



BUBBLE SCIENCE

Learn how to make a bubble solution and wand, then have fun trying them and tracking your results.

This week's activities: Bubble Solution Recipe - Making Bubbles

Bubble Solution Recipe

Make enough bubble solution to cover your wand. You can double this recipe if you need more solution.

Ingredients:

- 1 cup lukewarm water
- 4 tbsp dish soap
- 2 to 4 drops of plant oil or vegetable oil
- Small bowl
- Straws, pipe cleaners, thin wire

Directions:

1. Pour the cup of water into a container.
2. Add the liquid dish soap, slowly stirring until it has been dissolved. Make sure you don't stir so much that bubbles start to appear.
3. Let the mixture sit for about five to 10 minutes.
4. Add a few drops of oil and stir just a couple of times.



Making Bubbles

When you have your homemade bubble solution, try it.

Use a bubble wand, if you have one, or make one with a pipe cleaner or thin piece of wire (ask a grownup for help with the wire). Looking at this picture, see how you can twist your pipe cleaners or wire into wands.

Different sized loops make different sized bubbles. Try making shapes with them, such as a square or double loop.



Observations

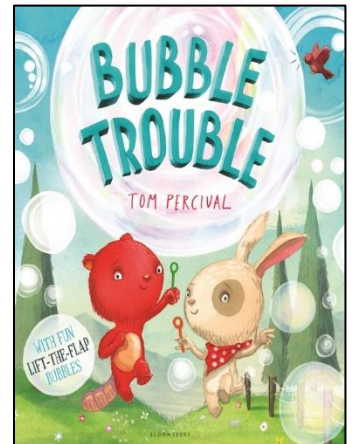
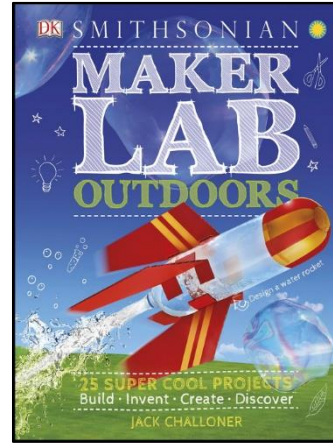
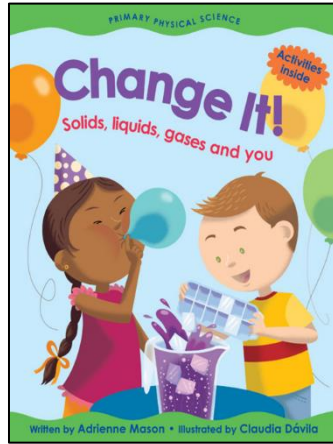
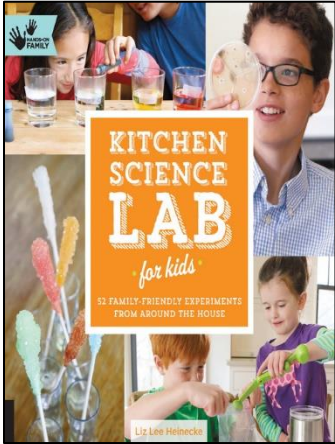
Try blowing bubbles using the solution you made. Did it work for you? Do the bubbles last or do they pop after you create them with your wand? Experiment adding a little more liquid detergent or a little more water to the mixture. If you use different wand shapes, what shapes are the bubbles?

What is a bubble? How did the bubbles form? In this experiment, a bubble is air surrounded by a soap film. The soap film is created using dish soap and water. There are two layers of soap molecules and in between is the water -- kind of like a sandwich! The soap molecules work together

to hold the water. The density of water is heavier than a bubble's density. That is because the bubble contains more air and is therefore lighter. This allows the bubbles to float in the air or on top of water and other objects.

Links to eResources:

Check out our [eBooks](#) on these topics:



[Bubbles](#) | [Science](#) | [Experiments](#) | [Water](#)

On Hoopla Kids, search under the subject term **bubbles**. Two interesting titles to look at are *Bubbles Float*, *Bubbles Pop* by Mark Weakland or *How to Make Bubbles* by Erika L. Shores.

On KanopyKids, check out the episode *Nucleation Fountain* of the series *Science Max* (Episode 13). Phil attempts a few experiments using air pressure bubbles, diet cola and mints, eggs, and marshmallows.

You can get a library card at hpl.ca/online-registration.

If you would like to share one or all your creations, please take a picture and post it to social media using the hashtag, #HPLmakesomething.



#HPLmakesomething

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