

Race Car Design Challenge

Brownie Mechanical Engineering Step 2

Materials:

- Paper
- Pencil
- 2 or 4 wooden dowels, skewers, straws, or other materials to attach the wheels through the car cabin.
- 4 wooden wheels, round soda caps, CDs, plastic water bottle lids, spools, or other round materials
- Hot glue, tape, clay, poster putty
- Body for the car such as toilet paper roll, small box, paper towels, pieces of cardboard, cups, etc.

Instructions:

1. Gather materials: Gather materials that you have at your house to build your car. Don't forget you can upcycle materials!
2. Brainstorm: Start off by brainstorming how you could use the materials you have to build a car. Spend about 10 minutes doing this with your paper and pencil.
3. Plan: Plan the design of your car. Designing your car before you build allows you to think through any problems ahead of time. Take about 10-15 minutes to draw and design your car on a piece of paper.
4. Build: Now it's time to build your car! Take a look at your design and materials and start building your car.
5. Test: Time to test out your car to make sure it will move.
6. Share your car and design with family and friends virtually.

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