

# Baggie Blast

## What You Need

- 1 medium zip-top baggie, tested thoroughly with water for leaks beforehand
- 1 paper towel
- 45 mL (3 tablespoons) baking soda
- 300 mL (1 1/2 cups) vinegar
- 60 mL (1/4 cup) warm water



## What to Do

1. Put the baking soda in the middle of the paper towel and carefully fold it up to make a little packet.
2. Put the vinegar and water into the baggie.
3. Place the baking soda packet just inside the baggie, and hold it out of the liquid while you seal the baggie. Make sure the baggie is completely closed.
4. Make a hypothesis! What do you think will happen when the vinegar, water, and baking soda mix?
5. Let the packet drop into the liquid, put the liquid on the ground, and stand back about 3 meters (10 feet).
6. What happens to make the baggie pop? Is the product of this reaction a solid, liquid, or gas?

## What's Happening

A chemical reaction creates products that are chemically different from the reactants. Chemical indicators are clues that a chemical reaction has taken place. One example of a chemical indicator is the formation of a gas. In this chemical reaction, the baking soda and vinegar react to produce carbon dioxide gas that fills the baggie and causes it to pop. The gas is the product of the reaction between a solid and a liquid, so it is an easy way to tell that a chemical reaction is happening.