

# Making Forest Connections — Grades K-2



## **Making Forest Connections: A Correlation of the Washington Forest Education K-12 Learning Framework with Other Educational Resources**

### **Grades K-2**

The Washington Forest Education K-12 Learning Framework 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 Washington's forests. This correlation document helps them further by identifying connections between each of the Washington Forest Education K-12 Learning Framework's 62 concepts and:

- [Next Generation Science Standards \(NGSS\)](#) performance expectations
- [Project Learning Tree \(PLT\)](#) activities
- Pacific Education Institute Resources
- [Project WILD](#) activities
- Other resources

#### **Forest Education in Grades K-2**

Primary students are active explorers and are naturally curious about their world. They learn best through direct discovery in hands-on experiences that engage the five senses. During the primary years, students develop the ability to approach the world logically, with an increasing capacity to use abstract reasoning. Students in urban and suburban areas may never have seen a forest firsthand and may have preconceived notions about forests based on stories or movies.

Forest framework activities at this level should aim to introduce students to trees and forests, focusing on:

- What is a forest?
- Who lives in forests?
- What can we do to help forests?

Giving students opportunities to be keen observers will provide them with a strong foundation for becoming both good scientists and critical thinkers. Simple investigations both inside and outside the classroom will help them learn to analyze results and apply their understanding to new situations. Collecting and categorizing natural objects, and other hands-on activities, will help acquaint them with the natural world in general — and with Washington's forests.

For more information about the forest learning framework by grade level, see the [Washington Forest Education K-12 Learning Framework](#).

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## About the Resources

This document identifies connections between the Washington Forest Education K-12 Learning Framework and the following resources for Grades K-2.

**NGSS Performance Expectations** – NGSS standards identify expectations for what students should be able to do by the end of the year or grade band. These performance expectations also incorporate three dimensions of science: disciplinary core ideas, science and engineering practices, and cross-cutting concepts. For more information, see [www.nextgenscience.org](http://www.nextgenscience.org).

**Project Learning Tree (PLT) Activities** – Relevant activities are identified from PLT's *PreK-8 Environmental Education Activity Guide*. **Bolded** activities are the most relevant. Activities in **red** represent updates found in PLT's *Explore Your Environment K-8 Activity Guide*, published in 2021. Educators can receive these curriculum guides by attending a PLT professional development. For more details, contact the Pacific Education Institute.

**Pacific Education Institute (PEI) Resources** – A variety of guides, lessons, and videos from PEI help to strengthen the Washington Forest Education K-12 Learning Framework. They provide information and learning activities to support K-12 teachers and their students in learning about forests.

- PEI Guides
- ELA and Math Performance Tasks
- Forests of Washington Lessons
- PLT extension activities
- K-3 Schoolyard Investigations
- Career Profile Cards
- Solution Oriented Learning Storylines (SOLS)

Resources available for download at <https://pacificeducationinstitute.org/>.

**Project WILD Activities** – Relevant activities are identified from the *Project WILD K-12 Curriculum and Activity Guide*. Educators can receive this guide by attending a Project WILD workshop. For more details, contact the Pacific Education Institute.

**Oregon Forests Resources Institute (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.

For more information on receiving these free resources go to: [oregonforests.org](http://oregonforests.org).

## Acknowledgements

This correlation was supported by a Project Learning Tree Model Program Initiative grant from the Sustainable Forestry Initiative. We appreciate the hard work of the Oregon Forest Resources Institute (OFRI) to create such valuable forest education resources and their generosity in sharing them with others to adapt and use. Thank you to Pat Otto, former PLT WA State Coordinator and PEI Education Manager for adapting these correlations for use by Washington educators. Her forest education expertise and work to create locally relevant materials is an invaluable resource and we are grateful.

