



Lesson # 27

Lesson Plan
Revised 6/06

Sense and Non-Sense

Grade Level: K - 2

Teachers, this is a basic lesson plan that you may modify at your discretion.

Modifications to Video: There have been several changes to the lesson plan since the video was made. This lesson plan reflects the latest changes made as a result of suggestions from teachers who have presented the lesson during the daytime program. Please continue to send us your ideas!

Overall Educational Objective: Identify the five senses and communicate the kind of information that each sense provides. (hearing, smell, touch, taste, sight)

Associated Standard and CORE Objective:

- **3000-01** Make observations using the five senses.

Materials List:

- 30 - Gloves
- 30 - Object bags
- 30 - Goggles
- 5 - Ear muffs
- 1 - Shaved ice machine
- 1 - Popcorn machine
- - Paper cups
- - Plastic cups
- - Syrup
- - Popcorn, oil, salt, measuring cups and spoons

Teacher Provides:

- Ice (3-4 bags)
- 1-4 Adult helpers

Lesson Activities:

Discussion of the 5 senses: Hearing, Sight, Taste, Touch, and Smell.

1. Smell: The nose is the organ we use to smell with. The olfactory nerves (smell) are also used to help us taste.
2. Taste: The tongue is the primary organ used for tasting. The surface of the tongue is covered with taste buds, with the largest concentration at the back of the tongue. These taste buds determine whether a food tastes sweet, sour or salty. Visit web sites on Taste: <http://www.miamisci.org/ph/tongue.html>
3. Hearing: The ear is the organ used to hear. We hear because of air particles vibrating from the object to the ear.
4. Sight or Vision: The eyes coupled with the brain conduct a process that helps us see. The eye takes in the light, and the brain translates what the eye sees.
5. Touch: Touch happens when our skin comes in contact with objects around us. The feeling that we have is transmitted by nerve endings in the skin, which go to the brain, letting us know that we have come in contact with an object.

Instructions:

1. Hand out one glove to each student and instruct them to put the glove on.
2. Hand out the fabric bags but tell the students not to open the bags or look inside. When all the students have a bag, instruct the students to put their gloved hand in and feel around. Ask them what they feel.
3. After the students have had a few minutes to feel around inside the bag, ask them to dump the contents of the bag out on their desks. Discuss what items they see. Were they able to feel everything that was inside the bag? Why or why not? Did they use any other senses in order to determine what was inside the bag?
4. Have the students put the items back inside the bags and hand them in. Ask seven or eight students to keep their gloves on and the rest of the class to turn their gloves in.
5. Hand out goggles to every student. There are five different vision impairments illustrated with the goggles. (A. Cataracts: when the lens of the eye becomes cloudy. B. Loss of peripheral vision: no longer able to see to the side. C. Tunnel vision: only able to see straight ahead. D. Spots in the line of vision. E. Loss of front vision: only able to see to the sides. Ask the students to describe what they

see. The students may trade goggles with other students to experience the different types of vision impairments.

6. Have seven or eight different students keep the goggles on and everyone else turn theirs back in.
7. While the students are handing in the goggles, the second teacher or assistant needs to start making shaved ice cups. Add a squirt or two of **ONE** of the colors available to each snow cup. Explain to the students that they will be asked to taste their color of ice one at a time starting with the red and then tell you if they think the flavor is **VERY SWEET, SWEET, SOUR, VERY SOUR**. Then ask each child to tell you which flavor they think each color is (i.e. red=strawberry, raspberry). Record on a chart each student's response. When all of the flavors have been analyzed, explain to the students that all flavors were the same and that because of the color (the sense of sight), they only thought that the flavors were different. The use of the chart helps the students see how differently people can see the same thing.

Syrup Recipe

2 cups lemon juice
4 cups sugar
1 gallon water

Fill bottles and add food coloring to each separate bottle

8. Hand out the ear muffs and explain that the students will be asked to put the ear muffs on and then listen. At this point you may clap your hands, drop a book, bang on a drum, or talk to the students. Then have the students take off the ear muffs and discuss what they did and didn't hear. Here again, have some of the students keep on their ear muffs and the rest turn theirs in.
9. Have the students plug their noses. Explain to them that you are going to make popcorn and ask them to tell you what they smell. Verbally tell them how wonderful and appetizing it all smells, that it makes your mouth water. Ask them if just listening to you talk about it makes them want some, or if they think that they would want it more if they could smell the popcorn popping? Hand out a sample of popcorn to each student and have them eat some. How does it taste? Tell the students to unplug their noses and smell and eat the popcorn. What differences do they notice about how the popcorn tastes when they plugged their noses, and when they didn't? Did the popcorn taste better without their noses plugged?

