



The Sense of Taste

5

✓ Lesson Objectives

Core Content Objectives

Students will:

- ✓ Describe the sense of taste
- ✓ Identify the parts of the mouth
- ✓ Provide simple explanations about how the tongue works

Language Arts Objectives

The following language arts objectives are addressed in this lesson. Objectives aligning with the Common Core State Standards are noted with the corresponding standard in parentheses. Refer to the Alignment Chart for additional standards addressed in all lessons in this domain.

Students will:

- ✓ With prompting and support, identify the main topic and retell key details from “The Sense of Taste” (RI.K.2)
- ✓ With prompting and support, describe an illustration of a boy eating a watermelon and use illustrations that accompany “The Sense of Taste” to check and support understanding of the read-aloud (RI.K.7)
- ✓ Present information about the sense of taste by using a combination of drawing, dictating, and writing about four different tastes: sweet, salty, bitter, and sour (W.K.2)
- ✓ With assistance, categorize and organize foods into categories (W.K.8)
- ✓ With prompting and support, describe familiar things, such as a favorite taste, and provide additional detail (SL.K.4)

- ✓ Provide additional detail about categories of taste by adding drawings to descriptions of four types of taste (SL.K.5)
- ✓ Sort foods into categories to gain a sense of the concepts the categories represent (L.K.5a)
- ✓ Prior to listening to “The Sense of Taste,” identify what they know about the five senses
- ✓ While listening to “The Sense of Taste,” orally predict what will happen next in the read-aloud based on text heard thus far, and then compare the actual outcome to the prediction

Core Vocabulary

congested, *adj.* Having too much mucus or fluid in your nose and in other places where the air we breathe needs to travel

Example: I am so congested that I cannot breathe very well.

Variation(s): none

flavorful, *adj.* Having a strong and pleasant taste

Example: The fried fish was very flavorful.

Variation(s): none

pucker, *v.* To purse your lips together so that you look like a fish or as if you are ready to give someone a kiss

Example: The sour taste of lemons always makes me pucker.

Variation(s): puckers, puckered, puckering

saliva, *n.* The watery fluid in your mouth


Example: I swallowed the saliva in my mouth.

Variation(s): none

taste buds, *n.* Tiny bumps on the tongue that send taste messages to the brain

Example: People have many taste buds on their tongue.

Variation(s): taste bud

<i>At a Glance</i>	Exercise	Materials	Minutes
<i>Introducing the Read-Aloud</i>	What Have We Already Learned?		10
	Purpose for Listening		
<i>Presenting the Read-Aloud</i>	The Sense of Taste		10
<i>Discussing the Read-Aloud</i>	Comprehension Questions		10
	Word Work: Pucker		5
 Complete Remainder of the Lesson Later in the Day			
<i>Extensions</i>	Drawing the Read-Aloud	food samples: salty, sweet, sour, bitter; drawing paper, drawing tools	15



The Sense of Taste

5_A

Introducing the Read-Aloud

10 minutes

What Have We Already Learned?

Review the senses that students have been studying (sight, hearing, smell). Now tell students that today they are going to think and talk about the sense of taste. Ask them to close their eyes for a second and imagine their favorite tastes and foods. They might like the taste of bananas, chocolate chip cookies, pizza, egg salad, cheese, or grape lollipops.

Then, instruct them to open their eyes and ask them, “What is your very favorite taste?” Have two or three students share their responses.

Purpose for Listening

Tell students to listen to find out more about the main topic, or main idea, of today’s lesson: the sense of taste and the parts of the body that we use to taste things.



The Sense of Taste

◀ Show image 5A-1: Boy eating watermelon¹

1 [Point to the picture and ask a student to describe it.] Does the boy look happy? Why do you think he is happy?

2 *Bumps*, as it is used here, means a little, raised area. *Bump* can also mean to run into and knock against something.

Look at the boy in this picture. He is happy because he's about to taste something yummy and sweet, and he knows it! But if it weren't for a few bumps on his tongue, he wouldn't be able to taste it at all!² And since taste is the weakest of the five senses, it gets help from another sense to help you enjoy the foods you eat. Can you guess which sense that would be? Listen to find out what other sense works with taste to help you enjoy the foods you eat.

