



## 4-H Maker Challenge Mousetrap Powered Car Distance Challenge Contest Rules

The 4-H Mousetrap Powered Car Distance Challenge is a contest for youth to design and build a vehicle powered solely by a standard-sized mouse trap to travel as far as possible. The car that travels the farthest will be declared the winner. Awards will be given to the top three cars.

### **Qualification for State Activities Day (May 19<sup>th</sup> at Manchester Community College)**

To qualify for the New Hampshire 4-H Mousetrap Car Distance Challenge at State Activities Day, youth need to compete at a county based 4-H event. The top three cars from each county will qualify for the Mousetrap Powered Car Distance Challenge at State Activities Day. Contact your county 4-H Program Manager to see how you can qualify.

### **Rules**

1. Vehicle must be powered by one Victor brand mouse trap measuring: 1  $\frac{3}{4}$  " x 3  $\frac{7}{8}$  ".
2. The mousetrap cannot be physically altered except for the following:
  - a. holes can be drilled only to mount the mouse trap to a frame
  - b. the mouse trap's snapper arm may be cut and lengthened
3. Vehicles must be self-starting. They may not start with any additional potential and/or kinetic energy other than what can be stored in the mouse trap's spring.
4. The spring from the mouse trap cannot be altered or heat treated.
5. The mouse trap's spring cannot be wound more than its normal travel distance or 180 degrees.
6. The vehicle must steer itself and may not receive a push in any direction in order to avoid a collision.
7. All vehicles will go through a compliance check to be sure that it meets all the rules.
8. Each participant may have up to three trials to race their car. The best measured distance will be scored.
9. The greatest linear distance will be the total distance a vehicle travels measured perpendicular from the front of the starting line to the point of the vehicle that was closest to the start line and will not "angle" to where the vehicle comes to rest.
10. The Judge has the final decision as to the appropriateness of any additional items that might be used in the construction of the vehicle.
11. Vehicles may not be altered during the contest between trials. Repairs may be made as long as they do not include any design changes.