



Oregon Forest Resources Institute

Grades 3–5 Forest Connections: A Correlation of the Oregon Forest Literacy Plan with Other Educational Resources

The [Oregon Forest Literacy Plan](#) gives educators in our forest-rich state a strong foundation for incorporating forest and natural resources in their classrooms and programs, and provides a conceptual framework for teaching about Oregon’s forests. This correlation document helps them further by identifying connections between each of the Oregon Forest Literacy Plan’s 73 concepts and:

- [Oregon Environmental Literacy Plan](#) strands
- [Oregon Science Standards](#) performance expectations
- [Oregon Forest Resource Institute \(OFRI\)](#) materials
- [Project Learning Tree \(PLT\)](#) activities
- [Project WILD](#) activities

Forest Literacy in Grades 3-5

Students in the intermediate years are interested in the natural world, in how things are put together and in how things work. This is a time when their intellectual capabilities expand greatly as they move from a focus on the here and now toward abstract thinking. Students this age work well in groups and enjoy doing collaborative projects. They enjoy problem-solving, sharing ideas and voicing opinions. They also want to be responsible members of the local community.

Forest literacy activities at the intermediate level may focus on:

- What do forest organisms need to survive?
- How are forests and their inhabitants adapted to the Oregon climate and landscape?
- In what ways are forests important to Oregon’s environment, economy and people?

Using trees and forests as the focus, students can practice posing questions for investigations, reasoning about the conclusions and implications, and managing multiple variables. Engaging students in a variety of activities will deepen their understanding of the forest ecosystem on which we all depend.

For more information about forest literacy by grade level, see the Oregon Forest Literacy Plan, available at learnforests.org.

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About the Resources

This document identifies connections between the Oregon Forest Literacy Plan concepts and the following resources for Grades 3-5.

Oregon Environmental Literacy Plan – The goal of the [Oregon Environmental Literacy Plan](#) is to promote environmental literacy, which is defined in the plan as “an individual’s understanding, skills and motivation to make responsible decisions that consider his or her relationships to natural systems, communities and future generations.” The plan identifies five learning strands designed to support the cultivation of environmentally literate students and to integrate learning experiences inside and outside the classroom.

The following table outlines what environmentally literate students should know at each grade level. For more information about the Oregon Environmental Literacy Plan, see oelp.oregonstate.edu.

Grade-Level Progression for Environmentally Literate K-12 Students		
Elementary	Middle School	High School
Know they have influence on their environment and community by the way that they care for themselves, others and places.	Are gaining a sense of self in their natural and human community, including their impact on others in those systems. Are able to discuss issues, take in multiple perspectives, back up personal opinions with evidence, and distinguish between opinion and fact.	Are inspired to be lifelong learners, stewards and enthusiasts of the natural world. Are prepared to make informed decisions that consider the economic, social and environmental impacts of issues using credible evidence.

Source: Standards Integration: A Framework for Incorporating NGSS, Social Sciences and Environmental Literacy into Classroom Curriculum. Oregon State University Extension Service

Oregon Science Standards (PEs) – Oregon Science Standards identify expectations for what students should be able to do by the end of the year or grade band. Adapted from the Next Generation Science Standards (NGSS), these Performance Expectations (PEs) also incorporate three dimensions of science: disciplinary core ideas, science and engineering practices, and crosscutting concepts. For more information, see oregon.gov/ode.

OFRI Materials – A variety of publications and videos from OFRI help to strengthen forest literacy. They provide information and learning activities to support K-12 teachers and their students in learning about the environment. See learnforests.org to order or download these free materials.

PLT Activities – Relevant activities are identified from PLT’s *Explore Your Environment: K-8 Activity Guide* (EYE), the *Energy in Ecosystems* e-unit (EU), and the older *PreK-8 Environmental Education Activity Guide* (PK8). Educators can receive these activity guides by participating in a PLT professional development event. For more details, contact the Oregon Natural Resources Education Program at 541-737-9121 or onrep@oregonstate.edu.

Project WILD Activities – Relevant activities are identified from the *Project WILD K-12 Curriculum and Activity Guide*. Educators can receive this guide by participating in a Project WILD workshop. For more details, contact the Oregon Natural Resources Education Program at 541-737-9121 or onrep@oregonstate.edu.

