

JR-SCIENTISTS

INFLATING BALLOON

Just a few simple ingredients from the kitchen and you have amazing chemistry for kids at your fingertips.

INSTRUCTIONS:

STEP 1: Blow up the balloon a bit to stretch it out some.

STEP 2: Use the funnel and teaspoon to add baking soda to the balloon.

STEP 3: Fill the container half full with vinegar.

STEP 4: While pinching you balloon closed, attach the end over the bottle and make sure there is a good seal.

STEP 5: Lift up the balloon to dump the baking soda into the container of vinegar and watch what happens!

SUPPLIES

Baking Soda

Vinegar

Empty Water Bottles

Balloons

Measuring Spoons

Funnel (optional)

THE SCIENCE

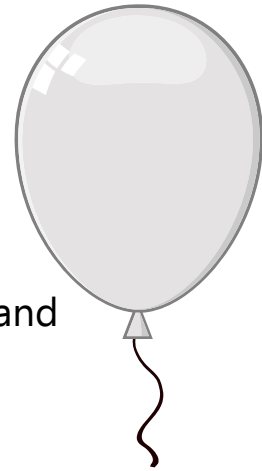
The science, behind this balloon baking soda experiment, is the chemical reaction between the base {baking soda} and the acid {vinegar}. When the two ingredients mix together the balloon baking soda experiment gets it's lift!

That lift is the gas produced from the two ingredients is carbon dioxide or CO₂. As the gas tries to leave the plastic container, it goes up into the balloon because of the tight seal you have created. Because the gas has nowhere to go and is pushing against the balloon it inflates it! Similarly, we exhale carbon dioxide when we blow up balloons.

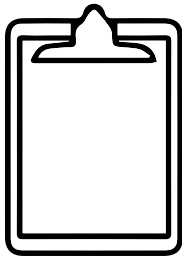


Inflating Balloon Observations

Use this worksheet to process and evaluate your work.



What do you think will happen when you mix the vinegar and baking soda?



RECORD

What did you see? What did you hear?

If you increase the amount of soda, does it change the size of the balloon?

Does the amount of liquid in the bottle change?

What have I learned?
