

Science

Technology

Engineering

rt Math



Pumpkin Exploration



You will need:

- A pumpkin or mini pumpkin
- Spoons & carving knife (adult use only)
- Baking soda (1 tablespoon)
- Vinegar (1/2 cup)
- Dish soap (1 squirt)
- Measuring cup
- A tray to catch the mess, because there will be a lot of bubbly overflow! (or do this project outside)
- Food Coloring/watercolor paints (if desired)

- Step 1: Caregivers, carve around the stem and pull off top
- **Step 2:** Hand your child a spoon and scoop out the insides together.
- **Step 3:** Pour vinegar, dish soap, and food coloring/ watercolor paint into pumpkin cavity and mix. *Food coloring will stain so be prepared with a plastic table cloth or do this experiment outside if possible.
- **Step 4:** Add the baking soda (with a countdown for more suspense!). Repeat the experiment for even more fun, try different amounts of each ingredient and see what works best.

Talking Points & Further Exploration

Match the difficulty to what fits your family best. It can be as easy or as complicated as you need it to be.

- Talk with your child about what is happening with the baking soda and vinegar. It is creating a **chemical reaction** that causes a release of air in the form of bubbles. This air is **carbon dioxide**, the same thing we breathe out!
- Save the pumpkin insides, let your child explore the seeds and pumpkin goop if they want. For less mess, you can make a sensory bag by zipping insides with seeds into a ziplock baggy and tape shut, then let your child squish and play with the bag. During their sensory exploration talk about the seeds and parts of the pumpkin. Check out some of the books below which talk about how pumpkins grow. Talk about different gourds. Ask your child if they think other types of gourds look the same inside. Take a look if you can.
- Save the seeds for baking and talk with your child about the many ways pumpkins can be food! Check out the book below, "Pumpkin Seed to Pie" to see how this process works. Baking is another form of chemistry, just like mixing vinegar with baking soda to make a reaction. If you can, try one of the recipes together. Baking with your child helps them learn more about measurements, following steps (sequencing), and can be a lot of fun!

Click the book covers for more Pumpkin information and fun!

(ebooks available through hoopladigital.com & lakecounty.overdrive.com)









