

Parent Guide

How can I use this with my children?

This recipe is great for giving your child a visual prompt to get them thinking about space, the Solar System and planets. It also helps them to think about chemistry and chemical reactions.

How does this help my children's learning?

Encourage your child to think about all the planets of the Solar System - consider the size and appearance of each planet, their names and place within the Solar System.

Ideas for further learning:

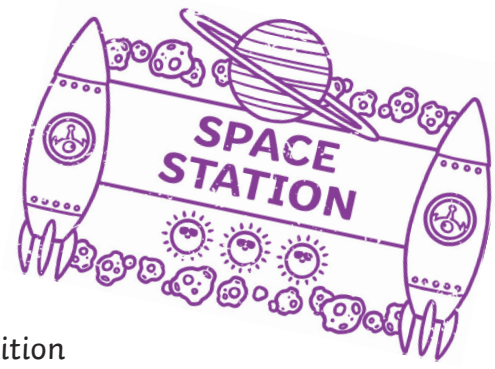
What other uses can this reaction have? Can your child think of any other ways they could use the bicarbonate of soda and vinegar reaction to create a piece of art, design or science?



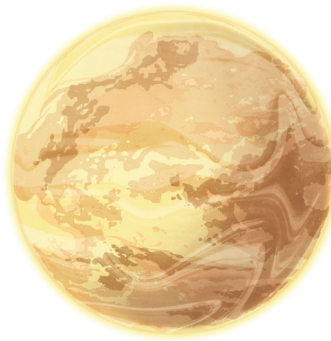
Fizzing Planets

The Solar System is the name for the space around our Sun. There are eight planets in our Solar System - Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

Each planet is very different in size, appearance, temperature, composition (what they are made of), speed of rotation and orbit of the Sun.



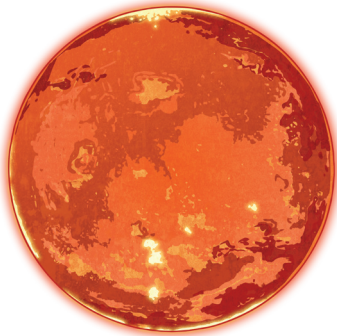
Mercury



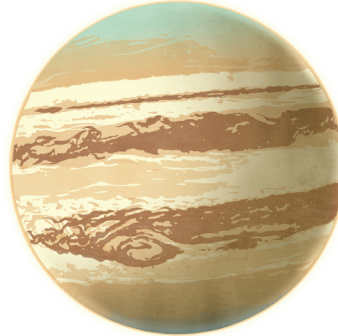
Venus



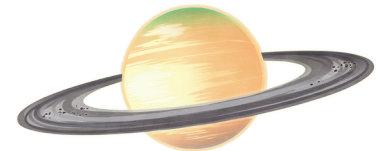
Earth



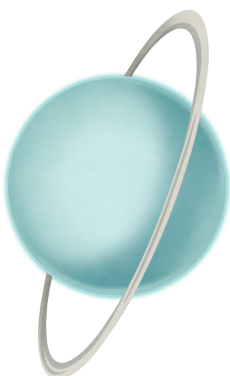
Mars



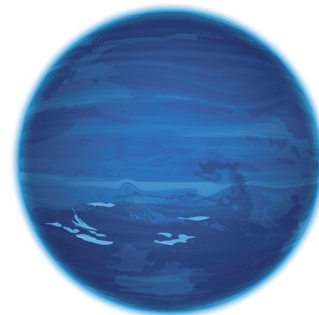
Jupiter



Saturn



Uranus



Neptune

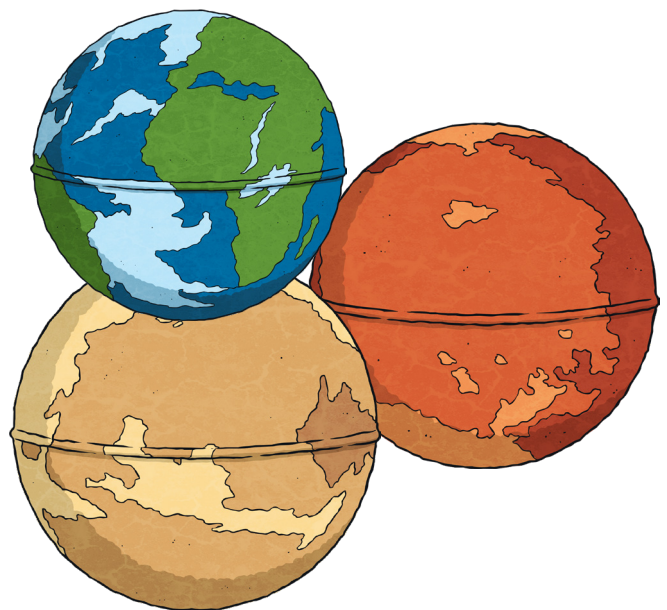
You will need:

