



## GERMY PEPPER

### SCIENCE SAFETY

PLEASE follow these safety precautions when doing any science experiment.

- **ALWAYS** have an adult present.
- **ALWAYS** wear the correct safety gear while doing any experiment.
- **NEVER** eat or drink anything while doing any experiment.
- **REMEMBER** experiments may require marbles, small balls, balloons, and other small parts. Those objects could become a CHOKING HAZARD. Adults are to perform those experiments using these objects. Any child can choke or suffocate on uninflated or broken balloons. Keep uninflated or broken balloons away from children.

### INGREDIENTS

- Pepper
- Dish Soap
- Deep Dinner Plate

### INSTRUCTIONS

**STEP 1:** Fill the deep dinner plate with water. Describe and classify the water by its observable properties.

**STEP 2:** Cover the surface of the water with pepper. This represents germs, such as the new coronavirus. Describe and classify the pepper by its observable properties.

**STEP 3:** Using your left index finger, dip the tip of your finger into the center of the plate of water and pepper. Notice the pepper or germs on your finger.

**STEP 4:** Using your right index finger, dip the tip of your finger into the dish soap and then into the center of the plate of water and pepper. Notice how the pepper or germs run from the soap. Is there any pepper or germs on your finger? Describe and classify the dish soap by its observable properties.

### EXPLANATION

Water molecules like to stick together creating surface tension, which allows the pepper to float on top of the water. The dish soap changes the surface tension, causing the pepper to sink. As the water molecules pull away, from the soap, they pull the pepper toward the edge of the plate.



### SCIENCE BACKGROUND

Matter is anything that has mass and takes up space. Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. Measurements of a variety of properties can be used to identify matter. Different properties are suited to different purposes.

### I CAN STATEMENTS

- ✓ I can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

### NEXT GENERATION SCIENCE STANDARDS CONNECTION

2 – Structure and Properties of Matter I Patterns