

# Problem Solvers Activity SE 13: The Five Senses

## CHILDREN ARE LEARNING...<sup>1</sup>

### Science Content:

- Observe and describe objects using all five senses.
- Recognize that we need to use our senses safely. (For example, a child shouldn't touch a hot stove or taste something without asking an adult's permission.)

## CHILDREN ARE DOING...

### Science Practices:

- Look for patterns
- Make observations
- Carry out investigations

## NOTE TO TEACHERS:

This activity offers a rich opportunity to model and expose children to rich, descriptive vocabulary. As you plan your teaching, write down some adjectives that describe each of the items provided on the tray below. Be sure to use and define these new words for children as you move through the activity. Some examples are below:

- |                |         |           |                    |
|----------------|---------|-----------|--------------------|
| • Soft         | • Salty | • Smooth  | • Firm             |
| • Fuzzy, Furry | • Sweet | • Bumpy   | • Pleasing         |
| • Crunchy      | • Chewy | • Squishy | • Delicious, Yummy |

## MATERIALS NEEDED:

*In this activity on the five senses, children will be tasting items. Please select two common snack foods children typically see in the classroom. However, these items should be different from each other in appearance, taste, and smell. In this activity, we use cheese and crackers as an example. **Please feel free to substitute allergy-friendly, familiar, and culturally appropriate food items based on your students' needs and communities.***

1 small slice of cheese per child, plus one for demonstration

1 cracker per child, plus one for demonstration

5 plates/napkins to serve the food

20 index cards

Stuffed animal

2 trays

<sup>1</sup> Adapted from the Next Generation Science Standards (kindergarten): <https://www.nextgenscience.org/>

- 4 small snacks (like 4 pretzels or raisins)
- 2 small bowls
- 2 balls (any type, don't have to be the same)
- 2 crayons OR containers of play-dough
- 2 bells, rattles or shakers/maracas

### Handout 1: Senses Cards

## PREPARATION:

- **For the EXPAND activity:**
  - Place a piece of cheese on one plate and a cracker on another plate.
  - Place a piece of cheese and a cracker on each of 4 plates for the tasting portion of the activity. Cover each plate with a paper napkin or paper towel so the items are not visible.
- **For the EXPLORE activity:**
  - Print four copies of **Handout 1**. Cut out each image and tape/staple to an index card. Make two stacks of cards—each stack should have one card representing each sense (5 cards per stack).
  - Have the stuffed animal handy.
  - Place 2 small snacks (pretzels or raisins) in each of 2 bowls.
  - On each tray, place a bowl with snacks; a ball; a crayon/play-dough, and a bell/shaker. Keep trays aside until ready to use.

## Activity Instructions

### ENGAGE

Gather a group of 4 children at a table or in a circle on the floor. (Note: Groups of 6 children work well if you are teaching 4-year-olds.)

**ASK:** Today, we are going to talk about our senses. Has anyone heard about their senses before? What do you know about them? (*Invite children to share.*)

**EXPLAIN:** Our senses describe the different ways that our bodies give us information about the world. What kind of information do you get from your...

- Eyes?
- Ears?
- Noses?
- Tongues?
- Skin, especially our hands and fingers?

**SAY:** Today, we're going to explore all the ways we can use our senses to find out about the world. You will use your eyes, nose, ears, and hands, to share what you can see, smell, touch, and hear. *Use questions like those following to engage children's senses.*

- Look around the room and tell me one thing you can see.
- Now let's close our eyes and listen. What can you hear?
- Now close your eyes and use your fingers to feel the carpet (or table). How does it feel? Is it smooth or fuzzy? Hard or soft?
- What are sounds you like to hear? Are there sounds you don't like to hear?
- What are some things you like to touch? Are there things that don't feel good to touch (for example, something that is too hot)?

**EXPLAIN:** People use their senses to discover the world around them. You just used three of your senses—seeing, hearing, and touching. Today we're going to explore those three senses and two more: tasting and smelling.

## EXPAND

**PREPARE:** Place two plates on the table side by side, one with a slice of cheese and one with a cracker.

*For this activity, children will be touching the food items. They will NOT be eating these items. (See note concerning allergies in the **Materials** section above.)*

**ASK:** We have a challenge for this activity. We are going to use our senses to describe this cheese and cracker—**without tasting them**.

