

# Race Car Design Challenge



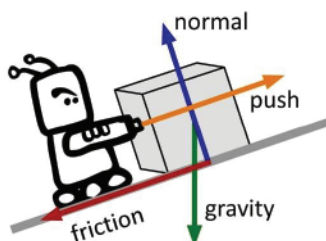
Get creative! Design your race car and race track, then test them out using "fair tests" to learn how design effects speed. How will your design effect the speed of your race car? Ready your imaginary engine; design, build, test, and improve. Get ready to...3, 2, 1 Go! Share with us at gsnnj.

### Supplies:

- Pencils, markers, pens, etc.
- Paper
- Toy car (learn about force and friction)
- Cardboard or posterboard (for race track)
- Table or a stack of books (for the top of your race track)
- Phone or camera (to capture your "photo finishes")
- Bottle caps, beads, or something for wheels
- Toilet or paper towel rolls (or other material for the body of the car)

### Be an engineer!

1. Learn how design can effect speed
2. Design and build your race car
3. Design your race track
4. Conduct a fair test and record results
6. Share @gsnnj



Use your resources wisely, be creative and get to work building your race car and track. Learn about speed, force, friction, gravity, and matter. Who will win the race car design challenge?



## Race Car Design Challenge Examples



### What you need to know:

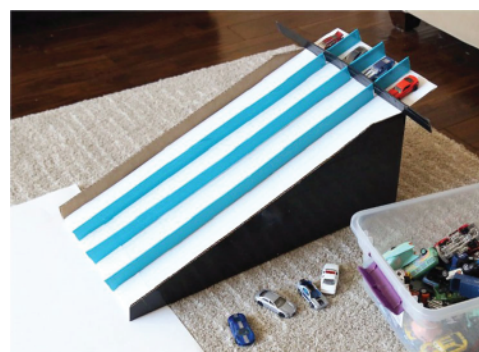
Friction - is a force that slows moving objects.

Force - is a strength or energy that creates movement like push and pull.

Gravity - is a force of attraction that pulls together all matter.

Matter - is anything you can physically touch.

Speed - is the rate at which someone or something is able to move or operate.



<https://www.freekidscrafts.com/cardboard-tube-race-car/>

<https://www.handimania.com/diy/toilet-paper-roll-race-cars.html>