

# 2008 Physics Olympics

## Mousetrap Cars

### Rules

1. Each team may use only one standard Victor mousetrap as the means of power.
2. The spring can not be altered in any way.
3. The vehicle shall have a minimum of three functioning wheels which must be in contact with the floor at all times.
4. There is no weight or size limit on the vehicle.
5. No rubber bands or tubing may be used to add potential energy.
6. The arm extension must be rigid so as not to add any potential energy. (Check with Mr. Andrews to make sure your arm is acceptable - **you will be disqualified if the arm is flexible**)
7. The 500 gram mass must remain on the vehicle at all times.
8. **No Kits of any kind!**

### Competition

1. The vehicle will be placed on the starting line on the gym floor in a "loaded position", the front wheel will be on the starting line.
2. When told by the judge, you will release your vehicle, **you can not give your vehicle any forward motion.**
3. In the case that it will not start, you can blow lightly at your vehicle to try to get it started, you may only try this twice.
4. If the vehicle hits an object, the judge will rotate it so that it can continue to move.
5. Each vehicle will have two trials to determine the best distance from the start location.

## Scoring

1. The vehicle that travels the furthest distance will be the winner.
2. The distance will be measured from the starting line to the front wheel in a straight line.
3. If the vehicle runs out of room while it is still moving, you will get an additional trial diagonally across the gym.
4. In case of a tie, the lighter vehicle will be the winner.

## Grades

- A Must travel a minimum of 45 feet
- B Must travel a minimum of 35 feet
- C Must travel a minimum of 15 feet
- D Must start to move
- F Does not move at all or is disqualified or not finished