



Challenger's Morning Science Segment:

October 31, 2016

Topic: Chemical Reactions

Build: Oozing Jack-O'-Lantern

Credit:

<http://www.pbs.org/parents/adventures-in-learning/2013/10/the-great-elephant-toothpaste-experiment/>

Materials Needed:

Hydrogen peroxide [3-6%] / dry yeast / dish soap / food coloring / warm water / carved pumpkin / shallow glass bowl

Create your own oozing Jack-O'-Lantern: First mix your standard packet of dry yeast with ~3 Tablespoons of warm water. Set aside and let the yeast rise. For easy clean up, place carved pumpkin on a large shallow pan/dish. Next pour ~ ½ cup hydrogen peroxide into a glass bowl and add a small amount of dish soap and ~5 drops of food coloring. Place bowl of peroxide mix inside of the carved pumpkin. Finally, when you are ready for your show to begin, pour yeast mixture into the bowl of peroxide mix. Quickly re-cap pumpkin, stand back and enjoy the oozy-gooey show!

The science [credit: <http://www.pbs.org/parents/adventures-in-learning/2013/10/the-great-elephant-toothpaste-experiment/>]

Hydrogen peroxide has two hydrogen atoms and two oxygen atoms. When yeast is added, it assists in removing the extra oxygen. The resulting oozy foam is just the oxygen, in gas form, looking for a way to escape. The reaction is also exothermic in that it creates energy in the form of heat.

This activity ties into the Challenger Learning Center of Maine, where students experience a newfound excitement for science, technology, engineering and math.

What's up next? Challenger is selling premium Innovator Russet Potatoes straight from Aroostook County, with proceeds supporting Challenger's mission to inspire Maine students in science and math. 2016 has yielded another fine growing season – these are beautiful potatoes. Satisfaction is guaranteed! Order now and pick up your order on Nov. 5. At just \$25 for a 50 lb. bag, buy one for you, and buy a second to donate to Good Shepherd Food Bank to help local food pantries (we'll do the delivering to Good Shepherd for you)! FMI- www.astronaut.org