

How Do Whales See?

Materials:

2 hand held mirrors

Objective:

See the world through the eyes of a whale and understand why they can easily get entangled in fishing gear and other ocean debris

Guiding Questions:

What advantage does a whale have by seeing out both sides?

What disadvantage does a whale have by not being able to see straight in front?

Your eyes are in front of your head. So you see what is in front of you and some of what is on either side. Your brain connects what both of your eyes see into one wide image. This is called binocular vision. But whales' eyes are on the sides of their heads. Each eye sees a separate view. This type of vision is called monocular vision. In this experiment, you will find out what it's like to have monocular vision.

Procedure

1. Students hold two mirrors back to back.
2. Students rest the two back-to-back mirrors on their nose
3. Slowly separate the far edges of the mirrors slightly, keeping the edges closest to the face together, to create a peripheral view.
4. Observe what you see! Is it different or the same as what you can see in front of you? Can you see anything in front of you?



Based on a lesson in the *Face-ing Extension Curriculum Guide*, a partnership of the New Bedford Whaling Museum, Audubon Society of RI, and Whale and Dolphin Conservation, 2012 and 2016.