**Properties of Water Lab Name**

#### 1. A Study of Cohesion

Materials: Wax paper, beaker of water, beaker of alcohol and pipettes

1. Using the materials above, place a few drops of water on the wax paper.

2. Observe the shape of the drops.

3. Place a few drops of alcohol next to the water drops. How do the drops compare?

4. Place a drop of alcohol on the water drop. What happened to the drop of water?

**2. A Study of Surface Tension**

Materials: Pipe cleaner, bubble solution, small beaker and salt.

1. Shape the pipe cleaner in to a wand to blow bubbles.

2. Dip the pipe cleaner into the bubble solution and blow a bubble.

3. Observe the shape and texture of the bubble.

4. Add salt (about 6 grams) to the bubble solution, swirl to mix, blow a bubble. What did you observe about blowing a bubble after adding the salt?

#### 3. A Study of Adhesion

Materials: graduated cylinder, beaker of water, beaker of alcohol

1. Fill the 10 ml graduated cylinder to the 10 ml mark with water.

2. Look at the surface of the water (known as the meniscus) from the side.

3. Draw the meniscus on your own paper.

4. Repeat steps 1, 2 and 3 using alcohol.

5. Compare the two menisci.

Challenge Questions !

1. How do you think surface tension plays a part in preventing excessive bleeding?
2. How do you think that adhesion plays a part in moving blood through blood vessels?
3. During the day, a plant loses water through pores in the leaves. Explain how cohesion of water helps move water in the plant to replace the water that is lost.