

The Oozing Pumpkin

Understanding Chemical Reactions

This experiment is very exciting because you will learn about catalysts and chemical reactions!

Safety Cautions: Hydrogen Peroxide can irritate your skin and eyes, be sure to wear safety goggles, gloves and to ask an adult for supervision.



Experiment:

1. Carve a pumpkin with any design you desire
2. Add $\frac{1}{2}$ cup of hydrogen peroxide solution into a cup or beaker (30% Hydrogen Peroxide works best)
3. Add 4-5 drops of food coloring to the mixture
4. Add 1 tablespoon of liquid dish soap into the cup and mix by swirling
5. Open up the top of the pumpkin and carefully place the cup on the bottom
6. In a separate cup combine warm water and yeast for 30 seconds (this helps to activate the yeast)
7. Pour the yeast solution into the cup and quickly put the top on the pumpkin and observe what happens!

Science Behind the Oozing Pumpkin:

After you combine the hydrogen peroxide and dish soap together, did you notice anything? Once they are added together a reaction begins to take place! This reaction would take hours to complete without the help of the yeast. Yeast serves as a CATALYST, which helps to speed up the chemical reaction. Catalysts can be found all over the world, one way to think of a catalyst is to imagine walking to school. If you were going to walk to school it would take a long time. However, if you were to ride a bus you would get to school much faster. In this scenario the catalyst is the bus, helping you get to school faster!