Instructions for Popcorn machine:

DO NOT PREHEAT POPCORN POPPER!

Put 1 ice cream scoop of oil, about ¼ cup of popcorn, and one or two measuring spoons of the yellow popcorn salt into the pot. THEN turn on the kettle heat and agitator. When the popcorn stops popping, turn off the heat and agitator and dump the popcorn out of the kettle.

10. Have all of the students turn in their props. Discuss with the students how they felt when they were unable to see, hear, touch, and smell. Help them understand the importance for compassion and understanding for people with disabilities. Explain how, when people have a disability, their other senses sharpen or improve to make-up for the disability. This is an ideal module to help the children understand that everyone has some sort of disability. Some disabilities are more easily seen, and some are not (unable to see, walk, talk, read). Everyone has the need to be loved and accepted, the need to have friends, the need to be active and do things. When we understand that everyone has some sort of disability, it is easier to be friendly to everyone around us.
11. Call attention to the career fields that are related to this module. Discuss how students might prepare for occupations that interest them.

Teacher Tips:

- This module requires some adult helpers to keep it running smoothly. The snow cone machine is a noisy distraction; snow cones can be made in another room, or a bunch of ice can be processed and kept cold in a fridge until needed. Small cups can be used for the popcorn. The popcorn machine should be cooled and wiped clean when done. The snow cone machine should be drained of water before storing.
- This module could be done with the students at their desks or gathered around a table in the front of the classroom. The ability to easily interact with the students will help keep this module going.

References:

- US News and World Report v122, Jan 13 '97, p.50-6 "The Senses" Talks about the flood of new studies on the senses and discusses how this research has altered the once perceived theories of the senses.

Please make your students aware that this lesson relates to the following:

Career Fields:

Science, Technical, Social-Humanitarian

Occupations:

- **Optometrist:** They examine eyes for vision problems, diseases, and other disorders of the eye. They test the eyes for proper depth, color perception, and focus. They prescribe corrective lenses and treatment, as well as supplying the patient with the necessary glasses, contact lenses, and drugs.

Education: Bachelor's Degree and 4-year Professional Degree

- **Pathologist:** Work with people who cannot make speech sounds, or cannot make them clearly. They work with those with speech rhythm and fluency problems, such as stuttering; people with voice quality problems, such as inappropriate pitch or harsh voice; people with problems understanding and producing language; and those with cognitive communication impairments. They diagnose and develop a therapy program for those with the previous problems.

Education: Master's Degree

- **Psychologist:** They study human behavior and mental processes in order to understand, explain, and change peoples' behavior. They may also study the way a person thinks, feels, and behaves. Research psychologists investigate the physical, cognitive, emotional, and social aspects of human behavior. Applied psychologists counsel and conduct training programs, perform market research, and apply psychological treatments to a variety of medical and surgical conditions.

How it Relates: Psychologists help those with disabilities as well as their families learn to deal with their disabilities. They also help with the emotional problems that can stem from disabilities.

Education: Master's Degree

- **Social Worker:** They counsel and aid individuals and families who require social service assistance. They talk with people to understand their problems and plan ways to help them, as well as helping individuals and families cope with illnesses. They will also advise on child-care and place children in foster homes. They plan activities and services for children, teenagers, adults, and older persons. They also provide information and referral services.

Education: Bachelor's Degree

- **Special Education Teacher:** They teach elementary and secondary students who are physically and educationally handicapped. They may use tools such as sign language and Braille writers. They plan courses, prepare lessons, grade papers, and keep records. Another important aspect is that they encourage and advise students and parents.

Education: Bachelor's Degree

* Taken from Occupational Outlook Handbook 1998-1999.

Review Questions:

1. What are our five senses?

2. Does our sense of smell affect our sense of taste?
 3. Can our sense of sight also affect our sense of taste?
 4. What is the primary organ used for tasting? Where do we have our largest concentration of taste buds?
 5. Can our senses sometimes deceive (trick) us?
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Junior Engineering, UMC 3735, Utah State University, Logan, UT 84322-3735 **E-mail:** jweb@ext.usu.edu
Phone: (435) 797-8000 **Fax:** (435) 797-8005 **URL:** juniorengineering.usu.edu