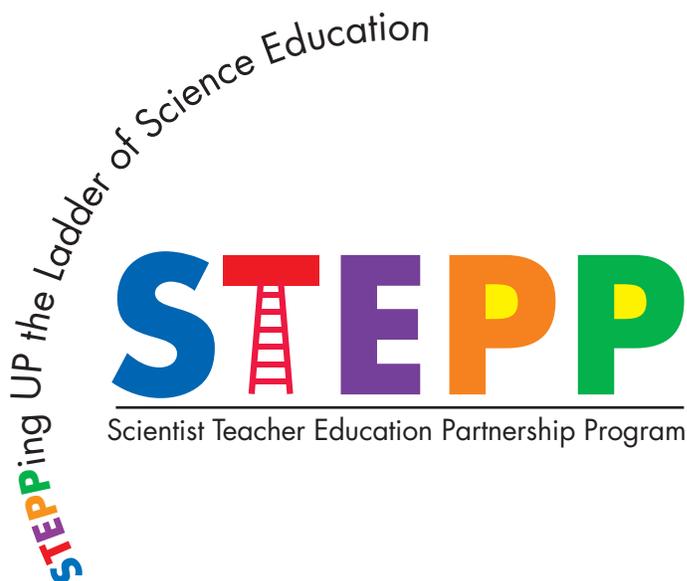


# Function Beginner



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## Scientific Staff

William J. McIlvane, Ph.D., Project Director, Psychological Science  
Leo H. Buchanan, Ph.D., Auditory Science  
James E. Crandall, Ph.D., Neuro Science  
Sheila Mihalick, Ph.D., Psychological Science  
Stephen Oross, III, Ph.D., Psychological Science

## Teachers

LeiLanie D'Agostino, M.Ed., Grades 1- 6, Elementary School Teacher  
Sue-Ellen Lydon-Daddona, Grades K - 8, Science Specialist  
Ann Walsh, M.Ed., Grades 1 - 8, Elementary/Middle School Teacher

# Making Sense of our Senses

## Lesson One

### In a Nutshell

This lesson is designed for students to begin to see that our brain helps us to function. The lesson centers on the five senses and how we use them individually and together in response to different situations.

### Objectives

Students will identify their five senses.

Students will understand that often senses work together to respond to different situations.

Students will understand that the brain plays a role in each of our sense's ability to function.

### Materials



Before beginning this unit/lesson, please administer the Sensory Function Pre-Test.

### Vocabulary

**Sense Organ** - The nose, eyes, ears, tongue, and skin are sense organs.

### Prior Preparation

Gum should be cut into equal sized pieces so that each student receives a sample of each flavor of gum. Please do NOT put the gum back in the original wrapper before distributing to the students so that the gum will not be recognized by it's wrapper.

**Note to teacher:** Any 2 flavors of gum may be used as long as their appearance is the same.

## Identifying Mystery Sounds (Hearing & Seeing) - Notes to Teacher

The activity we are about to do is designed for students to see how many common sounds they can recognize using their senses. The enclosed sound tape will be played twice for the students - the first time the students may rely only on their “sense of hearing” to assist them. The second time they hear the tape they will be shown pictures as well. By adding these visuals students will then be combining their sense of vision and hearing to assist them. (Below are pictures of the sounds as they appear on the tape. See the teacher’s copy of the student sheet for sound “titles”.)



### Procedure

#### Activity One: Identifying Mystery Sounds (Hearing & Seeing)

1. Pass out the worksheet “My Guess Sheet (Hearing)” (pg.5). Tell students that you are going to play a tape that they will need to listen to very carefully. They will hear sounds and try to identify what each sound is.
2. Play the tape. For each sound have the students write and/or draw the object that would be making that sound. You may choose to stop the tape after each sound to allow time for words or drawings.
3. Pass out the worksheet, “My Guess Sheet (Hearing and Seeing)” (pg. 6).
4. Now place the “Mystery Pictures” in full view of all students and **REPEAT STEP TWO**  
**Make sure not to place the pictures in the same order as the noises on the tape.**
5. Again, for each sound have the students write and/or draw the object that would be making that sound. Remind students that the tape will be playing the same sounds, in the same order as before. For this sheet students may write/draw the same objects as the first sheet, **BUT** they may also write/draw different objects, as the pictures are intended to assist them in better identifying the sounds.
6. Give students the correct answers. Take time for students to correct both of their papers and compare the number of correct guesses for each.
7. Have a brief discussion comparing, “My Guess Sheet (Hearing)” and “My Guess Sheet (Hearing and Seeing)”.

