

“In the Human Body”

Module 15, Adventure 1

The logo for "EXPLORE IT" is enclosed in a black rectangular border. The word "EXPLORE" is in a bold, sans-serif font, with the letter "O" highlighted in green and the letter "R" in purple. The word "IT" is in a smaller, regular sans-serif font.

Prompt:

In this activity, you will try different experiments. Each will give you a chance to observe how your brain and body uses your sense of smell, sight, hearing, and touch.

Materials:

- Paper and pencil
- Two glasses
- 1 cup of vinegar
- 1 cup of water
- 1 Index card
- 1 black marker
- Five identical (or very similar) jars or containers that cannot be seen through
- 5 groups of items to put in containers to test your sense of hearing. Some examples include putting paper clips in one container, cotton balls in a second container, water in a third container, coins in another container, and rice in one more.
 - It is recommended that someone at home does this so it is a surprise!
- 5 items around home to touch and describe
- *Optional: Explorer Notebook*

Instructions:

1. Each experiment below will focus on a different sense and how your brain understands what you're sensing.
2. **Sense of Smell**
 - a. Ask someone in your home to pour two identical glasses - one with vinegar, and one with water, without you looking!

- b. Use your sense of smell to tell the difference. Can you use any other senses to tell the difference between water and vinegar?
- c. *Sense of smell bonus:*
 - i. Why do you think a sense of smell is important?
 - ii. What is your favorite smell? How does it make you feel when you smell it?

3. Sense of Sight

- a. Everyone has a blind spot, an area you cannot see.
- b. Find out where your blind spot is! Follow the instructions in this video (from New York Hall of Science) to learn how to check your blindspot: <https://www.youtube.com/watch?v=QXzgokis33I>
- c. *Sense of sight bonus:*
 - i. Are you right-handed or left-handed or both? Do you think your eyes also have a dominant side?
 - ii. Test it out by pointing to an object with both eyes open. Then close one eye and the other. There should be one eye where the object you are pointing at stays in the same spot and you seem to be pointing somewhere else with the other eye. The eye that is open when you are still pointing at the same spot is your dominant eye.

4. Sense of Hearing

- a. Ask someone in your home to put a different item or group of items in each of five jars/containers. Or, you can do it yourself and then mix up the jars/containers.
 - i. Note - each container should be identical or very similar, and cannot be glass or something you can see through.
- b. Close your eyes and shake each container, one at a time. By shaking the container, you create a vibration and a sound.
- c. Can you identify what is in each container by only using your sense of hearing? Try to describe each sound as you shake the container. Write down your guess, what you hear, and what you discover the material is after you open up the jar/container.
- d. *Sense of hearing bonus:*
 - i. Sound and vibration can travel through objects, like string! Take two pieces of string and tie each around a spoon. Wrap the other side on your fingers and put them inside your ears. Knock the spoon against things and see what you notice.

5. Sense of Touch

- a. Choose five things around your home.
- b. Close your eyes and touch/feel each item. Write or record yourself giving a description of each item, and ask someone in your home to guess what the item is!
- c. *Sense of Touch bonus:*
 - i. Pick five small objects and find five containers that you can't see through. Put one object in each container. Ask someone in your home to close their eyes and feel the object in each container. See if they can guess what it is without looking!

Resources:

- View this video, made by the New York Hall of Science, to learn about how to find your blindspot! <https://www.youtube.com/watch?v=QXzgokis33I>

Extensions:

- Visit the [Boston Children's Museum's Beyond the Chalkboard webpage](#) and filter by keyword 'senses' to find many activities that build on how humans use their various senses.
- Go to the "In the Human Body" topic on Flipgrid and share what you observed!

Explorer Notebook

You can use this to help you set up your Explorer Notebook!

Test Your Senses Module 15, Adventure 1	
Sense of Smell Observations	Sense of Sight Observations
Sense of Hearing Observations	Sense of Touch Observations