

TEACH THE IMPORTANCE OF GOOD HYGIENE

# Polarize Pepper & Soap

Materials needed: Shallow bowl ( a pie tin works great for this experiment), water, pepper, dish soap, & a toothpick.

## Experiment Steps:

- Fill a bowl/pie tin with about an inch of water.
- Sprinkle pepper on the surface of the water - pepper is hydrophobic, so it won't dissolve or sink due to the water's surface tension.
- Squeeze a little dish soap on your work surface, & dip your toothpick into the soap. You will only need a drop or so of soap for the experiment to work.
- Poke the soapy toothpick into the water, right in the center - you should see the pepper rapidly spread to the edge of the bowl/pie tin.
- Talk to your kids - Why did this reaction occur? Soap is able to break down the water's surface tension, which is part of the reason we use it to clean. So as the water's surface tension changes in the middle of the bowl where you put the soap, it will want to maintain the tension outside of the circumference, pulling the pepper away with it.

