



Smell Session Outline For the Outdoor Skills Program

- I. Welcome students
- II. Activity: Smell Match
- III. Activity: Painting with Spices

Literature Link: Nature and wildlife based books have been included in the lessons and kits. Books may directly relate to the lesson or may just be a fun read. Unless directed in the lesson, incorporate the book as you see fit.

Suggested reading times:

- Before lesson to bring students together
- In between activities as a transition
- After an activity while waiting for parents to arrive
- After an activity while waiting for a project

The Outdoor Skills program is a partnership with Nebraska Games & Parks and the UNL Extension/4-H Youth Development Program to provide hands-on lessons for youth during their afterschool time and school days off. It provides the opportunity to master skills in the areas of hunting, fishing, and exploring the outdoors. This educational program is part of the 20 year plan to recruit, develop and retain hunters, anglers, and outdoor enthusiasts in Nebraska.

Inventory

Session: Smell

Kit Materials & Equipment

- (10) Paintbrushes
- (10) Small plastic containers for mixing “paint”
- Tape (in craft tote)
- (11) Smell Jars
- (11) Laminated images of objects producing smells
- (3) Bottles of tempera paint (red, yellow, and white)
- Spices:
 - Cinnamon
 - Nutmeg
 - Paprika
 - Turmeric
 - Chili powder
- Flavorings:
 - Vanilla
 - Peppermint
 - Cherry
 - Almond
 - Strawberry

Supplies Instructor Provides

- Construction paper for painting

Literature Provided

- Whose Butt?* by Stan Tekiela

Suggested Literature (Not provided in kit)

- Smell It!* (Let’s Start Science)
By Sally Hewitt
- Animal Talk: How Animals Communicate through Sight, Sound and Smell*
By Etta Kaner.
- What’s That Awful Smell?*
By Heather Tekavec

Session: Smells (Plants)

Title of Activity: Painting with Spices

Objectives: Participants will:

1. Understand how their sense of smell helps them understand the world around them.

Method: Students create artwork using paints made from different spices and flavorings.

Materials Contained in Kit:

- (10) Paintbrushes
- (10) Plastic containers for mixing the paint with spices
- (4) Tempera paints (red, yellow, white & blue)
- Spices
 - Cinnamon
 - Nutmeg
 - Paprika
 - Turmeric
 - Chili powder
- Flavorings
 - Vanilla
 - Peppermint
 - Cherry
 - Almond
 - Strawberry

Materials Needed for Activity:

- Blank paper for painting
- Vegetable Oil (mix with cinnamon)

Duration: 30 minutes

Group Size: any

Setting: Indoors or Outdoors

Key Terms: senses, olfactory bulb

SET Abilities (Concepts): Observe, Draw/Design, Compare

Fair and Take Home Project: Smells painting

Background:

In the “Smell Jar” Activity, we learned all about our sense of smell and how it helps us learn about the world and stay safe. We learned different things create different smells and we all have our favorite (and least favorite) smells.

Now, we will use our sense of smell when creating original artwork!

The Activity:

Before the activity:

1. Prepare work area for painting. Suggest the students wear older clothes that day.
2. Mix the tempera paints with the flavorings to create different combination. Use water with paprika and oil with cinnamon to make a paste.

Examples:

Red paint and peppermint
White paint and vanilla
Yellow paint and almond

Procedure:

1. Ask children if they ever use their sense of smell... while painting!
2. Explain to children they are going to be painting with paints that smell. Show them the paints and ask them if they can use their sense of smell to determine what is in the paint.
3. Give each student at least one piece of paper. Allow children time to create their masterpieces... if they finish one quickly, give them a second sheet of paper to make another.

4. Talk with students as they paint about the different smells. Which one do they like best? Which one do they like least? Which ones do you think a rabbit would like best? Why? What about a fox?
5. Encourage students to create one piece of art using only smells (regardless of the color) they like.
6. Paint containers and brushes must be cleaned out afterwards to avoid mold.

Literature Link:

(Encouraged to read before or after the lesson)

Whose Butt? By: Stan Tekiela



Session: Smells (Plants)

Title of Activity: Smell Match

Objectives: Participants will:

1. Understand how their sense of smell helps them understand the world around them.

Method: Students use their sense of smell to match several smells to pictures of the objects which produced the smell.

