

What you need:

- Corn syrup
- Dish soap
- Jar
- Marker
- Chenille stem (pipe cleaner)
- Spoon for mixing
- Water
- Measuring Cup



Safety Note: Do not drink the mixture.

What you do:

Step 1: Pour 250mL (1 cup) of dishwashing soap, 125mL (½ cup) of corn syrup, and 62.5mL (¼ cup) of water into the jar.

Step 2: Slowly mix the three liquids together with the spoon. Do not mix quickly, otherwise bubbles will form.

Step 3: Wrap a chenille stem end around a marker to make a bubble wand. Slide the chenille stem off the marker, and twist the stem on itself.

Step 4: Dip the wand loop into the solution. Wait for five seconds the first time you do this to let the bristles soak up the solution.

Step 5: Remove the wand from the solution and blow through the loop. What do you see? What happens when the bubbles pop?

Step 1 - 2:



Step 3:



Step 4:



What's going on:

Water molecules are attracted to each other. They pull on each other. When water meets air, the water molecules stick together in a layer at the surface. This is because they are more attracted to each other than to the air molecules. We call this surface tension. Normal water has too much surface tension to make bubbles. Adding a detergent like dish soap weakens the surface tension so bubbles can form. When the water in a bubble dries up, or evaporates, the bubble bursts. Corn syrup slows down this process, so the bubbles are stronger and last longer. When the water finally does dry up, the bubble pops, leaving a ghostly film of corn syrup and soap.

Now try this:

Try making bubble solutions with different ratios of corn syrup, dishwashing soap, and water. Do the bubbles last longer? Are the bubbles as strong? Does the bubble solution become stronger or weaker over time?

