

**Lesson Title:** Layers of a Forest**Overview:**

Students will learn four layers of a Pacific Temperate Rainforest. Through the following activities: drawing a forest labeling the different layers, watching Washington Forest Protection Association (WFPA) Layers of the Forest video, guessing wildlife species that live in each layer. The follow-up activities include writing narrative, descriptive or expository writing paragraphs as well as retelling the legend.

**Standards (Working towards):****4th grade**

Science: 4-ESS3-1 Obtain and combine information to describe that energy and fuels are derived from natural resources and that their uses affect the environment.

ELA: CCSS.ELA.W.4.2.D Use precise language and domain-specific vocabulary to inform about or explain the topic.

Washington Social Studies: E2.4.3 Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services in Washington state.

**5th grade**

Science: 5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers and the environment.

ELA: CCSS.ELA.W.5.2.D Use precise language and domain-specific vocabulary to inform about or explain the topic.

Washington Social Studies: E2.5.2 Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services.

**Objective:** Students will be able to identify the four layers of the forest and how they interact. Students will be able to create food chains and learn wildlife that uses each layer of a forest.

**Lesson Description:****Pre-Lessons:**

- Discuss with students what elements make a habitat.
- Brainstorm about elements in a forest and what types of wildlife lives in the forest.
- Learn for the food chain activity the following terms:
  1. Producer, 2. 1st consumer=herbivore, 3. 2nd consumer=carnivore, 4. Decomposer or Scavenger
- PLT – Activity 45 Web of Life <https://www.plt.org/family-activity/web-of-life/>

**Post Lessons:**

- Write a descriptive paragraph using one of the layers of the forest and how a storm, fire, drought could impact your forest layer.
- Choose a disturbance and write a descriptive paragraph from the perspective of a plant or tree.
- Write an expository paragraph why one of the four layers is important to the forest.
- Write a narrative story about a wildlife species that lives in the forest.
- Write a paragraph about a wildlife species and why it would not survive well in a different ecosystem such as desert, ocean. Think about food sources, shelter (cover), water, space.
- Make food chain for different wildlife species.

**Extension:**

- Take a hike and look for a Douglas-fir cone (hint: look under a Douglas-fir tree), then retell the legend to your family or friends.
- Take a hike and try to identify different plants on the forest floor.
- Make a tower diorama of the different layers in the forest.
- Make a rainforest terrarium - go online for directions.
- Read books about Pacific Northwest forests.

**Resources:**

- Neighborwood FB <https://www.facebook.com/groups/4495891857149300/>
- Washington Forest Protection Association (WFPA) <https://www.wfpa.org/>
- Pacific Education Institute (PEI) <https://pacificeducationinstitute.org/>
- Project Learning Tree (PLT) <https://www.plt.org/>
- Oregon Forest Resource Institute <https://oregonforests.org/pub/fact-sheet-wildlife>

**Create your own food chain  
from wildlife in the Pacific  
Northwest.**

- Start with a plant (**producer**)
- Who would eat plants? (**herbivore**)
- Who would eat this species? (**carnivore**)
- What would happen to this carnivore when it dies? (**decomposer or scavenger**)



**Our Food Chain Story:**

Once upon a time a little mouse (**herbivore**) was eating a grass (**producer**) in the forest.

The little mouse was unaware that a garter snake (**carnivore**) was also slithering in the forest. The next thing the mouse knew the snake gobbled him up.

The snake was full from eating the mouse and decided to lay in the sun when along came a fox who had the snake for lunch.

What happened to the fox when it died?

Did a **decomposer, scavenger** or both help the fox continue in this food chain?

