



The Salmon Life Cycle

Teacher's Guide

So you want to teach your student(s) about the salmon life cycle? *Fintastic!* The Pacific Salmon Foundation (PSF) has a number of interactive resources to help you! These resources include a video lesson led by one of our salmon biologists, as well as a vocabulary sheet, a vocabulary game, and a colouring sheet for the younger students. 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 students. 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 (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. Vocabulary Game – printed for each student or group of students. The Vocabulary Tiles in this game will need to be cut out. It is up to you whether you prepare these ahead of time or get the students to do this themselves.
4. Large piece of poster or flip chart paper on which you will draw a large circle and divide into 6 sections, labelling each section with one of the life stages: egg, alevin, fry, smolt, adult, spawners. The students will be filling these in with facts/drawings so make sure each wedge is big enough! Cut out each section and have them ready to hand out to students when it's time for the activity in the video. This works best for students in groups, however if they're working individually, make sure to have enough circles/wedges for each student to have a life stage wedge.
5. Ensure students have their own pen or pencil and colouring supplies (pencil crayons or markers)
6. Tape (for assembling the life cycle wedges on the board in the activity)
7. Computer and projector for showing the salmon life cycle videos.

Lesson Plan:

1. Review with students before starting the PSF video lesson:
 - [Yukon River Salmon Story video](#) (3mins 20sec) – available on YouTube
 - A short introduction to salmon life cycles and the challenges salmon face along their migration.
 - [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 and vocabulary game
 - Spend some time going through the vocabulary and playing the game to get students comfortable with the terminology that will be used throughout the lesson.

3. Play the PSF Salmon Life Cycle Video
 - Sam, our biologist in the salmon life cycle video, will walk your class through the salmon life cycle.
 - Near the beginning, she will get the students to have a quick think and write about what a life cycle is, jotting down a few points on their post-it notes.
 - She will pose questions to the students throughout the lesson. You can pause the video and encourage the students to discuss the question and/or write their answers in their notebooks.
 - After presenting the salmon life cycle, Sam will lead you and your students through an activity. At this point, you can hand out the life cycle paper wedges. Depending on the size of your class, you can either have the students form six groups (one for each life stage), or assign each student a life stage that they will work on on their own.
 - i. If you are working with single student one-on-one, have them pick a life stage that they will work with for the activity. Also have them draw a circle and divide it into the 6 life stages and name them. They won't be providing details on all life stages, but can refer back to the entire life cycle drawing when talking about the importance of the stage they've chosen to use in the activity.

- The activity has the students imagine they are presenting information on the salmon life cycle at a community workshop. They will be providing key facts on each of the life stages and then assembling them on the board/wall to create the full salmon life cycle. As students go up to tape their piece of the life cycle to the board, have them share what they have written with the rest of the class.
- Sam will take on the role of a 'concerned community member' and ask your students some questions. Pause the video here and encourage dialogue around the question. You could also get students in the class to pretend to be different members of the community and get them to ask each other questions.

4. Return to the post-it notes:

- Now that the lesson is complete, have students come back to their post-it notes and reflect on what they've learned. They can add any new thoughts to their post-its about what a life cycle is.
- Optional: as a class, you could have the students put their post-it notes up on the board. You can then read some of them out loud anonymously. Get the class to decide what a life cycle is together and come up with a definition as a group.

5. Other activities post-lesson:

- Do an exercise comparing salmon life cycle to that of another animal
- Visit a local stream and look at the habitat features: is there vegetation along the river banks to provide shade and structural support (prevent erosion), what's the substrate (e.g. gravel, sand, vegetation, etc), how deep is it, what's the temperature, how fast is it flowing, can they identify spots that would be good for fish (and describe why)?