

ACTIVITY: SAVING SPRINGER: FIND YOUR ORCA FAMILY

GRADE LEVEL 2-6

OBJECTIVE

Students will be able to explain how orca family pods are organized and how they communicate (20 minutes).

BACKGROUND

In the ocean, visibility decreases with depth. Pods of orcas use sound to navigate, find food, and to communicate. Though their physical proximity to each other may change throughout the day, orcas are usually within acoustic range. Each pod has a set of unique calls. Increases in ambient boat noise have the potential to mask the ability to communicate with each other and echolocate. Students will be given a letter (J, K, or L), indicating which pod they are from; by saying that letter students will find their orca family. Students will play a second time, but have them close their eyes, insert Springer (the A letter), and make some noise. The students will probably go slower at first and get louder, too. Later, discuss the results with them.

MATERIALS

Paper squares with letters on them (see “Find Your Orca Family” table)

PROCEDURES

1. Hand each student the paper letter (either J, K, or L) and tell each student not to show it to anyone. Remember to pull the A paper out for the first round of the activity.
2. Ask students to spread out. When the teacher says begin, the students can only say the letter on the piece of paper. Students will try to assemble into their pods acoustically.
3. Give them about 1-2 minutes or until three distinct groups are formed. Share with the class that there are three resident pods of killer whales in the Pacific Northwest, and each pod makes certain calls specific to their pod.
 - a) J pod has about 26 whales
 - b) K pod has about 19 whales
 - c) L pod is the largest pod, with about 43 whales

To get a more accurate number of whales per pod, visit:

www.whalemuseum.org/programs/orcadoptioin/whalelist.html

4. Have the students in each pod find the oldest girl in their pods. Tell the oldest girl that she is the leader of her family group (in other words, the oldest female killer whale leads her pod). These pods include grandmothers, mothers, their children, aunts, uncles, and cousins but no fathers. The fathers live with their mother (usually in another pod).



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5. Next, have them spread back out and try the game again, but this time with their eyes closed. Explain that light only reaches the upper portion of the ocean, so whales rely on sound to find their way. Secretly ask one student to take the A card. As students begin the activity, start making noise to simulate boat noise in their environment.
6. When the students have found their family pods again, look for the lone A whale. Ask why he/she did not find anyone to be in his/her group (nobody else was saying “A”). Ask students what were the challenges during the activity this time. They might say that:
 - a) It was hard to hear their group as the noise level increased.
 - b) In the first round of the activity, the students could rely both on sight and sound. With their eyes closed, moving around might have been slower, so that it took longer to form groups.
 - c) Students might also say that it was hard to decipher between J and K because they sounded more similar than J’s and L’s or K’s and L’s.
7. Highlight that Springer was not a member of the southern resident pods (J, K, and L pod); she was a northern resident killer whale from A pod. Ask the student holding the A card how it felt to not find other A’s or family members? Was it stressful, sad, or lonely?
8. Have the leader of each pod collect the small pieces of paper with the letters on them and give to the teacher.



FIND YOUR ORCA FAMILY CARDS

DIRECTIONS

Cut the cards and mix them up. Hand one to each student. Tell students not to show each other their cards. There are more whales in L pod compared to the other two pods, hence the greater number of L's compared to J's and K's. Depending on your class size, you might need to add more L's or not use all of the cards; however, make sure you use the A..

J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	L
J	K	L	A

