## Bubble Wands

## Supplies you will need:

- Pipe cleaners
- Bubble solution- You can use a pre-made bubble solution or you can make your own homemade bubble solution. The recipe is below!
- Shallow Pan
- Beads


## HOMEMADE BUBBLE SOLUTION

- $1 / 2$ cup of Light Corn Syrup
- 1 cup of Dawn Dish Soap
- 3 cups of water

Mix your ingredients together in a jar or plastic container and you are ready to use.

## Ready to Start -

Use your pipe cleaners to form different shapes from bubbles. You can either make your shapes 2D or 3D. Add beads to the handle if you would like! Can't wait to see what shapes you create.

## Did you know...



If you make your shapes 3D, you'll be able to use them as a structure for making shaped bubbles, otherwise...BUBBLES WILL COME OUT ROUND NO MATTER WHAT SHAPE THE WAND IS.

The kids will quickly come to realize that there is only one shape of a bubble. Did you find that your bubbles always ended up being blown into a sphere shape? Why is that?

A bubble is formed when air gets trapped inside the bubble solution. The air tries to push its way out of the bubble, but the liquid in the bubble solution wants to have the least amount of surface area, due to the clinging properties of liquid molecules. Water molecules prefer bonding with other water molecules, which is why water gathers in drops instead of just spreading out. A sphere is the least amount of surface area for the volume of what is contained inside the sphere (in this case, air). So bubbles will always form circles no matter the shape of the bubble wand. (https://littlebinsforlittlehands.com/geometric-bubble-stem-activity/)

