How does temperature affect the rate of dissolving? (Virtual Video)

1. Ask Mrs. Roehm to pour 100 mL of hot water into a beaker for you.
2. Into another beaker, pour 100 ml ice water (Get ice from the bucket). You may want to let the ice sit in the water for a little while to make sure it is very cold.
3. Add ONE drop of food coloring to each beaker and observe the different rates of dissolving.

Is hot water less dense than cold water?
(Virtual Video)

1. Using tongs remove one of the “hot balloons” from the water on the hot plate.
2. Take a “cold balloon” from the bucket of ice.
3. Make sure the red bucket is full of warm water from the sink. Refill it with warm water if the water is cold.
4. Drop both of the balloons in the red buck of warm water at the same time.
5. Which balloon rises to the top faster?
6. **Put the hot and cold balloons back in the pot and the ice bucket.**

Making Thermometers
(Virtual Video)

1. Put the "Snapple Bottle" thermometer on the ring stand. (It may be a Snapple bottle or it may be a flask with clay on it)
2. Wearing goggles, light the Bunsen burner under the ring stand.
3. Watch the level of the liquid in the straw.
4. Once the liquid has reached the top of the straw, turn off the burner. Then, use the gloves to remove the thermometer ("snapple bottle") and place it in the bucket of cold water. Observe what happens to the liquid in the straw once we remove heat. (It is important to turn off the flame before grabbing the thermometer with gloves.)

Surface Tension
(Virtual Video)

1. Surface tension is a property of matter. Some liquids can form what appears to be a "film" on top them.
2. You need a clean beaker for this. If the beaker at the station has pepper or bubbles in it, you need to rinse it out until there is no soap and pepper left.
3. Fill the cleaned beaker with 100 ml of water.
4. Shake some pepper on the surface of the water. Do not shake or stir the liquid! The pepper should be floating on top of the water.
5. Dip the toothpick in the dish soap, and carefully touch it to the center of the surface of the water. Enjoy your adventures with pepper!