

# Family Fun

## Six Senses of a Shark

**Enduring Understanding:** Sharks use their six senses to understand their surroundings.

### Materials

- Five senses worksheet
- paper or white board
- Apples and pears  
(NOTE: You can choose another healthy snack)
- Small containers filled with various scents, like spice jars (two of each kind)
- Small containers filled with different items (two of each kind)
- Paper towel rolls
- Rubber bands
- Colored plastic wrap
- Variety of household objects with different textures (soft, hard, sticky, smooth, rough)
- Large magnets
- Small magnets
- Magazines or books
- Paper or plastic cups
- Internet (optional)

### Setup:

1. Prepare needed research and writing materials.

### Program outline:

#### What are senses?

- Humans have five senses: hearing, smell, sight, taste, and touch. Our five senses help us explore the world and know what things sound, smell, look, taste, and feel like.
- Without our senses it would be difficult to understand and explore the world around us.
- If the Internet is available, visit this website to review the five senses: <https://ca.pbslearningmedia.org/resource/cg9-sci-5senses/curious-george-five-senses/>

#### Animals have senses, too. The shark is one animal that uses its senses every day.

- Sharks have six senses.
  - Like us, sharks can hear, smell, look, taste, and touch. Their sixth sense is electroreception—sharks can tell when an animal or fish is near them even if they can't see it. (Please refer to Center 6 for a hands-on, visual way to explain electroreception.)
  - They use their senses to find food, explore the world, and avoid danger.

**Create a chart that compares human senses and shark senses to use as a reference. Include visuals for each of the senses.**

## Program outline continued:

### Sample Chart

| People have five senses | sharks have six senses |
|-------------------------|------------------------|
| 1. Sight                | 1. Sight               |
| 2. Hearing              | 2. Hearing             |
| 3. Smell                | 3. Smell               |
| 4. Taste                | 4. Taste               |
| 5. Touch                | 5. Touch               |
|                         | 6. Electoreception     |

- Explore sharks' six senses through six centeractivities.

### Center 1 Sight

- Place colored plastic wrap over toilet paper rolls held together with a rubber band.
- Put out a few different colors and different colored objects.
- Let students explore what happens to the objects when they look at different colored objects through different colored eye gear.

### Center 2 Hearing

- Put small objects (beads, thumbtacks, rice, pasta, buttons, etc.) into small containers.
- Shake the containers and ask what they hear.

### Center 3 Smell (If students have food allergies, choose non-food items.)

- Place pairs of different scented materials (mint, onion, cinnamon, etc.) in containers or small bags. (Each scent must have a match.)
- Mix up containers. Students try to find the correct match.

### Center 4 Taste

- Put out pieces of two peeled fruits that look the same (pear and apple).
- Students taste each fruit and guess which is apple and which is pear.

### Center 5 Touch

- Fill paper bags with objects (such as fabric, sandpaper, cotton balls, shaving cream, modeling clay) with different textures (rough, smooth, hard, soft).
- Students describe objects and guess what is inside each bag without looking.  
OR
- Give students a tray of objects and two buckets (one for soft things, one for hard).
- Students sort objects and place them in the correct bucket based on how each object feels.

## Program outline continued:

### Center 6 Electoreception

- Give each student a large magnet. These magnets are “sharks.”
- Hide smaller magnets inside various objects (bag, magazine, cup, etc.) These magnets are other “ocean animals.”
- Students use the large magnet to detect hidden smaller magnets.
- This is similar to the way sharks use electoreception. Even though they can’t see other ocean animals, they can use their sixth sense (electoreception) to sense when they are near.

### Sharing Results

- Review each center activity and the six senses of a shark on the chart.
- Talk and share your favorite center activities or share something you experienced. (“My favorite activity was \_\_\_\_\_ because \_\_\_\_\_,” or “I saw...I felt...I heard,” etc.)
- If time allows, students can draw a picture of their favorite center activity using the worksheet below.



