

This Reaction is Cool



2 minutes

What You Will Do

Demonstrate an endothermic chemical reaction.

Get it Together

- ◆ 3 Tbsp. baking soda
- ◆ $\frac{1}{2}$ cup vinegar
- ◆ Plastic cup

Procedure

1. Place the baking soda in the cup.
2. Pour in the vinegar.
3. Feel the outside of the cup for a moment.

A Closer Look

The chemical reaction of baking soda and vinegar produces carbon dioxide gas. As with any chemical reaction, there is a temperature change. In this case, heat energy is being absorbed by the reaction, making the glass feel cooler. We call this type of reaction endothermic. The opposite of an endothermic reaction is an exothermic reaction—when heat energy is given off and heat is produced.

Attention!

Hold this over a sink because it might overflow.

