

Activity: Shark Senses

Grade Level: PreK (ages 3-5)

Objectives:

- Understand what makes sharks successful hunters.
- Name all seven senses of a shark.
- Identify which shark sense is similar to magnets.

Vocabulary

Ampullae of Lorenzini: small, gel-filled pores, located near a shark's face

Lateral line: a visible line along the side of a shark that detects pressure and vibration

Apex predator: an animal that sits on the top of a food web, consuming other animals with little to no predators of their own

Background Information:

Sharks are considered apex predators. This means they are at the top of the food web. Sharks are an apex predator because they have seven senses to help them survive! Did you know that humans only have five senses? Can you name all five human senses?

We use our sense of smell, taste, touch, sight, and hearing to explore. The lateral line and ampullae of Lorenzini set sharks apart from humans. These are their two extra senses. They use these senses, plus the same five we have, to explore the oceans! Their lateral line helps them move swiftly through the ocean. They can make sharp turns like a racecar on a speed track. The ampullae of Lorenzini help them detect food from far away. They can pick up electrical impulses in the water given off from swimming fish and other ocean creatures. When a fish's heart beats fast, it creates a stronger signal for sharks.

The way sharks are attracted to these impulses is similar to magnets. They are drawn to each other even if they are not touching.

Materials:

- Empty container
- Solid medium such as gravel, sand, dirt
- Small magnets
- Magnet wand or larger magnet

Procedures:

How-To Activity:

1. Fill the container with one of the suggested mediums above.
2. Hide the small magnets throughout the box with your child.
3. Once the magnets are placed, use the larger magnet and scan over the top of the box.
4. See if you can find every magnet hidden in the box.

After Activity Questions:

1. What are some things that increase a fish's heartbeat?
2. What other factors of a shark make them an apex predator?
3. Can you name any other apex predators? (land or water)