

Slime

Supplies

- Water in a Container
- Food Coloring
- Guar Gum
- Borax Solution
- Ziploc Bags
- 1/8 tsp. Measuring Spoon
- 1 tsp. Measuring Spoon
- 100 ml Graduated Cylinder

Show Set Up

- To prepare Borax Solution, mix one cup of Borax into 1 gallon (16 cups) of water. Mix until all Borax is dissolved.
- Set out all supplies.

Show Clean Up

- Wash measuring spoons.
- Return all supplies to the proper container.

Demo Outline

1. Add 50 ml water.
2. Add 2 drops of food coloring.
3. Add 1/8 tsp. guar gum and mix together.
4. Add 1 tsp. Borax solution.

Demo Script

Today, we are making slime! First, we mix our water and food coloring. **[Give guest a Ziploc bag and add 50 ml water.]** What color would you like your slime to be? **[Allow guest to add 2 drops of the food color of their choice.]** Next, we need to add our guar gum. Guar gum comes from a plant and is used as a thickening agent in things such as ice cream and lotion. **[Slowly add 1/8 tsp. of guar gum to bag. Direct the guest to close the Ziploc bag and mix the water and guar gum with their fingers.]** Guar gum is made of monomers. Monomers are just little parts, or molecules. Our monomers of water and guar gum are hanging out in the bag together, side-by-side. In order to make our monomers stick together and become slime, we need to create a chemical reaction. To do this, we are going to add a catalyst, which starts or speeds up a chemical reaction. **[Direct guest to open bag, and add 1 tsp. of Borax solution.]** Our Borax solution, which is a laundry detergent, is our catalyst. Once we add the Borax solution, our monomers start to stick together to form polymers. Polymers are long chains of monomers. This polymer is unique because it has qualities of both a solid and a liquid. It can take the shape of its containers like a liquid does, yet you can hold it in your hand and pick it up like a solid. Polymer molecules chain themselves together, so they can stretch and bend like chains. Jell-O, rubber bands, plastic bottles, sneaker soles, even gum are all forms of polymers. The polymer you made should be kept in a sealed plastic bag when you aren't playing with it. Also, be sure to keep it away from young kids or pets who might think it is food. You have been an excellent chemist today! Thanks for helping me make slime!