

Stinky Feet

Companion Text: I Lost My Sock, by Lin Jakary & Ryan Olson

Subject Area & Grade Level: Science, 2nd Grade

Materials: Ziploc bags and paper towels, one each for each student

Objectives

After this lesson, students will be able to:

- Define bacteria
- Explain how our sense of smell helps to keep us safe and clean
- Demonstrate how to properly test the smell of a substance in a lab setting

Staging Activity

Have students name their five senses, and tell them that today's lesson will be about the sense of smell. Explain that smell is a helpful sense because it can protect people from getting too close to bacteria, which are very small living organisms that can make us sick if they get in our body. Mention also that some bacteria, such as the ones used to make yogurt, are "good" bacteria, and do not make people sick.

Core Activity

Read the story once through without stopping. Then, ask students if they can remember which one of the reasons that the boy imagined his sock might have left was related to smell. ("Did it jump because my feet are stinky?") Ask students if they have ever noticed that sometimes when they take off their shoes, their feet smell stinky. Explain that the reason is because feet have more sweat glands than other parts of the body, and that when feet are trapped in shoes all day, that sweat has nowhere to go and it just builds up. There are some "bad" bacteria that eat sweat, and these bacteria love to live on feet or in socks and shoes because they can eat all the built-up sweat. As they start eating, the bacteria excrete a strong odor and that's what you smell when your feet are stinky.

Explain also that many different kinds of bacteria release yucky smells, so people are wired to stay away from places where these bacteria live. This helps people to avoid eating rotten food, touching garbage, and going near places that have a lot of bacteria. Our sense of smell helps to keep us safe and clean.

Extension

Give each student a resealable plastic bag, and a paper towel. Have students take their bags home, and put a few drops or a small smear of any food substance in their house on their paper towels, and seal them into the plastic bags. The next day, collect plastic bags from students as they enter the classroom, having each student whisper secretly what they put in, numbering each bag with a permanent marker, and making a key for later divulgence. Then, let students pass the bags around and see how many food items they can correctly identify. Teach students how to smell safely in a lab setting, by wafting the scent toward themselves from the open bag.