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Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
1.A.1. A forest is an ecosystem dominated by trees, and includes a variety of other organisms.	2) Physical, living and human systems		Explore the Forest Forest Fact Break: Ecosystems (v) Into the Forest Investigate the Forest Sounds of the Forest	EYE: Charting Biodiversity Discover Diversity Poet-Tree PK8: 5: Poet-Tree 6: Picture This! 8: The Forest of S.T. Shrew 10: Charting Diversity 22: Trees as Habitat 49: Tropical Treehouse EU: Energy in Ecosystems	
1.A.2. Different forest biomes exist around the world. Examples include tropical forests, temperate forests and boreal forests. Oregon is in the temperate forest biome.	2) Physical, living and human systems			PK8: 49: Tropical Treehouse	
1.A.3. Many different forest types exist within a biome, typically named by their dominant tree species. Common forest types in Oregon include spruce-hemlock, Douglas-fir, ponderosa pine, mixed conifer, and juniper.	2) Physical, living and human systems		Forest Essays, Grades 2-3 Forest Fact Break: Forest Types (v) Into the Forest Investigate the Forest Oregon's Forests (poster)	EYE: Soil Builders Tree ID PK8: 8: The Forest of S.T. Shrew 68: Name That Tree 70: Soil Stories	
1.A.4. Woodlands, such as oak savannas, are areas with trees that are less dense than forests but function similarly.	2) Physical, living and human systems		Forest Essays, Grades 2-3 Forest Fact Break: Forest Types (v) Into the Forest Investigate the Forest Oregon's Forests (poster)	EU: Energy in Ecosystems	
1.A.5. An urban forest is a type of forest that includes all the publicly and privately owned trees within a city, town, or suburb working together as an ecosystem.	2) Physical, living and human systems			EYE: Adopt a Tree Trees in Trouble PK8: 30: Three Cheers for Trees 56: We Can Work It Out 77: Trees in Trouble	

* OFRI materials marked with a (v) are videos.

** Activities are from *Explore Your Environment: K-8 Activity Guide* (EYE), the *Energy in Ecosystems e-unit* (EU), and *PreK-8 Environmental Education Activity Guide* (PK8).

*** Activities are from *Project WILD K-12 Curriculum & Activity Guide*.

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1.B.1. A tree is a woody perennial plant, usually more than 12 feet (4 meters) tall at maturity, with a single main stem and a more or less distinct crown of leaves or needles.	2) Physical, living and human systems		Explore the Forest Forest Fact Break: Tree Biology (v) Into the Forest Investigate the Forest	EYE: Adopt a Tree Tree Cookies Tree Factory Tree ID PK8: 3: Peppermint Beetle 21: Adopt a Tree 62: To Be a Tree 63: Tree Factory 64: Looking at Leaves 76: Tree Cookies	
1.B.2. Trees can be identified based on seeds, leaves, flowers, bark, shape and other parts. They are classified into genus, family and species groups.	1) Systems thinking		Explore the Forest Into the Forest Investigate the Forest	EYE: Nature's Skyscrapers Tree Factory Tree ID PK8: 6: Picture This! 43: Have Seeds, Will Travel 61: The Closer You Look 62: To Be a Tree 63: Tree Factory 64: Looking at Leaves 65: Bursting Buds 66: Germinating Giants 68: Name That Tree	
1.B.3. Trees are generally categorized as broadleaf (having broad, flat leaves and producing seeds in fruits, flower or nuts) or conifer (having needle-like or scale-like leaves and producing seeds in cones).	2) Physical, living and human systems		Explore the Forest Into the Forest Investigate the Forest	EYE: Nature's Skyscrapers Tree ID PK8: 43: Have Seeds, Will Travel 64: Looking at Leaves 65: Bursting Buds 68: Name That Tree	
1.B.4. Trees have life stages that include seed germination, growth, maturity, reproduction, decline and death.	2) Physical, living and human systems	3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.	Forest Essays, Grades 4-5 Explore the Forest	EYE: Every Tree for Itself Here We Grow Again Nature's Skyscrapers Tree Factory Tree ID (EYE)	Limiting Factors: How Many Bears?

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		<p>(Somewhat relevant) 3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.</p> <p>(Somewhat relevant) 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.</p>		<p>PK8: 27: Every Tree for Itself 41: How Plants Grow 65: Bursting Buds 66: Germinating Giants 76: Tree Cookies 77: Trees in Trouble 79: Tree Lifecycle</p> <p>EU: Energy in Ecosystems</p>	
1.B.5. As part of the forest ecosystem, trees have many roles (e.g., supplying oxygen, providing habitat and food, holding soil, moderating temperature, capturing and storing carbon, and cycling water and nutrients). They may have different roles at different life stages.	2) Physical, living and human systems	5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	<p>Explore the Forest Forest Essays, Grades 2-3 Forest Essays, Grades 4-5 Forest Fact Break: Water (v) Forest Fact Break: Carbon Capture (v) Forest Fact Break: Ecosystems (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest Tree Carbon Tape</p>	<p>EYE: A Tree's Life Fallen Log Plant a Tree Soil Builders Tree Factory Water Wonders Web of Life)</p> <p>PK8: 4: Water Wonders 45: Web of Life 63: Tree Factory 70: Soil Stories 79: Tree Lifecycle 2: Get in Touch with Trees 23: The Fallen Log 28: Air Plants 31: Plant a Tree 44: Water Wonders 45: Web of Life 63: Tree Factory 70: Soil Stories 79: Tree Lifecycle</p> <p>EU: Energy in Ecosystems</p>	Which Niche?

