

## STEAM Peeps



### Supplies:

- Microwave oven
- Peeps, chicks or bunnies, any color
- microwave-safe plate
- Toothpicks
- Empty water bottle, top cut off at the first line
- Pie plate or another water-proof plate with raised edges
- Water

## Experiment #1: Peeps and Heat



Let's heat Peeps in the microwave oven. What do you think will happen to the Peeps? Will they shrink? Will they expand or grow? Let's find out!

Directions:

Start by putting 1 or 2 Peeps in a microwave-safe plate. Put them in the microwave oven for 30 seconds and watch what happens. Wow! They got really big! Did you guess right that the Peeps would expand in the heat?

**Science Behind It:**

Peeps, like other marshmallows, are basically thousands of teeny tiny air bubbles surrounded by thin walls of gelatin and sugar syrup. When microwaved, the water molecules in that syrup begin to vibrate and heat up. They quickly turn to steam and fill the air pockets in the marshmallow, causing them to expand. This is why you see your Peep grow!

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And now, just for fun...add toothpicks, and watch the Peeps sword war!!

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## **Experiment #2: Peep Geysers**



Stuff your water bottle with Peeps...4 Peeps bunnies fit perfectly in mine.

Place in microwave oven and set the timer for 30 seconds. Watch the geyser erupt!

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### **Experiment #3: Peeps Diffusion**



Let's find out what happens when we wet our Peeps. Place our colorful chicks in a circle in a pie plate or other water-proof plate, then pour water in the center of the plate until the Peeps are partially covered. wait and watch.

What do you think will happen?

**Science Behind It:**

Many of the foods we eat are colored with artificial dyes. Some of these dyes will easily dissolve in water. This means that when foods containing the dyes are placed in water, the molecules that make up the dye will break away from the food and start to spread out in the water. The process where molecules spread out like this is called diffusion.

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Have fun experimenting with your Peeps!