

# The Senses

FRAMEWORK
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I. Scientific and Engineering Practices
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II. Cross-Cutting Concepts
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III. Physical Sciences
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SKILLS/OBJECTIVES
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-Get to know the 5 senses
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-Understand how different stimuli can affect an individual sense
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MATERIALS
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| <ul style="list-style-type: none"><li>• 2 sheets: optical illusions and worksheet</li><li>• TOUCH: Tempera paint in different colors</li><li>• Sand, Flour, Ground pepper, (other ground items)</li><li>• Plain white paper</li><li>• TASTE: lemon wedges, potato chips, unsweetened cocoa, apple juice, lemonade</li><li>• Plates, cups</li><li>• SMELL: Onions, Vanilla extract, Cinnamon, vinegar, rubbing alcohol, peanut butter, peppermint extract</li><li>• SIGHT: metal spoon, metal fork, plastic spoon, little mirror</li><li>• SOUND: an “eardrum” (plastic wrap stretched tightly over a container with a pretty large opening, with some dried rice on top)</li><li>• A few ways to make noises (tin cookie sheet, tuner, silverware to bang together, an instrument, a drum)</li></ul> |
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Activity #1	Touch
Materials	<ul style="list-style-type: none"> <li>○ Sand, Flour, Ground Pepper</li> <li>○ White Paper</li> </ul>

- Have the kids paint with paint that has been mixed with one of the above substances
- Have them guess which substance is in which paint and discuss how the paints feel different

Activity #2	Taste
Materials	<ul style="list-style-type: none"> <li>○ lemon wedges, potato chips, unsweetened cocoa, apple juice, lemonade</li> <li>○ Plates, cups</li> </ul>

- Try the foods (only a little bit per child, remind them that it's tasting, not eating). Which one is bitter, sweet, sour, salty?
- Now, try the lemonade. Which food does it taste like the most? Why is it sweeter?
- Which taste is your favorite? Least favorite?
- Look at the taste bud diagram.

Activity #3	Smell
Materials	<ul style="list-style-type: none"> <li>○ Onions, Vanilla extract, Cinnamon, vinegar, rubbing alcohol, peanut butter, peppermint extract</li> <li>○</li> </ul>

- Put the smells in separate containers that the kids cannot see into and poke holes in the tops (put the liquid smells on cottonballs)
- Which one smells the best? Worst? Strongest? Weakest?

Activity #4	Sight
Materials	metal spoon, metal fork, plastic spoon, little mirror

- Find your reflection! Circle words on the sheet that do show your reflection.
- Why does the metal spoon show your reflection better than the metal fork?
- What kind of materials show your reflection better?
- Look at the optical illusions! What's going on? (You are getting conflicting sensory input)
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- EXTRA: Draw what you see in the mirror!

Activity #5	Sound
Materials	<ul style="list-style-type: none"> <li>○ lemon wedges, potato chips, unsweetened cocoa, apple juice, lemonade</li> <li>○ Plates, cups</li> </ul>

- Explain sound waves and the eardrum – sound waves vibrate the eardrum in much the same way that the sounds vibrate this fake eardrum
- Hold the cup, let kids take turns making different sounds near the cup and observe how different ones make the rice jump

NAME

TEMPERATURE

DATE

WEATHER

### THE SENSES!

**\*The five senses are TOUCH, TASTE, SMELL, SIGHT, and SOUND\***

#### 1. TOUCH

Paint! Cross out the word if you have paint mixed with:

Salt

Flour

Water

Sand

Ground Pepper

#### 2. TASTE

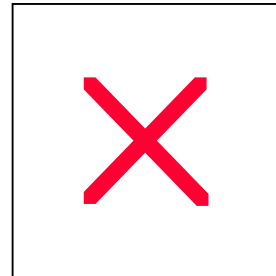
Eat! Cross out the word when you taste something:

Bitter

Sweet

Salty

Sour



#### 3. SMELL

Sniff! Cross out the word when you smell:

Onions

Peppermint extract

Vinegar

Vanilla extract

Peanut butter

Cinnamon

Rubbing alcohol

#### 4. SIGHT

Look! Cross out objects that DO reflect:

Plastic spoon

Window

Table

Metal spoon

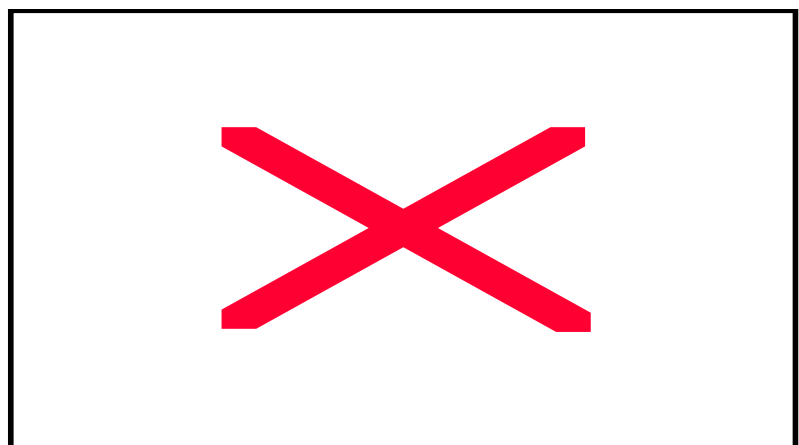
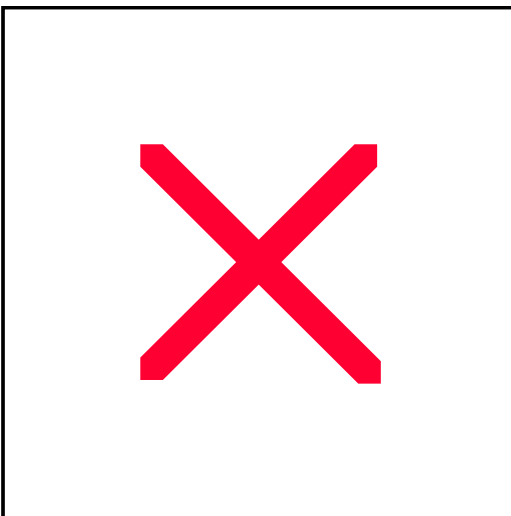
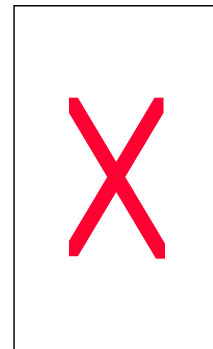
Wooden block

Aluminum foil

What are optical illusions?

#### 5. SOUND

Listen! Find objects to use as noisemakers!



OPTICAL ILLUSIONS!

