

Argument about the Vinegar and Baking Soda Investigation

Question: Does a chemical reaction occur when you mix vinegar with baking soda?

Claim: A chemical reaction does occur when you mixed vinegar with baking soda.

I did an investigation where I mixed $\frac{1}{2}$ a cup of powdered baking soda with $\frac{1}{2}$ a cup of vinegar. I put these ingredients in a bottle, and put a balloon on top of the bottle.

A gas forming indicates that a chemical reaction is happening.

When I added the vinegar to the baking soda, bubbles began to form immediately.

Bubbles are evidence that a gas is forming.

One sign that a chemical reaction happened is that the substances heat up or cool down.

I observed that a balloon attached to the bottle filled up. The balloon filled up so much that it almost exploded. The balloon was filling up because of the gas that formed from the chemical reaction.

The substance that was produced by the baking soda and vinegar experiment reminded me of soda water.

The bubbles are really interesting because they are filled with gas from the chemical reaction.