

SCATTERED PEPPER TRICK

Experiment

WHAT YOU NEED:

- Shallow dish
- Water
- Pepper
- Dish soap

WHAT YOU DO:

1. Pour some water into the dish.
2. Sprinkle about a teaspoon of pepper over the surface of the water. Notice how it floats but doesn't move much? Stick your finger into the water and try to push some of the pepper towards the edges of the dish.
3. Now put a drop of dish soap onto your finger and dip it in the water in the center of the dish. What happens to the pepper this time?



WHAT HAPPENED:

Water in a dish has a tension across it called surface tension—it acts sort of like a very thin layer of film stretched across the water. This tension isn't broken by the pepper or by your finger. It is, however, broken by dish soap! The dish soap breaks through the "film" across the top of the water and creates a burst, pushing the pepper outward towards the edges of the dish! To perform this as a magic trick for your family or friends, you'll need to start over by rinsing all the soap out of the dish and refilling it with water and pepper. Once the surface tension has been broken by the soap, you can't get it back unless you start over.