## Background information:

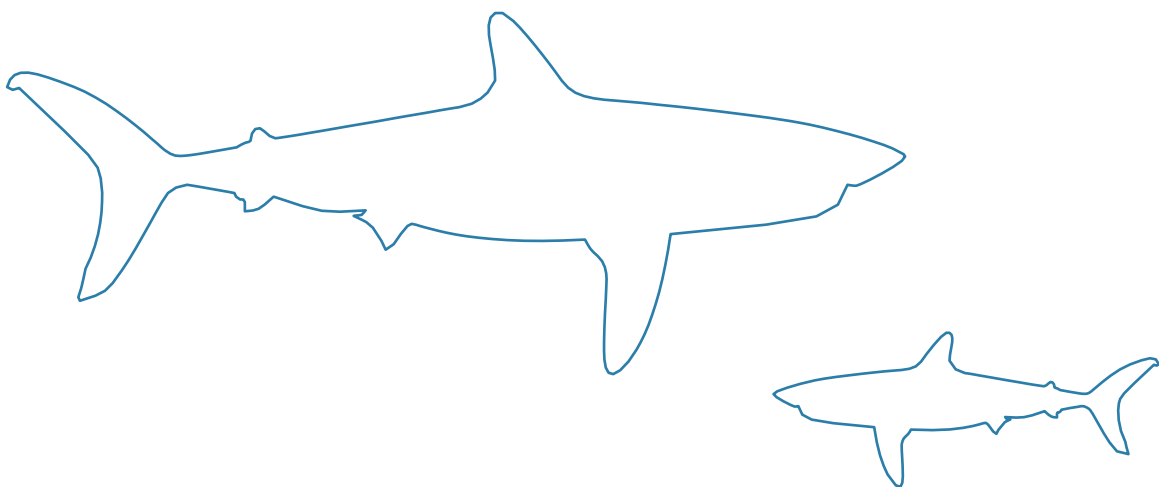
### Six Senses of a Shark

Sharks have six senses that include sight, hearing, taste, smell, touch, and electroreception. These six senses help sharks understand their environment. Their sense of smell and sharp sense of sight allow them to hunt and navigate through dark waters. In fact, sharks can dilate their pupils in order to see in dark conditions. Sharks use their sense of touch to feel vibrations, which helps them to detect food, predators, and other nearby dangers. Their sense of hearing helps them to identify nearby movement. This ability is also important to help regulate balance. A shark's sense of taste is also significant. Its mouth is lined with special taste sensors that help the shark's brain distinguish between food it likes and food it doesn't like. Finally, the shark's sixth sense, electroreception, is used when prey give off electric currents. Sharks can detect or sense these electric currents (without hearing or vision), which become stronger as they move closer. While electroreception is found in many aquatic animals, other animals like cockroaches, bees, and platypuses have been observed to have this sixth sense as well.

### Additional Information

Sharks use their senses to help them hunt and find food. There are many different types of sharks, so their diets depend on the type of habitat that they live in. Sharks are top predators in their ecosystem, and they are highly adaptable. Although sharks may prefer a certain type of food, they can adjust what they eat in order to survive.

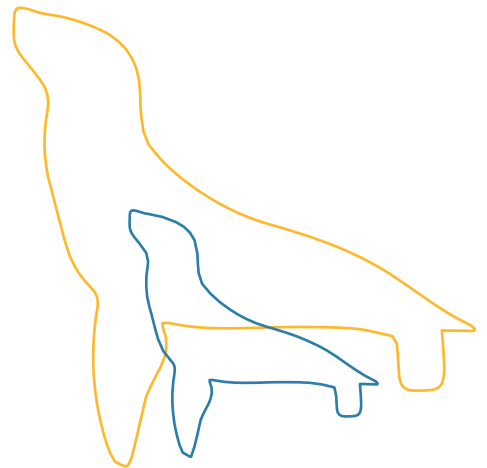
While sharks are feared for their attacks on human beings, no shark species hunts people. The energy gained from consuming a human would most likely not make up for the energy lost hunting and attacking a person. Sharks kill fewer than ten people each year. In fact, most people who die from shark attacks die from lack of proper medical care.



## glossary:

**Electroreception:** Detection by an animal of electric fields or currents

**Sense:** Faculty by which the body perceives a external stimulus



Name: \_\_\_\_\_

## five senses



Here is a picture of me using my favorite sense.

I am \_\_\_\_\_.