

SALMON RESEARCHING & REPORTING

Students research and develop a report about one aspect of how salmon operate in a healthy ecosystem.

GRADE

5th

NEXT GENERATION

LS2-1

TIME

45 minutes Session 1

20 minutes Session 2

35 minutes Session 3

30 minutes Session 4

30 minutes Session 5

LEARNING OBJECTIVES

- Gain experience in researching a topic and reporting information.
- Cultivate working effectively as a team on a multi-faceted task.
- Practice giving positive feedback.

PREPARATION

1. Review the suggested timing and breakdown of this lesson into sessions and modify as you see fit.
2. Establish the project schedule, book a resource person if you know one, and book an audience if your students are to report to students in a different classroom.
3. Make one copy of the “Outlining a Report” worksheet for each team and add the question to be answered by each. Here are suggested questions; add or substitute as you see fit:
 - What does a salmon eat over its life cycle and where does it find that food?
 - How do plants on land and in the water contribute to salmon growth and survival in a healthy habitat and are some more important than others?
 - What types of animals use nutrients from dead salmon (ones you could see without a magnifying glass or microscope)?
 - How do decomposing salmon contribute to a healthy forest? (Note: Google “trees eat salmon” for articles you may wish to copy on this topic.)
4. Make one copy of “Researching and Presenting a Scientific Report” for each team. (Note: If your district or school has its own guidelines, substitute those.)
5. Set aside one pocket folder for each team.
6. Assemble research resources, including
 - *Salmon Forest*, especially pages about nutrients from salmon carcasses
 - books from the school library
 - articles you have found on line
 - student access to the internet
 - a habitat biologist or other knowledgeable volunteer you might know

WHAT TO DO

Session One

1. Tell students they will be working in teams to research and report on one aspect of how salmon operate in a healthy ecosystem.
2. Assign students to teams and locations in the room and give each team a pocket folder.
3. Give each team its copy of “Outlining a Report,” and discuss thoroughly.
4. Give each team its copy of “Researching and Presenting a Scientific Report” and discuss sections 1, 2, 3, and 4.
5. Provide research resources and tell students to work until time is up for today.
6. Tell students to keep all their documents in the pocket folder.

Session Two

1. Tell students to resume their research with the goal of having their outline complete when time is up for today.
2. Remind each team to put documents in its pocket folder.

Session Three

1. Review sections 5, 6, and 7 of “Researching and Presenting a Scientific Report” until all students seem to understand what they are to do.
2. Provide each team with tools for drafting reports (pen and paper, computer).
3. Tell students they should have their reports drafted when time is up for today.

Session Four

1. Tell students they should have finalized their reports and practiced their presentations when time is up for today.
2. Tell students that, next time, they will be presenting their reports and evaluating the project.

Session Five

1. Prepare the room for presentations or take teams to another classroom to present, per your plan.
2. Call up each team in turn and remind the audience to ask questions and thank each team after the presentation.
3. When all the presentations are finished, engage your students in discussing what they learned. Here are suggested questions:
 - How well did the research process work for you?
 - What parts of the project do you think you did really well?
 - What did you learn that had nothing to do with your research question?
 - Were the worksheets helpful in researching your topic and creating your presentation?
 - What might you do better or differently the next time you need to research and present such a report?

OUTLINING A REPORT

Question To Be Answered: _____

Introduction: _____

Fact # 1: _____

Source: _____

Fact # 2: _____

Source: _____

Fact # 3: _____

Source: _____

Fact # 4: _____

Source: _____

Conclusion: _____

RESEARCHING AND PRESENTING A SCIENTIFIC REPORT

1. UNDERSTAND THE PROJECT.

- What type of presentation will you be doing?
 - Written report
 - Poster
 - Speech
 - Skit
 - Slideshow
 - Video
 - Other
- Who is the audience for your report?
 - Teacher
 - Classmates
 - Younger students
 - Peers in another classroom
- When is the project due?

2. ASK QUESTIONS.

- What is your research topic?
- What subtopics might you investigate to help you understand and explore this topic?
- What are key words that could guide you to the information you need?

3. SELECT SOURCES OF INFORMATION.

Decide what **types of sources** will have the information you need:

- What kind of information you will need (general, specific, numbers, illustrations, etc.)
- What types of sources are most likely to have this type of information (books, magazines, websites, videos, etc.)
- Does your assignment require that you research certain types of sources or that you check a minimum number of sources?

Evaluate likely sources of information:

- Does the information appear to be **reliable** (well researched, up to date, by someone with experience)?
- Does the information appear to be **relevant** to your research question?

4. DIG INTO YOUR SOURCES.

- If this is a team project, decide who will check which sources.
- If the source has a table of contents and/or index, check it for your key words.
- Skim through the text to see if it is spot on or off base.
- If you decide that it's a good source, ask if the information is factual - based on lengthy observation, testing in a laboratory or in the field, or agreed to by multiple experts.
- Take notes. Write only what you need to know now; you can go back later for details or quotes.

5. DRAFT YOUR REPORT.

(Adapt this advice if your presentation will not be a written report.)

- If this is a team project, decide who will draft what.
- Use the form provided to outline your report.
- If you find you have holes in your outline, fill them by doing more research.
- Start writing, using your outline as your guide.
- Refer to your notes and go back to sources for details.
- Call on your experience and teacher, as needed, to meet these standards for a report:
 - Write in complete sentences.
 - Present information in an easy-to-follow way and make it interesting.
 - Use quotation marks around direct quotes.
 - Cite the primary sources you use.

6. FINALIZE YOUR REPORT.

- Reread your draft:
 - Have you clearly stated the question your report answers?
 - Did you use evidence from your research to support your ideas?
 - Is the information well organized?
 - Does it communicate to your audience what you learned?
 - Is your audience likely to find it interesting?
 - Are spelling and grammar correct?
- Quietly read the report out loud to be sure it sounds right.
- If this is a team project, work on the draft until every team member is satisfied with it.
- Write or type the final report, following the guidelines your teacher gives you.
- Check the report for any typos.

7. SHARE WHAT YOU LEARNED.

- Submit your report by the deadline.
- If you are to present it to the class or to younger students, your teacher will give you the time and location.
- Decide as a team whether one member will read the report or if you will present it in sections.
- Practice your presentation with another team:
 - Invite and answer questions about your research. If you don't know an answer, don't bluff; offer to look it up.
 - Speak slowly and clearly so all can hear.
 - Connect with your audience by looking up from time to time.
 - Thank your audience when you are done.