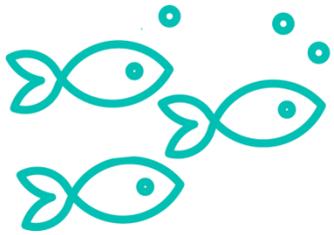


Orca and Salmon Predator Prey Game:



Background: Southern Resident orcas are apex predators, which means they sit on the very top of the food web, and their primary food is salmon. Salmon are anadromous fish, which means they start their life in freshwater and eventually navigate downstream into the ocean, where they grow into adults before making the one-way trip back to the rivers of their birth to spawn and die. Before they go back to those rivers, adult salmon make ideal orca food. Orcas use sound (echolocation) to find their food and communicate with each other while foraging. This game will test your own echolocation skills and give you an idea of the challenges orcas face in finding their food!

Activity Set Up: Decide what the boundaries of the game will be – this is your habitat. You can play inside or outside in a specific area. If playing inside, one or two rooms should work fine. Within the established boundary, players should remove any structures that could cause any player to get hurt, as well as move larger objects to the side to create more open space in the middle. Choose a player to start as an orca, and all the other players will start as salmon.

Gameplay: The orca, with eyes closed or blindfolded (whale-themed blindfolds encouraged!), counts down from 20 seconds. During this time the salmon are maneuvering and spreading out throughout the boundary (habitat) – salmon are allowed to keep their eyes open! After twenty seconds, the orca will start echolocating by clapping their hands one clap at a time, and the salmon immediately respond by clapping back. Salmon are allowed to continue to move throughout the boundary (habitat), and the orca will continue to echolocate (clap) until they tag one salmon (prey). When a salmon gets tagged, they will stand in place for ten seconds. After ten seconds, the tagged salmon transforms into a second orca, closes their eyes, and starts to echolocate to find the other salmon. Since orcas forage cooperatively, the orcas can link arms or join together to expand their search radius. Keep foraging until there is only one salmon left. The surviving salmon will start as the orca the next round, if you choose to play again.

Reflective Questions:

What was something that surprised you about this game after playing?

What is realistic about this game related to orca and salmon? What is unrealistic?

Did the orca use their echolocation effectively? If not, how could this have been improved?

How did the gameplay change, if at all, once there were fewer salmon?

