival, individually and as a species. Students will observe animals in their habitats, and use a simulated ecosystem to learn how human activity can result in species' extinction. CA Science Standards 3d, 3e, 5a

**Surviving in the Wilderness:** This class focuses on how the nature is able to provide our basic needs for survival. Students will learn the importance of maintaining body heat, using the natural resources in the area to build a shelter. They will also learn how to secure water and food, specifically wild edibles.

**Land Use Proposal/Stewardship:** In the final class, students analyze the data they have collected during their stay and develop an appropriate plan of land use that demonstrates good stewardship. Students will be challenged to examine their impact on the natural environment, their role as stewards, and their specific responsibilities to preserve the earth. CA Science Standards 7a, 7c, 7d, 7e