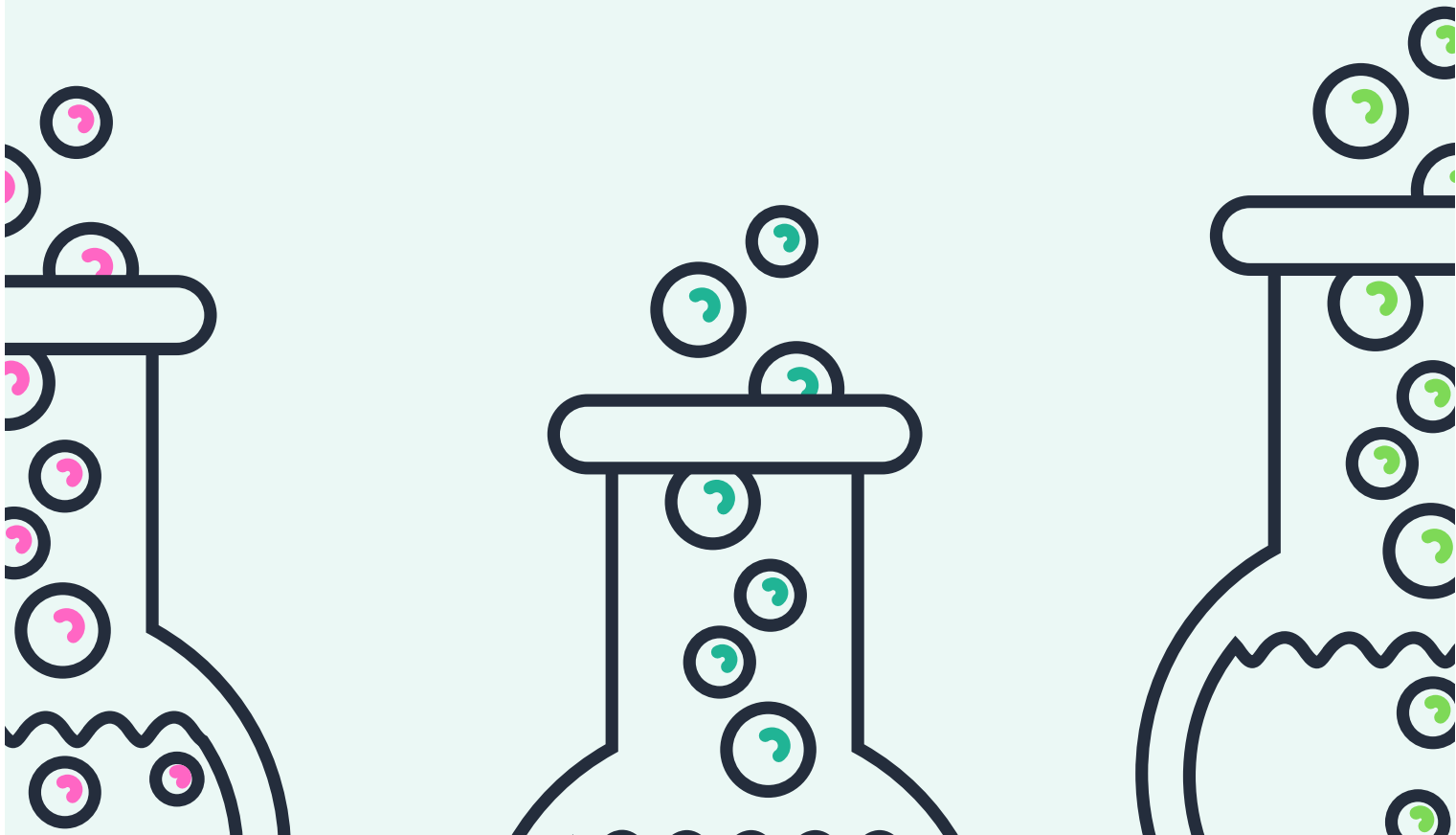


THE BEST

FIZZY SCIENCE

EXPERIMENTS EVER!

Super easy fizzy science experiments
you can safely do at home with
materials you will find in your kitchen!





FIZZY SCIENCE

INTRODUCTION

Kids LOVE science experiments! Mixing baking soda and vinegar is a great way to safely introduce them to chemical reactions. When you mix baking soda and vinegar together, carbon dioxide and water are released. The fizz produced when the carbon dioxide is released is such fun to watch - especially when you add some color to the mix. Here's how you can easily try my favorite fizzy experiments in your own home!



