

# Building a Balloon Car

Junior- Balloon Car Design Challenge Step 2

## Materials:

- Paper
- Pencil
- Balloon
- Straws – One for the jet
- Rubber bands, tape
- For the body of the car – Water bottle, toilet paper tube, juice box, plastic cup, etc.
- Wheels – bottle caps, CDs, cardboard circles, wheels, spools, plastic water bottle lids
- Axle – straws, dowels, BBQ skewers
- Tape, hot glue, clay, putty to attach wheels to axels

## Instructions:

1. Gather Materials: Look around your home to gather materials. Don't forget you can upcycle recyclable materials!
2. Brainstorm and Plan: Think about the materials you have and what you want your car to look like. Brainstorm ideas and draw pictures of the design plan you want to use to build your car. Think about your car's body, axel, wheels, etc.
3. Build the Jet: To make the jet, put the long end of the flexible straw about halfway into the balloon. Attach the straw to the balloon so that no air can escape using either tape or a rubber band. Test the jet by blowing up the balloon through the straw and then letting go. It should go straight.
4. Build Your Car: Gather your materials and design plan, then build your car. Don't forget to add your jet.
5. Test Your Car: Blow up your balloon to fill up your "gas tank," and hold the end of the straw closed to keep the air in while you set your car on the ground. Make sure you have enough room for your car to move around! If your car doesn't work the way you want it to, that's not a failure, that's an opportunity to make it better. Take a few minutes to think about what went wrong and how you can change it.

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