



FunFest 2025 Mousetrap Car Competition Rules Middle and High School



Objective: The objective is to construct a mousetrap car that will travel 10 meters.

Entries and Judging

Participants: 10 cars per school. 1-2 members per team. A team member **MUST** be present for this competition.

Submission: All submissions must be delivered to Sandhills Community College (by school personnel) on Thursday, March 27, 2025, in Little Hall, Room 153. Cars must be marked with school name and student name(s) for identification.

SCC Judge: TBD

Judging Location: Little Hall – Downstair Hallway

Notes: None

Determining the winner: The winner will be determined to be the car with the best of two attempts.

Competition Rules

The Mousetrap Vehicle

A. Introduction

Transportation is a major industry. Technologies are being developed to improve the efficiency of transportation as well as reduce the cost of transporting goods.

B. The Problem

Design a wheeled vehicle which uses a standard mousetrap as its only source of propulsion. The vehicle will have to travel a distance of exactly 10 meters in a straight line.

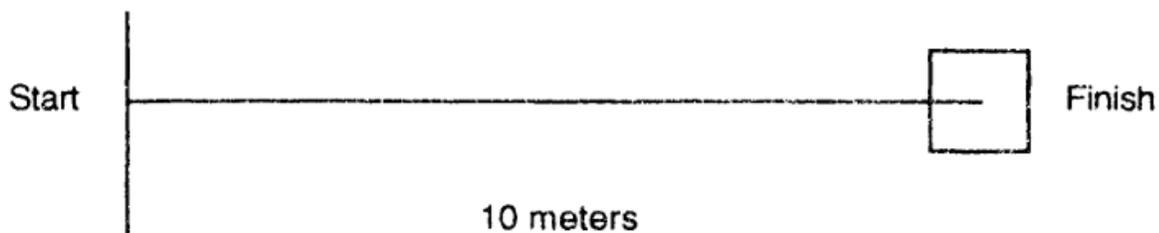
C. Specifications

- Materials include one standard mousetrap and any other materials the designer would like to include.
- All energy must come from the mousetrap spring. This energy can be converted into other forms of energy or used to multiply force.
- It is illegal to use other stored energy forms. For example, using a rubber band that is stretched before the mousetrap is sprung.
- The instructor may make final decisions as to the appropriateness of materials.
- The mousetrap must be sprung with a device other than your hands.
- All vehicles must be self-starting.
- Vehicles which do not meet the preceding criteria will be disqualified.

D. The Competition

Each entry will have two attempts to achieve the 10-meter mark.

The best of the two attempts will be recorded for judging.



To determine a winner, the distance from the center of the finish block to the front center of the car will be measured.

MOUSETRAP CAR GUIDELINES

1. Vehicles must be self-contained, use only one mousetrap of any brand. Use a standard mousetrap to build the car (no rat traps allowed). No modifications of the mouse trap spring are allowed. Arm extensions are allowed.
2. The mousetrap spring must be the only source of stored energy for powering the car. No elastic bands of any kind may be used to help power the car.
3. Rubber bands may be used for traction on the wheels.
4. The car must be set at the start of the race, and the car must be able to start ITSELF after the tripping of the mouse trap. No push or pull from the designer(s) is allowed. Students must design a trip mechanism which meets the race rules.

Race Rules

1. The car will be raced on a smooth flat surface.
2. The car will run twice with the best single performance used for the competition.