

Canister Rocket

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Activity - Canister Rocket What happens when vinegar and baking soda mix together ?

In this experiment, you'll make a rocket out of common household items.

You will need:

- film canister
- baking soda
- teaspoon or paddle pop stick
- vinegar
- eye protection or glasses
- plate
- adult

What to do

SAFETY WARNING: This activity involves a flying projectile. Have an adult with you and wear eye protection. Do this activity outside and NEVER point your canister rocket at ANYTHING, except the sky!

- Take the lid off the canister. Before adding ingredients, practice step 5.
- Put on your eye protection.
- Pour a small amount of vinegar, about 5ml deep, into the canister body.
- Using the teaspoon, place about ½ cm² (about " of a teaspoon) of baking soda on the inside of the lid.
- Make sure your plate is level. Hold the body of the canister in one hand and the lid in the other.
- Quickly press the lid firmly on, place the canister lid down on the plate and stand back.
- Your canister will blast off 2-10 seconds later!
- Have close look at the lid and bubbling ingredients left on the plate. What's happening? When vinegar and baking soda mix together, a fast chemical reaction occurs that produces carbon dioxide gas (CO₂). As more and more carbon dioxide gas is produced, the bits of carbon dioxide (called molecules) are squashed together and pressure builds up inside the canister. The pressure soon pops the lid off, launching the canister into the air.

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