#FontanaTogether

Elephant Toothpaste

Elephant toothpaste is awesome! It is special because each tiny foam bubble is filled with oxygen. The yeast acts as a catalyst (a helper) to remove the oxygen from the hydrogen peroxide. Since it does this very fast, it creates lots and lots of bubbles. The experiment creates a reaction called an exothermic reaction, which means it not only creates foam, it also creates heat! The foam produced is just water, soap, and oxygen.

Materials:

- 1/2 a cup of Hydrogen peroxide
- A packet of dry yeast (one packet is approximately 1/4 oz)
- 3 Tablespoons warm water
- Food coloring
- A cylinder (at least 500 ml) or you can use a bottle
- A tablespoon of dish soap (any will do)
- Safety goggles

Instructions:

1. Pour 1/2 cup hydrogen peroxide solution, 1/4 cup dishwashing soap, and a few drops of food coloring into the bottle.
2. Swish the bottle around to mix the ingredients. Set the bottle in a sink or outdoors or some other place where you won't mind getting wet foam everywhere.
3. In a separate container, mix a packet of active yeast with a little warm water.
4. Give the yeast about five minutes to activate before proceeding to the next step.
5. When you are ready to do the demo, pour the yeast mixture into the bottle. The reaction occurs immediately upon the addition of the yeast.
6. **It will be hot, be careful.**

Modifications/Variations:

1. Use more than one food coloring
2. Use a tray to contain the mess
3. Use a stronger Hydrogen peroxide (20-volume hydrogen peroxide)