Materials Contained in Kit:

- (11) Smell jars
- (11) Laminated images of objects producing smells.
- Tape (in craft tote)

Materials Needed for Activity:

- None

Duration: 20 minutes

Group Size: any

Setting: Indoors and outdoors

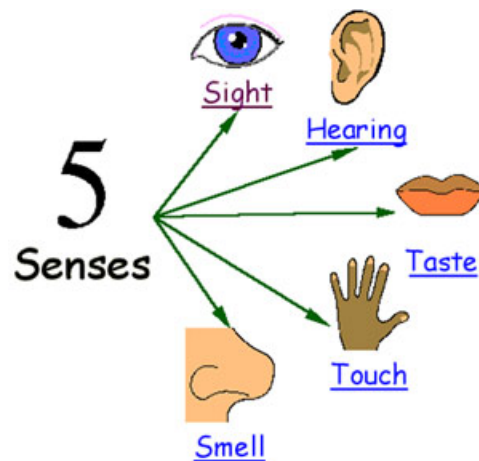
Key Terms: senses, olfactory bulb

SET Abilities (Concepts): Observe, Organize, Question, Collaborate

Background:

Sight, touch, taste, sound, and smell. Our five senses help us learn and understand the world around us. It is through our sense of sound that we know there is a bird chirping

in the pine tree. It is through our sense of touch that we know a cactus is prickly and hurtful to touch. It is through our sense of taste that we know that the bitter taste of nightshade means the plant's leaves are poisonous. And, it is through our sense of sight that we know that a snake is in the grass and we should step over it. And, of course, it is our sense of smell that we know someone has just baked chocolate chip cookies and they are ready to be eaten!



Just like every other sense, our sense of smell is important in learning about and understanding the natural world. Our sense of smell has taught us fruits often smell sweet when they are ready to be eaten. It is also our sense of smell that helps us avoid danger – skunks, snakes, and many insects will emit an odor to warn us they are not happy and to back away!

But, just how does our sense of smell work? Well, let's think about those chocolate chip cookies. When they are in the oven, little (*tiny*) bits of the cookie break off from the main cookie and float around in the air. When we breathe, we pull these little bits of cookie into our nose with the air we are breathing. These little bits of cookie enter

our nose. Once there, they come in contact with our olfactory bulb – a small patch of cells at the top of our nose designed to bind to the little bits of cookie. The olfactory bulb sends a message to our brain that there are chocolate chip cookies.

As stated before, the human olfactory bulb is made up of many cells. In fact, humans have about 5-6 million cells on their olfactory bulbs. In comparison, a rabbit has about 100 million, a dog has about 220 million, and a white-tailed deer has about 297 million! No wonder deer can smell danger hundreds of yards away.

The Activity:

Before the activity:

1. Hang the laminated images around the room.

Procedure:

1. Ask students what their five senses are (sight, taste, smell, hearing and touch).
2. Ask children if they think they ever use their sense of smell. For what? Why is the sense of smell important?
3. Explain to children they are going to be using their sense of smell to match jars filled with smells to pictures of objects that produced the smell. For example, they would match the jar that smelled like a lemon to the picture of lemons.
4. Give each student a jar. Tell them to remove the lid and slowly smell what is inside.
5. Once they smell their jar, they should move around the room and stand near the image of the object that produced their smell. (note: more than one student may be by each images).
6. Have students return their jar to the center and play again.

7. Talk with students about why your sense of smell is important:
 - a. It helps you know what is around you and keeps you safe (skunk, fire, burning object, gas leak, etc.).
 - b. It helps you taste your food (most of our ability to taste food comes from our sense of smell (not our sense of taste!).
 - c. It helps you stay healthy (to know when you need to take a bath (!), to know when food has gone bad, etc.
8. Ask students what their favorite smell was. Explain that just like we all have different things we like to taste (eat), different things we like to see (favorite color, etc.), we also have different smells that we like. Some people actually like the smell of a skunk!

Smell Jar Key	
Jar	Smell
1	Strawberry
2	Peppermint
3	Cedar
4	Cinnamon
5	Fox
6	Vanilla
7	Fish Oil
8	Skunk
9	Lavender
10	Coconut
11	Rosemary

Literature Link:

Smell It! (Let's Start Science) by Sally Hewitt

Animal Talk: How Animals Communicate through Sight, Sound and Smell by Etta Kaner

What's That Awful Smell? by Heather Tekav

Smells of Nature Answer Key

1 - Strawberry

2 - Peppermint

3 - Cedar

4 - Cinnamon

5 - Fox

6 - Vanilla

7 - Fish Oil

8 - Skunk

9 - Lavender

10 - Coconut

11 - Rosemary

Smells of Nature Answer Key

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3 - Cedar

4 - Cinnamon

5 - Fox

6 - Vanilla

7 - Fish Oil

8 - Skunk

9 - Lavender

10 - Coconut

11 - Rosemary



Strawberry



Peppermint



Cedar Trees



Cinnamon



Fox



Vanilla



Fish Oil



Skunk



Lavender



Coconut



Rosemary