Slime Bubbles Science Project

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What You Need:

* 5 oz. bottle of Elmer’s clear school glue
* [Food coloring](https://www.homesciencetools.com/food-coloring/p/CH-FOODCOL/)
* Sta-Flo Liquid Starch (about ½ cup)
* Bowl
* Spoon
* Straw (hard plastic straws that come with reusable cups are easiest to use)
* Paper towels for cleaning up

What You Do:

1. Pour the whole bottle of glue into a bowl and mix in a few drops of food coloring (we used 3 drops of green).
2. Pour a small amount of liquid starch into the colored glue and mix it thoroughly. It will begin to form a clump.
3. Add a little more starch and stir it in well. Continue adding starch and mixing with the spoon until you can’t stir it anymore, then it’s time for the fun part: use your hands!
4. Add more starch and knead it into the mixture. It will feel slimy and may still stick to your hands. Try to scrape as much of the mixture out of the bowl and
5. off the spoon and your hands as you can, then mix it in. As you knead it, it will begin to dry off a little.
6. Stretch the slime with one hand and watch what happens. If it’s really stretchy, it’s a great slime that is a lot of fun to play with. Separate it into two parts and set one back in the bowl. Add a little more starch to the other part and continue kneading and mixing (it may separate into strands, but keep squishing and it will come back together). When you stretch it, does it break off? If not, keep adding a little starch at a time.
7. Once your slime is stiff enough, pull of a bouncy-ball sized piece, make it into a ball, and stick a straw into it. Press the slime around the straw and hold it firmly so no air can escape, then slowly blow through the open end of the straw. This may take some practice, but you should be able to get a decent bubble!
8. Store your slime in a ziploc bag when not in use (it should keep well for a week or two). Wash your hands after touching the slime.

**What Happened:**

Slime is a polymer, which is a long chain of molecules that gives it stretch and flexibility. Glue is also a polymer, so why doesn't it behave the same way as this slime? Well, when you added starch to the glue, it caused the glue molecules to link together in a way that made them flexible and more solid than liquid. This is called cross-linking. Cross-linked molecules are bigger and less liquid-like than regular polymers. The chains of polymers already in the glue were linked together by the starch molecules, making them less fluid and more stretchy!