

## Grade 3 Week 1

### PEPPER IN THE PIE PLATE

#### **MATERIALS:**

2 pie plates or shallow dishes  
cold water  
warm water  
liquid soap  
pepper

#### **PROCEDURE:**

1. Fill one of the pie plates with warm water, the other with cold water.
2. Sprinkle some pepper on to the water in each of the pie plates and observe the results.
3. Put liquid soap on the tip of your finger.
4. Slowly immerse your finger into pie plate filled with warm water. (Immerse it at the edge of the pie plate.)
5. Repeat steps 3 and 4 using the pie plate with cold water.

#### **QUESTIONS:**

1. What happened to the pepper in the warm water when the soapy fingertip was placed near the edge of the pie plate?
2. How did the results using cold water compare with the results using the warm water?
3. How does soap assist in cleaning dishes, clothes, or a person's body?

#### **WHY IT WORKS:**

All things are made up of tiny particles, called molecules. The molecules of water at the surface hold together with such strength that they form a kind of skin, called surface tension. The chemicals in the soap cause the water molecules to hold together less strongly, breaking the surface tension. The water molecules and the pepper move a part easier.