



Washington
Department of
**FISH and
WILDLIFE**

My What Specialized Teeth You Have

Qué dientes tan especializados tienes 3-5th Grade

Themes: Carnivores, Adaptations, Wildlife Diversity

Location:

Lesson can be taught in the classroom.

Remote learning modification: Lesson can be taught over Zoom or Google Classrooms.

Standards:

NGSS

4-LS1-1

Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

3-LS3-2

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

Modifications, Adaptations:

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

Materials:

WDFW PowerPoint, skull comparison worksheet, skull comparison teacher answer key.

Objectives:

Students will..

1. Identify three structural differences between carnivores and herbivores.
2. Classify differences among carnivores in Washington.
3. Explain why carnivores are adapted to live in a variety of environments.
4. Research the natural and biological history of a carnivore of interest.
5. Analyze why/what makes their chosen carnivore well-adapted to survive, hunt, and reproduce in Washington.

Vocabulary:

English

Adaptation: A change or the process of change by which an organism or species becomes better suited to its environment.

Carnivore: An animal that eats a diet consisting mainly of animals, whether it comes from live animals or dead ones (scavenging).

Camouflage: When organisms blend in with their environment. Can be used as defense from predators or as a hiding technique for predators.

Diversity: The variation of species in an ecosystem.

Ecosystem: All the plants and animals that live in a particular area together and their relationship with the non-

living environment.

Herbivore: An animal that gets its energy from eating [plants](#). Plants can include fruit, nuts, seeds, etc.

Omnivore: A kind of animal that eats both animals or plants.

Scavenger: An animal that feeds on dead animals.

Specialized: When an animal has a(n) adaptation(s) that allow(s) it to catch a specific type or prey or live in a specific ecosystem.

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.

Carnívoro: un animal que come una dieta que consiste principalmente de animales, ya sean animales vivos o muertos (carroña).

Camuflaje: cuando los organismos se mezclan con el entorno. Se puede usar como defensa contra los depredadores o como técnica para ocultarse de los depredadores.

Diversidad: la variedad de especies en un ecosistema.

Ecosistema: todas las plantas y los animales que viven juntos en una zona particular y su relación con el ambiente no vivo.

Herbívoro: un animal que obtiene su energía comiendo plantas. Las plantas pueden incluir frutas, nueces, semillas, etc.

Omnívoro: un tipo de animal que come animales y plantas.

Carroñero: un animal que se alimenta de animales muertos. Especializado: cuando un animal tiene una o varias adaptaciones que le permiten atrapar a un tipo o presa específica, o que vive en un ecosistema específico.

Procedure:

Introduction to Carnivores in Washington

Open the WDFW PowerPoint, Introduction to Carnivores. Make sure presenter notes are turned on. On the second slide, you will ask students to guess which of the animals is a carnivore. After they guess, you can click and the correct answer (sea otter) will be circled. Ask students why they think the sea otter is a carnivore and the other two are not.

The next slide (three) will introduce what a carnivore is. Try not to say carnivores eat "meat". Meat typically refers to muscle and many carnivores (and omnivores) eat more than the muscle (organs, bones, feathers/fur, etc.).

Slide four will give students some examples of animals who eat other animals. You can have them try and guess what animals they might be eating based on size and students' pre-existing knowledge of the species. Have students try and name other carnivores who live in Washington.

Next, ask kids how they think carnivores are different from



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herbivores and omnivores. Watch the short video to learn more. After watching the video (slide six) have students recite reasons the three categories are different. You can write the answers on a whiteboard, then click through when students are done.

Slide seven introduces the term adaptation and explains how carnivores are adapted to their environment and an animal-eating lifestyle. Slide eight continues to go over adaptations in mammal skulls for herbivores, carnivores, and omnivores. Before reviewing this slide, ask students to describe differences and similarities in the skulls. Click the link on the slide to watch a short video on carnivore skulls.

Slides 9-13 have students guess whether the animal is an herbivore or a carnivore. Slide 14 asks students to recall common traits of carnivores. You can write traits down as students say them.

Slides 15 and 16 show how carnivores are diverse. Some are large (cougar) some are small (shrews). Carnivores eat a variety of different animals.

Slide 17. Ask students why they think carnivores might be important to the ecosystems they live in. Do carnivores ever benefit humans? Why or why not? Review the slide which shares information on the importance of carnivores.

Learning how to spot a carnivore

In this activity, students will compare and contrast skulls of Washington mammals. They will take [a virtual field trip to the Washington Fish and Wildlife skull museum](#) and look at six specimens. Using the skull comparison worksheet, they will describe the skulls and decide whether the skull belongs to an omnivore, carnivore, or herbivore. After students have turned in their sheets, review the skulls. Allow students to share their observations with the class or with a partner. You should reveal the type of eater the animal is and the species.

Exploring Washington's carnivores

Carnivores aren't just mammals. Carnivores can include fish, insects, birds, reptiles, amphibians, and [even some plants!](#) In the next activity, students will explore three of Washington's carnivores: A cougar, an osprey, and a rattlesnake. [Students will now explore the traits of three Washington carnivores.](#) Provide students with the Washington carnivores activity sheet to fill out as they explore the different slides.

Final project

Have students do some initial research and choose a Washington carnivore they would like to learn more about. It can be any type of animal (insect, mammal, reptile, amphibian, bird, etc.). The animal must be a carnivore. This means the majority of its diet should be other animals. Students will put together a report on the life history of this species. This should include:

1. What does the animal eat?
2. What type(s) of habitat(s) does the animal live in?
3. When does it mate and have babies?
4. Does it hibernate or migrate?
5. What adaptations allow it to hunt its prey? (i.e., teeth, camouflage, specialized feet, etc.)
6. How are these specialized traits influenced by their environment?

7. Why is this carnivore important to its environment?
8. Why did you choose this carnivore to research?

Students should use credible sources, ideally from a government agency or a nonprofit organization. [They must cite these sources.](#) Students can create a written report with images, a PowerPoint presentation with images and videos, an illustrated book, or other project that answers the above questions and highlights the adaptations of their chosen carnivore.



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.

Supplemental activities:

- [Seattle Urban Carnivore Project:](#) Students can see where [carnivores have been spotted](#) in the greater Seattle Metro area. They can explore the map and add data.
- [Carnivore skulls:](#) A WDFW-curated collection of mostly mammalian carnivore skulls in 3D. Students can explore similarities and differences in the skulls.
- [Misunderstood Meat Eaters:](#) A half-hour episode from San Diego Zoo Kids' Corner about carnivores.

Other information:

- [Carnivores in Mt. Rainier National Park-National Park Service](#)
- [Order Carnivora-Burke Museum](#)
- [Preservation of large carnivores- University of Washington](#)