Sensational Senses Pre-Visit Guide: Pre-K to 1st Grade

During this program students will take an in-depth look at our five senses and explore the differences and similarities with how they’re used in the animal kingdom.

These resources will help you and your students prepare to make the most of your zoo experience!

In-Classroom Activities

Learn about the five senses and the organs associated with them:

- We see with our eyes.
- We smell with our noses.
- We hear with our ears.
- We touch with our skin.
- We taste with our tongues.

Explore how we use our senses with these easy experiments:

**SOUND**

Sound Shaker Matchmaker: Using a variety of small objects (such as paper clips, coins, rocks, etc.) in small cans or jars, make several sets of matching sound shakers. Make sure that the container is covered so that the objects are not visible. Pass out the shakers to students at random, and explain that they must try to find their match only by sound.

*Animal connection:* Birds, frogs, and many other animals make a variety of calls to communicate with each other. They warn each other of danger, find mates, and defend their homes using sounds!

**SIGHT**

Magnification: Allow students to use hand lenses or magnifying glasses to look at everyday objects. Challenge students to look through their magnifying glass at varying distances; ask them to describe how the object looks, what details they may notice, shapes they find, etc.

*Animal connection:* Birds of prey have eyes that allow them to magnify objects that are far away—a hawk could see an ant crawling on the ground from the top of a 10-story building!

**TOUCH**

What’s in the bag: Gather natural objects that are soft, smooth, rough, bumpy (like pinecones, rocks, leaves, etc.) and put them into paper bags. Pass them around the
classroom so students can investigate with their hands to "see" the objects using only their sense of touch. When all the students have had the opportunity to feel the objects, instruct them to share their guesses before revealing what's inside.

**Animal connection:** Many animals have little hairs sticking out from their face called whiskers; these are very sensitive to touch, and help the animal detect movement and the presence of nearby objects—even in the dark!

**TASTE**
Salt vs. Sugar Taste Test: Sprinkle some salt and sugar onto individual black sheets of paper (one of each per kid, do not tell them what they are!). Ask, how does the first one look? How does it feel? Ask the same questions about the other. Can they tell a difference between the two? Then have children taste the salt and sugar one by one. Ask them if they can name what they tasted, how it tasted (sweet/salty), and whether they could tell the difference between the two.

**Animal connection:** Many insects taste with their FEET! This allows them to test and identify a food source before actually eating it, and in some cases (like with butterflies) it helps female insects find the appropriate plants on which to lay their eggs!

**SMELL**
The Nose Knows: Gather an assortment of smelly ingredients or oils in small plastic cups (lemon, vinegar, mint, cedar, banana, pine, etc.). Keep the items separated and enclosed so that the odors do not mix. Use only small amounts of each item and instruct students to take only small whiffs from each container. Put a blindfold on a student (or punch holes in the top of the containers to eliminate the need of a blindfold) and ask the student to: identify the item by smell, rate the odor (bad or good for young kids), and tell about any memories associated with the smells.

**Animal connection:** Many animals smell with body parts other than a nose! Male moths use their antennae—feathery appendages that are covered in smell receptors—to find females up to 7 miles away!

**Recommended Reading**
- The Magic School Bus Explores the Senses by Joanna Cole
- The Five Senses by Keith Faulkner & Jonathan Lambert
- How Do Animals Use Their Senses by Alejandro Algarra

**Discussion/Research Topics**

*Do animals have any senses that humans do not?*

*Which animals have the best sense of smell? Sight? Hearing?*
Student Worksheet

What would the fox use to **SEE**? Color in **BLUE**.

What would the fox use to **HEAR**? Color in **PURPLE**.

What would the fox use to **SMELL**? Color in **YELLOW**.

What would the fox use to **FEEL**? Color in **GREEN**.

What would the fox use to **TASTE**? Color in **RED**.