

Stay at Home Science



Alka-Seltzer Rockets

What You Need

Film Canister
Water
Alka-Seltzer
Paper Towels

What You Do

1. Fill the film canister 1/3 with water.
2. Work quickly! Drop in a half tablet of Alka-Seltzer and snap the lid on tight.
3. Stand the rocket upright, and step back. CAUTION: Be careful when launching your rocket. Stand back and don't point it at anyone.

Questions to ask

- What if you use more or less water?
- What if you use more or less Alka-Seltzer?
- What if you use hot or cold water?

What's the Science?

As the antacid tablet “fizzes,” carbon dioxide is released inside the canister. Pressure from the gas builds and eventually pops the lid off. The thrust, or push, of your rocket is related to how much pressure builds up inside of the canister before the top pops off.

Try This

Use science vocabulary: Use related science words such as action, reaction, chemical reaction, and experiment. Children learn new vocabulary words when they hear grown-ups use them in context.

Extend your experiments: Choose one variable to change at a time and predict how that will affect the rocket launch. Try different amounts of water or Alka-Seltzer, hot vs cold water, whole tablets vs crushed up powder.

Keep in Mind

- Children are natural scientists; let them lead the way in their experimentation! Encourage them to ask questions and make suggestions only when they are stuck/discouraged.
- The order suggested is not the only right or perfect way. Adjust the activities based on the age, ability, and interests of the children.

Additional Resources

Zoom! Zoom! Zoom! I'm Off to the Moon by Dan Yaccarino
Joe Joe the Wizard Brews up Solids, Liquids and Gases by Eric Braun

