



Inhale and Smell

<p>THE BASICS</p>	<p>THE TOOLBOX</p>	<p>EDUCATION STANDARDS</p>	<p>Life Science Content Standard: Understanding that every organism has structures that serve different functions, and can also work together for growth and survival.</p>
<p> Grade Level: 4-12</p>	<ul style="list-style-type: none"> • 7-8 food extracts such as vanilla, root beer, lemon, orange, almond, pineapple, or peppermint. 	<p>SAFETY CONCERNS</p>	<p>Don't inhale too deeply, or you could get a noseful of extract!</p>
<p> Estimated Time: 35 min.</p>	<ul style="list-style-type: none"> • Masking tape • Pencils and paper 	<p>FOR KIDS WITH DISABILITIES</p>	<p>This is an excellent activity for visually-impaired students.</p>



Educational Objective:

To identify various smells, and demonstrate that the sense of taste is related to the sense of smell.

What to Do:

- Make copies of the activity sheet and data chart.
- Cover the labels on the food extract bottles with masking tape so the participants cannot identify the substances by sight.
- Number each bottle, and write the number and the name of the corresponding extract on a master sheet so you know the answers.
- You may want to make 2 or 3 identical sets for large groups of students.

Questions to Ask Students As They Do This Activity:

- Did you identify the smells?
- Which scents were easy to identify?
- Which were difficult?
- Name some situations in which you would encounter some of these scents.

Why It Happens:

Your nose is the organ for smell. There are nerve endings in your nose that distinguish the odors of different substances. When you have a cold and your nose is congested, your odor detectors do not function properly. This makes it difficult for you to taste your food, because most of "taste" is really smell. When they are functioning properly, the nerve endings in your nose detect a smell and send nerve impulses to your brain. The brain then determines what the smell is, allowing you to identify it. Over time, smoking can diminish your sense of smell.

WEB SITES

- **Yucky Gross & Cool Body**
<http://yucky.kids.discovery.com/flash/body/> (Grades 3-8)
- **The Senses**
<http://faculty.washington.edu/chudler/chsense.html> (Grades K-12)

SOFTWARE

- **My Amazing Human Body**
DK Interactive Learning, 1997
(Grades 3-6)
- **A.D.A.M. The Inside Story**
ADAM Software, Inc., 1996
(Grades 5-8)

READING ROOM

- Ballard, Carol. **How Do We Taste and Smell?** Raintree Steck-Vaughn, 1998. (Grades 1-4)
- Wright, Lillian. **Smelling and Tasting.** Raintree Steck-Vaughn, 1995. (Grades 3-4)
- Pluckrose, Henry. **Smelling.** Gareth Stevens, 1995. (Grades K-4)

Career Connections

An otolaryngologist is a doctor who focuses on the treatment of ailments that primarily affect the ear, nose, and throat.

INHALE AND SMELL ACTIVITY SHEET

Your nose is the organ for smell. Today, we're going to use our noses to identify several kitchen extracts used in cooking. None of these extracts are harmful, but be careful not to sniff too deeply or you might get a noseful of extract!

1. Your leader will provide you with 7-8 different kitchen extracts with the labels covered up.
2. Smell the first extract. What does the smell remind you of? What kind of extract do you think it is? Record your observations and your guess on the chart below.
3. Repeat step 2 for all the remaining extracts.
4. When everyone is done, your teacher will reveal what the extracts really are. How many did you get correct?

Inhale and Smell Data Chart

	Observations/Notes	Guess
1		
2		
3		
4		
5		
6		
7		
8		