# Making Forest Connections — Grades K-2 Washington

Theme 1: What is a Forest?					
Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities (Title and Location in <i>Explore Your Environment K-8</i> are in red)	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Definition of a Forest</b></p> <p>1. Forests are ecosystems characterized by a dominance of tree cover and the presence of a wide variety of other organisms (e.g., other plants and animals).</p> <p>2. Forests are comprised of trees that may differ in species, age and size, and are affected by biotic factors (e.g., plants, animals and humans) and abiotic factors (e.g., soils, nutrients, moisture, sunlight and climate).</p> <p>3. Urban forests include all the publicly and privately owned trees within a city, town, or suburb working together as an ecosystem.</p>	<p>K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.</p> <p>K-ESS3.1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the place they live.</p> <p>2-LS-1 Make observations of plants and animals to compare the diversity of life in different habitats</p>	<p><b>1: The Shape of Things</b>                  2: Get in Touch with Trees                  4: Sounds Around  <b>8: The Forest of S.T. Shrew</b>                  20: Environmental Exchange Box  <b>22: Trees as Habitat (p. 76)</b>  <b>23: Fallen Log (p. 116)</b>                  30: Three Cheers for Trees                  41: How Plants Grow (Here We Grow Again, p. 57)  <b>46: Schoolyard Safari -Forest Safari (Backyard Safari, p. 29)</b>                  48: Field, Forest, and Stream (p. 257)                  49: Tropical Treehouse  <b>68: Name That Tree (Tree ID, p. 186)</b>                  70: Soil Stories (Soil Builders, p. 161)                  77: Trees in Trouble (p. 197)                  78: Signs of Fall (p. 155)</p> <p>E-Unit for Grades K-2:  <a href="#">Treemendous Science!</a></p> <p>GreenSchools Early Childhood: <a href="#">School Site Investigation</a></p>	<p><a href="#">ELA Performance Tasks</a>                  Off to the Woods (Grade 1)</p> <p><b>Guides</b>  <a href="#">Fostering Outdoor Observation Skills</a>  <a href="#">FieldDesign: Engineering Design for Field-Based Applications K-5</a></p> <p><b>PLT Extensions</b>  <a href="http://www.pltwa.com">www.pltwa.com</a>                  Shape of Things Bingo                  Trees as Habitats Bingo                  Fallen Log student page</p> <p><b>Solutions Oriented Learning Storylines</b>  <a href="#">Urban Forestry: The Needs of Trees</a> (Grade 2)</p>		<p><a href="#">OFRI</a>                  Sounds of the Forest</p> <p><b>Other</b>                  US Forest Service-Discover the Forest  <a href="https://discovertheforest.org/">https://discovertheforest.org/</a></p> <p>Trees Are Terrific! (Ranger Rick's Naturescope Series Vol. 1)</p>

# Making Forest Connections — Grades K-2 Washington

Theme 1: What is a Forest?					
Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities (Title and Location in <i>Explore Your Environment K-8</i> are in red)	PEI Resources	Project WILD Activities	Additional Resources
<p style="text-align: center;"><b>Trees as Part of the Forest</b></p> <p>1. A tree is a woody perennial plant usually 12 feet or more (4 meters or more) tall, with a single main stem and a more or less distinct crown of leaves or needles.</p> <p>2. Trees have life stages that include germination, growth, maturity, reproduction, decline and death.</p> <p>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).</p> <p>4. Trees compete with each other and with other plants growing near them for nutrients, sunlight, space and water.</p> <p>5. The health and wellness of trees in a forest ecosystem depend on and are affected by many factors.</p>	<p>K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.</p> <p>K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p> <p>2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.</p>	<p><b>2: Get in Touch with Trees</b> 4: Sounds Around <b>21: Adopt a Tree (p. 21)</b> <b>27: Every Tree for Itself (p. 110)</b> 31: Plant a Tree (p. 350) 36: Pollution Search <b>41: How Plants Grow (Here We Grow Again, p. 57)</b> 48: Field, Forest, and Stream (p. 257) <b>62: To Be a Tree</b> <b>63: Tree Factory -variation (p. 180)</b> 64: Looking at Leaves (Tree ID, p. 186) 65: Bursting Buds (p. 40) 67: How Big Is Your Tree? (Nature's Skyscrapers, p. 325) 70: Soil Stories (Soil Builders, p. 161) <b>76: Tree Cookies (p. 171)</b> <b>77: Trees in Trouble (p. 197)</b> <b>79: Tree Lifecycle (A Tree's Life, pg. 14)</b></p> <p>E-Unit for Grades K-2 <a href="#">Tremendous Science</a></p>	<p><a href="#">ELA Performance Tasks</a> Off to the Woods (Grade 1)</p> <p><b>Guides</b> <a href="#">Fostering Outdoor Observation Skills</a>  <a href="#">FieldDesign: Engineering Design for Field-Based Applications K-5</a></p> <p><b>Schoolyard Investigations</b> <a href="#">Getting to Know a Tree</a> (Grade 1, also available in <a href="#">Spanish</a>)</p> <p><b>PLT Extensions</b> <a href="#">www.pltwa.com</a> Fallen Log Student Page Tree Needs Puzzle</p>	<p>What's That Habitat?</p>	<p><a href="#">OFRI</a> Forest Essays, Grades 2-3 <b>Forest Fact Breaks:</b> Tree Biology</p> <p><b>Other</b> US Forest Service-Discover the Forest <a href="https://discovertheforest.org/">https://discovertheforest.org/</a></p> <p>I-Tree: Tree Benefits <a href="http://www.treebenefits.com">www.treebenefits.com</a></p>

