

Making Sense Of Your Senses

Grade Level: Kindergarten

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Length of Unit: Ten days

I ABSTRACT

This unit introduces the scientific topic of the five senses as found in the *Core Knowledge Sequence* for Kindergarten. Included in this unit are activities suited for different learning styles. Content areas are combined and are interactive. Also the five senses, sight, hearing, smell, taste, and touch are discussed with the associated body part. There is information about people who have some type of sensory limitation, and some ways these are corrected or improved. The culminating activity gives the student an opportunity to use what has been learned to create a product that will relate this unit to future learning.

II OVERVIEW

A. Concept Objectives for this unit

1. Understand that the five senses are interrelated.
2. Develop an awareness that the senses are dependent on the brain in order to work correctly.
3. Learn that there are five physical senses and one emotional sense.
4. Develop an awareness of individuals whom might have sensory limitations.

B. Content covered from Core Knowledge Sequence

1. The five senses and associated body parts
Sight: eyes
Hearing: ears
Smell: nose
Taste: tongue
Touch: skin
*Brain: all the senses work with the brain

C. Skills

1. The student will ask questions and make predictions that can be addressed using scientific investigation.*
 2. The student will summarize the function of all the senses.*
 3. The student will name some sensory limitations and ways in which they can be improved.*
 4. The student will name some smells they like or dislike.*
 5. The student will compare some senses of animals and people.
 6. The student will describe the difference between touch feel, and emotional feel.
 7. The student will describe his/her emotional feeling after listening to classical music.
- * Oklahoma State PASS Science Skill

III. BACKGROUND KNOWLEDGE

- A. For Teachers:
 - 1. Dillner, Dr. Luisa, and Dr. Peter Abrahams. *Human Body*. Well Books. Westport, Ct. 1993. ISBN 0-88705-644
 - 2. Learning Page.com, *The Five Senses*
 - 3. Publisher's Distributor Inc., *The Giant Book of The Human Body*, Markham, Ontario, Canada 1990. ISBN 0-600-57201-3
 - 4. Royston, Angela, Edwina Riddell, *The Senses*, Barrons Educational Series, Inc. 1993. ISBN 0-8120-6272-8
 - 5. Savron, Stacy, *The Human Body*, Kids Books Inc. Chicago, IL. 1997 ISBN 1-56156-587-3
- B. For Students:
 - 1. The students will have a basic understanding of the five senses and their associated body parts.

IV. RESOURCES

- A. Aliko, *My five Senses*.
- B. Johnson, Tony. *The Quilt Story*.
- C. Martin, Bill Jr. *Brown Bear, Brown Bear*.
- D. Martin, Bill Jr. *Polar Bear, Polar Bear*.
- E. Publisher's Distributor Inc., *The Giant Book of The Human Body*.
- F. Royston, Angela/Edwina Riddell, *The Senses*.
- G. Savron, Stacy. *The Human Body*.
- H. Sharmat, Mitchell. *Gregory The Terrible Eater*.
- I. Copies of Appendix

V. LESSONS

Lesson One: The EYES have it

- A. *Daily Objectives*
 - 1. Concept Objectives
 - a. Understand how our sight works.
 - b. Develop an awareness of the relation between our vision and our brain.
 - 2. Lesson Content
 - a. Sight is the most complex of all our senses.
 - b. The vocabulary explaining sight.
 - c. Things that help us see.
 - d. Visual limitations.
 - 3. Skill Objectives
 - a. The student will ask questions and make predictions that can be addressed through scientific investigation.
 - b. The student will summarize the function of the eyes.
 - c. The student will name some visual limitations and ways in which they can be improved.
- B. *Materials*
 - 1. Student crayons and pencil
 - 2. Overhead projector and copy of eye model

3. Book *Brown Bear, Brown Bear*.
- C. *Key Vocabulary*
1. Brain-organ in head that reads messages from senses
 2. Cornea-transparent covering of eye
 3. Iris-color part of eye
 4. Lens-clear part of eye, behind pupil
 5. Lid-skin covering outside of eye
 6. Optic Nerve-located in back of eye, sends information to brain
 7. Pupil-dark circle in center of eye
 8. Retina-back part of eye, light is projected on it
 9. Sclera-the white part of eye, around the pupil

D. *Procedure/Activities*

DAY ONE

1. Teacher asks students to choose an object from a basket. Then each student describes what they see.
2. As a group the students put the objects in order according to color, shape, and size. Then as a group make a real object graph showing the results.
3. Use an overhead model as a guide for the students to see the eye parts. Have the students create their own copy of the model after the teacher shows them the names and location of each eye part.

