

Objective

By the end of this lesson, you will understand the basics of Chemistry and be able to perform simple chemical experiments at home.

Materials and Prep

Materials needed: water, baking soda, vinegar, food coloring, small containers, safety goggles (optional)

Make sure to have a clear workspace and adult supervision for certain activities.

Activities

- Create a fizzing volcano: Mix baking soda, vinegar, and a drop of food coloring in a container to see a chemical reaction.
- Color-changing milk: Add a drop of food coloring to milk and then dip a cotton swab with dish soap to see colors swirl due to surface tension changes.
- Make a rainbow in a jar: Layer different liquids with different densities like honey, water, and oil to see how they stack up.

Talking Points

- Chemistry is like magic, but it's really just about how different materials interact with each other.
- When we mix baking soda and vinegar, they react and create bubbles. This is because they are making a new substance together.
- Did you know that different liquids have different weights? That's why they separate when we pour them together.