

Marshall County Museum Big Bubble Blowout

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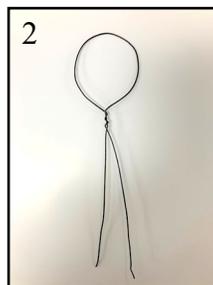
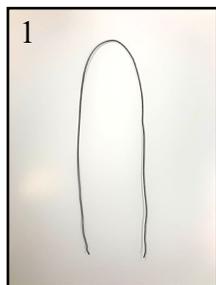
Have you ever blown bubbles? Bubble fun has been around for longer than you think. People were using bubble wands and bubble pipes at least 400 years ago. Bubbles work by adding air to a "skin" of soapy water. The surface tension between the outside of the bubble and the inside of the bubble is what causes a bubble to look like a ball when it floats away from the wand. Bubbles pop because of gravity. Can you guess how that happens? Think and talk about it, and then look at the bottom of the page.*

The surface of a bubble appears to have many colors that look like they are swirling around. This is called iridescence. This is caused by the light reflecting from inside the bubble combining with the light reflecting from the outside of the bubble. The colors change as the thickness of the bubble changes.

DO (ASK AN ADULT TO HELP YOU):

Make your bubble solution. Combine 1/2 cup of dishwashing detergent (Dawn works best), 4 1/2 cups of water, and 4 tablespoons of glycerin (buy it at Walmart or most grocery stores) or corn syrup. Mix the solution **VERY SLOWLY AND GENTLY**. Don't shake it up because you don't want foam - that's lots of tiny soap bubbles all together, like when you pour soap into the running bath or dish water!

- ♦ **Make a bubble wand.** (See pictures below) 1. Take your floral or craft wire and make it into an upside-down U-shape. 2. About one-fourth of the way down the wire from the U-shape, twist the wires together several times to make the U-shape into an O-shape. 3. Then take some beads and string them onto the two straight wires all the way up to the bottom of the O-shape. When the wire is full, twist the ends up around the last bead to secure them. Now you are ready to dip your new wand into the bubble solution and start blowing bubbles!



Materials:

- Dishwashing liquid
- Glycerin
- Container for bubble solution
- Floral or craft wire (18 gauge)
- Assorted craft beads

Optional additional materials:

- Plastic water bottle
- Tube sock
- Paper or plastic drinking straws
- Sturdy rubber bands
- Liquid tempera paint
- Assortment of small containers, such as fruit cups
- Camera (optional)

* Gravity makes a bubble pop because the water and soap is drawn downward, causing the top of the bubble to get thinner and thinner. Eventually, if the bubble doesn't get popped some other way, the top will get so thin that it cannot hold up, and it pops. What else could make a bubble pop?

MORE THINGS TO DO WITH YOUR BUBBLE SOLUTION:

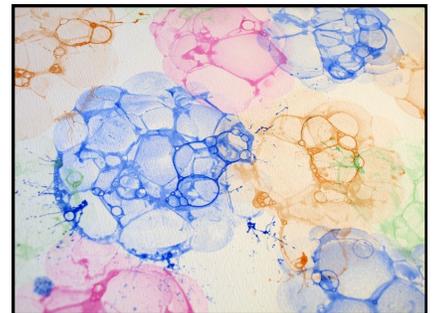


- ◆ **Make a bubble snake.** Take an empty plastic water bottle and have an adult help you cut the bottom out. Stretch an old tube sock over the open bottom of the bottle and secure it with a rubber band. Dip the sock end into a dish of bubble solution until it is very wet. Slowly and gently blow into the mouth of your bottle, and you'll get a bubble snake! (Just don't inhale or you might get a mouthful of soap - icky!)

- ◆ **Make a bubble shooter.** Take about seven plastic or paper straws and bind them together with a rubber band (tape works fine too). Dip the end of your straw bundle into the bubble solution and blow gently on the other end to shoot your bubbles into the air.



- ◆ **Do some bubble art.** Gently mix tempera paint with a little water and a squirt of dishwashing soap in a small container. Do this for as many colors as you want to use. Blow gently through a straw into the mixture to create lots and lots of bubbles. Then carefully place a piece of paper over the bubbles until it touches them, making a print on the paper. Try using several colors of bubbles on the same sheet, or putting your solution in a large shallow pan and covering the whole sheet of paper at once. Allow it to dry flat and display your artwork.



SHARE:

- ◆ Make a video of your bubble adventures and post it on social media.
- ◆ Hang your bubble art up where everybody can enjoy it.
- ◆ Make more bubble wands and give them to your friends and family.
- ◆ Post pictures of you with your bubbles on social media with the hashtag #MCMuseumFromHome.