

OREGON GARDEN

Natural Resources Education Program

LESSONS

Forests are an integral part of the Oregon landscape. With nearly half our state covered by forests, they contribute greatly to our quality of life.

The goal of these four lessons is to enhance students' understanding and appreciation of Oregon's forests. Each lesson guides students in an engaging investigation of forests they can do on their own at home, no matter where they live.

The lessons focus on four topics that are explored in on-site programs at The Oregon Garden's Rediscovery Forest. This demonstration forest, which is managed jointly with the Oregon Forest Resources Institute (OFRI), serves the multiple goals of education, research and public enjoyment.

Oregon Garden Natural Resources Education Program – and the lessons here – focus on four topics:

STANDARDS CONNECTIONS

RELATED STANDARDS

The four lessons help teach toward the following NGSS standards:

NGSS Performance Expectations

- 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

NGSS Disciplinary Core Ideas

- LS1.A: Structure and Function
- LS2.A: Interdependent Relationships in Ecosystems
- ESS3.C: Human Impacts on Earth Systems

NGSS Science and Engineering Practices

- Developing and Using Models
- Planning and Carrying Out Investigations
- Analyzing and Interpreting Data
- Obtaining, Evaluating, and Communicating Information

RELATED OREGON FOREST LITERACY PLAN CONCEPTS

- Theme 1, B.3. As part of the forest ecosystem, trees have various roles (e.g., supplying oxygen, providing habitat, holding soil, moderating temperature, capturing and storing carbon, and cycling water and nutrients).
- Theme 1, C.3. Forest ecosystems include processes such as photosynthesis, energy flow and the cycling of nutrients, water, carbon and other matter.
- Theme 1, D.1. Trees can be classified into genus, family, and species groups based on their seeds, leaves, flowers and other tree parts.
- Theme 2, B.5. Oregon's forests are important ecological systems, interconnected with other systems not only environmentally, but socially and economically. Changes in the conditions and uses of Oregon's forests may affect the conditions and uses of forests worldwide.
- Theme 2, C.1. Oregon's forests provide basic resources that people use every day.

Designed for flexibility

Students may do each lesson:

- completely electronically or in combination with science journals
- as pre-visit preparation or post-visit follow-up to a Rediscovery Forest field trip

Format

Each lesson invites students to explore the lesson topic through videos and other content developed by OFRI. Each lesson also involves students in making direct observations outdoors in their backyard, schoolyard, neighborhood or nearby park.

All lessons include a brief overview to introduce the topic, and simple activities to deepen understanding. They incorporate fillable blanks for recording observations and responses, or they can be used in conjunction with science journals.

The lessons are organized around the 5-E model of science instruction. This model allows students to develop an understanding of science concepts through active engagement and exploration. The 5-E model includes these steps: Engage, Explore, Explain, Elaborate and Evaluate.

Time considerations

Each lesson will take students approximately 45 minutes to complete. Of course, this will vary depending on the students and whether they do some or all of a given lesson.

VISITING THE OREGON GARDEN AND THE REDISCOVERY FOREST

If you would like to bring your class to The Oregon Garden, please sign up for a field trip on the OFRI website: learnforests.org/resource_article/rediscovery-forest-education-program.

If you're interested in visiting The Oregon Garden with your family, check out hours, prices and more information at The Oregon Garden website: oregongarden.org.



Oregon Forest Resources Institute

LearnForests.org