



Ms. Valerie's Learning at Home Activity Balloon Experiment

Related **Science Lesson** Airs September 8, 2021 on WQLN PBS

How to Make

Materials:

- Balloon
- Baking soda
- Vinegar
- Water bottle
- Funnel (or you could make a make-shift funnel out of stiff paper)



Directions:

1. Put some vinegar in the water bottle.
2. Use the funnel to put some baking soda in the balloon.
3. Stretch the mouth of the balloon over the mouth of the bottle without dumping in the baking soda.
4. When the balloon is firmly attached, lift the balloon up, dumping the baking soda into the vinegar. Observe to see what happens!

What is going on here?

When you combine baking soda and vinegar, you get a chemical reaction. Vinegar (an acid) reacts with baking soda (a base) to create carbon dioxide gas which fills up the balloon. Try experimenting with different amounts of vinegar and baking soda to see what happens (with or without the balloon). You could also try adding different things like dish soap or food coloring. Talk with your child about the different states of matter in this experiment: solid (keep their shape-the bottle, the balloon), liquid (take the shape of their container- vinegar), and gas (fill up the shape of their container- carbon dioxide gas).

