

ELEPHANT TOOTHPASTE

Explore classic science experiments with a super simple setup, particularly thermogenic reactions!

INSTRUCTIONS

STEP 1: Place down a tray first to catch the eruption. Then pour 1/2 cup of hydrogen peroxide liquid into your container or bottle.

STEP 2: Add about 10-20 drops of food coloring.

STEP 3: Add a squirt of dish soap or about one tablespoon of dish soap and give it a gentle swirl.

STEP 4: Mix the water and yeast in a small container until it's fully incorporated.

STEP 5: Pour the yeast mixture into the hydrogen peroxide/soap mixture and watch what happens!

THE SCIENCE

The reaction between the hydrogen peroxide and the yeast is exothermic. You will feel the warmth outside the container because energy is being released.

The yeast (also known as a catalase because it acts as a catalyst) helps to remove the oxygen from the hydrogen peroxide creating tons of tiny bubbles (oxygen gas) that make all that cool foam. The foam is a combination of the oxygen, water, and dish soap you added.

SUPPLIES

20-Volume hydrogen peroxide

Dry fast-acting yeast

Warm water

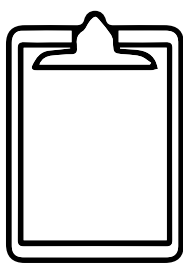
Dish Soap

Food coloring

16 Oz container

Elephant Toothpaste Observations

Use this worksheet to process and evaluate your work.



RECORD

What do you think will happen?

What did you see? How long does the reaction last?

What makes the foam appear?

Try the activity without the dish soap. What was different?