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1.B.6. Trees have complex relationships with other organisms. They may compete or cooperate with each other and with other organisms for nutrients, sunlight, space and water.	2) Physical, living and human systems		Forest Fact Break: Water (v) Into the Forest Investigate the Forest	EYE: Every Tree for Itself Here We Grow Again Life on the Edge PK8: 27: Every Tree for Itself 41: How Plants Grow 88: Life on the Edge EU: Energy in Ecosystems	
1.B.7. Tree health is affected by many factors, including competition (for space, light, water and nutrients), climate, weather, natural and human-caused disturbances, pests and disease, as well as human interventions.	2) Physical, living and human systems		Explore the Forest Forest Fact Break: Ecosystems (v) Forest Fact Break: Sustainability (v) Investigate the Forest	EYE: Here We Grow Again Nature's Skyscrapers Trees in Trouble PK8: 4: Sounds Around 26: Dynamic Duos 36: Pollution Search 41: How Plants Grow 67: How Big Is Your Tree? 77: Trees in Trouble EU: Energy in Ecosystems	Environmental Barometer
1.C.1. Forest ecosystems consist of different types of living organisms and nonliving components, both above and below ground, interacting within a given environment, space and time.	2) Physical, living and human systems	(Somewhat relevant) 3-LS2-1. Construct an argument that some animals form groups that help members survive.	Explore the Forest Forest Essays, Grades 2-3 Forest Essays, Grades 4-5 Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest Sounds of the Forest	EYE: Adopt a Tree Charting Biodiversity Discover Diversity Field, Forest, and Stream Soil Builders PK8: 9: Planet Diversity 11: Can It Be Real? 18: Tale of the Sun 21: Adopt a Tree 22: Trees as Habitat 23: The Fallen Log 25: Birds and Worms 26: Dynamic Duos 46: Schoolyard Safari 47: Are Vacant Lots Vacant?	

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** Activities are from *Explore Your Environment: K-8 Activity Guide* (EYE), the *Energy in Ecosystems e-unit* (EU), and *Pre-K-8 Environmental Education Activity Guide* (PK8).

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				48: Field, Forest, and Stream 70: Soil Stories 78: Signs of Fall EU: Energy in Ecosystems	
1.C.2. Forest ecosystems include processes such as photosynthesis, energy flow and the cycling of nutrients, water, carbon and other matter. Energy and matter are transferred between producers, consumers and decomposers.	2) Physical, living and human systems	5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Explore the Forest Forest Essays, Grades 2-3 Forest Essays, Grades 4-5 Forest Fact Break: Photosynthesis (v) Forest Fact Break: Water (v) Forest Fact Break: Carbon Capture (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest	EYE: Exploration Energy! Fallen Log Soil Builders Every Tree for Itself Here We Grow Again Water Wonders Web of Life Field, Forest, and Stream 16: Pass the Plants, Please PK8: 23: The Fallen Log 24: Nature's Recyclers 27: Every Tree for Itself 28: Air Plants 39: Energy Sleuths 42: Sunlight and Shades of Green 44: Water Wonders 45: Web of Life 48: Field, Forest, and Stream EU: Energy in Ecosystems	Owl Pellets Trophic Transfer
1.C.3. Forest ecosystems are complex and dynamic, and continuously undergo change or adaptation, ranging from gradual change (e.g., succession and climate) to abrupt change (e.g., fire and disease).	2) Physical, living and human systems	3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	Explore the Forest Forest Essays, Grades 2-3 Forest Essays, Grades 4-5 Forest Fact Break: Fire (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest	EYE: Birds and Bugs Charting Biodiversity Discover Diversity Nothing Succeeds Like Succession Signs of Fall Web of Life PK8: 80: Nothing Succeeds Like Succession 81: Living with Fire 86: Our Changing World 3: Peppermint Beetle	Time Lapse

