#### SCIENCE, TECHNOLOGY, ENGINEERING & MATH



# **CHEMICAL REACTIONS (K-2)**

### **The SCIENCE of CHEMISTRY:**

Chemistry is the study of how substances react with each other.





A **chemist** uses the science of chemicals to make our lives better.

When a **chemical reaction** occurs, the substance is changed forever.



MARGRET & H.A.REY'S Curiotus Geotige and the Hot Air Balloon

READ:

George is a good little monkey – and always very curious! Join him in one of Margaret and H.A. Rey's adventures, <u>Curious George and the Hot</u> <u>Air Balloon</u> and start thinking about this week's experiment. Don't have a copy at home? Click on the book title for digital access or find a <u>read</u> <u>aloud</u> of the book online.

## **ACTIVITY: BLOWING UP a BALLOON**

Materials: 1 water bottle, 1 balloon, 1 funnel, 1/3 cup baking soda, 1 cup vinegar

- 1. Stretch the balloon out, then the place over the small end of the funnel.
- 2. Pour ~1/3 cup of baking soda into the funnel. **TIP**: Gently shake the balloon around until it all falls into the balloon.
- 3. Rinse off the funnel and use it to pour 1 cup vinegar into a water bottle.
- 4. Gently stretch the opening of the balloon over the opening of the bottle. **TIP**: Make sure the balloon hangs down at the side to keep the baking soda from falling in.
- 5. Lift the balloon so that it is completely upright allowing all of the baking soda to fall into the vinegar and watch the magic of science as the balloon begins to inflate!

What is happening? Mixing baking soda and vinegar causes a chemical reaction that releases carbon dioxide gas (the same gas we breathe out). The balloon traps the gas, airing it up!

#### For step-by-step instructions, watch the video at: Balloon Inflation STEM Activity

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org

