## Curiosity Labs™ by Merck: RUN RWAY PEPPER

# In this experiment, you will learn...

- What surface tension is
- Why it is important to use soap when washing your hands

**Share your results and tag us! #SPARKCuriosity** 



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### SUPPLIES

Water

 Liquid soap

Plate

• Pepper

# Instructions

#### STEP 1

Pour water onto the plate, just enough to cover the bottom of the plate.

#### STEP 2

Wait for the water to calm, and then shake some pepper into the water.

#### STEP 3

Take your finger and stick it in the water and pepper. Notice how the pepper sticks to your finger.

#### STEP 4

Add some soap onto your finger, and then put your finger back in the water.

### Share your results and tag us! #SPARKCuriosity

# FUN FACTS

Using soap when washing your hands is very important. Soap, when used with water, will break the surface tension, creating a slippery environment that germs cannot hang onto.

# WHAT HAPPENED?

The pepper runs away to the side of the plate, just like germs run away from soap! Water molecules like to cling to each other, which creates surface tension.

When your finger isn't clean and you stick it in the water, the pepper sticks to your hand.

When adding soap, the pepper quickly moves away. This is because soap breaks the surface tension, and thus, cleans an object.

## Merck