The Five Senses

1. In advance, mix some salt water in a cup and hide it in the classroom. Make copies of Student Resource 1.1, Vocabulary, and cut it up to make flashcards. Use the cards to introduce vocabulary words as they come up throughout the section.

2. Tell students to look around the classroom. Ask: **What do you see?** (Students will name people, objects, etc.) Tell students that everything they have named is made of matter; matter is the stuff that everything is made of.

3. Tell students that there is mystery matter hidden in the room. You are going to describe it and see whether they can guess what it is. Tell students that this matter looks clear, it makes a splashing sound when you shake it, it feels wet, it smells a little spicy, and it tastes very salty. Ask: **What do you think it is?** (Answers will vary.)

4. Show students the glass of salt water. Explain that they have just identified the salt water based on its properties: how it looks, sounds, feels, smells, and tastes. All matter has properties. We use our senses—sight, hearing, touch, smell, and taste—to observe the properties of matter so we can tell what it is, learn more about it, and describe it to others.
How Does It Feel?

20 minutes
Small Groups

Objectives
- Students understand that objects have physical properties that can be explored through the sense of touch.
- Students sort/classify objects based on how they feel, and record their findings in a chart.

Materials
For each group
- 1 cloth bag
- 1 cotton ball
- 1 marble
- *objects to feel (in addition to cotton ball, marble, paper clip, and penny): dry sponge, wood block, cloth, fake fur, stick, walnut in shell, ball, felt, sandpaper, piece of carpet, ball of clay etc.
- 1 paper clip
- 1 penny
- 2 trays, plastic
- *Not provided in kit

Student Resource
- 1.2 Touch

In Advance
- Place the objects to feel in a cloth bag. Each group will need one bag of objects.
- Make a transparency of Student Resource 1.2, Touch.

1. Distribute the Student Resource.
Make copies of Student Resource 1.2, Touch, and distribute to students. Project the transparency.

2. Student volunteers feel and describe objects.
Place a cloth bag of assorted objects on a desk. Ask a volunteer to place his or her hand into the cloth bag, pick up one object (without looking at it), and describe how the object feels. Write their words on the transparency under How does it feel? Help students copy the words onto their Resource page. Then have the student guess what the object is and take it out of the bag to show the class. Pass around the object for other students to feel. Repeat this with two or three more volunteers.
3. **Students take turns feeling and describing objects in bag.**
   Divide the class into small groups and give each group a cloth bag of objects and two plastic trays. Tell students to take turns feeling an object in the bag and describing it before lifting it out of the bag to show the others in the group.

4. **Demonstrate how to sort objects based on how they feel.**
   Ask the groups to show the class a few of the objects in their bags and to share the words they used to describe the objects. Choose two opposing words from the list, such as **hard and soft**. With students’ help, choose two objects from the bag that are hard, and two objects that are soft, and place the objects themselves in the correct column on the transparency chart. Have students do the same on their Resource pages. Tell students they have just sorted objects by their hardness, or how hard or soft they are. Hardness is a property of matter.

5. **Students sort objects based on how they feel.**
   Ask groups to choose a new property by which to sort the objects (for example, texture: how **smooth** or **rough** they are). Then have groups sort all the objects in their bags into these two categories, placing the objects in two different trays. When they have finished, have students choose another property (for example, weight: how **heavy** or **light** something is) and repeat the exercise.

**Assessment**

Ask: **Which of your five senses did you use in this activity?** (**touch**) Have students point to the part on their bodies used to touch. (hand/fingers)
How Does It Sound?

20 minutes  Small Groups

Objectives

- Students observe and describe the sounds objects make when shaken in a container.
- Students understand that the physical properties of an object affect the sound it makes when shaken.
- Students sort/classify objects based on the sounds they make, and record their findings in a chart.

Materials

**For each group**

- 4 film containers
- 2 marbles
- *objects (in addition to marbles and pennies) that make a distinct sound when shaken, such as rice, beans, crayon pieces, or erasers
- 3 pennies

*Not provided in kit

Student Resource

- 1.3 Hear

Inquiry Focus

- Observe

In Advance

- Each group will need four film containers filled with objects that make a distinct sound when shaken. For each group, place 3 pennies in one film container and 2 marbles in a second container. Choose two other items to fill each group’s remaining two containers. Each group should have the same objects inside their film containers.
- Make a transparency of Student Resource 1.3, *Hear*.

1. **Distribute the Student Resource.**
   Make copies of Student Resource 1.3, *Hear*, and distribute to students. Project the transparency.

2. **Students shake the containers and describe the sound each makes.**
   Divide the class into small groups. Give each group four film containers, each filled with a different object. Have students take turns shaking each container. Ask them to describe and compare the sounds. Write their words on the transparency under *How does it sound?* Help students copy the words onto their Resource page. Then have students guess what the object is and open the film container to see if they are right.
How Does It Sound? (continued)

Ask: **Why do the objects in one container sound different from the objects in another container?** *(The objects are made out of different types of matter; they are different sizes and shapes; there are different numbers of objects in each container, etc.)*

3. **Students sort the containers by the sound they make.**
   
   Ask students to sort their containers based on how loud or soft a sound they make when shaken. Tell them to place the objects from each container in the correct column on their Resource page. Do the same using the overhead transparency. Ask: **Are there other ways to sort the containers based on how they sound?** *(Other sounds may include: rattly/clunky, clinky/not clinky, sounds like a small object/sounds like a big object.)* Have students sort the containers using a different property of sound.

4. **Students match containers based on the sounds they make.**
   
   Collect all containers. Give each pair of students one film container. Have students walk around the room, listening to each other’s containers until they find a match. Have students with a match sit on the floor together. When all students have a match, have each group demonstrate the sound their containers make and then open their containers.

**Assessment**

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

**Extension**

**Mystery Sounds**

Have students try other materials in the containers to see how they sound. They can make “mystery” containers for the other students to listen to and have them guess what is making the sound.