

## Bubbles Lab

Purpose: To test the hypothesis that bubble-making can be affected by adding chemicals to a bubble-blowing mixture.

### Materials

- Plastic cups
- Measuring spoons
- Liquid dish detergent
- Graduated cylinder
- Water
- Sugar
- Salt
- Drinking Straw

### Procedure

1. Label three cups 1, 2, and 3. Measure one teaspoon liquid dish detergent into each cup. Use the graduated cylinder to add 50 mL of water to each cup, then swirl the cups to make a clear mixture.
2. Add 1/2 teaspoon sugar to cup #2 and 1/2 teaspoon salt to cup #3. Swirl each cup gently for one minute.
3. Dip the drinking straw into cup #1, withdraw it, and blow gently into the straw to make the best bubble you can. Practice making bubbles until you feel you have control over your bubble production.
4. Repeat step three with the mixtures in cups #2 and #3.

### Analysis and Conclusion

1. Did you observe any differences in your bubble making from the mixtures in cup #1 and cup #2?
2. Did you observe any differences in your bubble making from the mixtures in cup #1 and cup #3?
3. What can you conclude about the effects of sugar and salt on your ability to produce bubbles?
4. Propose a **new** hypothesis based on bubble making and design an experiment to test your hypothesis.