DAY TWO

4. Read to the students the book *Brown Bear, Brown Bear*, and discuss what was seen.
5. Using the Braille model, let the students make an alphabet, then use a pushpin on the alphabet to make their own Braille alphabet.

E. *Evaluation/Assessment*

1. An informal screening to determine the student's current knowledge of the senses.
2. The teacher will ask the student to tell the function of the eye, then name one visual limitation, and one visual aid.

Lesson Two: Do your EARS hang low?

A. *Daily Objectives*

1. Concept Objectives
 - a. Understand how our hearing works.
 - b. Develop an awareness of the relationship between our hearing and our brain.
2. Lesson Content
 - a. The sense of hearing is dependent on sound waves.
 - b. Vocabulary explaining hearing.
 - c. Things that help us hear.
 - d. Hearing limitations.
3. Skill Objectives
 - a. The student will ask questions and make predictions that can be addressed through scientific investigation.
 - b. The student will summarize the function of the ears.

- c. The student will name some auditory limitations and ways they can be improved.

B. *Materials*

1. Student crayons and pencil.
2. Overhead projector and copy of ear model.
3. *Polar Bear, Polar Bear*
4. Appendix D
5. Disposable ear plugs or cotton balls for students.
6. CD player and classical music.
7. Chart tablet, and markers.

C. *Key Vocabulary*

1. Anvil-bone inside ear.
2. Auditory nerves-send message to the brain about sound
3. Cochlea-collects vibrations and sends to auditory nerve
4. Ear Canal-connects to outer ear, takes in sound waves
5. Ear Drum-vibrations move against this and send it to inner ear
6. Ear Flap-skin outside of ear, surrounding ear opening
7. Hammer-tiny bone between anvil and stirrup
8. Semicircular Canals-in inner next to cochlea, helps send vibrations
9. Stirrup-one of three tiny bones inside ear collects vibrations

D. *Procedures/Activities*

DAY THREE

1. On the playground the teacher asks the children to sit quietly and listen to the sounds. Then each student tells the group the sounds he/she heard. The teacher then makes a list on chart paper.
2. The students put ear plugs or cotton in their ears and listen to the sounds. The teacher writes the sounds the students heard. Discuss why it was different. The students draw a picture of the sounds they liked. This can be done outside or inside.

DAY FOUR

3. Use overhead model of ear as a guide for the students to see the ear, parts. Have the students repeat the name as the teacher uses the overhead model and points to each part.
4. Students can draw a model of the ear and then color it.
5. Read with the students the book *Polar Bear, Polar Bear*
6. Using appendix D to sing the song, and make up the motions. The tune is like "Turkey in The Straw."

E. *Evaluation/ Assessment*

1. The teacher will ask the student to tell the function of the ear.
2. Ongoing observations of the student's ability.
3. Individual portfolio with the student's work inside.

Lesson Three: Only the NOSE knows!

A. *Daily Objectives*

1. Concept Objectives
 - a. Understand how our nose helps us smell.
 - b. Develop an awareness of the relationship between our

- sense of smell and our brain.
 - c. Learn to identify smells.
 - 2. Lesson Content
 - a. The sense of smell is only part of what the nose does.
 - b. Vocabulary explaining the sense of smell.
 - c. Things your nose tells you.
 - d. Smell comparisons.
 - 3. Skill Objectives
 - a. The student will ask questions and make predictions.
 - b. The student will summarize the function of the nose.
 - c. The student will name smells they like or dislike, and draw a picture of them.
 - d. The student will compare the sense of smell of animals and people.

B. *Materials*

1. Appendix *E*
2. Film canisters (6-8) with a cotton ball inside each.
3. Two drops different liquids put on cotton balls inside the film canisters.
4. Samples of things that might smell good, and bad.
5. Student crayons and pencil.
6. Overhead projector and copy of appendix *E*.
7. Air popcorn popper.
8. Popcorn
9. Bowl to hold popped popcorn.
10. Paper plates for each student to put their popcorn.

