EXPERIMENT

SOAPY SOLUTIONS

Materials Needed:
- Cooking oil
- Cinnamon
- Access to sink to wash hands
- Measuring spoons (teaspoon and tablespoon)

QUESTION
What is the most effective way to remove bacteria from your hands?

MY HYPOTHESIS:

GETTING READY
Ask three classmates to volunteer for the experiment.

PROCEDURE
For the student volunteers:
1. Rub 1 tablespoon of cooking oil all over your hands until completely coated. Sprinkle 1 teaspoon of cinnamon on hands and rub it around until it's evenly distributed. The cinnamon will be like bacteria. It's all over!
2. Wash hands as follows, rubbing them briskly for 20 seconds:
   • Student #1: wash hands with cold water and no soap
   • Student #2: wash hands with warm water and no soap
   • Student #3: wash hands with warm water and soap

For the rest of the class:
1. Observe the three handwashing methods.
2. Record the results.

MY OBSERVATIONS
- The method of handwashing that removed the most “bacteria” was:
- The method that removed the least “bacteria” was:
- Illustrate how the hands of Students 1, 2 and 3 looked after washing.

MY CONCLUSIONS
- I can remove bacteria from my hands by:
  - If I used only cold water and no soap to wash, this is what might happen:
  - Why does the . . .
    • Warm water help?
    • Soap?
    • Rubbing?

TELL YOUR FAMILY
Encourage all family members to wash hands with soap and warm water for 20 seconds.

Compliments of The Partnership for Food Safety Education
Visit our web site: www.fightbac.org

TIP
Check to make sure there is handwashing soap at every sink in your home and at school.