

Project: Salmon Life Cycle Game

Students will develop a board game that shows the life cycle, the positive influences (helps) and the hazards faced by the Pacific Salmon. The game will begin with the fertilized eggs and conclude with the spawning adults. In between, include the alevin (in the gravel), fry (in the stream), smolt (downstream migration), ocean, and adult (upstream) migration stages of the salmon's life. Place appropriate hazards and helps that affect the salmon's survival at different stages of their life. These helps and hazards should include both natural and human sources. For example, the ocean threats include being caught in nets by commercial fishers and predation by marine mammals (sea lions, orcas, ...). Positive conditions could include favorable ocean temperatures and plenty of food for salmon to eat.

One way to complete the project is to create a game similar to "Life." Players may spin or role a die as they work their way around the board and follow the instructions for the square on which they land. Spaces may be favorable, hazardous, or blank. When instructed, players may be required to lose a turn, move backwards, or move forward to an open space. The game should follow the salmon's life cycle and the challenges should be appropriate for each stage. The winner of the game is the first player to complete the journey of the salmon.

Another way to create a game is for each player to begin with an equal number of chips, or points. At each stage of the game the players spin a number between 1-3. Each number represents a condition that either favors or threatens the salmon at that stage of their life. If it favors the salmon, then no chips or points are lost. If it threatens a salmon, then either 1 or 2 chips (maybe more if using points) are lost. The winner is the person with the most chips or points at the end of the game.

The objective of the project is for students to express their understanding of the life cycle and challenges of the Pacific Salmon in a creative way. The following criteria will be used for evaluating the project:

- 1) The game should include a title and student name(s) 1 pts
- 2) The student's game must include the stages of a salmon's life, and sequence 6 pts
the stages from eggs to adults (from freshwater stream, to ocean, and back).
There should be at least 6 stages identified.
- 3) The students should include appropriate helps and hazards at each stage of 18 pts
life, remembering that salmon require cool and clean water, plenty of food and shelter, and lots of luck if they are to overcome the many natural and manmade obstacles. For one person – there should be at least 10 different hazards and 8 different helps; if working in pairs – 15 different hazards and 12 different helps.
- 4) The game should include clear instructions about how the game is to be 5 pts
played. These instructions will state the game's objective, how the players move, and how they respond to helps and hazards.
- 5) Creativity and workmanship will also be considered. This is a reflection of 5 pts
the effort and thoughtfulness students use in developing their game.

Total Points..... 35 pts

Due Date: _____