ALL WASHED UP!

E X P E R I M E N T

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:

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GETTING READY

Ask three classmates to volunteer for the experiment.

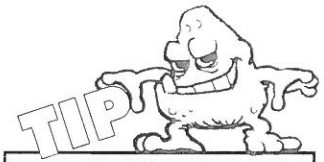
PROCEDURE

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**

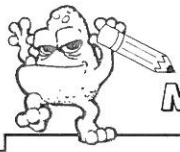
For the rest of the class:

1. Observe the three handwashing methods.
2. Record the results.



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

- 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.