



Mousetrap Car Project

11th Grade Physics

Allen High School

You will work in teams of 2.

You are to construct a vehicle using a mousetrap as the source of propulsion. You are trying to get the car to go as far as it can. It does not matter how quickly the car travels.

Materials will be provided by teacher. Other materials may be used but require teacher approval.

You will be given class time to make the car.

You will need to research mousetrap cars and create a plan for your car.

Your design should show creativity and originality.

The cars will be tested in class on Tuesday, November 25.

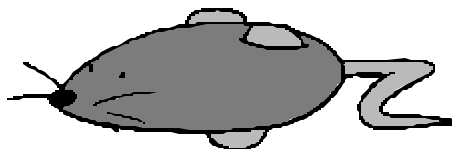
Cars must be completed by the beginning of class on November 25th.

The following are criteria for the Car:

1. The mousetrap is the only source of power. You may not push start the car.
2. All parts of the car must be with the car as it travels. Nothing may fall off the car.
3. The car must steer itself; no outside forces may be used to guide it.
4. Teacher has final decision as to the appropriateness of any additional items that may be used to construct the vehicle.

The following are criteria for testing the Car:

1. Distance will be measured from the front of the tape at the starting line to the point of the vehicle that was at the starting line at time of release.
2. Each group will be given three attempts. The greatest distance achieved in a single attempt will be the official distance the car traveled.





Mousetrap Car Project Scoring Rubric

3 pts.	2 pts.	1 pt.	0 pts.
Car is complete and ready to be tested.	Car is not ready at beginning of class but able to be tested by the end of class	Car is not completed on test date.	No car.
Car is soundly constructed and no parts fall off during the three tests.	Car has loose parts but stays intact during tests.	Car has loose parts that fall off during testing but completes three tests.	Car falls apart during tests and cannot complete the tests.
Students have thorough research and complete plan for mousetrap car.	Students have minimal research and plans for mousetrap car.	Students have either research or plan, but not both prior to testing.	Students have no research or plan for car prior to testing.
Students work together during construction and testing of car.	Some cooperation between students during construction and testing.	Student provides minimal help during construction and testing.	Student does not participate at all during construction and testing.
Design is creative and shows ingenuity. Design and construction is unique.	Design shows some creativity. May copy some examples but includes originality in design.	Design show little creativity or originality.	Design shows no creativity. Example is copied.
Car travels 8m.	Car travels 4m.	Car travels 1m	Car does not start, travels less than 1m.

Bonus Points Available:

1 pt. for every 4 m traveled over the 8 m mark.

Maximum Allowed: 5 Bonus Points.