IMPORTANT INFORMATION

While the materials used in these experiments are non-toxic, they don't taste very nice. Do not allow your children to eat or consume any of the baking soda or vinegar. Remember that food coloring and liquid watercolors can stain skin, clothing and furniture. It might be a good idea to use a drip tray or some sort of protective mat to prevent spills from damaging surrounding areas. Wearing an art smock or old clothing may also be a good idea! ALWAYS supervise your children carefully for the duration of the experiment. Join in with your children. It will be fun!



HOW TO USE THIS WORKBOOK

Read through all the information in this workbook. You will find the materials and step-by-step instructions required for the fizzy experiments. Print the worksheet and complete alongside your experiment. Enjoy!

FIZZY ERUPTIONS

In this experiment, you will mix baking soda and vinegar to make colorful fizzy reactions. These reactions will look like this first picture below.



MATERIALS

You will need:

- Tray or plate
- Baking (bicarb) soda
- White vinegar
- Food coloring or liquid watercolor
- Dropper or pipettes

INSTRUCTIONS



1. Spread a thin layer of baking soda over your plate or tray. Add the food coloring to the vinegar



2. Use a pipette or dropper to squeeze the colored vinegar over the baking soda. Watch the fizz escape!

DISCUSSION

Did your experiment work? Did you see the little fizzy explosions? It's fun isn't it? In this experiment, a chemical reaction between the baking soda and the vinegar occurs and creates a gas called carbon dioxide. When the gas is released it causes the fizz. Carbon dioxide is the same gas that is added to soda drinks to make them bubbly - a process called carbonation. As well as seeing the gas escape, did you happen to hear it fizz? You will have to listen very carefully to hear this.

Now that you know the basics behind these reactions, you will be able to create all sorts of fun baking soda and vinegar reactions.

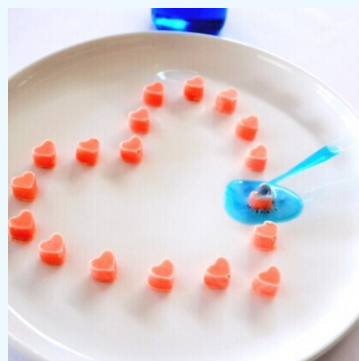
FURTHER EXPERIMENTS

1. You can turn this experiment into a magic trick! Place a muffin tray on a flat surface, squeeze 1-2 drops of food coloring into each well and then cover with baking soda. Then squeeze vinegar over the baking to reveal the hidden color! See picture 1 below for the results.
2. Try freezing a mixture of baking soda and water in an ice-cube tray overnight. Pop the frozen cubes out onto a tray and then squeeze over the vinegar. The cubes will start to fizz and dissolve.
3. You can even blow a balloon without touching it using baking soda and vinegar! To do this, pour some vinegar into a plastic bottle. Attach a funnel to a balloon and add 1-2 tablespoons of baking soda. Fit the balloon over the opening of the bottle and tip the contents of the balloon into the vinegar. Stand back and watch the balloon inflate!

1



2



3



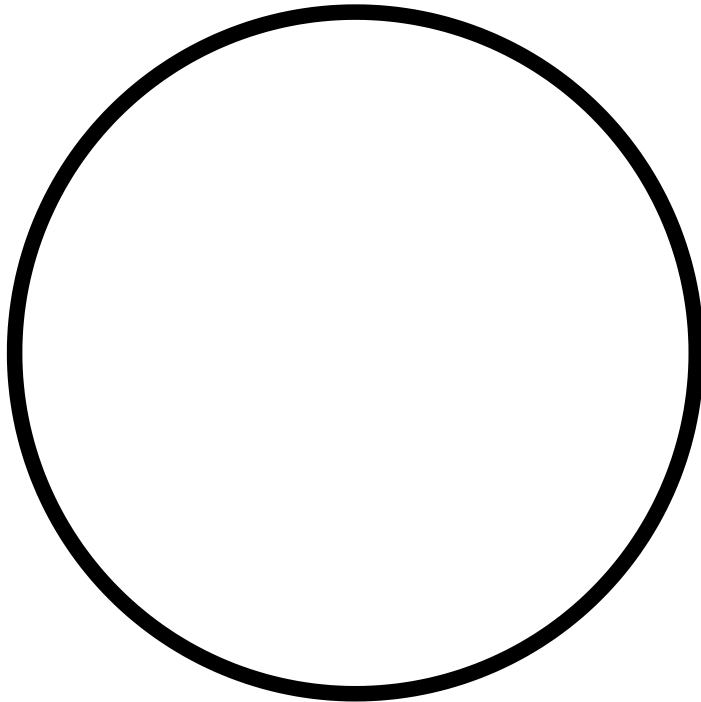
FIZZY ERUPTIONS

NAME:

DATE:

WHAT DO YOU THINK WILL HAPPEN:

DRAW WHAT HAPPENED:



EXPLAIN WHAT HAPPENED: