

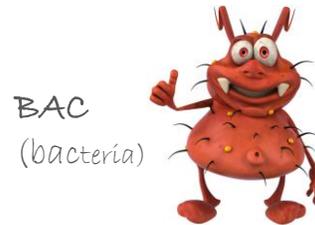
# Outsmart Germs!

## Handwashing Experiment (with oil and flax)

Some people think a quick rinse under running water will take care of germs. Or worse yet, they just go about the day without even *thinking* about the germs they may have picked up along the way. Studies show that people who wash their hands more often, get sick less often!

### Your supply list:

- Vegetable Oil
- Flax Seeds "germs"
- Access to a sink and plain liquid soap



**This lesson will give students the opportunity to practice proper handwashing. The lesson is most effective when taught in conjunction with the following:**

- Handwashing How-To videos (available at [www.germsmart.ca](http://www.germsmart.ca))
- Handwashing & Hand Sanitizing How-to Posters (available from Germ Smart)

## What Does It Take To Outsmart Germs?

**STEP ONE:** Pour a teaspoon of vegetable oil and a sprinkle of flax (your pretend germs) in each student's hand. Have them rub their hands together (like they are putting on lotion). Then, look at their hands. Where are germs (flax & oil) hiding?

**STEP TWO:** Now, wipe the oil & flax off with a paper towel, and examine their hands again. How many germs are left? Discuss with students how their hands feel. Do they look clean? Do they feel clean? Where might the germs be hiding?

**STEP THREE:** Try washing hands in cold water - without soap. Examine hands again. Did this do a better job? Probably, but are their hands still oily? If cold water can't get rid of oil, what kind of job do you think it does at getting rid of germs?

**STEP FOUR:** Wash in warm water with plenty of soap and scrubbing. This is a great time review the steps to proper handwashing (you'll find a how-to video, power point, and posters at [www.germsmart.ca](http://www.germsmart.ca)). How do your hands compare after washing with soap and warm water to just using paper towel or cold water?

This experiment demonstrates that plain water, especially plain cold water, is not as effective at

cleaning as warm water and soap. Think about it, if plain water can't even get oils off your skin (like the ones that naturally build up while you work and play), how will it rinse away the germs that hide underneath - and in all the folds and creases of your skin? It can't. It takes lots of soap, warm water, and some good scrubbing!

**ALTERNATE OPTION** – Divide the student group into four, then have each group complete one of the steps above and compare with other groups.

**STEP FIVE** – Display what you have learned! Now that you know why we should wash our hands with warm soap and water, why not display what you have learned to the rest of the school? Create a **Germ Smart** bulletin board!

To reinforce learning for younger students, have students trace their hand four times on a piece of paper. Then, using a glue stick and flax seeds, document what their hands looked like after:

- 1) no washing at all,
- 2) wiping with a paper towel,
- 2) washing with cold water, and
- 3) scrubbing with warm water and soap.

Use Germ Smart How-to posters as a reminder for students to wash their hands often throughout the day, especially: after using the bathroom, after coming in from outside, and before eating.

