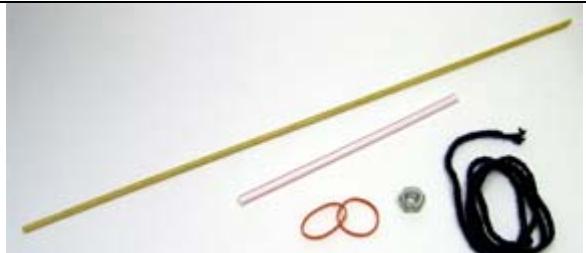


Make Your Own Giant Bubble Wand

Follow the directions below to make your own giant bubble wand, and in no time you'll be blowing bountifully big bubbles!

Bubble Wand Materials:

Dowel, 3/8" - 1/4" diameter and 2-3 ft. long*
Drinking straw*
Shoelace or piece of thick yarn or cotton string (about 3 ft. long)
Washer or nut with ~1/4" hole
Rubber bands (2)

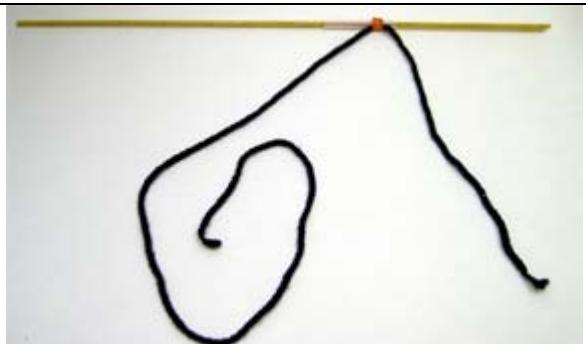


Cut the straw about $2\frac{1}{2}$ inches long. Slide the straw over the dowel.

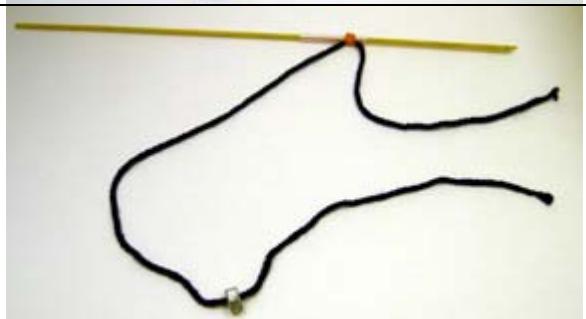


*The exact sizes of the dowel and straw may vary. The important thing is to match the straw and dowel diameters so that the straw slides easily along the dowel.

Measure about 11 inches from the end of the shoelace, and make a mark. Use a rubber band to attach the shoelace to the straw where you made the mark. Wrap the rubber band tight enough to hold the shoelace snug to the straw, but not so tight that the straw crushes. The straw needs to be able to slide smoothly along the dowel.



Thread the long end of the yarn or shoe lace through the washer.



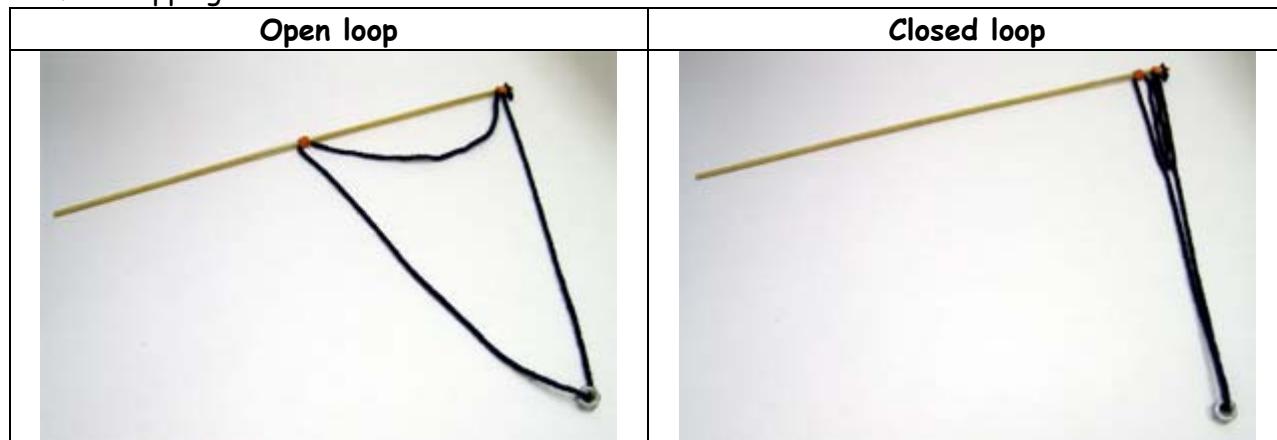
Bring the ends of the shoe lace together and use a rubber band to attach the ends of the shoelace tightly to the tip of the dowel.



Now you have your bubble wand!

Using your giant bubble wand

Hold the end of the wand (the end that does not have the rubberband) with one hand and hold the straw slide with the other hand. See how sliding the straw back and forth opens and closes the loop. The motion of making a bubble is to slowly open then slowly close back the loop while sweeping the wand through the air. You may want to practice a few times before dipping into the bubble solution!



The second part of making bubbles is the bubble solution. There are a lot of bubble solution recipes on the web, so you can try some different recipes and see which one works best for you. Here's one that we like.

Bubble Solution	
<p>Clean pail or wide-mouth juice pitcher $\frac{1}{2}$ cup Liquid dishwashing detergent (Joy or Dawn are recommended) 5 cups cold water 2 tablespoons glycerin (available from the pharmacy)</p>	

Combine all the ingredients and stir. Try not to froth up the top too much. Some people say that letting the bubble solution sit overnight helps make better bubbles, so if you can stand to wait that long, you could try letting it sit until tomorrow. If there is too much froth on top you may need to let it sit a while anyway.

Let's make some giant bubbles!

Slide the straw to the end of the wand to close the loop. Dip the wand into the pail of bubble solution, making sure the loop gets completely submerged. Bring it out, still closed, and let some of the excess drain off for a few seconds. Now, with the motion you have practiced, slowly sweep the wand through the air while slowly opening up the loop. When a good sized bubble is bulging out of the loop, slowly close the loop back to seal off the bubble. You may need to practice a few times to get the motion down and to judge how big of a bubble you can make before you need to close it off.

Some Additional Tips and Pointers

- Ask for an adult's permission before making and using the giant bubble wand.
- It's not nice to get soap in people's eyes, or to poke them with a dowel, so be careful with your wand and the bubble solution.
- Be sure that you have enough space to sweep out your bubble before you start. Any spectators should step back to give you room.
- If it's too windy or if the humidity is very low, you may not be able to make good bubbles. Save the bubble solution and try again another day.
- If you keep an eye out for the materials you'll need, you probably won't even have to purchase anything new to make your bubble wand.
 - Next time you are in a restaurant, save the straw or ask for an extra one. Note: Different restaurants have different sized straws.
 - Use a shoe lace from an old worn out pair of shoes (ask first before taking the shoelace out of your older sister's running shoes).
 - Ask Mom and Dad to check the shop or the tool drawer for a spare dowel and an old washer or nut you can use.
 - Try the detergent that is already in the kitchen. It will probably work fine.
 - If you can't find glycerin, try using sugar or Karo syrup as a substitute. Warning: Bubble solution made with sugar or Karo will start growing things if left for several days.
- Final tip! Mom would really appreciate it if you do some additional soap experimentation involving the detergent and the dishes in the kitchen sink.