- Let's start with our **sense of sight**—what we can see. Let's look at the cheese: what color is it? What color is the cracker? What shape is the cheese? What shape is the cracker?  
*(Explore children's observations of what the food looks like.)*
- Now let's use our **sense of touch**: What do you feel when you touch the cracker? Is it bumpy or smooth? Soft or hard? Now, let's touch the cheese. How does it feel? Smooth, a little sticky, soft or hard? *(Explore children's observations of what the food feels like.)*
- Let's use our **sense of hearing**. Let's listen: Is the food making a noise? (Of course not!) Is there anything you could do to get the cheese to make noise? (No.) Can the cracker make a noise? (Yes, if you bite into it or snap it in half. Demonstrate for children and have them listen closely.)  
*(Explore children's observations of what the food sounds like.)*

## CONSIDERATIONS FOR THE SECOND PART OF THIS ACTIVITY:

Some children will not want to close their eyes. Children who have strong sensory preferences or food aversions may not feel safe closing their eyes while eating. Children with a trauma history may also not feel safe closing their eyes for an activity like this one. There may be other reasons why children prefer not to close their eyes for a tasting experience.

If you encounter this child behavior, skip the portion of the activity about closing eyes. Instead, prompt children to eat/chew slowly and pay attention to how each item feels in their hands and tastes in their mouths. This "mindful eating" technique focuses the children's attention on the sensory aspects of the food.

If children reject the snacks due to existing preferences, let them know that's okay. Validate that they are in charge of their own bodies, and they can decide what and how much to eat. If desired, you can ask them to imagine how these food items taste.

**ASK:** Do you think you could guess there was cheese on this plate with your eyes closed? What would you do to find out what food was there, if you couldn't see what was on your plate? Is there a sense you could use to help you figure it out? (What about our sense of smell?)

**TRY IT:** Let's try it. I'm going to hold either a piece of cheese or cracker up to your nose while you close your eyes. You can use your sense of smell to tell me which one it is. Are you ready?

*Invite each child to take a turn closing their eyes. Hold either a piece of cheese or a cracker up to their nose. See if they can identify, by smell, which food item it is.*

**SAY:** Next, we are going to guess which is the cheese and which is the cracker by tasting them. But we're going to taste them **with our eyes closed!** Are you ready? *(Distribute a covered plate to each child.)* When your eyes are closed, I'll take the napkin off. When you're ready, you can take a bite from the snacks on your plate. You can use your sense of touch, smell, and taste to decide what you are eating—is it cheese or is it a cracker?

*Remove the napkin from each plate. Give children time to taste each item. When children are done, have them open their eyes and continue with the conversation.*

**ASK:** Use questions like the ones below to explore tasting these snacks:

- Which did you taste first—the cheese or the cracker?
- Did they taste the same or different?
- How did you know which was the cheese without looking?
- How did you know which was the cracker?
- What did you do to figure out which was which when you couldn't see them?

**EXPLAIN:** How many smelled the cheese and cracker? How many tasted it? Did you feel its texture or shape? Crackers and cheese smell different. They feel different in our hands. They taste different, too. You have five senses, and each one of them gives you information about the world around you.

**ASK:** Our senses give us information, but it's not always safe to touch or eat everything around us. Can you think of some things it's not safe to touch? *(Answers might include a hot stove or a sharp pair of scissors.)* Right. We don't touch a hot stove or sharp scissors or anything else that might hurt us. Can you think of some things it's not safe to taste? *(Answers will vary, but teacher response should focus on the fact that we only put food in our mouth, and only when an adult says it's ok.)*

**SUMMARIZE:** What did we discover together about our senses, Problem Solvers? *(Let children share their observations.)* There are lots of ways to explore the world using all five senses. Who can remember some of the senses we explored? (Seeing, hearing, touching, smelling, and tasting.)

## EXPLORE

**INTRODUCE:** Now, we're going to play a game where we explore different objects using our senses. To help us play, I have some cards here – each card has a picture of a different one of our senses. Let's see if you can guess which each card stands for by looking at the picture for a clue!

*Hold up each of the **Senses Cards** and ask children if they can guess which sense the card represents. When done, place the children in pairs.*

**EXPLAIN:** Now, here's the game: I'm going to give each of your groups a tray of objects to explore. You'll pick an object off your tray and then pick a card. Look at your card and decide what sense it is. Then tell your partner whether you can use that sense to explore the object. Let's try it together. I'm going to choose a stuffed animal.

