



Washington
Department of
**FISH and
WILDLIFE**

Temperate Rainforests of Washington

Bosques templados de Washington

3-5th

Themes: Adaptations, Senses, Ecosystems

Location:

The PowerPoint, brainstorming, and assessments can be done in the classroom with student computers. **Remote learning modification:** Lesson can be taught over Zoom or Google Classrooms.

Field trips to your [local Washington State Parks](#) will help students see ecosystems in person. [Moran](#) and [Larrabee](#) are the two featured in this lesson You can also visit a [WDFW Wildlife](#) area near you.

Modifications, Adaptations:

For COVID-19 distance learning, or other remote learning modification, look for **remote learning modifications** throughout the lesson plan.

Standards:

NGSS

[3-LS3-2](#)

Use evidence to support the explanation that traits can be influenced by 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.

OSPI

Visual Arts Standards

[VA:Cr3.1.3](#)

Elaborate visual information by adding details in an artwork to enhance emerging meaning.

Materials:

WDFW PowerPoints, coloring materials, paper for drawing.

Objectives:

Students will..

1. Explain what it means for an organism to be adapted to its habitat.
2. Summarize how adaptations help an organism.
3. Illustrate the flora and fauna of the temperate rainforest and how they interact.
4. Construct an organism that would be adapted to the temperate rainforest.

Vocabulary:

English

Adaptation: A physical or behavioral trait an organism has to be well suited to its habitat.

Climate: The average weather over a long period of time that controls what plants and animals can live in an area.

Decomposer: A living thing that feeds on and breaks down

plant and animal matter.

Epiphyte: A plant that grows on the surface of another plant and does not need to have roots in the ground.

Evergreen: Trees that keep their leaves year-round and therefore remain green through the colder months.

Habitat: Where an animal lives and finds its food, water, and shelter.

Nurse log: Fallen tree that provides a nursery for seedlings as the tree decomposes.

Rainforest: An area of tall, mostly evergreen trees with large amounts of precipitation.

Temperate: An area or climate with mild temperatures.

Spanish

Adaptación: Una habilidad especial que ayuda a un animal a sobrevivir. Las adaptaciones pueden ser cambios físicos en el cuerpo del animal o cambios de comportamiento en un animal o grupo de animales.

Clima: La temperatura promedio durante un periodo largo de tiempo que controla qué plantas y animales pueden vivir en la zona.

Descomponedor: Un ser vivo que se alimenta y descompone materia vegetal y animal.

Epífita: Una planta que crece en la superficie de otra planta y no necesita tener raíces en la tierra.

De hoja perenne: árboles que conservan sus hojas todo el año y, por lo tanto, permanecen verdes en los meses más fríos.

Hábitat: El lugar donde vive un animal y encuentra comida, agua y refugio.

Maderas muertas: árboles caídos que proporcionan alimento a las plántulas, a medida que los árboles se descomponen.

Bosque: Una zona de árboles altos, en su mayoría perennes, con una gran cantidad de lluvia.

Templado: Una zona o un clima con temperaturas moderadas.

Procedure:

Introduction to Temperate Rainforests of Washington

Begin the lesson by opening the Temperate Rainforests of Washington PowerPoint Presentation. Many of the slides have interactive elements that will take time for students to consider and be able to answer. On the slide covering nurse logs, there is a YouTube video linked that does an excellent job explaining what a nurse log is.

After the slide covering banana slugs, there is a short, [optional video](#) about banana slugs in the resources section. For some of the more critical answer prompts, consider having students talk with a partner or, **remote learning modification:** have students type their responses in the chat breakout groups to further discuss. For the question on the final slide, have students pair up or assign breakout groups to come up with their answers in a collaborative effort. Have each group share with the class.



Adaptations of Temperate Rainforests

This PowerPoint presentation will prepare students for the final assessment activity. Open the Adaptations of the Temperate Rainforests PowerPoint. This presentation has many similar interactive elements and opportunities for students to engage. On slide three, have students break into small groups or pairs and discuss what adaptations they think each has. Ask students to share with the class one or two of the adaptations.


On slide five, use your schoolyard or local park to have students use their senses in their outdoors. They can write down what senses they use or just think of one thing they sensed that they want to share with the class. **Remote learning modification:** Ask students to go outdoors with an adult for three minutes. For students who are not able to go outside, consider showing this video on how to observe nature. On slide six, have students guess what senses each animal uses. There are no real wrong answers. Slides 16-19 have an activity where students will consider three different animals and try to answer the provided questions. Have students break into groups to discuss each animal. Allow students five minutes to talk about each animal before moving on to the next.

Final Assessment

Create your own animal that would live in the temperate rainforest.

Use the Temperate Rainforest Final Project document in additional materials. Pass out the Create a Creature worksheet to students. This sheet provides the guidelines and structure of the final assessment. The second page has an example of the completed project. You can give this to students so they have a complete understanding of what is expected. Students will create their own, new creature that is well adapted to the temperate rainforest. While creating their creature, there is a list of questions students should consider and four elements they need to include. Students should write their artist statement before starting their illustration.

They should include as much as they can from their artist statement in the illustration. The timeline of this project should be about a week. Artist statements can be written during class time as students may have questions, but the illustration should be done outside of class or potentially during art class time, if your schedule permits. Students will present their final drawings to the class with a brief explanation of their creature and why they chose to create it.

 **Idea:** Show off your students' work! Share student projects from this lesson with WDFW.
Facebook: @WashingtonFishWildlife
Instagram: @TheWDFW
Twitter: @WDFW
#WildWashington #WildWa

Did you teach this lesson? [Give us your feedback.](#)

Additional Resources :

We encourage you to use the following resources as either a supplement to this lesson, or to share the resources with students for their project.

- [Meet the Coastal Temperate Rainforest](#)

A video from the Institute of Urban Ecology in Vancouver that introduced the Temperate Rainforest along the Pacific Northwest coast.

- [Redwood Ranger Minute: Banana Slugs](#)

A quick video about banana slugs and some helpful visuals to better understand the banana slug.

- [Nature Observations at Camano Island State Park](#)

A video linked in the lesson plan that provides an outdoor sensory experience for student who may not have the ability to go outside.

- [#AskaWARanger Your Sense of Nature](#)

This is a Facebook Live event held by one of the WA Parks Interpretive rangers covering how animals use their senses. Very interactive and fun for younger students.

Washington State Parks resources:

- [Washington State Parks Junior Ranger Program](#)

The Junior Ranger booklet and badge program is a fun way for youth and families to explore Washington's state parks. Designed for youth 4 and up, this self-guided program encourages families to discover the natural and cultural wonders of Washington through fun exploration, games, and creative activities.

- [Virtual Learning Opportunities from State Parks](#)

WA State Parks offers several virtual learning opportunities from virtual field trips, to pre-recorded videos, to Facebook Live events.

This lesson was written in collaboration with Washington State Parks and Americorps Washington.

