

GROW YOUR PALS PROGRAM GUIDE



THE NATIONAL FFA MENTORING PROGRAM

Sponsored by



LESSON 3.30

In The 'kNow-SE'

Unit:
MISCELLANEOUS

PRECEPTS

A. Action

A1. Work independently and in groups to get things done

E. Awareness

E1. Address issues important to the community



NATIONAL STANDARDS

NS.9-12.1 – Science as Inquiry

Lesson Type:
Small Group

STUDENT LEARNING OBJECTIVES

As a result of this lesson, the student will ...

- Recognize the important role smell plays.
- Define the term *olfaction*.





TIME

Instruction time for this lesson: **25 minutes.**



RESOURCES

Olfaction - Wikipedia, the free encyclopedia. (n.d.). Main Page - Wikipedia, the free encyclopedia. Retrieved April 16, 2010, from <http://en.wikipedia.org/wiki/Olfaction>

Using Your Nose. (n.d.). Smell Activities For Young Children. Retrieved April 14, 2010, from www-saps.plantsci.cam.ac.uk/docs/smell/smellteachtech.pdf

National FFA Organization. (2003). LifeKnowledge Precepts and Signs of Success.



TOOLS, EQUIPMENT AND SUPPLIES

- ✓ Large bowl of water
- ✓ Large bowl of rubbing alcohol
- ✓ Large bowl of vinegar
- ✓ Construction paper for student projects – multiple sheets per student
- ✓ Assorted markers for student projects
- ✓ Paper and pencil for each student
- ✓ Bottle of perfume/body spray/room deodorizer
- ✓ Large lemon
- ✓ Cloth or paper towels for smelling and mess clean up
- ✓ PALS3.30.SG.ASSESS.A – one per student

KEY TERMS



The following term is presented in this lesson and appears in ***bold italics***:

Olfaction



CONTENT OUTLINE

Objective 1. | Define the term for *olfaction*

A. Sense of smelling

Objective 2. | Recognize the important role smell plays

A. Recognize good smells

B. Recognize harmful/dangerous smells

C. Recognize bad smells

INTEREST APPROACH

Have a bowl of water, a bowl of alcohol, and a bowl of vinegar set on a table. Label each bowl 1, 2 and 3, respectively. Gather students around the table and have each student smell each bowl and write down what they believe is in the bowls.



To yourself, please think of what could be in these bowls. Who will be first to share what they think is in each of the bowls?

Allow students to guess. After students have guessed begin next activity without telling students if they are right or wrong.

Give each student a piece of paper and pencil or allow them to get out their notes.



Now that everyone has a piece of paper, take a second and look at what is on the table. When I say the word SMELL, take a turn going around to each of these three bowls, smell what is in the bowl, then write down what you believe to be inside each container. After writing down what you believe to be in the container you may return to your seats, and we will discuss what is in each container. What questions do you have? Please make sure not to talk and do not touch the bowls of liquid.

SMELL



What is in container 1?

Allow students to guess.



What is in container 2?

Allow students to guess.



What is in container 3?

Allow students to guess.



How were some of your guesses different from before and after you smelled the liquid?

Discuss with students their differences in their guesses.



Why were there differences in your answers?

Students answers will vary, but they should conclude that without smelling, they were not able to conclude as to what the liquid was.



As many of you have concluded, it was impossible to know what the liquid was until you were able to smell them and get a better guess as to what it was. Today, we will be discussing the importance of smell, and how using our sense of smell can allow us to know when something such as danger is near. Throughout today's lesson we may smell additional items. Please remember, today and always, you should never smell an object or liquid, which you do not know exactly what it may be.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

OBJECTIVE 1. | Define the term “*olfaction*”



A. Sense of smelling



What would you guess the word *olfaction* means?

Allow students to answer



Those are all good answers. The official definition of *olfaction* is the sense of smell. When I say the *olfaction*, you say the sense of smell. “*Olfaction*”...*the sense of smell*.



This term will come in handy today as we begin to understand the very important role of smelling.

OBJECTIVE 2. | Recognize the important role smell plays



- A. Recognize good smells
- B. Recognize harmful/dangerous smells
- C. Recognize bad smells



Smells can be good things we enjoy in our lives. But, smells can also be things we dislike and bother us. Sometimes, smells can even be dangerous or harmful to us. Knowing the difference in these smells is very important to our safety.

Begin walking around the room with a bottle of perfume/body spray/room deodorizer, hidden in your hand or covered in a cloth. While walking, spray the object in several places around the room. Students should begin noticing the aroma in the room. Be careful not to spray too much or the smell will linger and over power other smells to be used during the lesson.



I can see you all reacting to what I am doing. What do you notice about the smell of the room?

Student's responses should be it smells good, it smells like my mom's perfume, you are spraying something that smells good.



Correct, I am spraying _____ around the room. This is a smell that we enjoy and like.

While moving around the room, begin squeezing a cut half of a large lemon into a cloth or paper towel. If needed, walk around various locations in the room to let the smell evenly disperse.



You should now begin to notice a different smell happening. What smell do you notice now?

Student's responses should be lemon, citrus, cleaner, etc.



Yes, I am squeezing a lemon. Some people enjoy the smell of a lemon, yet others do not like the smell. It can seem very strong and sometimes it is called a bad smell.

Light a match.



What do you smell now?

Student's responses should be smoke, fire, etc.



Yes, you should now begin smelling a lit match or smoke. This can be a bad smell. Being able to smell smoke can help save you and your family if your home were to catch on fire.

Just like we learned earlier, our sense of smell is important. Some smells are good. Just like the smell of the perfume. When we smelled the smell of the lighted match what did this remind you of?

Students' answers should be of a fire, housing burning down, etc.



Exactly, it reminded us of a fire. This is a smell of danger and needs attention. When we smelled the lemon, it was neither a bad nor a pleasant smell. Smells are different and can help give us a clue as to what is going on in the world around us. It is very important that we always pay attention to the smells or scents around us.



REVIEW / SUMMARY

Now let's review, after just looking at something, were we able to determine the smell of it?

Allow students to answer.



No, we were not. We had to smell them before we were able to tell what the smell was.

What types of smells are there we discussed today?

Answers should be good, bad, dangerous, etc.



Smells can warn us of different things and it is important we know these smells in case of danger.

Who will share what the term is for the sense of smell?

*Students will answer **olfaction**.*



You are correct, **olfaction** is the term for the sense of smell.

You all have done an expert job today in determining smells. Always remember, never smell an object that you are unfamiliar with and always tell an adult if you think you smell a dangerous smell.

APPLICATION



Large Group Idea

Play a “Name That Smell” game. Have several items that have an odor ready. Blindfold students and have them categorize the smells as something that is “good,” “bad,” or “dangerous.”



One-on-One Idea

On a sheet of paper have the student create three columns: Good Smells, Bad Smells, Dangerous Smells. The student then will list five examples of each smell.



PALS3.30.SG.ASSESS.A | EVALUATION ANSWER KEY

1. True
2. True
3. True
4. False
5. False

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Name: _____

Directions: Please circle “A” for True or “B” for False

- A - B 1. We identified lemon as a good smell that is not bad or good.
- A - B 2. Being able to identify smells can help if a danger is near.
- A - B 3. Smoke is a smell that communicated danger.
- A - B 4. Olfaction is the sense of hearing.
- A - B 5. If you smell something, it is always a danger.