# Mousetrap & Rubber Band Dragsters! <- back to Projects

by Mr. Dove (Based on MESA and <u>www.docfizzix.com</u> contests)

## **Objective:**

According to the requirements, construct a dragster that is powered **only** by 1 mousetrap and/or up to 4 rubber bands, and travels 3m on the ground in the least time.

Due Date: \_\_\_\_\_\_. The competition begins that day.

# Team Members:

1 to 2 in a group. Names must be written or engraved on the vehicle.

#### Scoring:

50 points possible + 15 points possible extra credit

The vehicle is built according to the requirements = +30 points

The vehicle has the name of the team member(s) on it = +5 points

For each full meter it moves forward by its own power (up to 3m) = + 5 points

First, second, and third place teams in the tournament earn: +15, +10, +5 extra points

## **Requirements:**

Safety 1st! Objectives & requirements must be met to compete.

- a. Chassis/frame must be built by the team, not a manufactured toy car chassis/frame.
- b. **Only** 1 mousetrap and/or up to 4 rubber bands total may be used, but NOT a rat trap.
- c. f a mousetrap is used, it must be firmly attached to the chassis/frame of the dragster.
- d. The dragster must be self-contained and self-propelled; launchers are not allowed.
- e. Materials that cannot be used are:

rat traps or rat trap springs, manufactured toy car chassis/frame, high pressure or combustible solid, liquid, or gas fuel (rocket engines, CO2, etc.)

- or any other item Mr. Barry decides is inappropriate or dangerous
  - Materials that can be used are: These materials are still subject to the above rules.
    - 1 mouse trap spring (no rat trap or rat trap springs), up to 4 rubber bands total,
    - toy vehicle tires, rims, axles (but not manufactured toy car chassis/frame),
    - coat hanger wire, pens, cd's, jar lids, wood (plywood, balsa, dowels),
  - metal fasteners (nails, screws, bolts, eye-hole screws to hold axles, etc.) tape, string, rope, cardboard, foam board, cans, plastic containers and bottles,
    - glue and contact cement for assembly (use only according to instructions)

# The Competition:

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Initially, the teams volunteer or are assigned to a race. The fastest dragster will have its time recorded. After each dragster has had at least one opportunity to have a winning time, the fastest eight dragsters will be selected for head to head drag races. First, second, and third place teams earn +15, +10, or +5 extra points.

