

Bouncy Ball:

You will need:

Borax (found in laundry section)

warm water

corn starch

glue (clear glue makes a see transparent ball and white glue makes an opaque ball)

2 small mixing cups

a stirring stick (plastic spoon)

Optional: food coloring, glitter, glow in the dark paint

Procedure:

Label one cup 'Borax Solution' and the other cup 'Ball Mixture'.

Pour 4 ounces (120ml) of warm water into the cup labeled 'Borax Solution' and 1 teaspoon of the borax powder into the cup. Stir the mixture to dissolve the borax.

Pour 1 tablespoon of glue into the cup labeled 'Ball Mixture'. Add 3-4 drops of food coloring, if desired.

Add 1/2 teaspoon of the borax solution you just made and 1 tablespoon of cornstarch to the glue. Do not stir.

Allow the ingredients to interact on their own for 10-15 seconds and then stir them together to fully mix.

Once the mixture becomes impossible to stir, take it out of the cup and start molding the ball with your hands. The ball will start out sticky and messy, but will solidify as you knead it. Once the ball is less sticky, continue rolling between your hands until it is smooth and round!

For younger kids, we would just make the balls and see what they bounce best against. For older kids, we would experiment with the borax/glue/cornstarch ratio, and talk about molecules, polymers and pressure

Experiment lifted from: <https://sciencebob.com/make-your-own-bouncy-ball/>