

Student Name:
 Team Members:
 Core:
 Due Date:

MOUSETRAP CAR STEAM CHALLENGE

I can develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved. -[MS-ETS1-4 Engineering Design](#)

Rubric Categories	Great 10	Good 8-9	Honorable Attempt 6-7	Incomplete 5
Car Design	Car travels more than two meters..	Car travels 1.5 - 2.0 meters	Car travels	Car does not move
Check for Success	No Errors: spelling, grammar, punctuation, caps & paragraph	Very Few Errors: spelling, grammar, punctuation, caps & paragraph	Some Errors: spelling, grammar, punctuation, caps & paragraph	Too Many Errors
Written Work Accuracy	All assigned components are complete and accurate	Almost all of the assigned components are complete and accurate	Some of the required components are complete and accurate	Incomplete
Craftsmanship	All work is done in a proffesional manner	Most work is done in a professional manner	Some aspects of professionalism exist	Improvements needed
Timeliness	All work is complete and checked in at least two weeks early	All work is complete and turned in at least one week early	All work is complete and turned in by the deadline	Work is turned in late or not at all

Grade	
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MOUSETRAP CAR

CHALLENGE: HOW CAN YOU BUILD A CAR POWERED BY ONE MOUSTRAP THAT CAN TRAVEL AT LEAST TWO METERS.

OVERVIEW AND PURPOSE

The challenge is to build a car that is powered by a Mousetrap from recycled materials.

MATERIALS

- One mousetrap
- Other teacher approved materials

INSERT PLANNING SKETCH BELOW - GOOGLE DRAWING/PHOTO - INCLUDE MATERIALS

MOUSTRAP CAR DATA TABLE: INCLUDE LABELS

Trial #	Distance	Time	Speed
1			
2			
3			
4			

PHOTO OF MOUSETRAP CAR



REGARDING ITERATION

Describe all of the changes you made to your design in an attempt to maximize distance traveled. Explain why you made each change.	
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RESEARCH/CALCULATIONS

What is a simple machine?	
What are the six simple machines?	
Which of the simple machines are used in your mousetrap car?	
What is a compound machine?	
Define power.	
Define horsepower.	
How do you find horsepower?	
What is the horsepower of your mousetrap car? Explain the steps that you took to find the horsepower (show your work in words).	