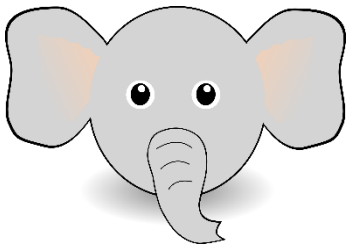
SUSD STEM Father Engagement



Elephant Toothpaste – Make a foaming toothpaste worthy of a large elephant!

Materials:

- Empty Plastic Bottle
- Dry Yeast (found in baking section of grocery stores)
- 3% Hydrogen Peroxide
- 1 TBSP Measuring Spoon
- ½ Cup Measuring Cup
- Warm Water
- Liquid Dish Soap
- Safety Glasses
- Large Tub/Tray
- Liquid Food Coloring (optional)
- Different Shaped Bottles/Glasses (optional)

Instructions:

1. Set up your experiment area by collecting all of your materials and setting the glass inside of the tub/tray.
2. Measure and add ½ Cup of hydrogen peroxide to your bottle that is inside of the tray.
3. Add a big squirt of dish soap into the bottle with the hydrogen peroxide and gently mix it by carefully swishing it around.
4. ** This is the moment you will add a few drops of your liquid food coloring *DIRECTLY* into your mixture. If you would like different colors added add a few drops *ALONG-SIDE* the opening of the bottle and let them drip down into the mixture. *DO NOT* mix the different colors of the food coloring into the mixture.
5. Inside of your measuring cup add 1 Tablespoon of dry yeast along with 3 Tablespoons of warm water and mix the two by stirring. Stir for about half a minute.
6. *QUICKLY*, but *CAREFULLY*, pour your new yeasty mixture into your bottle with your soapy hydrogen peroxide mixture and stand back from the bottle. *(MAKE SURE YOUR PROTECTIVE EYEWEAR IS ON)*

Results?

What do you think caused this reaction?
How would the experiment change if you modified the recipe?
If you were to change the shape of the bottle and size of the hole how would the experiment behave?

Vocab:

Modify: Making changes so something is different than it was before.
Reaction: Two or more chemicals/substances acting on each other to cause them to change.
Yeast: A single-celled organism that eats sugars and starches and turns them into carbon dioxide. Yeast is commonly used in baking to make bread rise.