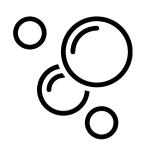


We are going to compare three bubble solutions

- 1. Store-bought bubbles
- 2. Water + dish soap solution
- 3. Water + dish soap + corn syrup

Which bubble solution do you think will make the best bubbles?

I think the **store-bought/ dish soap/ corn syrup** bubbles will be the best!



Bubble-ology

Materials:

- Store-bought bubbles
- Water
- Dish soap (Dawn works best!)
- Corn syrup
- 3 Paper cups

Directions

Prepare Solutions

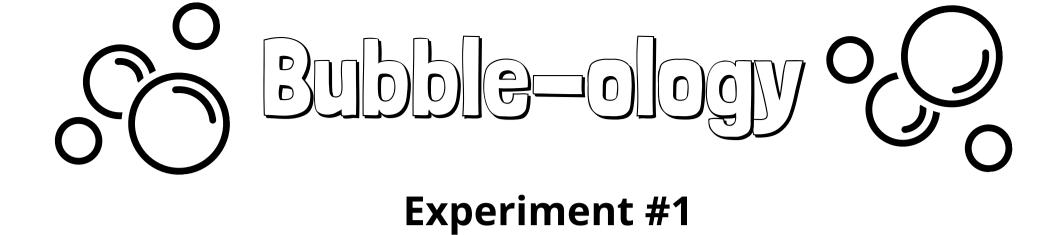
- 1. Fill a large bowl with 6 cups of water
- 2. Add a cup of dish soap and stir gently
- 3. Pour half of the dish soap solution into a second bowl
- 4. Add 1/8 a cup of corn syrup to one bowl and stir

Prepare Experiment

- 1. On the bottom of the paper cups, label each cup as "Store-bought," "Dish soap," and "Corn Syrup"
- 2. On the side of the cup, label them 1-3
- 3. Fill each cup with the corresponding solution

Science Best Practices:

It's important to perform experiments without knowing which solution is which. This practice is called blinding. Blinding is important because if you have a belief about which solution will produce the best bubbles, you might change the way you test each solution, introducing bias.



You are going to observe how well the three solutions perform on 3 tests:

1. The number of bubbles produced with a single blow 2. How big of a bubble you can make with a single blow 3. How long a single bubble does not burst

After recording your observations in the chart below, rank each of the solutions to decide which one is the best. Once you have selected a solution, check the bottom of the cup to reveal which solution is the best.

