

Welcome to our
science class!!!



STEAM sisters

SCIENCE | TECHNOLOGY | ENGINEERING | ART | MATH

About us

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- Group of 11th graders
- From Troy High School and International Academy East
- We've taken chemistry, biology, physics, and more :)
- We're so excited to learn more about science with you guys!!

For Our Lab Today...

We Will Be Doing...

Elephant Toothpaste!

Procedure

1. Form groups
2. ***We will add the hydrogen peroxide to your bottle. (½ cup)
3. Add 1 spoonful of dish soap into your bottle.
4. Add a few drops of food coloring into the bottle.
5. In the small cup, add 1 spoon of yeast and 3 spoons of warm water.
6. Stir the yeast and water.
7. Put the funnel in the bottle.
8. Pour the yeast mixture in the bottle, and take the funnel out.

Examples of physical and chemical changes

Physical Changes



Crushing a can



Melting an ice cube



Boiling water



Mixing sand with water



Breaking glass



Dissolving sugar in water



Shredding paper



Chopping wood



Mixing green and red marbles



Sublimation of dry ice

Chemical Changes



Iron Rusting



Burning Wood



Metabolism



Cooking an Egg



Baking a Cake



Electroplating



Rotting Banana



Vinegar and Baking Soda Mixture



Fireworks



Chemical Battery

Physical changes vs. chemical changes

Physical Changes	Chemical Changes
<ul style="list-style-type: none">● Change in the shape or appearance of an object● Changes in state of matter: solid, liquid, or gas● Easy to reverse the change <p>Examples:</p> <ul style="list-style-type: none">○ Dissolving sugar in water○ Crumpling a piece of paper○ Ice cube melting	<ul style="list-style-type: none">● Two or more substances are mixed and a new substance is made● Cannot be undone● Examples:<ul style="list-style-type: none">○ Baking a cake○ Food rotting○ Burning wood

The Science Behind Elephant Toothpaste

Was the elephant toothpaste a...

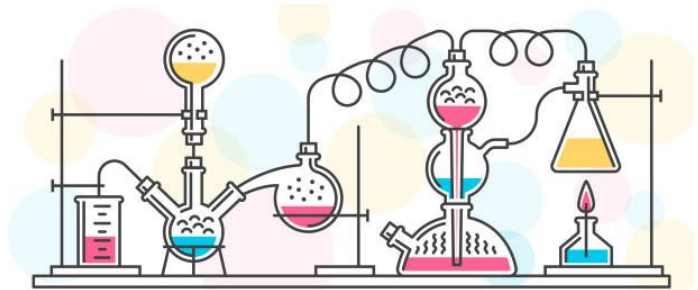
Chemical change

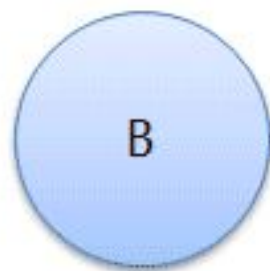
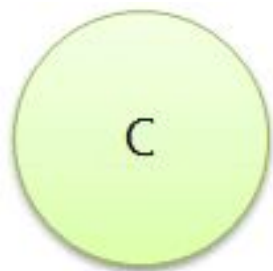
or

Physical change?



Chemical change!





Joan Berkowitz: famous female scientist

- Studied chemistry and environmental science
- Did research to help NASA
- Studies the air pollution from factories



We Hope You Enjoyed Today's Class!!