



Salmon Anatomy

Instructor's Guide

So, you want to teach your student(s) about the features of a salmon? *Eggsellent!* The Pacific Salmon Foundation (PSF) has a number of interactive resources to help you! These resources include a video lesson of a real-life salmon dissection led by one of our salmon biologists, a vocabulary sheet, a fill-in the blank diagram (perfect for younger students) or we even have a diagram that allows students to cut out and colour each of the internal features and place them in the correct location inside the body cavity of their paper salmon. All of these resources are located in the same place on the PSF website under 'Learn' > 'Educational Activities'. We have tried to make the material accessible for as many age groups as possible, but feel it would be most suitable for students in Grades 4-9. It can be delivered to a class or to individual students one-on-one, at school, or at home.

Below, we outline a general lesson plan for using these materials, but feel free to re-arrange the order of things to best suit your student(s). And have fun!

Approximate duration: 1hr (will depend on time allotted for activities prior to the video lesson)

Materials to Prepare Before Class:

1. Large post-it notes or recipe cards (each student should have 1 at their desk at the start of the lesson for a quick think activity).
2. Vocabulary sheets printed or on tablets for each student.
3. Ensure students have their own pen or pencil and colouring supplies (pencil crayons or markers)
4. Salmon Anatomy Diagram – printed for each student or group of students. It is up to you to decide whether you use the simple fill-in- the blank diagram, or the cut and colour diagram. If you are going to use the cut and colour diagram, you may want to have your student(s) cut out and colour the internal features before starting the lesson, that way students can have their parts ready to arrange correctly in the body cavity as they watch the dissection video. Note: the cut and colour diagrams are best printed on 11"x 17" paper.
5. Optional: Two large piece of poster or flip chart paper on which students will be taping their post-it notes/recipe cards. One will be used to tape or glue the first set of

- post-it notes/ recipe cards to. The second will be used to tape or glue the second set of post-it notes/recipe cards to.
6. Tape/Glue (for assembling the post-it notes/recipe cards on the board)
 7. Computer and projector for showing the salmon dissection videos.

Lesson Plan:

1. Review with students before starting the PSF video lesson:
 - [The Pacific Salmon: Hinterland Who's Who](#) (4mins 35sec) – available on YouTube
A short introduction to the five species of Pacific Salmon and their importance to the ecosystem, as well as some of the challenges they face.
 - [I am salmon video](#) (7 mins) – available on YouTube
An award-winning short video on the salmon life cycle told from the point of view of a salmon. It highlights the cultural importance of salmon, particularly to First Nations.
2. Hand out vocabulary sheet
 - Students will listen for the words in their vocabulary list and check them off as we discuss them.
3. Next, have the student(s) write down the name and purpose/function of an internal organ found in the human body on their post-it/recipe card.
4. Play the PSF Salmon Dissection Video
 - Note that you may want to warn students that this is a dissection of a real salmon. There will be blood, there will be slime. If at any time, students feel uncomfortable, they can simply stop the video or look away. It is also important to remind students, that as junior biologists, it is important to treat any animals (whether live or dead) with care and respect.
 - Nicole, our biologist in the dissection video, will walk your student(s) through the dissection. Starting with the external features and then moving into the internal organs and their functions.
 - As she proceeds, students can either fill in the blanks on the labelled diagram, or, if you have chosen to have the students cut out and colour the internal features, they can place these in the correct location within the body cavity of their paper fish. You can pause the video to allow students enough time to label/place the correct organ before moving on to the next

feature. You may also wish to ask students to think about whether these features and their functions are similar to those in their own bodies.

5. Return to the post-it notes/recipe cards:

- Now that the lesson is complete, have students come back to their post-it notes and reflect on what they wrote.
 - i. Reminder: this is where students should have written down the name and purpose of an organ in the human body.
- Give the student(s) a second post-it note/recipe card and ask them to write down the similar feature in a salmon. Does it serve the same purpose? Are there any differences?

Optional: as a class, you could have the students put their post-it notes up on the flip-chart. Have one flip chart page titled "Human Features" for the first post-it notes/recipe cards. Have a second flip chart page titled "Salmon Features". You can then read some of them out loud anonymously. Get the class to have a discussion about the similarities and differences of human anatomy versus salmon anatomy. What organs are similar? What organs are different?

6. Other activities post-lesson:

- Take the lesson one step further and have the student(s) think about how human activities could impact the structure and function of these features. Could similar activities impact similar human features?

Salmon Dissection Task Card

A dissection and investigation into the survival of salmon		
This is the work junior biologists will be engaging in. Check off tasks as we go along.		
Vocabulary Checklist	<ul style="list-style-type: none">• Listen for the words in your vocabulary list.• Check off the words, as we discuss them.	
Post-It Note/ recipe card	<ul style="list-style-type: none">• Before we start the dissection, write down one organ in our body. What is its function or purpose?	
Salmon Diagrams (External & Internal Anatomy)	<ul style="list-style-type: none">• Fill in the blanks: label the internal features of a salmon.• Cut & Colour: cut-out and colour the internal features. See if you can place them in the correct location inside the body cavity of your paper salmon.	
Post-It Note/ recipe card	<ul style="list-style-type: none">• Go back to your first post-it note & review what you wrote.• Get a new post-it note and write down the similar organ/feature in a salmon. Does it serve the same purpose? Are there any differences between a salmon and a human?	
Group Discussion and Questions	<ul style="list-style-type: none">• Use post-it note for discussion and questions. Report out on what you wrote.• Discuss how the features/organs of a salmon are similar or different to those of a human.• Optional: How could human activities impact internal features of a salmon. How could human activities impact how these features function? Could similar activities effect humans the same way?	