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				10: Charting Diversity 11: Can It Be Real? 12: Invasive Species 25: Birds and Worms 26: Dynamic Duos 45: Web of Life 65: Bursting Buds 78: Signs of Fall 80: Nothing Succeeds Like Succession 81: Living with Fire 86: Our Changing World EU: Energy in Ecosystems	
1.C.4. Disturbance events are a part of forest ecosystems. These events may be natural (e.g., wind and disease outbreaks), human-caused (e.g., harvesting timber and development) or a combination of both (e.g., fire). Disturbance events can change the makeup of the forest because different tree species respond differently to different types of events.	2) Physical, living and human systems 3) Interconnectedness of people and the environment		Explore the Forest Forest Fact Break: Fire (v) Forest Fact Break: Fire Safety (v) Investigate the Forest	EYE: Life on the Edge Nothing Succeeds Like Succession Tree Cookies Trees in Trouble PK8: 69: Forest for the Trees 76: Tree Cookies 77: Trees in Trouble 80: Nothing Succeeds Like Succession 81: Living with Fire 88: Life on the Edge EU: Energy in Ecosystems	Smokey Bear Said What?
1.C.5. Wildfire plays major roles in Oregon's forest ecosystems, including opening the forest canopy to sunlight and creating new habitat. Many forest plants and trees have adapted to wildfire, and some species cannot survive without it.	2) Physical, living and human systems 3) Interconnectedness of people and the environment		Explore the Forest Forest Fact Break: Fire (v) Forest Fact Break: Fire Safety (v)	EYE: Life on the Edge Living with Fire Nothing Succeeds Like Succession PK8: 80: Nothing Succeeds Like Succession 81: Living with Fire 88: Life on the Edge EU: Energy in Ecosystems	Smokey Bear Said What?

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Theme 1, C.6. Forests are interconnected with other terrestrial ecosystems (e.g., grasslands, meadows and agricultural lands) and aquatic (e.g., estuaries, riparian areas and wetlands).	2) Physical, living and human systems		Forest Essays, Grades 4-5 Inquiry at Hinkle Creek (v)	EYE: Water Wonders PK8: 7: Habitat Pen Pals (maybe) 20: Environmental Exchange Box 44: Water Wonders 86: Our Changing World	
1.C.7. Oregon's regions vary in soil types, elevation, topography, temperature, wind and rainfall patterns. These variations create the different forest types and species composition that, together with disturbance histories, contribute to the region's biodiversity.	2) Physical, living and human systems		Forest Essays, Grades 2-3 Forest Fact Break: Forest Types (v) Into the Forest Investigate the Forest Oregon's Forests (poster)	EYE: Charting Biodiversity Discover Diversity PK8: 7: Habitat Pen Pals 9: Planet Diversity 10: Charting Diversity 20: Environmental Exchange Box 27: Every Tree for Itself	
1.C.8. Climate change may affect Oregon's forest ecosystems in many ways, such as more frequent and intense fires, severe weather events, increased insect outbreaks, and changes in species composition.	2) Physical, living and human systems 3) Interconnectedness of people and the environment		investigate the Forest		
2.A.1. Forests improve air and water quality, and help stabilize soil.	2) Physical, living and human systems		Explore the Forest Forest Fact Break: Water (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest	EYE: Fallen Log Soil Builders Water Wonders PK8: 2: Get in Touch with Trees 4: Sounds Around 23: The Fallen Log 28: Air Plants 44: Water Wonders	HabiCache
2.A.2. Forests provide habitat for fish and wildlife. Many species depend on forest habitats for their survival.	2) Physical, living and human systems		Explore the Forest Forest Essays, Grades 2-3 Forest Essays, Grades 4-5 Forest Fact Break: Wildlife (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest Life in the Forest	EYE: Backyard Safari Birds and Bugs Fallen Log Soil Builders PK8: 1: The Shape of Things	Graphananimal HabiCache Habitat Circles My Kingdom for a Shelter What's That, Habitat?

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			Sounds of the Forest	6: Picture This! 7: Habitat Pen Pals 8: The Forest of S.T. Shrew 22: Trees as Habitat 23: The Fallen Log 24: Nature's Recyclers 25: Birds and Worms 26: Dynamic Duos 46: Schoolyard Safari 49: Tropical Treehouse EU: Energy in Ecosystems	
2.A.3. Forests sequester carbon from the atmosphere and are an essential component of the global carbon cycle.	2) Physical, living and human systems	5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water. 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Explore the Forest Forest Fact Break: Carbon Capture (v) Into the Forest Investigate the Forest Tree Carbon Tape		
2.A.4. Forests help mitigate the effects of climate change by storing carbon and regulating air temperature and water flow.	2) Physical, living and human systems	5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water. 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Explore the Forest Forest Fact Break: Carbon Capture (v) Into the Forest Investigate the Forest Tree Carbon Tape	PK8: 13: We All Need Trees	
2.A.5. Oregon's forests are important ecological systems that are interconnected with other ecosystems.	2) Physical, living and human systems	5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Explore the Forest Forest Essays, Grades 4-5	PK8: 86: Our Changing World 95: Did You Notice? EU: Energy in Ecosystems	

