How Does It Smell?

20 minutes

Small Groups

Objectives

• Students understand that one of the physical properties of an object is its smell.
• Students observe and describe the smells of different substances.
• Students try to identify substances based on smell, and record their findings in a chart.

Materials

For each group

• 1–2 cotton balls
• 4 film containers
• *pin
• *things to smell, such as food extracts on cotton balls, banana, orange, powdered chocolate mix, etc.

*Not provided in kit

Student Resource

1.4 Smell

Inquiry Focus

• Observe

In Advance

• Each group will need four film containers, each with a different-smelling substance in it. Three of the containers should be filled with substances that have a distinct scent. The fourth should be filled with a cotton ball, which has no smell. Poke pinholes in the tops of the film containers, so the smell will waft out. All groups should have the same four “smells” inside their film containers.
• Make a transparency of Student Resource 1.4, Smell.

1. Distribute the Student Resource.
Make copies of Student Resource 1.4, Smell, and distribute to students. Project the transparency.

2. Distribute the materials and have students describe the smells.
Divide the class into small groups. Give each group four film containers, each filled with a different-smelling substance. Have students take turns holding each container to their nose and smelling it. Ask them to describe the smells. Write their words on the transparency under How does it smell? Have students copy the words onto their Resource page.

▲ We learn about objects by smelling them.
How Does It Smell? (continued)

3. Students try to identify the substance inside each container, based on its smell.
   Have students sort the containers by whether they have a smell or not (three do; one does not). Then have students draw a picture of what they think is inside each of the three “smelly” containers.

4. Students match the containers based on how they smell.
   Tell students that every group has the same substances in its film containers. Ask students to walk around the room and find two containers that smell the same.
   Have students give the matching smell containers back to you. Let them guess what is making the smell, then open the containers and show them.

Assessment
Ask: Which of your five senses did you use in this activity? (smell) Have students point to the part on their bodies used to smell. (nose)

How Does It Look?

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
</table>

See

1. How does it look?

__________________________________________

__________________________________________

__________________________________________

2. Can you find it?

<table>
<thead>
<tr>
<th>Small</th>
<th>Round</th>
<th>Green</th>
</tr>
</thead>
</table>

Directions: 1. Have students copy the words from the transparency. 2. Have students draw one small, one round, and one green object located in the classroom.

Student Resource 1.5 (p. 19)

20 minutes

Pairs

Objectives

• Students understand that objects have physical properties that can be explored through the sense of sight.
• Students describe the appearance of a hidden object for others to identify.
• Students sort/classify objects based on size, shape, and color, and record their findings in a chart.

Materials

For each student

1. *object from home (to put in the bag)

1. *paper bag, lunch-size

*Not provided in kit

Student Resource

• 1.5 See

Inquiry Focus

• Observe

In Advance

• Ask students to bring in one small object in a paper lunch bag.
• Make a transparency of Student Resource 1.5, See.
1. **Distribute the Student Resource.**
   Make copies of Student Resource 1.5, See, and distribute to students. Project the transparency.

2. **Students think of three words to describe the appearance of a hidden object.**
   Have each student look at the object hidden in the paper bag he or she brought from home. Ask students to think of three words to describe what their object looks like. Prompt students by saying they can describe the object’s color, shape, and size.

3. **Students describe the object for their partner to guess.**
   Working in pairs, have students take turns describing their object and having their partner try to guess what it is. If the partner cannot guess the object, students should add more words to describe it. Then have students show the object to their partner and ask the partner to think of three more words to describe the object.

4. **Students share their descriptive words.**
   Ask students to share with the class all the words they used to describe what their object looks like. Write them on the overhead transparency, under *How does it look?* Have students copy the words onto their Resource page.

5. **Students classify objects based on size, shape, and color.**
   Tell students to look around the room and draw on their Resource pages charts one thing that is small, one thing that is round, and one thing that is green.

**Assessment**
Ask: *Which of your five senses did you use in this activity?* (sight) Have students point to the part on their bodies used to see. (eyes)
How Does It Taste?

Objectives

• Students understand that one of the physical properties of an object is its taste.
• Students learn that the four main tastes are sweet, salty, sour, and bitter.
• Students classify foods according to taste, and record their findings in a chart.

Materials

For each group

• *foods to taste (sweet, sour, and salty)
1 tray, plastic

For the teacher

1 *blindfold
3 *foods to taste (1 sweet, 1 sour, 1 salty; different from the ones above)
• *paper towels
1 tray, plastic

Student Resource

• 1.6 Taste

In Advance

• Prepare four trays of foods for students to taste, one tray per group. Put a paper towel on each tray with sweet foods, such as grapes; sour foods, such as lemon or grapefruit slices; and salty foods, such as potato chips or saltine crackers.
• Prepare an additional tray with a paper towel containing one sweet food, one salty food, and one sour food, to use in taste tests at the beginning of the activity. These foods should be different from the ones on the trays you just prepared.
• Make a transparency of Student Resource 1.6, Taste.

1. Distribute the Student Resource.

Make copies of Student Resource 1.6, Taste, and distribute to students. Project the transparency.

Safety

Wash your hands and have students wash their hands before this activity. Find out if any students have food allergies or are diabetic, and choose foods accordingly.

1. How does it taste?

2. Does it taste sweet, salty, or sour?

<table>
<thead>
<tr>
<th>Sweet</th>
<th>Salty</th>
<th>Sour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student Resource 1.6 (p. 20)
2. Student volunteers do blindfolded taste tests.
   Blindfold a student volunteer. Give the student a sour lemon slice to eat. Ask the student to describe what it tastes like. Write the words on the transparency under How does it taste? Have students copy the words onto their Resource page. Repeat the blindfolded taste test with another volunteer and a salty food, and a third volunteer and a sweet food. Write the words on the transparency for students to copy.

3. Introduce the four taste sensations.
   Introduce the words sweet, salty, sour, and bitter. Tell students that these are the four main taste sensations. If the student volunteers did not use these words to describe the foods they tasted, ask the volunteers now which foods were sweet, salty, and sour. Then ask: What foods have you tasted that are sweet? (Answers will vary but may include fruit, cookies, candy, and so on.) What foods have you tasted that are salty? (Answers will vary but may include potato chips, crackers, French fries.) What foods have you tasted that are sour? (Answers will vary but may include lemon or grapefruit.) Has anyone ever tasted anything bitter? What was it? (Answers will vary but may include medicine or spinach.)

4. Students classify foods by taste.
   Divide the class into small groups and give each group a tray of food. Ask students to taste each kind of food and decide which foods are sweet, which are salty, and which are sour. Review the three taste categories on the Resource page (“bitter” has been omitted), and ask students to draw each food under the appropriate category.

**Assessment**
Ask: Which of your five senses did you use in this activity? (taste) Have students point to the part on their bodies used to taste. (tongue)