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## Theme 1: What is a Forest?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Forests as Ecosystems</b></p> <p>1. Forest ecosystems consist of different types of organisms (e.g. producers, consumers, and decomposers) and nonliving components (e.g. sunlight, soil, minerals, and water) interacting within a given environment, space, and time.</p> <p>2. Humans depend on and influence forest ecosystems and are themselves influenced by forest ecosystems.</p> <p>3. Forest ecosystems include processes such as photosynthesis, energy flow and the cycling of nutrients, water, carbon, and other matter.</p> <p>4. 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).</p> <p>5. Natural and human-caused disturbance events are a part of forest ecosystems. Examples of natural events are wind and volcanic activity, and examples of human-caused events are logging, road construction and development. Wildfire is a disturbance that can be both natural and human-caused.</p> <p>6. Forests are interconnected with other terrestrial (e.g., rangeland) and aquatic (e.g., estuary) ecosystems, forming a larger system.</p>	<p>2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats</p> <p>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p> <p>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p> <p>K-ESS2-2. Construct an argument supported by evidence for how plant and animals (including humans) can change the environment to meet their needs.</p>	<p>1: The Shape of Things 3: Peppermint Beetle (p. 68) 16: Pass the Plants, Please 18: Tale of the Sun <b>22: Trees as Habitat (p. 76)</b> <b>23: Fallen Log (p. 116)</b> 24: Nature's Recyclers (Soil Builders, p. 161) 25: Birds and Worms (Birds and Bugs, p. 35) 27: Every Tree for Itself (p. 110) <b>45: Web of Life-adapt (p. 216)</b> <b>46: Schoolyard Safari-Forest Safari (Backyard Safari, p. 29)</b> 47: Are Vacant Lots Vacant? (Discover Diversity, p. 97 - adapt) 48: Field, Forest, and Stream (p. 257) <b>64: Looking at Leaves (Tree ID, p. 186)</b> <b>65: Bursting Buds (p. 40)</b> 70: Soil Stories (Soil Builders, p. 161) <b>76: Tree Cookies (p. 171)</b> 77: Trees in Trouble (p. 197) 78: Signs of Fall (p. 155) 81: Living with Fire (p. 315)</p> <p>E-Unit for Grades K-2: <a href="#">Treemendous Science!</a></p>	<p><a href="#">ELA Performance Tasks</a> Off to the Woods Going to the Pond What will the Weather Be?</p> <p><b>Guides</b> <a href="#">Fostering Outdoor Observation Skills</a></p> <p><a href="#">Field Design: Engineering Design for Field-Based Applications K-5</a></p> <p><b>PLT Extensions</b> <a href="http://www.pltwa.com">www.pltwa.com</a> Shape of Things Bingo Trees as Habitats Bingo Tree Needs Puzzle Butterfly Investigations Weather Investigations</p> <p><a href="#">Forests of Washington</a> (Adapt for K-2 and/or background knowledge): Lesson 2. Getting to know the Trees of Washington Lesson 4. Forest Homes Lesson 5. Come Grow With Us Lesson 7. Fire: Friend or Foe</p> <p><b>Solution Oriented Learning Storylines</b> <a href="#">Fire: Humans and Wildfires</a> (Kindergarten, also available in <a href="#">Spanish</a>)</p>	<p><b>Growing up WILD</b> Looking at Leaves</p> <p><b>K-12 Guide</b> Graphanimal</p> <p>What's that Habitat?</p> <p>Urban Nature Search (K-2 Adaptation)</p> <p>Busy Bees, Busy Blooms</p> <p>Surprise Terrarium</p> <p>What Bear Goes Where?</p> <p>Seed Need</p>	<p><a href="#">OFRI</a> Forest Essays, Grades 2-3 Sounds of the Forest <b>Forest Fact Breaks:</b> Ecosystems Water Photosynthesis Wildlife Wildfire</p> <p><b>Other</b> US Forest Service-Discover the Forest <a href="https://discovertheforest.org/">https://discovertheforest.org/</a></p> <p>Starflower lessons- <a href="https://www.wnps.org/starflower/">https://www.wnps.org/starflower/</a></p> <p>Trees Are Terrific! (Ranger Rick's Naturescope Series Vol. 1)</p>

