Curiosity Labs™ by MilliporeSigma:

DIY Bouncy Ball

In this experiment, you will learn...

- What a **polymer** is
- What a **chemical reaction** is

Share your results and tag us! **#SPARKCuriosity**

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DIY Bouncy Ball

SUPPLIES

- Warm water
- Borax soap
- All-purpose glue
- Corn starch
- Food coloring (optional)
- 2 small mixing bowls
- spoons

Instructions

STEP 1
Add 4 oz (118 mL) of warm water and 2 tsp. (10 g) of borax soap in one mixing bowl. Stir until well mixed and set aside.

STEP 2
Add 1 tbs (15mL) glue and 3 drops of food coloring to the second mixing bowl. Mix to get desired color

STEP 3
Add ½ tsp (2.5 mL) of the borax solution and 1 tbs (14 g) of corn starch to the glue. Let set for 15 seconds. DO NO STIR.

STEP 4
Stir the mixture together until it becomes stiff. Once it is to stiff to stir, take the mixture out and use your hands to form it into a ball.

STEP 5
Once it is in a ball shape, try to make it bounce.

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FUN FACTS

The glue is a polymer, or a chain of identical molecules, and when added to the Borax, it creates a way to cross-link the polymer molecules, which makes them stay together when forming a ball shape.

The corn starch helps lock the molecules into place so that they hold their shape better.

WHAT HAPPENED?

A bouncy ball was formed! This happened as a result of a chemical reaction caused by combining different substances, such as the glue and cornstarch, to create something entirely new.

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