C. *Key Vocabulary*

1. Brain-the organ inside the head that controls the body.
2. Breath-air taken into the nose.
3. Filter-protects nose from germs, and other unwanted particles.
4. Moistens-dampness that helps keep the air in lungs from drying.
5. Nostril-the part of the nose in which air is taken in.
6. Smell cell-carries odors from nose to brain.

D. *Procedures/Activities*

DAY FIVE

1. Teacher asks students to describe the scents they remember about the zoo, school lunch room, park, and the kitchen at home. In small groups have the students make posters of the scents they like.
2. Working in pairs, have the students use the film canisters with scents inside, and try to identify the scent. Mark the scent on the bottom so they can check their answers.
3. Use the activity described on number two, but have the students hold their noses when they smell the canisters. When finished have them compare the results. Now do it again but put a drop of water on their nose and see if there is a difference. Then compare these results with the other two activities.

DAY SIX

4. Use appendix *E* as a guide for the students to see the nose and the names of the smell parts. Have the students repeat the names as the teacher uses the overhead model and points to each part.
5. Students can color the appendix *E* of the nose.
6. As a class make popcorn using the air popper. Before popping it have students observe the size of the corn, and compare it after it has popped. Have the students describe the smell of the popcorn.

E. *Evaluation/Assessment*

1. The teacher asks the student to tell the function of the nose. Then name an animal who can smell things better than humans.
2. Ongoing observations of the student's ability.
3. Individual portfolios with student's work in them.

Lesson Four: Can you TASTE this bud?

A. *Daily Objectives*

1. Concept Objectives
 - a. Understand how our tongue is able to taste.
 - b. Develop an awareness of the relationship between our taste and our brain.
 - c. Appreciate how taste and smell work together to help make food taste better.
2. Lesson Content
 - a. How the sense of taste is controlled by taste buds.
 - b. Vocabulary explaining taste.
 - c. Things your taste tells you.
 - d. The smell/taste connection.
3. Skill Objectives
 - a. The student will ask questions and make predictions that can be addressed through scientific investigation.
 - b. The student will verbally summarize the function of the tongue.
 - c. The student will locate the four basic taste parts of the tongue.
 - d. Compare the location of taste buds of different animals.

B. *Materials*

1. Paper plates
2. Pickle slices
3. Potato chips
4. Orange peel
5. Jelly beans
6. Blindfolds
7. Student crayons, pencil, and paper
8. Chart paper and markers
9. *Gregory the Terrible Eater*
10. Appendix *G*
11. Assorted colors of play dough

C. *Key Vocabulary*

1. Bitter- unpleasant or acrid

2. Receptor Cells-inside taste buds tell brain how things taste
3. Salty-pungent or biting, also acidic
4. Sour-sharp, acidic
5. Sweet- pleasant, sugary
6. Taste Buds-bumpy dots on the taste parts of the tongue
7. Tongue-muscle used to taste things

D. *Procedure/Activities*

DAY SEVEN

1. Teacher ask students to describe the tastes they think about when they hear the words pickle, potato chip, orange peel, and jelly bean. On a chart tablet make a list and discuss the the words.
2. Using the tongue model on the overhead projector, let the students make a model on construction paper. Then discuss where the taste bud sections are, and let the students label their models. The students can then color their models.
3. In small groups and with a blindfold on, and holding their nose have the students taste a pickle slice, potato chip, orange peel, and a jelly bean. Allow the students to tell the group what they experienced.

DAY EIGHT

4. Sing song from appendix G
5. Read story *Gregory the Terrible Eater*
6. Let the children make their favorite foods with play dough.

E. *Evaluation/Assessment*

1. The teacher will ask the student to tell the function of the tongue and identify the four taste areas of the tongue.
2. Ongoing observations of the student's ability.
3. Individual portfolios with individual work in them.

Lesson Five: FEEL the Power!