*Place a stuffed animal in front of the children.*

**ASK:** Who would like to pick the first card? *(Let a child choose a Senses Card. Can they use that sense—for example, taste—to explore the stuffed animal? No. Have the next child choose a card. Can they use that sense—for example, touch—to explore the stuffed animal? Yes! Ask the child to tell you what it feels like.)*

Give each pair of children a prepared tray with four objects. Remind children that they can choose whatever object they want for their turn (objects can be chosen more than once; refill snack items as needed).

**OBSERVE:** As pairs are moving through the cards, observe to see if children are able to decide if they can use that sense to explore the object. If the answer is **yes**, prompt them (if needed) to share what they learned about the object from the sense on their card. If needed, use the questions below to support children's exploration:

- Can you see this object? What do you see?
- Can you hear this object? What do you hear?
- Can you smell this object? What do you smell?
- Can you touch this object? What does it feel like?
- Can you safely taste this object? What does it taste like?

**PLAY AGAIN:** Bring the group back together. Put one of the trays aside and position the other tray in front of the children. Place the **Senses** cards in a pile in front of the children.

**EXPLAIN:** We are going to play this game one more time. But we are going to play a little differently this time! This time, you will choose a **Senses** card and then describe an object on the tray using that sense. But don't tell us which one you are talking about! We have to guess what object you are describing. I'll go first.

**DEMONSTRATE:** I've picked a smell card. The object I'm thinking of smells sweet and delicious. Can anyone guess what object I'm thinking about on the tray? (That's right, it's the raisin!)

**TRY IT:** Give each child a chance to choose a **Senses** card and describe an object using that sense. See if the group can guess the object. *(Note: This version of the game will be more difficult and requires descriptive vocabulary that children may still be developing; they may need your assistance. Give each child one turn to play and continue if time allows.)*

## REFLECT

To close the activity, bring the children back together. Use a reflective question/s - like those below - to prompt children's thinking about how they use their senses.

- Tell me what senses you used in today's activities.
- What sense was your favorite today?
- What was some of the information you got from your senses in today's activities?
- Do people use all their senses all of the time? Which sense do you think they use the most?
- Which senses made it easiest for you to explore an object?

**SUMMARIZE:** Our five senses give us important information that helps us explore and learn about the world. Today, we discovered that we can use our senses to explore objects in different ways. We can look at objects to observe them. We can touch them, listen to, and even smell them! Sometimes we can taste them too. Our senses help us understand the world.

## Individualizing the Activity

### Make it more challenging:

- For the **Explore** activity, expand the game by having children take turns selecting an object in the classroom and see how many of the **Senses Cards** they can use to describe it.
- Collect data on each object children examine in the **Explore** activity to see which sense is used most and least frequently to explore items.
- Add additional items to the tray for children to explore (additional snacks, musical instruments, scented items, textured items, etc.)

### Make it less challenging:

- Focus on a different sense each day.
- Remove the “taste” card from the **Senses Cards** set.
- Skip the descriptive/guessing game component of the **Explore** activity.
- Run the Senses card game as a group experience.

## MAKING CONNECTIONS ACROSS THE DAY:

- When you take community walks, pause to prompt children to use their senses to notice what’s around them. Stop along your path and give children a chance to pick one object and focus on its sight, sounds, texture (if safe), smell. Alternatively, each day, you might take a walk with a theme—like a “Listening Walk” where you pay attention to the sounds in your community or a “Visual Walk” where you pay attention to what children can see in the community.
- Not everyone uses all five senses, and you may want to provide children with examples of other ways of finding out about the world. For example, some people use glasses to help them see, or hearing aids to help them hear. People who can’t hear sometimes use technology to amplify the sounds around them or, alternatively, a visual form of communication called American Sign Language. Some stories to share include:
  - *Arthur’s Eyes* by Marc Brown
  - *Some Kids Are Blind* and *Some Kids are Deaf*, both by Lola M. Schaefer
  - *Gracie’s Ears* by Debbie Blackington
  - *Sign & Singalong: Twinkle, Twinkle, Little Star* by Annie Kubler
  - *My First Book of Baby Signs: 40 Essential Signs to Learn and Practice* by Lane Rebelo
- Use shared mealtimes as an opportunity to explore the sense of taste and smell safely. You might try a guided mindfulness experience for children by asking questions like the ones below during a meal or snack-time:
  - Look. What colors and shapes do you see on your plate?
  - Listen. Does your food make a sound?
  - Touch. What does your food feel like (smooth, bumpy, sticky, or wet)?
  - Smell. What does your food smell like?
  - Taste. What does your food feel like on your tongue. How does it feel in your mouth? Does the flavor change as you chew it? Do you taste more than one flavor?

