



Newton's Laws of Motion Activity for Kids

Balloon Rocket DIY

 Duration: **20-30 min**

 Difficulty: **Easy**

 Cost: **\$0 to \$5**

Learn how to make your own balloon rocket!

Material List

-  Roll of Clear Tape
-  Balloon
-  Straw
-  Pair of Scissors
-  Fishing Line

Instructions

-  Find an anchor point for your fishing line and tie it on. Then measure it out to another point in the room.
-  Once you have the length you want, cut the line from the spool with your scissors.
-  To prepare your balloon rocket, cut the straw in half, and thread one of the halves onto your fishing line.
-  Blow up the balloon (holding the opening closed, but don't tie it), and tape it at the center onto the straw on the fishing line.
-  Grab the other end of the fishing line, then walk back to straighten it out.
-  Finally, hold the fishing line tight with one hand and let go of the balloon with the other hand to launch it.

How It Works

The force of the air leaving the balloon provides an equal and opposite force that makes the balloon move in the opposite direction. This is Newton's third law of motion, for every action there is an equal and opposite reaction. Try blowing up the balloon bigger or smaller, or making it heavier to see what happens.