It Makes Sense to Me

Objective

Given various materials, students explore their sense of smell.

Materials

Per student group:

- ❏ apple slices
- ❏ orange slices/peel
- ❏ grapefruit sections
- ❏ lemon wedges
- ❏ chunks of onion
- ❏ cotton balls soaked in extracts such as vanilla and cinnamon oil
- ❏ blindfolds (optional)
- ❏ paper plates for items

Background

A sense of smell is what leads many animals to their food. A polar bear's sense of smell is acute and it is the most important sense for detecting prey on land. A polar bear can most likely smell a seal from more than 1 km (0.6 mi.) away and 1 m (3 ft.) under the snow.

Action

1. Brainstorm with your students ways that they can test which kinds of smells people are best adapted for detecting. List each of their ideas on the classroom board. (After you do this activity you may decide to try a few of the students' ideas.)

2. Students work in pairs. One student will wear a blindfold or close his eyes while his partner holds various objects—one at a time—a few inches in front of the first student's nose. The student with his eyes closed will try to identify the object his partner is holding. When the student thinks he knows what the object is, he makes a guess. Each student gets three guesses to identify each object.

3. Distribute objects to each pair of students. (You may add other available objects with recognizable smells

4. Students take turns closing their eyes and guessing objects by their smell. Each student gets a chance to smell every object and make guesses.

5. Discuss the results. Which objects could the students identify easiest? Which were harder to identify? Were there objects that the students couldn't identify?

6. Tell students that polar bears can most likely smell a seal from more than 1 km (0.6 mi) away and 1 m (3 ft.) under the snow. Help students to think of substances we can smell from far away. (Examples: coffee brewing, popcorn popping, cookies baking, a barbecue, bacon frying, a fire burning.)