- During sensory activities like music, water play, painting or play-dough, ask children questions about their sensory experience (What do you see? Can you smell anything? What does this feel like in your hands? Can you hear anything? Does it make a sound? Is it ok to taste paint or play-dough?).
- Offer the **Senses Cards** and a tray of new objects to explore as a free play option for children.
- If the children in your class are interested in animals, you might want to explore animal senses. Many animals use the same senses as people do. Books to share include:
  - *My Five Senses* by Alik
  - *What Do You Do with a Tail Like This?* by Steve Jenkins and Robin Page
  - *Nose Knows: Wild Ways Animals Smell the World* by Emmanuelle Figueras and Claire de Gastold (This book is for older children, but the illustrations are great and the reader can summarize the key points to fit the interests and abilities of the audience.)
  - *Animal Senses: How Animals See, Hear, Taste, Smell, and Feel* by Pamela Hickman (Like the book above, this story is for older children but the reader can summarize the key points for a younger audience.)

## Song: *Exploring Oranges*

**Directions:** Gather a plastic toy orange (or print a photo of an orange) for this song. Alternatively, prepare some actual oranges or Clementines for a musical, sense-filled snack!

Let's explore some oranges today  
Using our senses to learn new things!

Let's use our sense of sight – Get ready to blink!	(Point to nose)
Blink your eyes - what do you see?	(Blink eyes)
Big round balls, orange as can be.	(Show picture or pretend to hold up a whole orange)
Blink blink blink...look at that round orange!	(Blink eyes; show picture of oranges)

Now let's use our sense of smell – Get ready to sniff!	(Point to nose)
Sniff with your nose – what do you smell?	(Sniff with nose)
Sweet sweet citrus! It smells so swell!	(Big breath and a smile)
Sniff sniff sniff – smells soooo good!	(Sniff with nose)

Now let's use our sense of hearing – Get ready to use your ears!	(Point to ears)
Use your ears - what do you hear?	(Cup hand behind ear to listen)
Listen to that juice spraying everywhere!	(Spraying motion with fingers)
Squeeze that orange; listen to the squishy sounds!	(Cup hand behind ear)

Now let's use our sense of touch – Get ready to grab some orange slices!	(Wiggle fingers)
Pick up a piece; how does it feel?	(Pretend to pick up an orange slice)
Slippery and sticky, orange appeal.	(Pretend to squeeze the orange)
Feel that juicy orange slice in your fingers!	(Rub fingers together)

Now let's use our sense of taste – Get ready to taste that orange!	(Point to mouth)
Put it in your mouth; how does it taste?	(Pretend to put orange in mouth)
Burst of citrus flavor, tangy and sweet.	(Pretend to chew)
Mm, mm, mm, I can't get enough of that yummy orange!	(Rub tummy)

Now it's your turn to pretend to juice an orange!	
Twist to the right	(Twist to the right)
Twist to the left	(Twist to the left)
Twist up high	(Twist up high)
Twist as low as you can get!	(Twist down low)
Now you're doing the orange juice dance!	(Twist fingers all around)
Juice, Juice, Juice, Twist it all around.	
Twist it all around....Twist it all around....Twist!	



## Making Literacy Connections

Share the following book with children as an opportunity to deepen their understanding of their five senses.

**Suggested Book:** *I Hear a Pickle (and Smell, See, Touch, and Taste It, Too!)* by Rachel Isadora

### AS YOU READ:

Each section in this book includes many examples of what a child might hear, smell, see, touch, and taste. Depending on the group's attention span, it's ok to skip some examples to focus on others, or read just one section in a single sitting.