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2.B.1. Forests provide multiple economic benefits, including jobs, a source of forest products and business opportunities (e.g., recreation and tourism).	3) Interconnectedness of people and the environment	4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Explore the Forest Forest Essays, Grades 4-5 Forest Fact Break: Carbon Capture (v) Forest Fact Break: Green Building (v) Forest Fact Break: Wood Products (v) Forest Team Go (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest	EYE: Make Your Own Paper Peek at Packaging We All Need Trees PK8: 13: We All Need Trees 15: A Few of My Favorite Things 32: A Forest of Many Uses 34: Who Works in this Forest? 39: Energy Sleuths 51: Make Your Own Paper 75: Tipi Talk 82: Resource-Go-Round 83: A Peek at Packaging	
2.B.2. Oregon's forest sector is one of the state's largest economic sectors. It provides living-wage employment that is important for all communities, particularly in rural areas of Oregon.	3) Interconnectedness of people and the environment	4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Forest Fact Break: Green Building (v) Forest Fact Break: Wood Products (v)	EYE: Make Your Own Paper Peek at Packaging We All Need Trees PK8: 15: A Few of My Favorite Things 20: Environmental Exchange Box 51: Make Your Own Paper 75: Tipi Talk 82: Resource-Go-Round	
2.B.3. Forests and forest products are important components of Oregon's green economy, which supports sustainable and efficient resource use. Forests are a renewable resource, and forest products store carbon and are also reusable and recyclable.	3) Interconnectedness of people and the environment	5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.	Forest Fact Break: Carbon Capture (v) Forest Fact Break: Green Building (v) Forest Fact Break: Wood Products (v) Tree Carbon Tape	EYE: Make Your Own Paper Peek at Packaging Reduce, Reuse, Recycling Renewable or Not? Trees for Many Reasons We All Need Trees PK8: 13: We All Need Trees 14: Renewable or Not? 15: A Few of My Favorite Things 51: Make Your Own Paper 82: Resource-Go-Round	
2.B.4. Financial gains, economic benefits and returns on investment help incentivize forest landowners to keep their land as	3) Interconnectedness of people and the environment				

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forestlands and prevent the loss of forests to other uses.					
2.B.5. Oregon's forest sector is innovative and changing, contributing to scientific research and new product development (e.g., mass timber, medical products and nanotechnology).	3) Interconnectedness of people and the environment		Forest Fact Break: Green Building (v) Forest Fact Break: Wood Products (v)		Sustainability: Then, Now, Later
2.C.1. Forests have been central to the region's history and are an integral part of Oregon as we know it today.	3) Interconnectedness of people and the environment	4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Explore the Forest Forest Essays, Grades 4-5	EYE: Trees for Many Reasons PK8: 40: Then and Now 75: Tipi Talk 90: Native Ways 93: Paper Civilizations	
2.C.2. Forests have always been – and continue to be – important to people who live on the land and within forest-dependent communities, including Indigenous peoples.	3) Interconnectedness of people and the environment	4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	Explore the Forest Forest Essays, Grades 4-5 Investigate the Forest	PK8: 17: People of the Forest 40: Then and Now 75: Tipi Talk 90: Native Ways 93: Paper Civilizations	
2.C.3. Forests provide many valuable benefits for Oregon communities, including clean water, fresh air, forest products, wildlife habitat and employment.	3) Interconnectedness of people and the environment		Life in the Forest	EYE: Make Your Own Paper My Green Future Peek at Packaging Trees for Many Reasons Trees as Habitats PK8: 8: The Forest of S.T. Shrew 13: We All Need Trees 15: A Few of My Favorite Things 17: People of the Forest 22: Trees as Habitats 28: Air Plants 30: Three Cheers for Trees 34: Who Works in this Forest? 51: Make Your Own Paper 82: Resource-Go-Round	

