Fizzing Planets

Connected Standard:
3.2 K.A.3 Describe the way matter can change.

What You Will Need:

- Vinegar
- Baking Soda
- 2 Colors of Food Coloring
- 2 Bowls
- 1 Tablespoon
- ¼ Cup
- Spoon or Dropper
- Gloves
- Water

Instructions:

1. Add ¼ cup of baking soda to each of your bowls.
2. Add 1 tablespoon of water to each of your bowls.
3. Add one drop of food coloring to each of your bowls (each bowl should be holding a different color).
4. Mix together. If your mixture seems too watery, add another tablespoon of baking soda.
5. While wearing gloves to avoid staining your hands, mold your two baking soda mixtures together to form a round planet shape.
6. Set your planet into one of your now empty bowls and slowly add vinegar to it using a spoon or dropper.
7. Observe!

The Science Behind It:
You can see that as you added your vinegar to your baking soda planet, the planet started to dissolve! The more vinegar you add, the more your planet will dissolve and get smaller! So why does this happen? Baking soda acts as a base and vinegar acts as an acid. When they combine, they create carbon dioxide gas, which gives us our fizzing bubbles!

Book to Pair with this Experiment:

- *Hidden Figures: The True Story of Four Black Women and the Space Race* written by Margot Lee Shetterly, illustrated by Laura Freeman

Experiment Credit: https://fun-a-day.com/fun-science-space-theme-fizzing-planets/