

## MOUSETRAP CAR CONTEST

### Objective:

Build a model car, powered only by a single standard mousetrap, which can travel the greatest distance in the least amount of time.

### Rules:

- Work in teams of two students (no more, no less!). Sign up your team.
- Any materials may be used, but the car must be homemade, and it must be made by you. No toy cars, & no car kits! You may use wheels from a toy car, but the rest of your car must be homemade.
- The ONLY source of energy for the car must be one single standard mousetrap – no rat traps! No rubber bands, batteries, motors, or anything else that contains energy.
- The car must have wheels, and it must move along the ground.
- The car should travel in a straight line - if it curves and hits an obstacle, it will still count, and your distance and time will still be measured.
- You may modify the wooden mousetrap base, and the metal arm (the part that squashes the mouse) in order to attach things to them. You may not modify the spring in any way (including how much it is wound up, and how far it unwinds!).
- You may not modify the release mechanism of the mousetrap. The car must be started using the normal release mechanism of the mousetrap!
- Cars will be impounded at the start of the period on test day – no working on cars during class.

### Scoring:

- Score = 10×Distance (m) – Time (sec)
- You will test your car twice – your score will be the average of the two tests.
- Mousetrap cars will be impounded at the start of the test period. No working on cars during class.