## Mousetrap car construction.\*

Build a vehicle powered solely by the energy of one standard-sized mousetrap that will travel the greatest linear distance.

You will have available all of the needed materials to construct a successful Mousetrap Car.

However, you are more than welcome to use other materials as long as you comply with the basic regulations stated below.

## **PROJECT RULES:**

- 1. The device must be powered by a single "Victor" brand mousetrap.
- 2. The mousetrap can not be physically altered except for the following: four holes can be drilled only to mount the mousetrap to the frame and a mousetrap's spring can be removed only to adjust the length of its lever arm.
- 3. The device cannot have any additional potential or kinetic energy at the start other than what can be stored in the mousetrap's spring itself. (This also means that you cannot push start your vehicle.)
- 4. The spring from the mousetrap cannot be altered or heat-treated.
- 5. The spring cannot be wound more than its normal travel distance or 180 degrees.
- 6. Vehicles must be self-starting. Vehicles may not receive a push in the forward direction or side direction.
- 7. The vehicle must steer itself.
- 8. Distance will be measured from the front of the tape at the starting line to the point of the vehicle that was closest to the start line at the time of release.

<sup>\*</sup> modified from http://cpphysics.homestead.com/mousetrapgrules.html











