



SALMON

What is It?

- The salmon family, Salmonidae, includes six species of Pacific salmon.
- Wild-caught chinook (king), coho (silver), keta (chum/dog), sockeye (red), and pink (humpy) salmon are the five species harvested in the Pacific Northwest.
- Salmon are born in freshwater and migrate to the ocean to feed and grow before returning to their birthplace to spawn.
- Some populations of salmon travel 30 miles per day on their spawning journeys. That's more than a marathon each day!

Harvest It

- Pacific salmon are harvested through various methods, including gillnet, purse seine, and troll fishing.
- Gillnets are attached to the boat and drift behind it below the ocean surface to catch fish as they swim.
- Purse seine nets capture schools of fish by encircling them with mesh nets.
- Troll fishers tow artificial lures or baited hooks through the water.





Home Sweet Home

Learn It

Grades 3rd–6th

Objectives

- Develop an awareness of fish life cycles and migration.
- Appreciate the necessity for clean, flowing water in our streams and rivers.

Materials

- 12 small plastic canisters with lids (large enough to hold a cotton ball)
- 5–6 different essential oils
- Cotton balls
- Tape or labels
- 2" x 5" notecards, one for each student

Directions

Setup

1. Starting with six essential oils, assign a number to each and create a key that says the oil name and the number assigned to it. This number will be referred to as a "water address."
2. Prepare a notecard for every student who will be participating by writing one of the six water addresses (i.e. essential oil number) on each. Try to create an equal quantity of notecards for each water address. Ex: for a class of 24 students, create four notecards for each water address. Fold notecards in half.
3. Saturate two cotton balls with one of the essential oils. Place each cotton ball in a canister and seal the canisters with a lid. Place a label or strip of tape on the bottom of each canister with its corresponding water address written on it.
4. Repeat this process for each essential oil until there are 6 sets of canisters with matching scents inside (12 canisters total).

Warm Up Discussion

Share with students that salmon are born in fresh water, but migrate to the ocean once they are mature. When it is time to reproduce, they return to the fresh water where they were born. It is not fully understood how they manage to navigate their way across many bodies of water to return home, but it is believed that they have a built-in homing device that enables them to smell their home, often referred to as a "water address." As juveniles, they imprint this smell. As adults, they are able to find this smell once again.

Ask students to compare their home habitat and life cycle to that of a salmon. Ask them to list some rivers and streams, or "water addresses", where salmon may spawn near their school or home. How far is it to the ocean? Would they need to get past any barriers, such as dams, to reach home? Discuss some possible journeys salmon species may make to other places in the Pacific Northwest.





Home Sweet Home

Directions

Activity

1. Tell the students they are going to play a salmon migration game. They are going to pretend to be adult salmon and try to find the smell of their "water address" in which to spawn.
2. Select six students and provide each with a set of canisters with matching "water addresses" along with the corresponding set of notecards. The water address on the notecard should match that of the canisters. Tell them to keep their water address number a secret.
3. Ask each student to place one of their canisters on a table on one side of the room, then have them walk to the opposite side of the room and spread out along a wall.
4. The remaining students will pretend to be salmon. Ask them to line up in equal rows facing the "water address" students, and tell them that they are going to get a whiff of their home water address, and will need to try to remember exactly what they smell.
5. One at a time, let the "salmon" walk to the "water addresses" they are lined in front of and smell the opened canister. After each salmon student has smelled from the canister, have the "water address" student place a corresponding 3" x 5" notecard in the "salmon" student's hand. Repeat until each salmon student has smelled the scent of one water address and received a card.
6. After all the "salmon" have smelled their "water address," they can walk (one at a time) across the room to the second set of canisters to see if they can find the scent that that matches the "water address" they previously smelled. This is their home! When they think they have found the matching "water address" they can line up behind it.
7. When all the "salmon" believe they have found their home address, have them compare the coded 3x5 cards with the coded numbers on the bottom of the canister. Are they the same?

Extender:

- Design a story or mural of the fish life cycle.
- Pretend they are a salmon migrating back to a nearby river or stream and write a descriptive story of everything they smell, taste, see, and hear.
- Create a skit about being a migrating salmon.

This activity was adapted from the US Fish and Wildlife Service's [Salmon in the Classroom Educators Guide](#).





Make It

Be sure to follow local Food Safety rules and regulations. Learn more here: [Food Safety Rules and Regulations | Washington State Department of Health](#).

Recipe: Salmon Salad with Pears Yield: 2 servings	
Ingredients	Directions
<ul style="list-style-type: none"> • 2 tablespoons unsweetened yogurt • 1 tablespoon lemon juice • 5 ounces canned salmon, in water or oil • 1 pear, chopped • 1 stalk celery, finely diced • 1 carrot, grated • 2 tablespoons parsley, fresh or dried (optional) 	<ol style="list-style-type: none"> 1. To make the dressing, mix yogurt and lemon juice in a small bowl. For thin dressing, add a tablespoon of water or milk. 2. Drain water or oil from canned salmon. Mix the salmon, pear, celery, carrot, and parsley (if using) in a bowl. 3. Add dressing to bowl and mix well. Serve and enjoy!

Notes

- Substitute chopped apple for chopped pear, if desired.

This recipe was adapted from adapted from [EatFresh](#).

Explore interactive taste test resources to encourage participants to try what you made!
[Taste-Testing Event Resources](#)



Eat It

Salmon is packed with nutrients that support growth and long-term health. It is one of very few foods that contain vitamin D, which plays an important role in supporting bone strength and immune function. It is also a good source of protein, which supports muscle growth and repair, and omega-3 fatty acids, important fats that support healthy heart, brain, and eyes. The vitamin B12 found in salmon helps the body convert food into usable energy.

Read It

- An Incredible Journey (Spanish version), by NOAA Fisheries
- A Salmon Story: Protecting the Future, written by Willie Poll and illustrated by Changelles Trainor-Matties
- The Salmon Run, by Clayton Gauthier

More About It

- Detailed information about different rockfish harvesting methods, from Sea Grant: [Gillnet](#), [Purse Seine](#), and [Troll](#), and [Trawl](#)
- Lesson for grades K–5th, from US Fish and Wildlife,: [Salmon in the Classroom Final 2018.pdf](#)
- Early learning tribal sovereignty curriculum from WA State Dept. of Children, Youth & Families, grades K–2nd: [Since Time Immemorial Early Learning Curriculum, Lesson 2: House of Salmon](#)
- STEM activities for early learners from I'm a Chef Too!: [Engineering Marine Wonders & Math in the Deep Blue Sea](#)
- Lesson for grades K–2nd from Grays Harbor County: [What Salmon Eat and What Eats Salmon](#)
- Lesson for grades 3rd–4th from Seattle Aquarium,: [The Salish Sea & Me: A Marine Activity and Learning Book](#)
- Lessons from NOAA Fisheries
 - Grades 4–5 [An Incredible Journey](#)
 - Gades 8–12 [Marine Ecosystem Modeling](#)
- Video lessons for salmon in the classroom: [Salmon in the Classroom](#)| [Franklin Conservation District](#)
- Videos and information sheets about Salmon as a traditional food of the Salish Sea: [Salmon](#)| [Cedar Box Experience](#)
- Interview Series from SeaGrant [Who brings your seafood to you? Profiles on Fishers & Growers](#)



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