

A SOAPY MAGIC TRICK



You won't believe your eyes when you see what soap can do in this simple science experiment! This is a quick experiment, but it's so fun to watch that you're going to want to repeat it several times.

You will need:

- A shallow bowl or plate
- Black pepper
- Water
- Dish soap

Instructions:

1. Fill your bowl or plate with enough water to reach the edges, but not overflow it.
2. Sprinkle black pepper evenly across the surface of the water. You can experiment with different amounts of pepper to see if more or less will change the outcome of the experiment.
3. Using clean and dry hands, stick a finger (without any soap) in the water and observe what happens.
4. Squeeze a tiny bit of dish soap onto a clean counter or in a small bowl.
5. Stick your finger in a small amount of dish soap. You can also use a cotton bud or a toothpick.
6. Predict what will happen once you stick your soapy finger into the water. This is called making a **hypothesis**.
7. Now, stick your soapy finger into the water. What happens? Was your hypothesis correct? You should see the pepper move quickly from the centre of the plate or bowl to the edges.



What is happening in this experiment?

When you add dish soap to the water, it breaks down the surface tension of the water – that's part of what makes soap such a good cleaner! As the soap moves into the water, the surface tension changes and the pepper no longer floats on top. But the water molecules try to keep the surface tension going, so they pull away from the soap, carrying the pepper along with them.



At Telethon Kids Institute, our researchers grow germs in the lab to learn more about what they do and how we can prevent them.