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<p style="text-align: center;"><b>Forests as Ecosystems (cont'd)</b></p> <p>7. Washington’s regions vary in soil types, elevation, temperature, wind, and rainfall patterns. These variations create the different forest types and residents (plants and animals) that, together with disturbance histories, contribute to that region’s biodiversity.</p>		<p>GreenSchools Early Childhood: <a href="#">School Site Investigation</a></p>			
<p style="text-align: center;"><b>Forest Classification</b></p> <p>1. Trees can be identified by their leaves, seeds, cones, flowers, fruits, and other characteristics. Trees can be classified into family, genus and species groups based on their reproductive parts and/or genetics.</p> <p>2. Different forest biomes exist around the world. Examples include tropical forests, temperate forests, and boreal forests. Washington is in the temperate forest biome.</p> <p>3. Many different forest types exist within a biome, typically named by their dominant tree species. Common forest types in Washington include spruce-hemlock, Douglas-fir, ponderosa pine, mixed conifer, and hardwood.</p>	<p>(Somewhat relevant) 1- LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.</p> <p>2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats</p>		<p><a href="#">Forests of Washington</a> (Adapt for K-2) Lesson 1. There’s no Place Like Home Lesson 2. Getting to know the Trees of Washington Lesson 4. Forest Homes Lesson 5. Come Grow With Us</p> <p><b>Schoolyard Investigations</b> <a href="#">Getting to Know a Tree</a> (Grade 1, also available in <a href="#">Spanish</a>)</p>		<p><a href="#">OFRI</a> Forest Essays Grade 2-3</p> <p><b>Other</b> Starflower Tree ID cards- <a href="https://www.wnps.org/starflower/">https://www.wnps.org/starflower/</a></p> <p>US Forest Service Coloring Pages <a href="https://www.fs.fed.us/wildflowers/kids/coloring/index.shtml">https://www.fs.fed.us/wildflowers/kids/coloring/index.shtml</a></p> <p>Native Plant Society <a href="https://www.wnps.org/cps-programs/education">https://www.wnps.org/cps-programs/education</a></p> <p>Tree/Plant ID app- <a href="https://www.treespnw.com/">https://www.treespnw.com/</a></p>

# Making Forest Connections — Grades K-2 Washington

## Theme 2: Why are Forests Important?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p style="text-align: center;"><b>Historical Importance</b></p> <p>1. Today, as in the past, forest continue to play a significant cultural, spiritual, and economic role in Native American Societies.</p> <p>2. In Washington’s development toward becoming a state, forests provided basic resources for Native Americans and settlers, jobs for a growing workforce, resources for building the nation and dollars for a new state economy.</p> <p>3. As multiple demands on forests increased, the practice of forest management evolved to conserve and preserve natural resources and to improve society’s use of forestlands. It incorporated scientific principles and an understanding of competing interests.</p> <p>4. Historical perspectives, which may include aesthetic, cultural, spiritual, economic, and educational factors, form our understanding of forests and our personal connections to forests, and guide decisions to ensure forests for future generations.</p>		<p>54. I’d Like to Visit a Place Where 95: Did You Notice? (p. 44)</p> <p>E-Unit for Grades K-2: <a href="#">Treemendous Science!</a></p>	<p><a href="#">Forests of Washington</a> (for background)</p>		<p><b>Other</b> <a href="#">Why Would Anyone Cut a Tree Down?</a> Adapt mini unit for lower grades</p>



