

ELEPHANT TOOTHPASTE

Materials Needed: Clean Plastic Bottle, 1/2 Cup Hydrogen Peroxide, 1 Tbsp Dry Yeast, 3 Tbsp Warm Water, 1 Tbsp Liquid Dish Soap, Food Coloring, Mixing Bowl, Safety Goggles, Tray

Instructions: Place the water bottle on a tray or washable surface. With safety goggles on, pour hydrogen peroxide into the bottle. Add 8 drops of food coloring to the bottle. Add dish soap to the bottle and gently swish the bottle to mix. Mix the warm water and yeast in a bowl for 30 seconds. Pour the yeast mixture into the bottle.

Tips: Use caution; as hydrogen peroxide can irritate skin and eyes. To get stripes (like real toothpaste), drop the food coloring in a stripe pattern down the sides of the bottle. Use a funnel for an easier pour. Do not put foam in your mouth.



1

PREPARE BOTTLE



2

PREPARE YEAST MIXTURE



3

ADD YEAST MIXTURE

The Science: When yeast is added to the hydrogen peroxide it acts as a catalyst. A catalyst is used to speed up a reaction, in this case, to release oxygen rapidly. The dish soap traps the released oxygen, which creates the foam. The reaction is exothermic, meaning it produces heat. This is why the bottle is hot after the experiment.