



Table Rocks Curriculum

Index and Lesson Descriptions

Botany:

- **Chapter Introduction**
- **Amazing Weed Parts (Grades K-5):** Students will learn the basic parts of a plant and the function of each by playing a memory/matching game. Students will also learn how special adaptations allow noxious weeds to thrive and outcompete native plants.
- **Champion Weed Seeds (Grades 4-8):** Students will explore noxious weeds and seed dispersal by examining real seeds. They will invent a weed seed which they will equip with adaptations for dispersal. An optional extension allows students to conduct an experiment and explore how noxious weeds respond to various management treatments.
- **Plant ID (Grades 4-8):** Students will investigate the basic parts of a plant, as well as the characteristics and methods used by botanists to identify and classify plant species. Students will use a dichotomous key to identify plant specimens. This is a great lesson to prepare students for plant identification during their Table Rocks hike.
- **Pollination Partners (Grades 4-5):** In order to explore the relationship between flowers and their pollinators, students will dissect flowers, construct flower models, and attempt to match each flower model with its correct pollinator. Includes several interesting extensions for students to learn more about pollinators.

Activity Sheets:

- **Arrow Leafed Balsamroot:** Information and coloring sheet
- **Deadly Twins:** Information and coloring sheet
- **Most Wanted Weed Cards:** Ten noxious weeds cards with information and photographs
- **One of a Kind:** Information and coloring sheet
- **Parts of a Flower:** Flower part diagram
- **Parts of a Plant:** Plant part diagram

- **So Ya Wanna Be a Botanist?:** Investigative activity sheet that will help students with plant identification.
- **Trees of Life:** Activity sheet explaining acorn preparation and uses, and how to distinguish between black and white oaks.
- **Weeding out the Words:** Crossword puzzle
- **What Tree Am I?:** Activity sheet introducing six different tree species that grow on the Table Rocks
- **The Wolf Flower:** Information and coloring sheet

Ecology:

- **Chapter Introduction**
- **Home Sweet Oak (Grades K-8):** Students will use a variety of art supplies to create a model oak tree including organisms living in and around oak trees. Students will explore ecological connections between organisms and oak trees.
- **Symbio! (Grades 4-8):** Students will define and give examples of six basic types of ecological relationships and will play a game (similar to Bingo) to demonstrate and reinforce their knowledge. Students will be able to observe and record interactions between organisms in the field and conduct additional research.

Habitat:

- **Habitat Lap Sit (Grades K-8):** Students learn how to identify the five basic components of habitat through a kinesthetic and fun team activity! A large outdoor or indoor space is needed.
- **Habitat Pen Pals (Grades K-8):** Students explore the four plant communities of the Table Rocks and identify the needs of animals in each habitat. Students will then write “pen pal” letters from the perspective of their chosen animal. Includes group work, research, and creative writing.
- **Habitat Scavenger Hunt (Grades K-5):** Students identify the essential components of a habitat by completing a classroom scavenger hunt. Students will also learn about some of the animal residents in each of the habitat types on the Table Rocks and their habitat requirements.
- **Home is a Habitat (Grades K-8):** Students will research different plant communities and organisms of the Table Rocks and create a poster or compile a class calendar of their results. This activity is a great way to introduce or conclude the Table Rocks curriculum.

Fire Ecology:

- **Chapter Introduction**
- **Fire and the Food Web (Grades 4-8):** Students investigate how organisms on the Table Rocks are interconnected and create a food web. Through an interactive game and research project, they will understand how this food web and the organisms within it are affected by fire.
- **Fire Tag (Grades K-5):** Students play an interactive game introducing the components necessary for a fire to ignite—the fire triangle. They will explore the positive and negative effects of wildfire on an ecosystem. This activity requires a large, outdoor or indoor space.
- **Some Plants Love Fire (Grades 4-8):** By creating a fictitious pyrophyte (fire-loving plant), students will demonstrate knowledge of adaptations plants have developed to survive fire as well as the pros and cons of fire on forest health.
- **Wildlife and Fire (Grades K-5):** Students identify animals present in the Table Rocks' ecosystem and their response to wildfire. Students will play a guessing game using clues to explore how fire can benefit or harm wildlife.

Geology:

- **Chapter Introduction**
- **Changes in the Earth's Structure (Grades 4-8):** Students learn about the geological processes leading to the formation of the Table Rocks. They will explore the process of erosion through group experiments with various natural materials.
- **Table Rock Fudge (Grades 4-8):** Through making fudge, this lesson demonstrates the differences between physical and chemical changes of matter. Students will also gain an understanding of the three states of matter through a separate classroom demonstration. A microwave or hot plate is needed to complete this lesson.

Public Land Management:

- **Chapter Introduction**
- **Forest Health (Grades K-8):** This activity emphasizes the essential components for a healthy forest, particularly the importance of space. A large outdoor or indoor space is needed.
- **Public Land Management: You Decide! (Grades 4-8):** Students evaluate a variety of land use activities and will consider how each use can affect the landscape. This lesson involves group work and research to help students understand public land management issues.

Native Americans:

- “Indians in Oregon Today”—Oregon Department of Education, Middle School –High School Curriculum
- For additional information please visit the Table Rocks Cultural History Website at <http://www.blm.gov/or/resources/recreation/table-rock-tribes.php>

Vernal Pools:

- **Chapter Introduction**
- **Dive in! To Vernal Pools (Grades K-8):** Students investigate the vernal pool ecosystem and its inhabitants. They will explore adaptations, lifecycles, and interrelationships of species relying on vernal pools. Students will investigate how environmental factors may affect the inhabitants of vernal pools. Lesson includes fun activity sheets.
- **Vernal Pool Investigators (Grades K-8):** Students explore the physical factors creating vernal pools and the annual cycles in the vernal pool ecosystem. Using activities and conducting experiments, students investigate the organisms that depend on the vernal pool ecosystem. Lesson includes fun coloring and activity sheets.

Wildlife:

- **Chapter Introduction**
- **Animals of the Table Rock Memory Game (Grades K-5):** Through an interactive memory game, students explore the characteristics, structure, and function of different mammals, amphibians, reptiles, birds, and insects of the Table Rocks. Includes an optional artistic extension for learning animal adaptations.
- **Build a Table Rocks Bird (Grades 4-8):** Students learn various bird adaptations and identify how these characteristic help birds survive and thrive in different environments. After investigating the structure and functions of different birds found on the Table Rocks, students will create their own birds using a variety of art media.
- **Feathered Friends (Grades K-5):** Students investigate bird characteristics by identifying, observing, and predicting bird species and habitat types found in their school yard or on a Table Rock hike. An outdoor space is needed for part of the lesson.

- **Food Web Freeze Tag (Grades 4-8):** This lesson demonstrates the concept of a food chain, a food web, and predator/prey relationships through an active game of tag. There are several possible artistic extensions as well as some variations of the game. A large outdoor space is necessary.

Activity Sheets:

- **Turkey Vulture:** Information and coloring sheet
- **Visitors From the South:** Information and coloring sheet
- **Western Fence Lizard:** Information and coloring sheet
- **Western Rattlesnake:** Information and coloring sheet
- **Wildlife Word Search:** Crossword puzzle with wildlife vocabulary

Activities:

- **Acorn Word Search:** A word search that introduces the importance of acorns to Native Americans.
- **Table Rocks Word Search:** Introduces the formation of the Table Rocks and includes basic vocabulary.

Coloring Books:

- Wildflowers of Table Rocks with identification tips! (Versions in English and Spanish)

Glossary