# Making Forest Connections — Grades K-2 Washington

## Theme 2: Why are Forests Important?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Environmental Importance</b></p> <p>1. Forests affect air, water, and soil quality.</p> <p>2. Forests provide habitat for fish and wildlife.</p> <p>3. Forests provide the opportunity to study ecosystems, conservation, and natural resource management.</p> <p>4. Forests sequester carbon from the atmosphere and are an essential component of the global carbon cycle. Forest products made from wood also store carbon.</p> <p>5. Washington’s forests are important ecological systems, interconnected with other systems not only environmentally, but socially and economically. Changes in the conditions and uses of Washington’s forests may affect the conditions and uses of forests worldwide.</p>	<p>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p> <p>2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.</p>	<p>1: The Shape of Things</p> <p>2. Sounds Around</p> <p>3: Peppermint Beetle (p. 68)</p> <p><b>13: We All Need Trees (p. 82)</b></p> <p>8: The Forest of S.T. Shrew</p> <p><b>22: Trees as Habitat (p. 76)</b></p> <p><b>23: Fallen Log (p. 116)</b></p> <p>24: Nature’s Recyclers (Soil Builders, p 161)</p> <p><b>30: Three Cheers for Trees</b></p> <p>46: Schoolyard Safari (Backyard Safari, p. 29)</p> <p>44. Water Wonders (p 206)</p> <p>47: Are Vacant Lots Vacant? (Discover Diversity, p. 97)</p> <p>49: Tropical Treehouse</p> <p>67: How Big Is Your Tree? (Nature’s Skyscrapers, p. 325)</p> <p>70: Soil Stories (Soil Builders, p. 161)</p> <p>89: Trees for Many Reasons (p. 193)</p> <p>95: Did You Notice? (p. 44)</p> <p>E-Unit for Grades K-2): <a href="#">Tremendous Science!</a></p>	<p><a href="#">ELA Performance Tasks</a></p> <p>Off to the Woods</p> <p>Forest Benefits (background information)</p> <p><b>PLT Extensions</b></p> <p><a href="http://www.pltwa.com">www.pltwa.com</a></p> <p>Tree Needs Puzzle</p> <p>Leaf as a System</p>	<p><b>Growing up WILD</b></p> <p>Looking at Leaves</p> <p><b>K-12 Guide</b></p> <p>Graphanimal</p> <p>My Kingdom for a Shelter</p> <p>What’s That, Habitat?</p> <p>Urban Nature Search (K-2 Adaptation)</p> <p>Busy Bees, Busy Blooms</p> <p>Surprise Terrarium</p> <p>What Bear Goes Where?</p>	<p><a href="#">OFRI</a></p> <p>Forest Essays, Grades 2-3</p> <p>Sounds of the Forest</p> <p><b>Forest Fact Breaks:</b></p> <p>Ecosystems</p> <p>Water</p> <p>Photosynthesis</p> <p>Wildlife</p> <p><b>Other</b></p> <p>Forest Carbon Cycle Stations</p> <p>Trees and Carbon</p> <p>Investments in Forest Carbon</p> <p><a href="https://www.rainforest-alliance.org/curricula/climate">https://www.rainforest-alliance.org/curricula/climate</a></p> <p>I-Tree: Tree Benefits</p> <p><a href="http://www.treebenefits.com">www.treebenefits.com</a></p>
<p><b>Social Importance</b></p> <p>1. Washington’s forests provide basic resources that people use every day.</p> <p>2. Individuals hold different values concerning forests and their use, based on their experience and connection with the forest.</p>	<p>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p>	<p><b>13: We All Need Trees (p. 82)</b></p> <p>16: Pass the Plants, Please</p> <p>18: Tale of the Sun</p> <p>21: Adopt a Tree (p 21)</p> <p><b>30: Three Cheers for Trees</b></p> <p><b>32: A Forest of Many Uses (Our Federal Forests, p. 342)</b></p> <p>39: Energy Sleuths (Exploration Energy, p. 247)</p> <p><b>51: Make Your Own Paper (p. 63)</b></p>	<p><a href="#">ELA Performance Tasks</a></p> <p>Off to the Woods</p> <p>Forest Benefits (background information)</p> <p><b>Solutions Oriented Learning Storylines</b></p> <p><a href="#">Urban Forestry: The Needs of Trees</a> (Grade 2)</p>		<p><b>Other</b></p> <p><a href="#">Why Would Anyone Cut a Tree Down?</a></p> <p>Adapt mini unit for lower grades</p>