### **Some suggested discussion questions: (Not required, but may be helpful)**

1. Which sheet had the higher number of correct guesses? (Usually sheet TWO)
2. What was the benefit of having the pictures in view during the second tape playing?

(When listening to the tape AND looking at the pictures, there was information going to more than one part of your brain – the hearing part and the seeing part. By incorporating pictures (a source of visual information) into this activity we are calling on two types of sense organs (ears and eyes) to help the brain understand the information the sense organs are sending. By looking at the pictures you were also limiting the possible choices you had to choose from. Another answer to this question is that this was the second time you heard these sounds played on the tape so the recognition factor was greater)

3. If you relied on other senses (touch, smell, and taste) instead of hearing and sight, do you think the mysteries would have been easier or more difficult to solve?

(Answers vary, but the two selected senses (hearing and sight) work the best for this activity. This question is a good lead into the second activity where the other senses are used.)

### **Activity Two: Identifying a Common Object's Mysterious Flavor - (Seeing, Touching, Smelling and Tasting)**

#### **Notes to Teacher**

The activity we are about to do is designed for students to identify a common object's flavor by relying on several senses (touch, vision, smell and taste). Although we could simply taste the gum and recognize its flavor(s) we will use other senses to solve this mystery.

1. Have students work in pairs for this task. Pass out a sample of each type of gum to each student. Tell students they will be asked to determine which is fruit flavored gum and which is bubble gum without putting the gum into their mouth immediately. The partner should observe and direct his/her partner through the steps of this task.

#### **Steps**

- A. Students should look at the gum. They may not hold it at this point. Observe color, shape, etc.
- B. Students may now hold it and feel it. Most will not be able to guess just by seeing and touching the gum.
- C. There are two different ways to complete this last step: **ONE:** Allow students to smell the gum and then to taste it. **TWO:** Have the students pinch their nose and taste the gum. Can they recognize the taste? (They should not be able to if their nose is plugged). Have students release their noses and chew. Allow students to taste and identify which gum is which.

2. Discuss the results of the above gum activities. It is important during this discussion that you explain to the students that if they guessed the correct flavor during the first two steps they were already applying their other senses and incorporating their prior knowledge to this situation. Simply viewing the gum would be impossible to positively know the flavor. This is a difficult concept, but a nice flow into the introduction of the brain's importance. Two things are happening here: 1.) The brain is receiving and interpreting messages from the various senses to assist in figuring out the flavor of the gum and 2.) The brain is recalling information the student previously knew about gum to figure out the flavor.
3. List both activities on the board (1- Mystery Tape 2- Mystery Gum) and ask the class if there is any connection between the two activities. This should lead to a discussion of the senses and the importance of multiple senses solving "mysteries" for us. Many students should notice that some mystery sounds were difficult to recognize just by the tape, but when the mystery object cards were displayed they could suddenly recognize the sound. This is because the brain interpreted what we were seeing and what we were hearing as well. Using both sense organs we were able to identify the sound. This is also true with the chewing gum. Our brain may recognize the shape and color of the gum, but also needs the extra clues from another sense, such as smell or taste, to respond and recognize the flavor.

