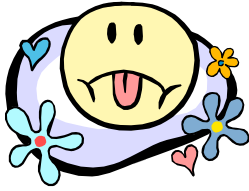


# TASTE AND SEE: WHAT CAN IT BE?



## **BENCHMARK and TASKS**

**SC.A.1.1.1** The student knows that objects can be described, classified, and compared by their composition (e.g., wood or metal) and their physical properties (e.g., color, size, and shape).

- The student uses senses to make observations about the physical properties of objects (e.g., color, shape, mass, capacity, form, texture, size, position, speed, and composition).
- The student compares and classifies objects and living things according to one or two attributes and explains a system of classification (e.g., metals or plastics, rough or smooth).

## **KEY QUESTION**

Can we classify foods by using our sense of taste?

## **BACKGROUND INFORMATION**

The Sense of Taste: The tongue is covered with taste receptors (or buds) that can identify sweet, sour, bitter, and salty tastes. Adults may have as many as 10,000 taste buds. Babies have even more taste buds than adults. Receptor cells live for only 1 to 2 weeks and then are replaced by new receptor cells.

## **MATERIALS**

### **Per group**

2 tablespoons unsweetened cocoa  
2 tablespoons lemon Kool-Aid (unsweetened)  
2 tablespoons salt  
2 tablespoons sugar  
squares of wax paper  
paper plate  
cotton swabs  
containers of water  
paper bag  
tape  
Song, *What Tastes Good to You?* by Suzy Gazlay, Sense-able Science, AIMS

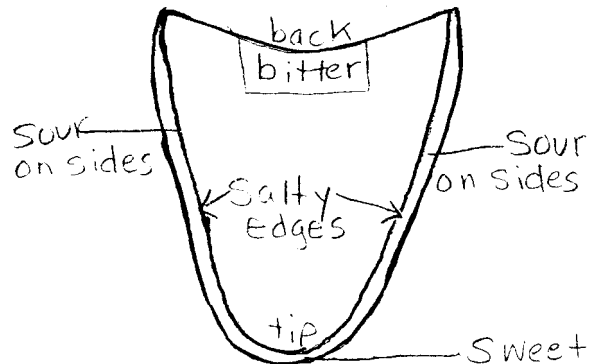
## **TEACHING TIPS**

1. To keep cotton swabs clean until students use them, place them in a small container of water. (Once a cotton swab has been dipped into one of the substances and tasted by a student, it should be discarded immediately.)
2. Distribute tasting foods on squares of wax paper set on a paper plate for each group. Write #1 on each wax paper with the lemon Kool-Aid, #2 on each wax paper with the sugar, #3 on each wax paper with the salt, and #4 on each wax paper with the unsweetened cocoa.

3. Remind students that the only time they may taste something in an investigation is when the teacher tells them it is okay to do so.

### **ENGAGE**

1. Read the poem:  
Taste and See – what can it be?  
Foods can taste bitter, sweet, sour, and \_\_\_\_\_  
Have students try to figure out the missing word.
2. In a “hammy” manner, show children your tongue and point out where the four taste receptors are located or draw the tongue on the board.



### **EXPLORE**

1. Distribute materials to each group.
2. Tell each student to dip one cotton swab into the substance on wax paper #1, and taste it. Ask them to identify whether it is bitter, salty, sweet or sour. Have students discard the used cotton swabs immediately in the trash can or a designated bag so there is no chance of someone else using them.
3. Have students follow the same procedure for each of the other three substances. Be sure students discard used swabs immediately after each substance is tasted.

### **EXPLAIN**

1. Ask:  
*What kind of foods taste bitter?* Identify the cocoa (#4).  
*What kind of foods taste sweet?* Identify the sugar (#2).  
*What kind of foods taste sour?* Identify the lemon Kool-Aid (#1).  
*What kind of foods taste salty?* Identify the salt (#3).
2. *How do most desserts taste? How does medicine taste?*  
*How do snacks like potato chips and pretzels taste?*
3. Encourage students to name other foods that are salty, sweet, sour, or bitter.
4. Have students cut out magazine pictures of foods or drinks and identify as salty, sweet, sour, or bitter.

### **EXTEND/APPLY**

1. Have students bring a wrapper from one of their favorite foods. Develop a class graph of the types of food (salty, bitter, sweet, sour). For foods that are difficult to categorize, you might suggest looking at labels. These labels give information as to the ingredients contained in the product. Students may be surprised to learn that many products contain large amounts of sugar and salt.
2. Sing the song, *What Tastes Good to You?*

### **ASSESSMENT**

Observe children as they cut and paste pictures of food and drink.

- Is the child choosing pictures that represent only one taste?
- Is the child able to choose a variety of pictures representing several tastes?
- Are they able to correctly classify the pictures according to taste?