A. Daily Objectives

1. Concept Objectives
 - a. Understand how our sense of touch relates to our feelings, and how prior knowledge or events relate to our emotional feelings.
 - b. Develop an awareness of the relationship between feelings and the brain.
 - c. Appreciate how the sense of touch and emotional feelings are different, but related.
2. Lesson content
 - a. The sense of touch is a physical feeling.
 - b. Vocabulary explaining what touch feeling is.
 - c. Things that your skin feels.
 - d. Things that your emotion feels.
 - e. The connection of feeling to the brain.
3. Skill Objectives

- a. The student will ask questions and make predictions that can be addressed through scientific investigation.
- b. The student will verbally summarize the function of the touch and emotion feelings.
- c. The student will verbally tell the difference between hard/soft, rough/smooth, and hot/cold touch feelings.
- d. The student will tell about their emotional feelings after listening to classical music.

B. *Materials*

1. Feely Sock made from small margarine tub, and tube sock.
2. Several small real objects (key, coin, cube, marble, apple)
3. Texture cards (index cards with different textures on them)
4. Crayon and pencil for students
5. Tape player or CD player
6. Classical music tape or CD
7. Pictures of objects used in Feely Sock
8. Blindfold
9. Paper
10. *The Quilt Story*
11. Appendix *H*

C. *Key Vocabulary*

1. Emotion-reaction to things in our environment
2. Texture-different types of surfaces, and feels
3. Touch- contact with the skin and another surface.

D. *Procedure/Activities*

DAY NINE

1. Teacher asks students to describe the feeling they have when they are cold/hot, wet/dry, hungry/full. Also if they have no friends/lots of friends, if hugged/or hit.
2. Give students appendix *H* and discuss.
3. In small groups students take turns putting on blindfold. Then feel things in the room. Try to guess what it is. Then using paper let the students do rubbings of something they like.

DAY TEN

4. Using the Feely Sock the teacher will place different items inside and let the students guess what it is by describing it. They can also match it with a picture.
5. Read the story *The Quilt Story* and discuss the feelings that were experienced.
6. Turn the classroom lights on low and let the students listen to classical music. They can also move in place according to how the music makes them feel.

E. *Evaluation/Assessment*

1. The teacher will ask the student to tell how a person can feel by touch. Then how a person can feel by their emotion.
2. Ongoing observation of the student's ability.
3. Individual portfolios with student's work in them.

VI

CULMINATING ACTIVITY

- A. This activity may require some extra help to do.
It will be done in five centers and take about one hour and fifteen minutes. The recommended number of students in each group is four. The centers will be an assessment as well as an activity.
- B. The centers will be as follows:
1. EYES-**
 2. EARS-**
 3. NOSE-**
 4. TASTE-**
 5. FEEL-**
- ** Each center will have a picture model, writing and drawing supplies, scissors, yarn, tongue depressors, small sacks, small objects that can be felt, smelled, make noise, or tasted.
- C. Set up each center with the supplies listed above. Samples of completed projects could also be put in centers. The students observe the items in the center for a minute, and discuss what they are. Then each student will draw a picture, write a sentence, a poem, make a book, or create a puppet that explains the topic of that center. At the end of fifteen minutes ring a bell, and the students will go to the next center. This continues until all centers have been visited.

VII

HANDOUTS/WORKSHEETS

Appendices (distributed during session only)

VIII

BIBLIOGRAPHY

- Aliki, *My Five Senses*. New York, New York: Thomas Y. Crowell Company. 1962.
- Hirsh, Jr., E.D. *What Your Kindergartener Needs To Know*. New York, New York: Doubleday, 1996, ISBN 0-385-48117-9
- Johnson, Tony. *The Quilt Story*. New York, New York: G. P. Putnam and Sons. 1985.
- Martin, Jr., Bill. *Brown Bear, Brown Bear*. New York, New York: Holt, Rinehart and Winston, Inc. 1970, ISBN 0-03-921624-1
- Martin, Jr., Bill. *Polar Bear, Polar Bear*. New York, New York: Henry Holt and Co. 1991, ISBN 0-8050-1759-3
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- Sharmat, Mitchell. *Gregory The Terrible Eater*. New York, New York: Four Winds Press-Scholastic Inc. 1980, ISBN 0-590-07586-1
- www.learning page.com (The Five Senses)