# Making Forest Connections — Grades K-2 Washington

## Theme 2: Why are Forests Important?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Social Importance (cont'd)</b></p> <p>3. Forests influence the economic, social and cultural composition of both urban and rural communities</p>		<p>54: I'd Like to Visit a Place Where...                      55: Planning the Ideal Community                      95: Did You Notice? (p. 44)</p>			
<p><b>Economic Importance</b></p> <p>1. Forests provide multiple economic benefits, including jobs and forest products; renewable energy and minerals; financial returns to owners and investors; and ecosystem service benefits such as carbon storage, clean water, recreation, and tourism.</p> <p>2. Forests provide income for local, state, national, and international economies. Washington's forest sector is one of the state's largest economic sectors and provides critical resources and products to the global marketplace, including softwood lumber, plywood, and engineered wood products.</p> <p>3. Forest products are an important component of Washington's "green" economy. They come from a renewable resource and store carbon, and most are also reusable and recyclable.</p> <p>4. Economic returns to forest landowners are important in preventing the loss of forests to other non-forest land uses.</p>		<p>13: We All Need Trees (p. 82)                      32: A Forest of Many Uses (Our Federal Forests, p. 342)                      39: Energy Sleuths (Exploration Energy, p. 247) 51: Make Your Own Paper (p. 63)</p> <p>E-Unit for Grades K-2: <a href="#">Tremendous Science!</a></p>	<p><a href="#">ELA Performance Tasks</a></p> <p>Off to the Woods                      Forest Benefits (background information)                      Forest Management (background information)</p>		<p><a href="#">OFRI</a>                      Forest Activity Sheet  <b>Forest Fact Breaks:</b>                      Wood Products                      Forest Management</p> <p><b>Other</b>                      I-Tree: Tree Benefits  <a href="http://www.treebenefits.com">www.treebenefits.com</a></p> <p><a href="#">Why Would Anyone Cut a Tree Down?</a>                      Adapt mini unit for lower grades</p>

# Making Forest Connections — Grades K-2 Washington

## Theme 3: How Do We Sustain Our Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Forest Ownership</b></p> <p>1. 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.</p> <p>2. Washington’s forests are managed under private (e.g., family and industrial) and public (e.g., state and federal) ownership. Each type of ownership may have different management objectives and may be subject to different laws and policies.</p> <p>3. Forestlands– as well as fire and other disturbances that affect them – cross natural boundaries, such as watersheds, and administrative boundaries, such as city limits and private property lines.</p> <p>4. Many forest landscapes are made up of a variety of ownerships, a mix of management objectives, and a blend of forest ecosystems.</p>		<p>31: Plant a Tree (p. 350)</p>	<p><a href="#">ELA Performance Tasks</a> Off to the Woods</p> <p><b>Solutions Oriented Learning Storylines:</b> <a href="#">Fire: Humans and Wildfires</a> (Kindergarten, also available in <a href="#">Spanish</a>) <a href="#">Urban Forestry: The Needs of Trees</a> (Grade 2)</p>		<p><a href="#">OFRI</a> <b>Forest Fact Breaks:</b> Forest Management</p>
<p><b>Forest Management</b></p> <p>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.</p> <p>2. Forest management ranges from active management (e.g., planting, thinning, and harvesting) to passive management (e.g., set- asides and wilderness areas) to grow, restore, maintain, conserve, or alter forests.</p>		<p>31: Plant a Tree (p. 350) 69: Forest for the Trees (adapt for younger grades)</p>	<p><a href="#">ELA Performance Tasks</a> Forest Benefits (background information) Forest Management (background information)</p>		<p><a href="#">OFRI</a> <b>Forest Fact Breaks:</b> Forest Management</p>