## **Homework**

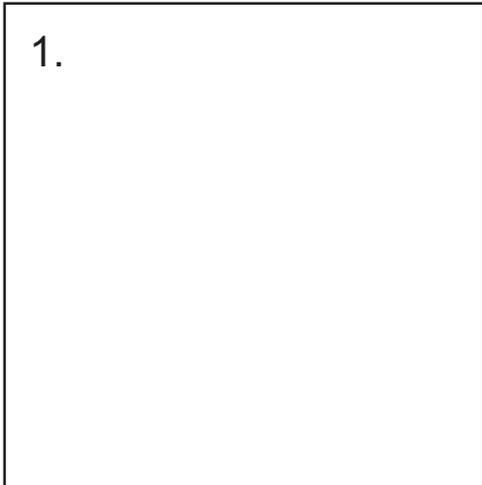
Pass out "Using Our Senses Together: Apple or Potato" worksheet (pgs.8,9). Explain to students that for homework they will be conducting an activity with an adult similar to the activities they completed in class. You may want to review the homework instructions with the class. Also, because supplies are needed for this activity you may want to extend the due date, OR request that the students have a potato and apple ready for when this assignment is passed out. Allow students to complete as a homework assignment.

# Mystery Sounds

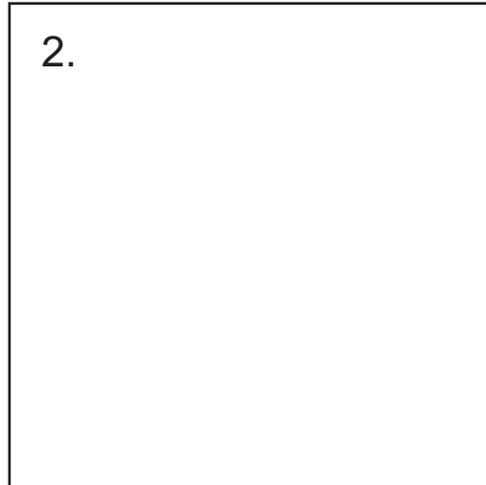
## "My Guess Sheet (Hearing)"

For each sound you hear write and/or draw the object that would be making the sound.

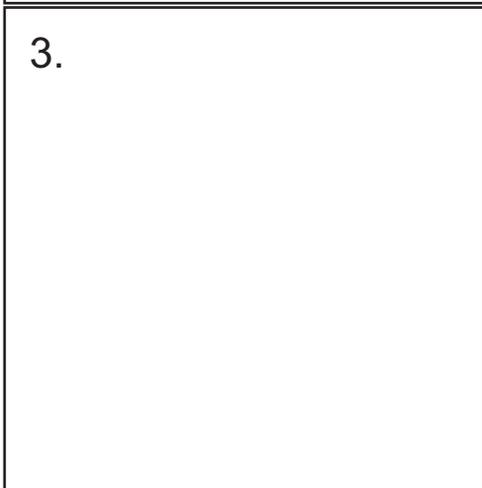
1.



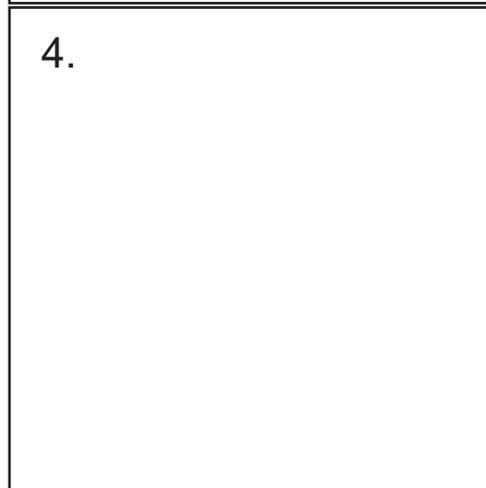
2.



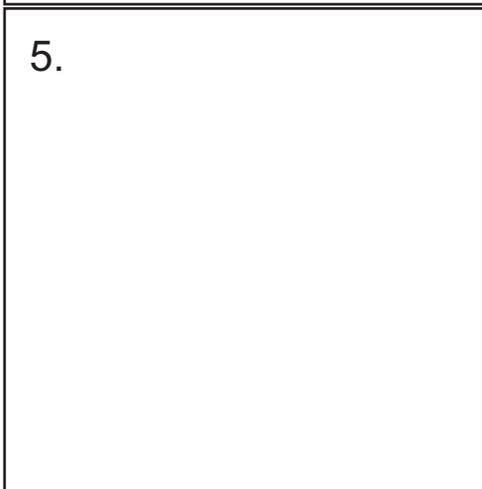
3.