- bicarbonate of soda
- food colouring (a variety of colours)
- water
- small bowls
- waterproof container (e.g. empty ice cream tub)
- vinegar
- pipette or teaspoon

Method:

1. Choose which planet you are going to make. Use the images above to decide which colours you need for your planet.
 2. For each colour that you will use, you will need to create a bicarbonate of soda mix.
 3. For the bicarbonate soda mix, you will need to place 1-part water to 4-parts bicarbonate of soda into a small bowl. So, if you use 100g of bicarbonate of soda, you will need 25ml of water.
 4. The mix needs to be firm enough to be moulded into shapes. If it is too runny, then add a little more bicarbonate of soda. If it is too dry and flaky, then add a little more water.
5. Using the food colouring, add a small amount of the colour you require to the mix.
 6. Repeat this for all the colours you require for your planet, so each colour will have an individual mix.
 7. Next, take a small amount of all the colours you need and mix them together into a small planet-shaped ball.
 8. To see your planet fizzer in action, place it in the waterproof container. Take a small pipette or teaspoon and fill it with vinegar. Carefully, add the vinegar, a small amount at a time, and watch the reaction taking place.

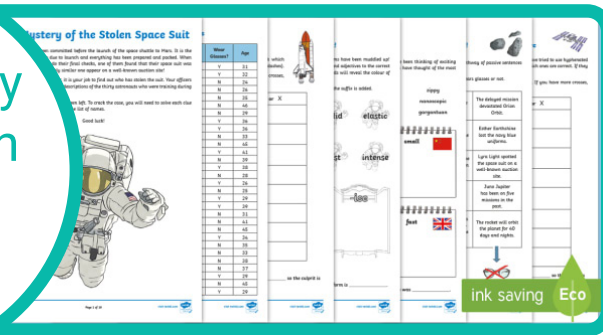
1. What is causing the planet to fizz?
2. How long does it take for the planet to dissolve?
3. Will the size of the planet change the reaction?
4. What happens to the colours as the fizzer bubbles away?



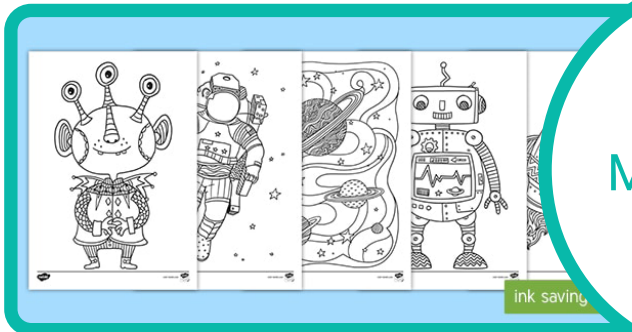
We hope the information on our website and resource is useful. However, some ingredients and/or materials used might cause allergic reactions, so if you have any concerns about your own or somebody else's health or wellbeing, always speak to a qualified health professional. Remember, activities listed within the resource should always be supervised by an appropriate adult.

If you enjoyed this resource, why not try...

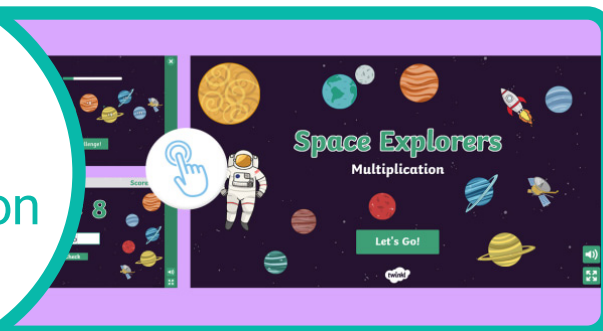
The Mystery of the Stolen Space Suit Game



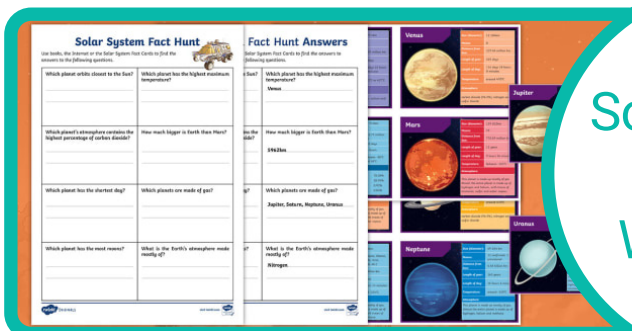
Space-Themed Mindfulness Colouring Pages



Space Explorers: Multiplication Game



Solar System Fact Hunt Worksheet



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