

Human Impact Lab: Elasmobranchs

Loggerhead Marinelife Center

Loggerhead Marinelife Center is an ocean conservation organization and sea turtle hospital located adjacent to one of the most important sea turtle nesting beaches in the world. The Center features an on-site campus hospital, research laboratory, educational exhibits and aquariums, and also operates the Juno Beach Pier, which hosts worldclass angling and sightseeing. The Center's conservation team works with 76 local and international organizations across six continents to form partnerships and share conservation initiatives and best practices that are core to its mission of ocean conservation. The Center is expanding and has launched its Waves of Progress capital expansion campaign, designed to accelerate and amplify LMC's conservation and education impact.

Our mission is to promote conservation of ocean ecosystems with a special focus on threatened and endangered sea turtles. Our vision is to be recognized locally and internationally as the leading authority in sea turtle education, research and rehabilitation.



Lesson Objectives

- I can define what an Elasmobranch is and give examples of specific species and what make them elasmobranchs
- I can describe an adaptation that sharks and fishes have that help them survive in their environment

Vocabulary

- <u>Predator</u>: an animal that naturally preys on others.
- <u>Elasmobranch:</u> a subclass of cartilaginous fish, include sharks, rays, skates, and sawfish
- <u>Chondrichthyes:</u> the taxonomic Class containing cartilaginous fishes; divided into two subclasses – Elasmobranchii and Holocephali

Material

- Pool noodles (2 per team)
- Caution cones or other obstacles
- Blindfold (1 per team)



Visit Marinelife.org to learn more about Loggerhead Marinelife Center!

Lateral Line Relay

Directions: In this activity, students will get to see what it is like to have the lateral line sensory system of fishes. The lateral line system is a sensory adaptation that allows fishes to detect water movements and pressure gradients. During this activity, the students will get to experience having a "lateral line system" by completing a short obstacle course while blindfolded with the help of their lateral line partner.

Set-up: Place five cones in a straight line, unevenly spaced out. Make separate lines of cones for different obstacles or teams. Assign partners to each student and assign each pair of students to one of the cone obstacles.

Activity Procedure: One student will be blindfolded and will act as the front end of the fish. The other student will act as the lateral line by standing behind their partner and holding a pool noodle on either side of them. The lateral line student will help the blind folded partner walk through the cone obstacle by tapping them with pool noodles on either side in order to turn them in different directions and maneuver around the obstacles. Each pair of students will complete the obstacle twice in order to switch roles.



Helpful Photos – Lateral Line Relay Photos: Limestone Creek Elementary, 5th Grade Spring 2019



