

# Senses

## With Shy Wolf Sanctuary



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**Shy Wolf Sanctuary**  
**Education and Experience Center**  
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# Senses



## Standards

- **MS-LS1.D.1** Each sense receptor responds to different inputs (electromagnetic, mechanical, chemical), transmitting them as signals that travel along nerve cells to the brain. The signals are then processed in the brain, resulting in immediate behaviors or memories.
- **MS-LS1.B.2** Animals engage in characteristic behaviors that increase the odds of reproduction.

## GOAL:

**Students will identify how animals use senses to survive and thrive in their environment**

In this lesson students will learn about how animals experience the same senses as they do and how animals use their senses to survive in their environments

Students will get an opportunity to understand how their bodies work and how the senses frequently work together to give their brain information about what they see, taste, feel, and hear.

## Included Resources:

Video link: [https://youtu.be/\\_2CpECiH2lg](https://youtu.be/_2CpECiH2lg)

SWAY link:

Teacher instructions and presentation

Vocabulary

Resource and Work Pages, Assessment Pages

## Differentiation:

Senses activities may be completed as demonstrations or may be assigned as cooperative group activities.

Teacher might assign a paragraph written summary of the results of each activity, have students pair and share, or have students record a FlipGrid video recounting their experiences and results.

## Resources Needed:

Pens or pencils, notes pages, internet access for video and lesson viewing

Possible resources for sense activities:

Blindfolds, beanbags, ball, baggies, cotton balls, flavor extracts or essential oils, different types of similar foods – potatoes, sweet potatoes, apples, berries, crackers, chips, chocolate chips, butterscotch chips, etc.

Time Required: 45 minutes concept presentation

Ten minutes per each additional lab selected.

**“TO HEAL HEARTS AND MINDS THROUGH RESCUE, SANCTUARY, AND EDUCATION.”**



<b>Engage</b>	Begin by asking students what senses they would use to find food in a strange city.
<b>Explore</b>	Use links in presentation to watch video on senses Discuss animal senses. Ask students to give their own examples.
<b>Explain</b>	Use presentation or SWAY to review and discuss concepts.
<b>Expand</b>	Using the information they have learned students will participate in activities that explore how each sense works in their body.
<b>Evaluate</b>	Students check their understanding through writing a summary, Pair and Share or FlipGrid.

### Procedure Summary

#### Using presentation:

**Introduce senses. Discuss which senses students will use to find food in a strange place. What are the challenges?**

**Review vocabulary concepts and the senses animals need to survive.**

**Show Shy Wolf Video (link above and in Senses Presentation) Use SWAY**

**Reinforce the basic components of animals using senses to survive (identify danger, find food, participate in family units).**

#### Introduce Activities

Select activities ahead of time and have any necessary supplies available.

Assign students to partners or introduce demonstration.

Discuss with students how they will be assessed at the end of activities.

Will they do a Pair and Share, write a summary, or record a Flip Grid?



## Student Resource Pages

### Vocabulary:

- **Sensory Organs** - the organs of the body that access those sensory capabilities and help us become conscious and respond to our surroundings
    - the eyes (for seeing), nose (for smelling), ears (for hearing), tongue (for tasting), and skin (for touching or feeling).
  - **Senses** - our ability to detect stimuli which are then interpreted and responded to accordingly
  - **Response** – Our response or reaction to the stimuli
  - **Behaviors** – actions that develop as a result or a response to a stimuli
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### Concepts:

- Our five senses help us learn about the world around us, just like senses in animals
- Animals senses help them find food
- Protect them from predators
- Provide animals with information about their environment
- Help them find shelter and avoid threats.

## **Experiments for Each Sense:**

### **Sight**

#### **Resources Needed: bean bag or small ball, blindfold**

Place students in pairs. Have students stand several feet apart. Instruct students to toss a bean bag back and forth. After a few tosses, blindfold one student in each pair. Then have them try tossing the bean bag back and forth again. Ask students what senses they had to use when their eyes were covered. Which was harder to do? How many more times did they catch the bean bag with their eyes open than when they had the blindfold on?

Variation: Sit on the floor and roll a large ball instead. Cover only one eye and discover how both eyes work together.

### **Hearing**

#### **Resource Needed: blindfold, pen and paper**

Our ears work together to process information in the brain. For this experiment you'll need several students, a blindfold, and a pen and paper to record information.

Test your students' sense of hearing by gathering several into a circle. One will be a record keeper, and another should be blindfolded. Students around the circle will randomly clap their hands once, and the blindfolded student will indicate where he thinks the sound came from. Record the accuracy of each student. Make the experiment harder by having the blindfolded student cover one of her ears and identify where the claps came from.

After several students have participated, review the test results to verify that two ears are better than one.

### **Smell –**

***This is a great activity to get your students up and moving around.***

**For this activity students can be asked to identify the smell of their cotton OR they can be challenged to find packmates like an animal would, by using their sense of smell to identify their packmates. You can further extend this activity by identifying one smell as a predator smell and have them avoid these predators by heading to the other side of the room.**

#### **Resources Needed: cotton balls, small plastic bags, different extracts or liquids with strong smell,**

Place cotton balls in a plastic bag and add drops of various extracts (such as almond, lemon, mint, coffee, strawberry, chocolate, etc.) to different bags. Give each student a bag and cotton ball scented with a different smell. Tell the students that they are to move around the room without talking, They should smell other student's cotton balls, try to identify the smell and then find other member of their "pack" (these students have the same smell on their cotton balls).

## Touch

### **Resources Needed: Ballpoint pen or stylus**

Explain to students that certain parts of their bodies have more nerve endings than others, which gives us a better sense of touch. Have them form pairs. Tell the first student close his or her eyes, and allow the partner to gently poke the other student with a ballpoint pen on the palm of his hand. The first student should be able to point exactly to where the other student poked him. Tell the student to try this again but this time poke the partner on the forearm. The student may not be able to determine the exactly location of the poke. Explain to the students that this an example of how nerve endings are dispersed in the body,

## Taste

### **Resources Needed: blindfold, small pieces of similar foods – potato, sweet potato, apple, raisins, craisins, anything with a smell will work**

Demonstrate how the body is dependent on both the tongue and the nose to determine taste. This activity can be a demonstration (use a pane of selected students) or it can be a group activity. Choose several students to be blindfolded. Give blindfolded students small pieces of food, such as potato and apple, and ask them to identify the food. Have students pinch their noses while tasting the food. Ask the students how important they think it is to have the combination of taste and smell.

## Culmination Activity

- Have teams of students plan a scavenger hunt for food, with clues for other student teams to follow. The clues should communicate information such as the kind and quantity of food and the direction and distance of the food source. The clues should involve at least two of the five senses (smell, vision, touch, hearing, taste) and guide students toward the food source without telling them exactly where it is. For example, clues might include head bobbing to one side to indicate direction, and tapping a certain number of times on the other person's hand to indicate distance. After groups have completed each other's scavenger hunts, discuss the following:
- Which clues were easiest to follow?
- Which senses did the clues use?
- Can you come up with clues that use less energy to communicate about food sources?

Use the space provided to write two paragraphs. The first paragraph should describe how animals use their senses in their environment. Use the second paragraph to describe what you learned about your senses in the activities you completed.