

Blast Off!

Use air power to send a straw rocket flying high. Whoooosh!

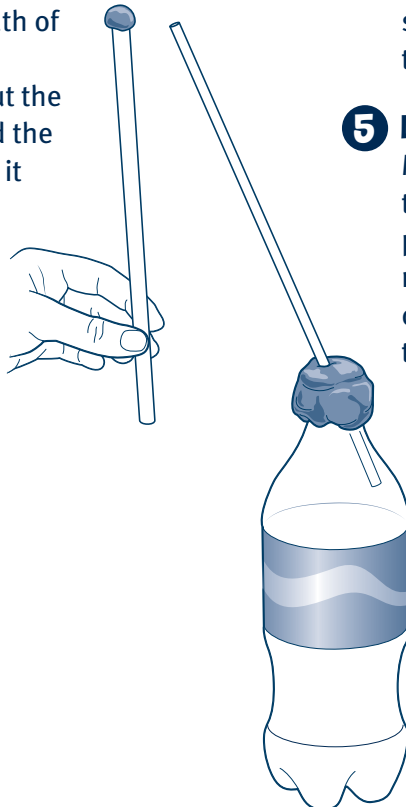


1 Get what You need.

- empty 20 oz. plastic bottle • thin straw • wide straw (that fits over the thin straw) • clay or poster putty • tape • scissors • construction paper (optional) • string (optional) • paper streamers (optional)

2 Build a rocket launcher.

- Hold a thin straw about an inch down into the mouth of the bottle.
- Wrap a ball of clay about the size of a quarter around the bottle opening, sealing it tightly around the straw and the bottle so no air can escape.
- Now squeeze the bottle. Do you feel air coming out of the top of the straw?



3 Build a rocket.

Seal up one end of a wide straw with a small ball of clay. Place the open end of the straw over the thinner straw on the rocket launcher.

4 Blast off!

Wrap both hands around the bottle and squeeze sharply. Your rocket should fly through the air. If the rocket doesn't launch, practice squeezing the bottle harder and check that there are no holes in the clay.

5 Design more rockets.

Make different rockets by attaching wings and tails to other wide straws. Use construction paper, string, or bits of streamers. Test the rockets. Which ones flew the farthest? Did any curve in the air? How did your additions change the way they flew?

Chew on This!

When you squeeze the plastic bottle, the air inside the bottle pushes through both straws. Since the top of the wide straw is plugged up, the air has no place to escape, so the air pressure launches the straw into the air.

safety TIP

Always point your rocket away from people before launching it.

Dig Deeper

Take it outside. Make wings or tails for your rockets from leaves, grass, or other materials found in nature.

Balloon racer. Can you get a balloon to shoot across a room on a zip line? Get a straw, some string, tape, and a balloon. Thread the string through the straw and ask two friends to hold each end of the string. Blow up the balloon and hold it closed. Tape the balloon to the straw. Release the balloon and see what happens!

Did You Know?

Every year, thousands of kids in grades 7–12 compete in the Team America Rocketry Challenge (TARC). They build rockets that can fly over 800 feet carrying one delicate passenger—an egg—that must land uncracked. Winners receive prizes, including an advanced rocketry course from NASA. Visit www.rocketcontest.org to find out more.



Watch **FETCH!** on PBS KIDS GO! (check local listings) and visit the **FETCH!** Web site at pbskidsgo.org/fetch.



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Fold

Fetch!

Blast Off!

Blossom just told me that lots of dogs have been launched into space on rocket ships. Yikes! Just thinking about zero gravity makes me dizzy. But I wouldn't mind munching on some astronaut ice cream and playing with toy rockets right here on good ol' Planet Earth. You make the rockets . . . and I'll get started eating the ice cream!

GOOO FETCH!