The first thing you do when you eat food is to open your mouth and take a bite. Then you start to chew it, or grind it up with your teeth. The wet **saliva**, or fluid, inside your mouth melts or dissolves the chewed-up food so it is easy to swallow. As the melted food moves across your tongue to go down your throat, it catches on tiny little bumps on your tongue.



◀ Show image 5A-2: Taste buds

3 [Point to and talk about the image. Explain that the picture within the box shows what taste buds look like "up close" under a microscope.]

Turn to a neighbor and look at each other's tongues—you'll see the bumps all over. Those tiny bumps contain **taste buds**, which come in all shapes and sizes and are responsible for telling your brain whether something tastes good or bad. There are over 10,000 taste buds in your mouth!³



◀ Show image 5A-3: Four tastes: sweet (cake), salty (pretzels), bitter (coffee), and sour (lemon)⁴

4 [Ask students to name the different foods depicted in the image.]

In certain spots on your tongue, you have special taste buds to detect four different types of tastes: sweet, salty, bitter, and sour. Fruits and desserts usually taste sweet because they contain sugar. Almost everyone likes sweet tastes—even babies smile when they taste a little sugar. Pretzels taste salty.⁵ A little salt can make foods more **flavorful**.⁶ Bitter, or bitterness, is something that you do not taste very often, especially when you are young. If something is bitter, like coffee, it usually has a sharp or unpleasant taste.

5 What are some other foods you eat that taste salty?

6 That means the food has a strong and pleasant taste.



← **Show image 5A-4: Child with sour face eating lemon**

Most people also agree that sour is not a pleasant taste. Lemons and pickles taste sour. What kind of face do you make when you taste something sour?⁷ If it's something really sour, like a raw lemon, most people **pucker** up: they suck in their lips like fish, squint their eyes, and wrinkle their noses.

7 [Have students make a face as if they have tasted something sour.]



← **Show image 5A-5: Variety of food**⁸

Here's something else—*very important!*—to remember about taste and taste buds: just because something doesn't taste as good as your favorite food, that doesn't mean you shouldn't try it, especially if it's healthy for you. Taste buds can be trained to accept, and even enjoy, lots of different tastes. Some tastes can seem strange or unpleasant at first, but then your taste buds get used to them, and before you know it, you've learned to like those tastes.

8 What are some foods that you didn't like when you were younger, but that you like now?



← **Show image 5A-6: Boy eating fried chicken**

You have five senses: sight, hearing, smell, taste, and touch. Taste helps you enjoy your food. But did you know that smell helps you enjoy your food, too?⁹ In fact, both your sense of taste and sense of smell work together to help you figure out what your food tastes like. If you sit down to eat a nice piece of fried chicken, as you bring it up to your mouth to eat, you start smelling it before you take a bite, and you keep smelling it as you chew. Your taste buds aren't actually that good at identifying chicken all by themselves—they can just tell that it's a little salty, and that it's not sweet, sour, or bitter. However, your nose sniffs in the fried chicken odor molecules and sends the brain even more details about the taste of the oil, and the meat, and the juices!¹⁰

9 When I asked you at the beginning of this read-aloud what other sense helps with the sense of taste, did you guess that it is the sense of smell?

10 Do you remember what odor molecules are?



← **Show image 5A-7: Boy pinching nose taking medicine**

Next time you have to taste something you don't like—like this boy and his medicine—try holding your nose and see how well you can still taste it. Even though you are putting something in your

mouth that travels across your taste buds, you probably won't be able to taste it as well as you would if you weren't pinching your nose. This is because you have closed your nostrils and blocked the odor molecules from reaching the smell receptors. Without the extra help from the sense of smell, you won't be able to taste things as well.

Have you ever noticed that if you have a cold, your food doesn't taste as good as it usually does? This is because your nose is **congested**, or filled with mucus, and so your sense of smell cannot help your sense of taste. In fact, if your nose is really stuffed up, you may not be able to taste anything at all!