- Point out the pickle on the title page. Ask: Is it possible to hear a pickle? Why or why not? Have any of the children eaten a pickle? Can they describe the taste?
- Read the word "crunch." Is that something you could hear?
- Point to the sense word that begins each new section, for example, "HEAR." Ask children to show you the part of their body that they use to hear.
- Note the "I don't . . ." parts of each section. Ask why not. "Why don't we hear worms, or snow falling?"
- Introduce and define new vocabulary: What does *allergic* mean? (Being allergic to something means that our body has a strong reaction to something we touch, eat or smell. When a person is *allergic* to something, they need to avoid it so they don't feel sick.)
- Reinforce safety rules: Why doesn't the child touch the plug, or the stove?
- Ask which sounds (sights, tastes, etc.) are children's favorites.
- When the narrator complains about a sound or smell they don't like, do the children agree? What sounds or smells do children dislike? Which ones do they *like*?
- Ask children to guess how children in the illustrations are feeling. What clues are they using in the picture to help them guess?

### BUILD ON THE BOOK: CREATING A BOOK OF OUR FAVORITE THINGS

**Materials:** Camera, paper (one page per child), printer, photocopier, stapler, three-hole punch, small binder

1. Create a class book focusing on the five senses. You can either create a book about "My Favorite Things," with a page for each child to describe a favorite object using as many senses as possible. Snap a photo of the child's favorite object and transcribe their words as they describe it. Use the **Senses Cards** if children need a prompt. An alternative approach is creating a book of 5 pages, with each devoted to one sense—insert a picture of that sense (eyes, hands, ears, mouth, nose) and ask your students to share their favorite smells, favorite tastes, etc.
2. Photocopy the book so each child has a copy to take home and share with parents.
3. Print the book and use the three-hole punch so you can place the pages in a small binder. Place the book in the class library/bookshelf.
4. Read the book to the children. Or, ask each child to "read"/tell the class about their page.

## Five Senses Cards

See



Hear



Touch



Smell



Taste





## Five Senses for Learning

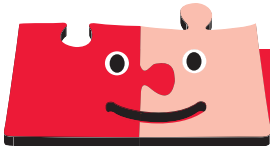
This week, children learned how the five senses—seeing, hearing, smelling, touching, and tasting—give them information about the world. At home, you can look for ways to describe objects in your child’s world using all five senses.

Here are some ideas to try:

- Take a walk outdoors and listen for the sounds you hear in your community.
- Play different kinds of music and listen together. Which music does your child like best?
- Ask your child to guess what you’re having for dinner based on cooking smells. Or, open a few spice jars and let them experience these different smells. Which do they like best/least?
- Ask your child to close their eyes and name the food they’re tasting.
- Take turns playing “I Spy.” Describe an object you can see and have your child guess what it is. Then let your child describe an object *they* see and have *you* guess what it is.
- Let your child explore things that are fun to touch—for example, popping bath bubbles or making mud pies.



**Safety note:** Not everything is okay to taste or touch. Preschoolers are very curious and have little self-control, so this is a reminder to scan your home to be sure that household chemicals are out of reach, blinds/curtain cords are secured, and stove/wall plugs are child-proofed.



## Solo para familias

# Cinco sentidos para el aprendizaje

Esta semana, los niños aprendieron cómo los cinco sentidos—vista, oído, olfato, gusto y tacto—les dan información sobre el mundo. En casa, puede buscar maneras de describir los objetos del mundo de su niño utilizando los cinco sentidos.

Estas son algunas ideas que puede probar:

- Den un paseo al aire libre y presten atención a los sonidos que oyen en su comunidad.
- Elijan distintos tipos de música y óigánla juntos. ¿Qué música le gusta más a su niño?
- Pídale que adivine lo que va a cenar según los olores de la cocina. O abra algunos frascos de especias y deje que experimente los distintos aromas. ¿Cuál le gusta más o menos?
- Pídale que cierre los ojos y diga el nombre de la comida que está probando.
- Jueguen por turnos al “veo-veo”. Describa un objeto que usted está viendo y haga que el niño adivine lo que es. A continuación, deje que el niño describa un objeto que él está viendo mientras *usted* trata de adivinar lo que es.
- Deje que el niño explore cosas que son divertidas al tocarlas, por ejemplo, reventar las burbujas de jabón o hacer tortas de barro.



**Nota sobre la seguridad:** No todo se puede tocar o probar sin peligro. Los niños de preescolar son muy curiosos y tienen poco autocontrol, así que este es un recordatorio para que examine su casa y se asegure de que los productos de limpieza están fuera del alcance del niño, las cuerdas de las persianas y cortinas están aseguradas y los enchufes de la cocina y el resto de la casa son a prueba de niños.