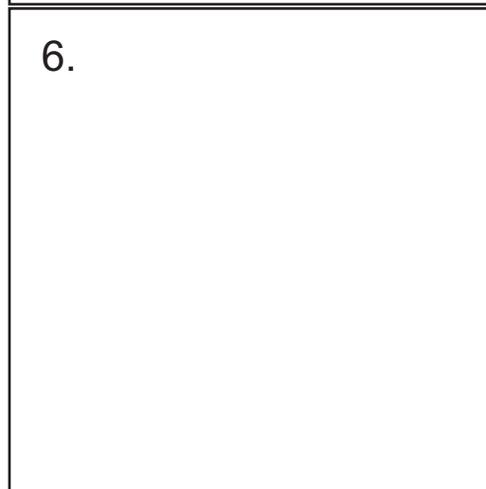
4.



5.



6.



# Mystery Sounds

## "My Guess Sheet (Hearing & Seeing)"

For each sound you hear write and/or draw the object that would be making the sound. This tape will be playing the same sounds in the same order as before (sheet one "My Guess Sheet (Hearing)").

1.

2.

3.

4.

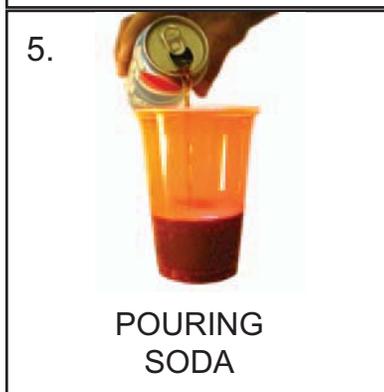
5.

6.

## Mystery Sounds

# "My Guess Sheet" (Teacher Answer Key)

For each sound you hear write and/or draw the object that would be making the sound.



The above are "ANSWERS" of the sounds played on the "Mystery Sound Tape." Please note, answers that are similar (that contain the selected sound) are acceptable.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# Using Our Senses Together: Apple or Potato

In lesson one, "Making Sense of Our Senses" we were given two tasks to help us see that often our senses work together to help us identify a sound or object from the environment. For this activity you will be working with an adult to help them to see and understand how our senses work together.

## What you will need:

- One apple (peeled- no skin)
- One potato (peeled- no skin)
- A knife
- (have an adult help you or supervise while using knife)
- Paper towel
- An Adult



## How to set-up the experiment:

Peel both the apple and the potato. Cut each into small cubes or slices. Try to make both the apple and potato have the same size pieces so that they look the same. Place apple pieces on one piece of paper towel and the potato pieces on a different piece of paper towel. Remember which is which.

## Do this:

- Let the adult see the apple and the potato pieces, but do not let them touch, taste or smell them.



Smell



See



Touch



Taste



Hear

- Ask the adult to close their eyes and give them one piece of  and one piece of . Have them tell you which is the apple and which is the potato by  only.

Did the adult guess the apple correctly?

YES

NO

Did the adult guess the potato correctly?

YES

NO

3. Again, have them close their eyes. Place the  or  under their nose and ask them to guess which they are  ing.

Did the adult guess the apple or potato correctly?            YES            NO

4. Have them hold their nose closed and taste either the  or . Ask them to guess which they are  ing.

Did the adult guess the apple or potato correctly?            YES            NO

5. Now, hand your parents both the  and  allow them to taste each again with their eyes open and nose released. Again, ask them to guess which they are tasting.

Did the adult guess the apple or potato correctly?            YES            NO

**Parent Comments:** Please answer the questions below. (Use backside of this page if needed.)

Which step was hardest for you?

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Which step was easiest?

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Why do you think this might be?

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Do you think that your senses worked better when separated or when they were used together?

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Discuss with your child how your senses are more accurate when working together. (ask your child to tell you about today's science class)