## Make a Bouncy Ball



Bouncy balls are usually made out of rubber, but in this simple experiment you can make - and decorate - your own bouncy ball using items from your kitchen!

#### Scientific Principle

Polymers: A polymer is a chain-like molecule made up of chemical compounds. Polymers-like rubber-are often long and flexible so they can be stretched without breaking.

#### The Sci<u>ence Behind It</u>

Cornstarch is made up of tiny molecules of glucose that mix and bond with the water when it is heated. Although the ball is solid, its polymers are flexible and allow the ball to bounce back when it is thrown against a surface.

# Materials & Ingredients

- Microwaveable dish
- Spoon for stirring
- 10 tsp warm water
- 3 Tbsp cornstarch
- Food coloring

### The Experiment Process

- 1. Pour the cornstarch into the dish, add 5 tsp of warm water and mix well using a spoon.
- 2. Heat the mixture in the microwave for 20 seconds.
- 3. Add another 5 tsp of water and 1 drop of food coloring if desired.
- 4. Mix well using the spoon, then roll the mixture into a ball shape.
- 5. Place the ball in the microwave and heat for 15 seconds to set the shape.
- 6. The ball is now ready to bounce. If cracks start to form, dab a few drops of water over the cracks.
- 7. Keep the ball in an airtight container to stop it from drying out.
- 8. Decorate your ball with glitter or paint if you want.