# Making Forest Connections — Grades K-2 Washington

## Theme 3: How Do We Sustain Our Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Forest Management (cont'd)</b></p> <p>3. Forest management includes the use of natural processes and goal-oriented decisions and actions to achieve a variety of desired outcomes, including ecological (e.g., improving wildlife habitat), 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.</p> <p>4. In Washington, forest management in private and state forests is regulated by the Washington Forest Practices Act, which aims to sustain forest land for timber production and the other benefits forests provide, including clean water, wildlife habitat, and recreation.</p> <p>5. 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.</p>					
<p><b>Forest Management Decisions</b></p> <p>1. A variety of individuals, companies, organizations, and government agencies manage forests. Forest management decisions may involve some or all of these working collaboratively to ensure mutually beneficial outcomes.</p>			<p><b>Solutions Oriented Learning Storylines</b>  <a href="#">Fire: Humans and Wildfires</a>                      (Kindergarten, also available in <a href="#">Spanish</a>)</p>		

# Making Forest Connections — Grades K-2 Washington

## Theme 3: How Do We Sustain Our Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p style="text-align: center;"><b>Forest Management Decisions (cont'd)</b></p> <p>2. Forest resource professionals aim to meet individual, societal and environmental needs.</p> <p>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.</p> <p>4. Washington foresters and forest managers prepare forest management plans based on landowner goals and objectives, capabilities of the forest site, laws, and available tools (e.g., planting, harvesting, and using prescribed fire).</p> <p>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.</p> <p>6. Government has a role in actively engaging organizations, businesses, communities and individuals in forest management and policy decisions, especially for publicly owned forests.</p>					

# Making Forest Connections — Grades K-2 Washington

## Theme 3: How Do We Sustain Our Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Forest Management Decisions (cont'd)</b></p> <p>7. Sustainable management of forests takes into account social, economic and ecological dimensions of sustainability. It includes maintaining forest health, productivity and diversity, and conserving a forested land base for the needs of present and future generations.</p> <p>8. Changing public demands and expectations for the forest, as well as unanticipated events, affect decisions about forest resource use. Sound management based on scientific research, economic analysis and public involvement is required.</p>					
<p><b>Forest Management Perspectives</b></p> <p>1. People have differing perspectives about forest management, which can be affected by politics, science, economics, values, perception, and experience.</p> <p>2. Forest management can be controversial because of diverse perspectives as well as the complex nature of forest ecosystems.</p> <p>3. Issues related to forest management include the effects of timber harvest, carbon sequestration and climate change, forest land uses, wildfire, and others.</p>		<p>32: A Forest of Many Uses (Our Federal Forests, p. 342)</p>	<p><a href="#">ELA Performance Tasks</a></p> <p>Forest Benefits (background information)</p> <p>Forest Management (background information)</p> <p><b>Solutions Oriented Learning Storylines</b></p> <p><a href="#">Fire: Humans and Wildfires</a> (Kindergarten, also available in <a href="#">Spanish</a>)</p>		

# Making Forest Connections — Grades K-2 Washington

## Theme 3: How Do We Sustain Our Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Forest Management Perspectives (cont'd)</b></p> <p>4. Involving multiple perspectives in decision-making, especially with regard to Washington’s public forests, can lead to more effective problem-solving and result in more sustainable outcomes for Washington’s forests.</p>					

