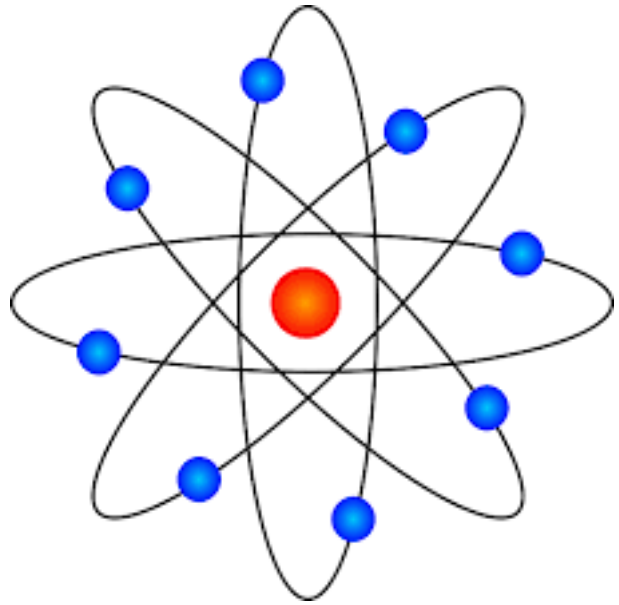


# MY SCIENCE JOURNAL



Name \_\_\_\_\_

Teacher \_\_\_\_\_

Grade \_\_\_\_\_

## LAYERS OF LIQUIDS

You will need:

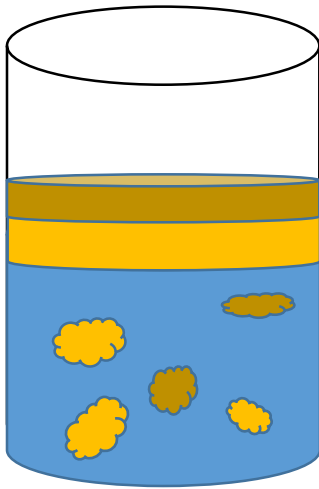
- tall, clear drinking glass
- large spoon
- water

- 1 cup of vegetable oil
- 1 cup of corn syrup
- food coloring

1. Fill glass halfway with water
2. Add food coloring, stir
3. Add oil, stir
4. Add syrup, stir

What do you think will happen? (Hypothesis)

What did you observe? (Results)



What Happened? (Explanation)

**DENSITY** is how close the molecules of a liquid are to each other. Liquids that flow slowly have high densities. The liquids do not mix because they have different densities. The liquids that are denser will **SINK**, and those that are less dense will **FLOAT**.

## INVISIBLE INK

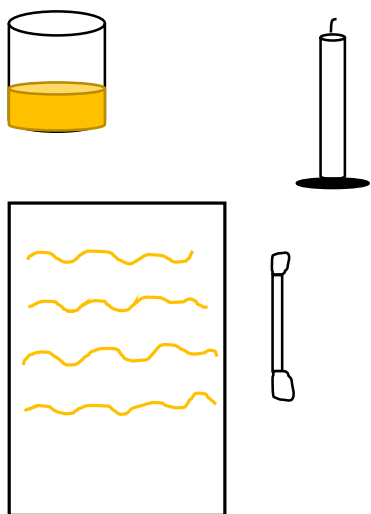
You will need:

- lemon juice
- cotton swabs (Q-tips)
- paper
- a candle
- an adult to help you

1. Dip the swab into lemon juice
2. Write a message on the paper
3. Wait for the paper to dry
4. Have an adult hold the paper over the flame of the candle

What do you think will happen? (Hypothesis)

What did you observe? (Results)



What Happened? (Explanation)

Lemon juice is an **ORGANIC COMPOUND**, which means it contains **CARBON**. When the carbon is heated, a chemical reaction called **OXIDATION** occurs and the lemon juice turns dark brown.

## BAKING SODA BALLOON

You will need:

- a balloon
- an empty bottle
- baking soda
- vinegar
- a spoon

1. Blow up the balloon a little
2. Pour 2 spoons of baking soda into the balloon
3. Fill the bottle halfway with vinegar
4. Cover the opening of the bottle with the balloon
5. Dump the baking soda into the bottle.

What do you think will happen? (Hypothesis)



What did you observe? (Results)

What Happened? (Explanation)

A **CHEMICAL REACTION** occurs when a new substance is formed. Baking soda and vinegar react to form **CARBON DIOXIDE**, which is the gas that fills the balloon.

## REMOTE CONTROL ROLLER

You will need:

-a balloon

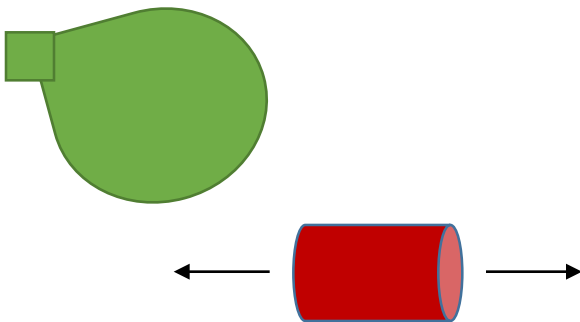
-an empty can

-your hair

What do you think will happen? (Hypothesis)

1. Blow up the balloon and tie it
2. Rub the balloon on your hair
3. Place the can on the ground and move the balloon back and forth over it.

What did you observe? (Results)



What Happened? (Conclusion)

Positive and negative forces will always attract each other. When you rub the balloon on your hair, it becomes loaded with **ELECTRONS**. These have a negative charge. When you hold the balloon over the can, the electrons attract the **PROTONS** on the surface of the can. These have a positive charge. That's why you can control the can with the balloon!

Some more fun activities to try  
with a parent.....

[http://www.exploratorium.edu/science\\_explorer/](http://www.exploratorium.edu/science_explorer/)

<http://www.funology.com/science-experiments/>

<http://www.hometrainingtools.com/a/science-projects>

<http://www.stevespanglerscience.com/lab/experiments/>