EXPERIMENT
YOU CAN DO AT
HOME

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BALLOON-POWERED JET

HANDS-ON AERODYNAMICS
BUILD, LAUNCH, AND LEARN!

Build a simple balloon-powered "***jet***" to explore thrust and aerodynamics, just like real aircraft!

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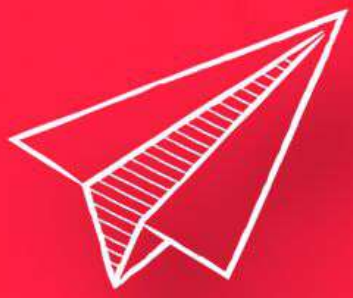
BALLOON-POWERED JET

WHAT YOU'LL NEED:

- 1 x Balloon
- 1 x Plastic straw
- 1 x 6+ feet of string
- 1 x Piece of tape
- 1 x Paper plane
- 2 x Chairs (or similar supports for the string)



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PREP WORK:

Set Up the Flight Path:

- Tie one end of the string to a chair or doorknob.
- Slide the straw onto the string.
- Secure the other end of the string to another chair, making sure it's pulled tight and level.

Build the Balloon "Engine":

- Inflate the balloon, but don't tie it, just hold the end closed.
- Tape the balloon to the straw, positioning it so the opening faces backward.
- Taper the paper plane to the opposite side of the straw.

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EXPERIMENT:

Launch Your Jet!

Slide your balloon jet to one end of the string. Let go of the balloon's end and watch as the escaping air propels it forward along the string, just like a jet taking off!

How It Works:

As air escapes the balloon, it creates thrust, pushing it forward, demonstrating Newton's third law: ***Every action has an equal and opposite reaction***.

Ready for takeoff? Try experimenting with different balloon sizes and longer string for extra fun!

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