# Making Forest Connections — Grades K-2 Washington

## Theme 4: What is Our Responsibility to Washington Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p><b>Our Connection to Washington's Forests</b></p> <p>1. Everyone should have the opportunity to identify and explore their personal connection with forests.</p> <p>2. Resources we use and consume every day are connected to Washington's forests.</p> <p>3. There are many ways that individuals can connect with forests in Washington, including hiking and picnicking in forests, volunteering for projects in and around forests, becoming informed and active voters, attending public meetings, and making wise consumer choices.</p>		<p>13: We All Need Trees (p. 82)</p> <p>18: Tale of the Sun</p> <p>21: Adopt a Tree (p. 21)</p> <p>22: Trees as Habitats (P. 76)</p> <p>23: Fallen Log (p. 116)</p> <p>30: Three Cheers for Trees</p> <p>31: Plant a Tree (p. 350)</p> <p>32: A Forest of Many Uses (Our Federal Forests, p. 342)</p> <p>46: Schoolyard Safari-Forest Safari (Backyard Safari, p. 29)</p> <p>54: I'd Like to Visit a Place Where...</p> <p>61: The Closer You Look (p. 72)</p> <p>89: Trees for Many Reasons (p. 193)</p> <p><a href="#">Treemendous Science!</a> (E-Unit for Grades K-2)</p>	<p><a href="#">ELA Performance Tasks</a></p> <p>Off to the Woods</p> <p>Going to the Pond</p> <p>What will the Weather Be?</p> <p>Forest Benefits (background information)</p> <p><b>Guides</b></p> <p><a href="#">Field Investigations</a></p> <p><a href="#">Fostering Outdoor Observation Skills</a></p> <p><b>Schoolyard Investigations</b></p> <p><a href="#">Getting to Know a Tree</a> (Grade 1, also available in <a href="#">Spanish</a>)</p>	<p>Graphanimal</p> <p>Urban Nature Search (adapt to be Forest Nature Search)</p> <p>Seed Need</p> <p><b>Project WILD Aquatic:</b></p> <p>Rainy Day Hike</p>	<p><a href="#">OFRI</a></p> <p>Forest Activity Sheet</p> <p><b>Forest Fact Breaks:</b></p> <p>Wood Products</p> <p>Forest Management</p> <p><b>Other</b></p> <p>US Forest Service-Discover the Forest <a href="https://discovertheforest.org/">https://discovertheforest.org/</a></p> <p><a href="#">Why Would Anyone Cut a Tree Down?</a></p> <p>Adapt mini unit for lower grades</p>
<p><b>Working for the Future of Washington's Forests</b></p> <p>1. Everyone has a responsibility to treat forests with respect and to become a conscientious steward of Washington's forests and forest resources.</p> <p>2. Personal behaviors directly impact the health and resiliency of our forests. For example, the products we buy, how we treat trails and campgrounds, and how we hunt or use fire can either harm or help forests.</p>		<p>30: Three Cheers for Trees</p> <p>31: Plant a Tree (p. 350)</p> <p>36: Pollution Search (Decisions, Decisions, p. 224)</p> <p>51: Make Your Own Paper (p. 63)</p> <p>54: I'd Like to Visit a Place Where...</p> <p>81: Living with Fire (p. 315)</p> <p>87: Earth Manners</p> <p>89: Trees for Many Reasons (p. 193)</p>	<p><a href="#">ELA Performance Tasks</a></p> <p>Off to the Woods</p> <p>Going to the Pond</p> <p>What will the Weather Be?</p> <p>Tree Benefits (background information)</p> <p>Forest Management (background information)</p> <p><b>Solutions Oriented Learning Storylines</b></p> <p><a href="#">Fire: Humans and Wildfires</a> (Kindergarten, also available in <a href="#">Spanish</a>)</p>		<p>US Forest Service-Discover the Forest <a href="https://discovertheforest.org/">https://discovertheforest.org/</a></p> <p><a href="#">Why Would Anyone Cut a Tree Down?</a></p> <p>Adapt mini unit for lower grades</p>



# Making Forest Connections — Grades K-2 Washington

## Theme 4: What is Our Responsibility to Washington Forests?

Washington Forest Education Framework	NGSS Performance Expectations	Project Learning Tree Activities	PEI Resources	Project WILD Activities	Additional Resources
<p style="text-align: center;"><b>Working for the Future of Washington’s Forests (cont’d)</b></p> <p>3. Choices we make regarding the use of forest resources affect our ability to sustain forest ecosystems into the future.</p> <p>4. A variety of professionals and skilled trade workers are needed to sustain our forests, including foresters, biologists, soil scientists, engineers, lawyers, information technology professionals, land managers, investors, environmental educators, communications specialists, logging operators, mechanics, and wood products manufacturers.</p> <p>5. As individuals or as members of groups, we can influence laws and policies about Washington’s forests.</p>					