



DESIGN CHALLENGE

What You'll Need

- 1 cardboard tube
- 4 drinking straws
- 1 sheet of paper
- 2 pipe cleaners
- 3 rubber bands
- 1 clothespin
- 3 toothpicks
- 4 miniature marshmallows
- 4 paper clips
- 1 binder clip
- 1 envelope
- 1 plastic spoon
- 1 bandage
- 3 raisins
- 10-15 miniature cars
- 1 12" length of string
- Bottlecaps/push-pins
- Tape

Quote



Explain the quote listed in your own words, and then describe how it applies to the design challenge.

"Whether you think you can or think you can't, you're right."

- Henry Ford

Car Showcase

Create a pedestal for each of the miniature cars so they are ready for display at least 1" above the ground.



Reflection Questions:

What was one thing important for you to know that helped you with your design?

How did the weight of your miniature car affect your pedestal?



Redesign Challenge:

How would you redesign your car pedestal so that it can rotate your car?



Overall Design Reflection Questions:

- What were some interesting discoveries you made while working on the Design Challenges?
 - About the problems? About yourself?
- What were some of the difficulties of the Design Challenges?
 - What made them difficult?
- What were some learning moments?
 - What made them so?
- How can you use what you have learned in the future?

For more on design and engineering, check out – Robots to the Rescue Digital Exploration on TGR EDU: Explore tgreduexplore.org/curriculum