Discussing the Read-Aloud

15 minutes

Comprehension Questions

10 minutes

If students have difficulty responding to questions, reread pertinent lines of the read-aloud and/or refer to specific images. If students give one-word answers and/or fail to use read-aloud or domain vocabulary in their responses, acknowledge correct responses by expanding the students' responses using richer and more complex language. Ask students to answer in complete sentences by having them restate the question in their responses.

1. *Inferential* What was the main topic, or main idea, of today's lesson? (the sense of taste)
2. *Literal* What are the bumps on your tongue called that help you taste foods? (taste buds)
3. *Literal* What are the four types of tastes you can taste with your taste buds? (sweet, salty, bitter, sour)
4. *Inferential* What are some foods that taste sweet? (Answers may vary.)
5. *Inferential* What are some foods that taste salty? (Answers may vary.)
6. *Inferential* What are some foods that taste bitter? (Answers may vary.)

7. *Inferential* What are some foods that taste sour? (Answers may vary.)
8. *Literal* What other sense helps with the sense of taste? (smell)
9. *Inferential* Why can't you taste your food very well when your nose is congested? (The mucus in your congested nose prevents you from smelling the food.)

[Please continue to model the *Think Pair Share* process for students, as necessary, and scaffold students in their use of the process.]

I am going to ask a couple of questions. I will give you a minute to think about the questions, and then I will ask you to turn to your neighbor and discuss the questions. Finally, I will call on several of you to share what you discussed with your partner.

10. *Evaluative Think Pair Share:* What foods can you think of that both smell and taste pleasant or good? (Answers may vary.) What foods can you think of that both smell and taste unpleasant or bad? (Answers may vary.)
11. After hearing today's read-aloud and questions and answers, do you have any remaining questions? [If time permits, you may wish to allow for individual, group, or class research of the text and/or other resources to answer these remaining questions.]

Word Work: Pucker

5 minutes

1. In the read-aloud you heard, “If it’s something really sour, like a raw lemon, most people *pucker* up.”
2. Say the word *pucker* with me.
3. *Pucker* means to purse your lips together so that you look like a fish or as if you are ready to give someone a kiss.
4. I usually pucker my lips when I taste a lemon.
5. Tell me about when you would pucker. Try to use the word *pucker* when you tell about it. [Ask two or three students. If necessary, guide and/or rephrase the students’ responses. “I pucker when ____.”]
6. What’s the word we’ve been talking about?

Use a *Making Choices* activity for follow-up. Directions: If any of the things I say are sour foods that might make someone pucker, pucker your lips. If not, smile wide.

1. vanilla ice cream (smile)
2. lemons (pucker)
3. peanut butter (smile)
4. pickles (pucker)
5. bananas (smile)



Complete Remainder of the Lesson Later in the Day



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Extensions

15 minutes

Drawing the Read-Aloud

If possible, consistent with your school's policy, provide students with food samples representative of these tastes: sweet, salty, bitter, and sour. If food samples are not available for tasting, talk about each of these kinds of taste. Then, give each student a piece of paper that has been folded into four sections. Have them illustrate in one corner of the sheet a food that is sweet; in the second corner, a food that is salty; in the third corner, a food that is bitter; and in the fourth corner, a food that is sour. Finally, have them draw their very favorite food in the center. During their drawing time, remember to talk with students about different tastes, repeating and expanding upon their responses using richer and more complex language.

When everyone is finished, place each illustration on the students' desks, and have the class take a gallery walk around the room to look at all the food depictions. Encourage students to discuss foods that appeal to their tastes and foods that might not appeal to their tastes. Remind them of the following paragraph from the read-aloud:

Here's something else—very important!—to remember about taste and taste buds: just because something doesn't taste as good as your favorite food, that doesn't mean you shouldn't try it, especially if it's healthy for you. Taste buds can be trained to accept, and even enjoy, lots of different tastes. Some tastes can seem strange or unpleasant at first, but then your taste buds get used to them, and before you know it, you've learned to like those tastes.

Also, be sure to mention that people must be careful about what they put into their mouths because some things can make them sick. Discuss whether it would be wise to taste berries off a plant

without knowing anything about the plant and its berries. Remind students that if they don't know if something may harm them, they shouldn't eat it. Better safe than sorry!