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2.C.4. Forests provide a variety of foods through hunting or foraging, including deer, elk, salmon, berries and nuts. These traditional forest foods are known as “first foods” by Indigenous people.	3) Interconnectedness of people and the environment		Life in the Forest	EYE: Signs of Fall	
2.C.5. Forests provide places for people to socialize, learn, recreate and enhance both physical and mental well-being.	3) Interconnectedness of people and the environment				
2.C.6. Forests have religious, spiritual and cultural significance for many groups and individuals.	3) Interconnectedness of people and the environment				
3.A.1. For thousands of years, all Oregon forests were Indigenous lands. Federal laws and policies led to the displacement of the Indigenous peoples from these lands.	3) Interconnectedness of people and the environment				
3.A.2. The history of forest ownership in Oregon shapes our forests and how they are managed.	3) Interconnectedness of people and the environment				
3.A.3. Today, the size and scale of forest ownership can vary from hundreds of thousands of acres in a national forest to an individual patch of trees in an urban forest.	2) Physical, living and human systems				
3.A.4. Oregon’s forests are managed under private (e.g., family and industrial), public (e.g., state and federal) and tribal ownership. Each type of ownership may have different management objectives and is subject to different laws and policies. Management objectives	3) Interconnectedness of people and the environment			PK8: 69: Forest for the Trees	

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may even differ within classes of ownership.					
3.A.5. Many forest landscapes are made up of a variety of ownerships, a mix of management objectives, and a blend of forest ecosystems.	2) Physical, living and human systems			EYE: Tree ID PK8: 68: Name That Tree	
3.A.6. Oregon's forestlands cross natural boundaries (e.g., watersheds) and human-designed boundaries (e.g., property lines), as do disturbances that affect the forest, such as fire.	3) Interconnectedness of people and the environment		Forest Essays, Grades 4-5 Forest Fact Break: Fire Safety Inquiry at Hinkle Creek (v)	EYE: Living with Fire PK8: 81: Living with Fire	3) Interconnectedness of people and the environment
3.B.1. Forest management is a long-term process that can lead to changes in tree species composition, size and age, as well as in forest health and resilience.	3) Interconnectedness of people and the environment	3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	Forest Fact Break: Forest Management (v) Into the Forest Investigate the Forest	EYE: Every Tree for Itself Nothing Succeeds Like Succession PK8: 80: Nothing Succeeds Like Succession	
3.B.2. From time immemorial, Indigenous people of Oregon have used fire and other practices such as girdling trees and land clearing to manage the forest. Their traditional ecological knowledge of Oregon's forests informs forest management practices that sustain forests.	3) Interconnectedness of people and the environment		Forest Fact Break: Forest Management (v) Investigate the Forest	PK8: 17: People of the Forest	
3.B.3. Forest management ranges from active management (e.g., planting, thinning, and harvesting) to passive management (e.g., reserves and wilderness areas) to grow, restore, maintain, conserve or alter forests.	3) Interconnectedness of people and the environment		Forest Fact Break: Clearcutting (v) Forest Fact Break: Forest Management (v) Forest Fact Break: Reforestation (v) Inquiry at Hinkle Creek (v) Into the Forest Investigate the Forest	EYE: Every Tree for Itself Plant a Tree PK8: 31: Plant a Tree 69: Forest for the Trees	

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Grades 3–5 Forest Connections

Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
3.B.4. Forest management includes using natural processes and goal-oriented decisions and actions to achieve a variety of desired outcomes, including environmental (e.g., improving wildlife habitat and carbon sequestration), economic (e.g., timber production), and social (e.g., recreation) outcomes. Many of these outcomes are interrelated and can be managed for simultaneously, while others may be incompatible.	3) Interconnectedness of people and the environment	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Forest Fact Break: Forest Management (v) Tree Carbon Tape	EYE: Every Tree for Itself PK8: 32: A Forest of Many Uses	Bat Blitz
3.B.5. In Oregon, forest management is regulated by both state and federal laws. Private and state forests must comply with the Oregon Forest Practices Act, which aims to sustain forest land for timber production and the other benefits forests provide, including clean water, stable soil and wildlife habitat.	3) Interconnectedness of people and the environment		Forest Fact Break: Sustainability (v) Forest Fact Break: Water (v) Into the Forest	EYE: Our Federal Forests	
3.B.6. Many private landowners participate in third-party forest certification to demonstrate that their forests are managed sustainably and meet criteria for environmental, economic and social outcomes.	3) Interconnectedness of people and the environment			EYE: What's in a Label?	
3.B.7. As human populations and global demand for forest resources increase, forest management and advances in research and technological systems can help to ensure forest resources are maintained or improved to produce the desired values and products.	3) Interconnectedness of people and the environment		Life in the Forest	EYE: Renewable or Not? PK8: 14: Renewable or Not? 15: A Few of My Favorite Things	

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Grades 3–5 Forest Connections

Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
3.C.1. A variety of individuals, companies, organizations, governments and agencies manage forests. Forest management decisions may involve some or all these working collaboratively to ensure mutually beneficial outcomes.	3) Interconnectedness of people and the environment		Find Your Path (v) Forest Team Go (v)	PK8: 34: Who Works in this Forest?	
3.C.2. Forest resource professionals aim to meet environmental, economic and social needs. They use scientific data and traditional ecological knowledge to inform their management decisions.	3) Interconnectedness of people and the environment		Find Your Path (v) Forest Team Go (v) Life in the Forest	PK8: 17: People of the Forest	
3.C.3. The type and intensity of forest management is dependent on the purposes for which the forest is managed, as well as forest type, ownership, size and location.	3) Interconnectedness of people and the environment		Into the Forest Investigate the Forest	PK8: 32: A Forest of Many Uses	
3.C.4. Oregon foresters and forest managers prepare forest management plans based on landowner goals and objectives, capacities of the forest site, laws and available management tools (e.g., planting, harvesting and using prescribed fire). The plans guide management decisions, and are often required for funding applications or documentation for forest certification.	3) Interconnectedness of people and the environment		Forest Fact Break: Fire Forest Fact Break: Clearcutting (v) Investigate the Forest		Smokey Bear Said What?
3.C.5. The public empowers governments to conserve, maintain and sustain forest resources by enacting laws, creating policies, establishing agencies, creating public lands, and providing management guidelines and continuing education for forest landowners.	3) Interconnectedness of people and the environment	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.		PK8: 54: I'd Like to Visit a Place Where... 58: There Ought to Be a Law	

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Grades 3–5 Forest Connections

Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
3.C.6. Government has a role in actively engaging organizations, businesses, communities and individuals in forest management and policy decisions for publicly owned forests. Collaboratives (partnerships among forest stakeholders) are increasingly used in making public land management decisions.	3) Interconnectedness of people and the environment			PK8: 57: Democracy in Action 58: There Ought to Be a Law	
3.C.7. Sustainable forest management takes into account environmental, economic and social dimensions of sustainability. It includes maintaining forest health, productivity and diversity, and maintaining a forested land base for the needs of present and future generations.	3) Interconnectedness of people and the environment	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Forest Fact Break: Sustainability Inquiry at Hinkle Creek (v)	PK8: 12: Invasive Species	
3.C.8. Forest management decisions that both respect Indigenous peoples' rights and incorporate their traditional ecological knowledge can help ensure a sustainable future for forests.	3) Interconnectedness of people and the environment				
3.C.9. Changing public demands and expectations for the forest, as well as unanticipated events, affect decisions about forest resource use. This requires sound management based on scientific research, economic analysis and public involvement.	3) Interconnectedness of people and the environment	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Inquiry at Hinkle Creek (v) Life in the Forest	PK8: 32: A Forest of Many Uses	3) Interconnectedness of people and the environment
3.C.10. Climate change is an increasing factor in forest management decisions. Some forest types and tree species are particularly vulnerable to changes in climate, and considerations include species to grow, harvest method to use, and spacing of trees and competing vegetation. Managing forests for increased	3) Interconnectedness of people and the environment		Forest Fact Sheet: Carbon & Climate Tree Carbon Tape	EYE: Decisions, Decisions	

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Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
carbon sequestration is also becoming more prevalent.					
3.D.1. People have differing perspectives on forests and forest management, which can be affected by cultural background and personal experiences, as well as by values, politics, science and economics. Their perspectives can change over time.	3) Interconnectedness of people and the environment			PK8: 5: Poet-Tree 32: A Forest of Many Uses 60: Publicize It! 90: Native Ways	3) Interconnectedness of people and the environment
3.D.2. Forestry practices can be controversial because of diverse perspectives as well as the complex nature of forest ecosystems.	3) Interconnectedness of people and the environment			PK8: 32: A Forest of Many Uses	3) Interconnectedness of people and the environment
3.D.3. Oregon has had a history of conflict over forest management issues. For example, conflicts have arisen over the preservation of ancient or old-growth forests, the protection of endangered species, and whether logging is appropriate on public lands.	3) Interconnectedness of people and the environment			EYE: Decisions, Decisions	
3.D.3. Current issues related to forest management include the effects of timber harvest, wildfire, climate change and land uses, as well as the perception of these effects.	3) Interconnectedness of people and the environment	3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	Forest Fact Break: Clearcutting (v) Forest Fact Sheet: Carbon & Climate	EYE: Life on the Edge PK8: 32: A Forest of Many Uses 81: Living with Fire 86: Our Changing World 88: Life on the Edge	Keeping Cool
3.D.4. Making sure to involve multiple perspectives in decision-making, especially with regard to Oregon's public forest lands, can lead to more effective problem-solving and result in more sustainable outcomes.	4) Personal and civic responsibility			PK8: 60: Publicize It!	
4.A.1. People have a reciprocal and complex relationship with forests: We both affect and are affected by forests.	3) Interconnectedness of people and the environment		Into the Forest Investigate the Forest	EYE: Trees for Many Reasons	

