

HOW DO WE SMELL?

Summary

Have you ever wondered how smell works? Have you ever smelled something and it made you think of a memory? If so, that's because our bodies are working with our brains to help us smell. Today, we are going to learn about how we smell and do some fun activities!

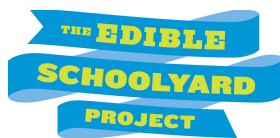
Before you get started: If you are not able to print out the worksheets, please copy the information from the worksheets into your notebook or on a piece of paper.

Materials

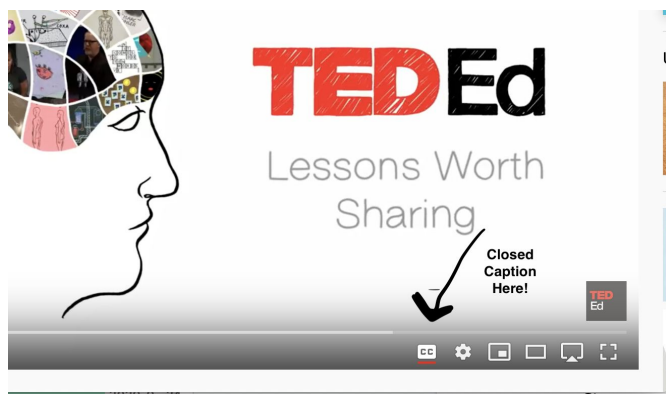
- Computer or phone to view videos
- Spices
- Structured worksheets
- Pen or Pencil

Vocabulary

- **Olfactory:** Olfactory is a fancy word that has to do with smelling.
- **Anosmia:** loss or inability to have a sense of smell.
- **Neurons** are the basic units of the nervous system and its most important part is the brain.
- **Gene** is the basic unit of heredity. This means that genes determine what traits are passed down from a mother and father to their child. Eye color, height, and hair color are some examples of the traits that are controlled by genes.
- **Pigmented:** color (something) with or as if with pigment.
- **Olfactory Epithelium:** The sense of smell, called olfaction, involves the detection and perception of chemicals floating in the air. Chemical molecules enter the nose and dissolve in mucous within a membrane called the olfactory epithelium.



WATCH: Please go to this link and watch the video. TED-Ed “How do we smell?” <https://www.youtube.com/watch?v=snJnO6OpjCs>. MAKE SURE YOU PUT ON THE CLOSED CAPTION. Here is where you find the closed caption on the video:



If you are watching the video on your phone, use this link: <https://tinyurl.com/smellesy>. We will watch the video again later, so you don't have to take notes. Just watch!

DO: Go into your kitchen and take out at least 3 different spices. Try and find:

- Curry powder
- Cinnamon
- Clove
- Cumin
- Vanilla
- Garlic

If you don't have those spices, don't worry! Grab whatever you can find. Also, grab some coffee. When you smell coffee it neutralizes your sense of smell so you can smell other spices.

WRITE: Using the spices from your kitchen to fill out your [Smell Lab Sheet](#).

WATCH AGAIN: You are going to watch the video again, TED-Ed “How do we smell?” Please go to: <https://www.youtube.com/watch?v=snJnO6OpjCs>. If you are copying the link, use this link: <https://tinyurl.com/smellesy>.



This time, please fill out the [Structured Worksheet for Video](#). In the worksheet there are directions to stop the video to write answers. **NOTE:** Read through the worksheet once before you start playing the video to make sure you know what you are looking for while you watch.

WRITE/REFLECT: As the video discusses, smell is the first sense you use when you are born. Smell is also strong at triggering memories. We want you to explore smell and memories. Fill out the [Food Memory Worksheet](#). On the sheet, write down the spices you smelled and a memory for each.

CONNECT: Go to someone in your house and ask them to smell one of the spices. Ask them to tell you a memory that is connected to that spice. Write it down on the [Family Food Memory Worksheet](#).

FIND: Find some of the words discussed in the video in this [Word Search](#).

Student Notes:

- Extend this lesson to the dinner table! Look at our recipes for [Garlic Roasted Chicken](#), [Oatmeal Cookies](#), and [Rice Pudding](#)

References

Eveleth, R (n.d) How do we Smell?. *TED-ED*. Retrieved from <https://ed.ted.com/lessons/how-do-we-smell-rose-eveleth#digdeeper>