



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences --particularly students of color and girls -- by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

learn about how baking soda works through yummy honeycomb!



Supplies Required:

- Baking Soda
- Sugar
- Water
- Honey or maple syrup or golden syrup
- Saucepan
- Something to stir in saucepan
- Baking Tray lined with foil
- Measuring Cups

Video

How to make honeycomb candy: <https://tinyurl.com/y7a6nwgw>

Overview

Sodium bicarbonate, otherwise known as baking soda, is a popular cooking ingredient with a lot of other household uses. In this experiment, you will observe the chemical reaction that baking soda goes through to make bubbles. The combination of baking soda and heat makes carbon dioxide gas, which leaves bubbles in the things you bake. This process is called *thermal decomposition*. The carbon dioxide gas is important for baked goods because it allows goods to rise.



Instructions

1. Put 8 tablespoons sugar, 1 tablespoon of water, and 2 tablespoons of syrup into saucepan.
2. Place saucepan over low heat with help of adult if needed.
3. Stir mixture until all sugar has melted.
4. Raise heat so some bubbles form.
5. Take saucepan off heat.
6. Add 1 teaspoon of baking soda and stir.
7. Watch the reaction of the baking soda and heat to create many frothy bubbles.
8. Pour the mixture into baking tray. Allow to cool and then enjoy!

Additional Resources

1. Additional instructions: <https://tinyurl.com/ydahudhp>
2. What triggers a chemical reaction? <https://tinyurl.com/nt74bme>

Share It Out

Share on social media: Take a video of the bubbly reaction between baking soda and the sugar mixture. Share the video with friends!

Use the hashtags:

#HoneycombCandy
#ProjectExploration
#StemAtHome

Share via PE's website: Students who complete STEM@home activities and share what they learned with the PE team via our website will earn points which can be traded in for cash prizes at the Explore Store. Your project number is 211. Learn more at www.projectexploration.org/explore-store

Join PE's character contest!

Design a STEM character who will lead kids through activities and be featured on our website and in our STEMbooks. Cash prizes will be awarded to the top 3 finalists. Learn more at: www.projectexploration.org/character-contest.



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