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Grades 3–5 Forest Connections

Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
4.A.2. Everyone should have the opportunity to identify and explore their personal and cultural relationships with forests, and to spend time in forests. Accommodations such as paved paths, multi-language signage, and proximity public transportation help to ensure access to forests for all.	4) Personal and civic responsibility			EYE: Adopt a Tree Plant a Tree Poet-Tree PK8: 2: Get in Touch with Trees 4: Sounds Around 5: Poet-Tree 7: Habitat Pen Pals 18: Tale of the Sun 21: Adopt a Tree 30: Three Cheers for Trees 31: Plant a Tree 54: I'd Like to Visit a Place Where... 61: The Closer You Look	Animal Poetry Learning to Look, Looking to See Nature in Art
4.A.3. There are many ways individuals can deepen our relationship with forests in Oregon, including learning about forests, recreating in forests, volunteering for projects in and around forests, and recognizing the ways forests enhance our lives.	4) Personal and civic responsibility		Forest Essays, Grades 2-3 Forest Essays, Grades 4-5	EYE: Improve Your Place Peek at Packaging Plant a Tree Trees for Many Reasons PK8: 54: I'd Like to Visit a Place Where... 83: A Peek at Packaging 89: Trees for Many Reasons 96: Improve Your Place	
4.A.4. We can look to forests to help us address some of the challenges our society faces, including climate change, biodiversity loss, wildfire and human health issues.	3) Interconnectedness of people and the environment	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Investigate the Forest	EYE: Decisions, Decisions Improve Your Place Life on the Edge	
4.B.1. Everyone has a responsibility to treat forests with respect, and to be a conscientious steward of forests and forest resources.	4) Personal and civic responsibility	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Forest Essays, Grades 2-3 Forest Essays, Grades 4-5 Into the Forest Investigate the Forest Sounds of the Forest	EYE: Decisions, Decisions Improve Your Place Peek at Packaging Plant a Tree Reduce, Reuse, Recycle Renewable or Not? Trees in Trouble PK8:	Habitat Heroes Sustainability: Then, Now, Later

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Grades 3–5 Forest Connections

Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
				36: Pollution Search 37: Reduce, Reuse, Recycle 38: Every Drop Counts 57: Democracy in Action 87: Earth Manners 96: Improve Your Place	
4. B.2. Personal behaviors and actions directly impact the health and resiliency of our forests. Our consumer choices and investments, how we interact with the land (e.g., trails, campgrounds and forest habitat), how we use or conserve water, and how we use fire can either harm or help forests.	4) Personal and civic responsibility	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Forest Essays, Grades 4-5 Explore the Forest Into the Forest	EYE: Decisions, Decisions Improve Your Place Peek at Packaging Plant a Tree Reduce, Reuse, Recycle Renewable or Not? Trees in Trouble PK8: 14: Renewable or Not? 15: A Few of My Favorite Things 30: Three Cheers for Trees 31: Plant a Tree 36: Pollution Search 54: I'd Like to Visit a Place Where... 81: Living with Fire 87: Earth Manners 96: Improve Your Place EU: Energy in Ecosystems	Habitat Heroes
4.B.3. As individuals or as members of groups, we influence laws and policies affecting Oregon's forests. Individuals can have their say by voting, working with community officials, joining organizations that advocate for forests and weighing in when public opinion is sought.	5) Investigate, plan and create a sustainable future	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.		EYE: Improve Your Place	
4.B.4. By learning about the objectives for and perspectives on forest management at local, national and global levels, individuals can better engage in conversations and actions to sustain forests.	5) Investigate, plan and create a sustainable future	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Investigate the Forest Forest Fact Break: Forest	EYE: Improve Your Place Plant a Tree	Sustainability: Then, Now, Later

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Grades 3–5 Forest Connections

Oregon Forest Literacy Plan Concepts	Oregon Environmental Literacy Strands	Oregon Science Standards (PEs)	OFRI Materials*	PLT Activities**	Project WILD Activities***
4.B.5. We need a variety of professionals and skilled workers to sustain our forests, including foresters, scientists, engineers, lawyers, information technology professionals, land managers, investors, educators, communications specialists, fire fighters, loggers, tree planters, truck drivers, mechanics and wood products manufacturers. Resources are available to learn about these valuable and rewarding careers.	5) Investigate, plan and create a sustainable future	5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Find Your Path (v) Forest Fact Break: Forest Forest Team Go (v)	PK8: 34: Who Works in this Forest?	

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