

### **EXPERIMENT**

Using the bouncy ball recipes predict which ones will bounce the best, roll the best, stay in a ball the best... (Etc.)

Then experiment. Make the different bouncy balls and test them to see which recipe works the best.

You could even try doubling the recipe to make a giant bouncy ball or half the recipe and make a tiny bouncy ball and see how that affects the results.

At the end of the experimenting, go back over the predictions and see if they were right.

# DIY BOUNCY BALLS

### **ADDITIONAL INFORMATION**

Borax can be found at most stores in the detergent aisle.

Another fun experiment would be to see if the homemade bouncy balls could stand up (in bounciness) to a store bought bouncy ball.

You could also try to see if the homemade bouncy ball recipes work as well as a bouncy ball kit.

Here are some resources for bouncy ball kits:

Amazon: Scientific Explorer
Ultimate Science Blast

Amazon: Scientific Explorer Ball
Blast Bouncers



# **BOUNCY BALL #1**



#### **SUPPLIES NEEDED:**

- ½ Cup Warm Water
- 1 Tablespoon Borax
- 1 Tablespoon Cornstarch
- 2 Tablespoons of White Liquid Glue

**Food Coloring** 

Optional: Disposable Rubber Gloves

# DIY BOUNCY BALLS

#### **INSTRUCTIONS**

- 1. In a cup, mix warm water and borax.
- 2. In another cup mix corn starch, glue, and food coloring.
- 3. Pour the glue mixture into the water and borax mixture.
- 4. The glue mixture will harden after 10 seconds. Use a fork to take it out of the water.
- 5. If the glue mixture is still sticky, squish it in your hands and dip it back in the water.
- 6. Roll the mixture in your hands to form a ball.
- 7. The more you handle the mixture the firmer it will be.
- 8. Enjoy!

Note: Keep in mind, the bouncy ball will flatten if left sitting for a while. Store them in a plastic container or plastic bag. If they flatten, roll them in your hands again and they should reshape to a ball.





# DIY BOUNCY BALLS

## **BOUNCY BALL #2**



### **SUPPLIES NEEDED:**

Two cups

**Measuring Spoons** 

A Coffee Stir Stick (Or something to stir with)

- 2 Tablespoons Warm Water
- 1/2 Teaspoon Borax
- 1 Tablespoon Cornstarch
- 1 Tablespoons of White Liquid Glue

**Food Coloring** 

Optional: Plastic bag for storage

#### **INSTRUCTIONS**

- In a cup, mix warm water and borax until the borax is dissolved.
- 2. In another cup mix corn starch, glue, and food coloring.
- 3. Add ½ teaspoon from the first cup mixture into the second cup.
- 4. Let the mixtures interact for about 15 seconds before stirring.
- After about 15 seconds, stir the mixture until it is hard to keep stirring.
- 6. Scoop the mixture out of the cup and roll into a ball.
- 7. Now you're all done!

Note: Best kept in a plastic bag to keep it from drying out.





# DIY BOUNCY BALLS

# **BOUNCY BALL #3**



#### **SUPPLIES NEEDED:**

Two cups

1/4 Cup Elmer's Glue

Food Coloring

1/2 Tablespoon Borax

1/4 Cup Warm Water



#### **INSTRUCTIONS**

- 1. Pour glue into a bowl.
- Add a few drops of food coloring.
- 3. Stir together until blended.
- 4. Add 1 ½ Tablespoon of Borax and stir, it should start to feel like a plastic texture after stirring.
- Add the water and stir the mixture around in the water. (The water will not mix with the mixture but it will help to stiffen it)
- 6. When the mixture is pretty stiff take it out of the bowl and run it under warm water to make it just a little more stiff.
- When it's stiff enough roll it into a ball and dry it off using a towel.

Note: Store in an air-tight container.