Exploration Lab

Bottle Rocket Explosion

Ages 7-10 | (1) 20 Minutes

This is an outdoor activity.

Instructions:

1.



Tape the pencils to the bottle.

2.



Carefully pour the vinegar into the bottle. Fill it 1/3 full.

- **3.** Lay open the paper towel, and pour the baking soda in the middle.
- **4.** Fold the bottom of the paper towel up, to hold the baking powder.
- **5.** Next, fold the sides in and roll it, to fit into the spout of the bottle.



- **6.** Slowly start inserting the baking soda packet into the opening of the bottle, be careful not to drop the whole thing in.
- 7. When the packet is almost completely into the bottle, use the cork to hold the packet in place.



- **8.** Give it a shake and quickly turn it over so that the bottle is standing on the pencils.
- **9.** Stand back, wait patiently, it won't take long. Watch your rocket take off!!

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bottle to take off!

What's Happening?

When the baking soda and vinegar combine it creates a chemical reaction and releases a gas called Carbon Dioxide. Since there is so much gas trapped in the bottle, it causes the

OVERVIEW

Build a rocket from a bottle and let it take off!

SUPPLIES NEEDED

- An empty plastic bottle
- 3 pencils (best if unsharpened)
- Duct Tape
- Wine Bottle Cork
- Paper Towel
- 2 tablespoons Baking Soda
- Vinegar
- Funnel (optional)

ONLINE RESOURCES

Instructional Video Link

