3 Fun DIY Science Experiments

Get ready to explore science with these easy, hands-on experiments you can do at home! Each one uses simple materials and helps you see real science in action—no lab coat needed!

#1. Magic Pepper & Soap

What You Need:

- · Shallow dish
- Water
- Ground pepper
- · Dish soap

What To Do:

- 1. Pour water into the dish and sprinkle pepper evenly on top.
- 2. Put a drop of dish soap on your finger.
- 3. Touch the water's surface and watch the pepper race away!
- Science Behind It: The soap breaks the water's surface tension, making the pepper scatter.

#2. Homemade Volcano

What You Need:

- · Small bottle or cup
- · 2 tablespoons baking soda
- 1/2 cup vinegar
- · A few drops of dish soap
- Optional: food coloring

What To Do:

- 1. Place the bottle on a tray (to catch spills).
- 2. Add baking soda, dish soap, and food coloring to the bottle.
- 3. Pour in the vinegar and watch your volcano erupt with bubbles and fizz!
- Science Behind It: Baking soda (a base) reacts with vinegar (an acid) to make carbon dioxide gas—causing the "eruption."

#3. Ice Cream in a Bag

What You Need:

- 1 cup milk or half-and-half
- 2 tablespoons sugar
- 1/2 teaspoon vanilla extract
- · Ice
- 1/4 cup salt
- · 1small zip-lock bag
- 1 large zip-lock bag

What To Do:

- 1. Add milk, sugar, and vanilla to the small bag and seal it tightly.
- 2. Fill the large bag halfway with ice and add salt.
- 3. Place the small bag inside the large one, seal, and shake for about 5–10 minutes.
- 4. Take it out, rinse the bag quickly, and enjoy your homemade ice cream!
- Science Behind It: The salt lowers the ice's freezing point, making it cold enough to freeze the ice cream mixture.

