

# Pop Rocks Expander!



## Introduction

Pop Rocks are one of the greatest candies of all time! You dump a few on your tongue and in an instant, they begin fizzing, popping and snapping in your mouth! What's going on here? What is the secret behind that fun candy?

## Materials Needed

Pop Rocks (1 package per bottle of soda)

Balloon (1 per bottle of soda)

16 - 20 oz bottles of soda (the greater the variety, the better!)

A funnel

## Method

1. Using the funnel, empty a bag of pop rocks into a balloon. Make sure all of the candies are in the balloon!
2. Place the balloon over the mouth of the bottle of soda, being careful to not dump the candy in the bottle.
3. Grab the balloon and dump the Pop Rocks into the soda. Make sure to observe what happens to the soda as it reacts with the candy. The balloon should be inflating.

## How Does This Work?

The secret behind the popping of the Pop Rocks candy is pressurized carbon dioxide gas. Each of the tiny candy pebbles contains a small amount of gas. These carbon dioxide bubbles make the popping sound you hear when they burst free from their candy shells.

What causes the balloon to inflate? The carbon dioxide contained in the candy isn't enough to cause the inflation, but when combined with the carbon dioxide in the soda (soda also contains pressurized carbon dioxide) the gasses are released from the bottle and into the balloon, causing inflation!

Adapted from <http://www.stevespanglerscience.com/lab/experiments/poprocks>

# Candy Science - Dissolve the 'M' off an M&M!



## **Introduction**

The art and science worlds collide with this color changing experiment that teaches you about primary and secondary colors using the property of surface tension.

## **Materials Needed**

M&Ms

Bowl of Water

## **Method**

1. Place four M&Ms in the water with the M side up and watch what happens!

## **How Does This Work?**

Some parts of the M&M candies are water-soluble and the others are not. After a short time of soaking, the colored dyes begin to dissolve and mix together. These dyes are water-soluble. After a while longer, the 'hard-shell' and 'M' float to the top; this is because they are not water-soluble.

Adapted from <http://www.stevespanglerscience.com/lab/experiments/floating-letters>