Pepper and Dish Soap Experiment

Goal: Show students the properties of water and how it interacts with pepper.

Materials -

- Pepper
- Dish Soap (enough to dip finger in lightly)
- Paper plate or something to hold water
- Water

Procedure -

1. Get a bowl or plate and fill with water (you do not want the water to overfill)
2. Sprinkle pepper lightly into the water so some visibly floats on top.
3. Dip your finger into the dish soap so that a little drop is on your finger.
4. Put your finger near the bowl with the pepper and water and observe what happens

☆ Explanation: Adding soap breaks down the surface tension and as the water molecules spread out away from the soap. Dish soap is amphipathic, meaning it has one hydrophobic (doesn't like water) end and a hydrophilic end (likes water). When soap comes in contact with water, it disrupts the hydrogen bonds and causes those bonds to break, visible by the pepper moving.

Image(s) -