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| **Planning**  **And**  **Design** | Excellent  \*sketch is complete and matches the final car  \*sketch is missing no labels or measurements | Good  \*sketch is mostly complete and matches final car  \*sketch is missing no more than two labels or measurements | Fair  \*sketch is mostly completed and matches final car  \*sketch is missing more than two labels and measurements | Poor  \*sketch is incomplete  \*sketch does not completely match final car presented  \*sketch is missing more than five labels and measurements |

<http://www.wikihow.com/Adapt-a-Mousetrap-Car-for-Distance>

<http://www.pbs.org/saf/1208/teaching/teaching.htm>

<http://ideas-inspire.com/mousetrap-cars/>

<http://scioly.org/wiki/index.php/Mousetrap_Vehicle>

The remaining points will be awarded for completion of a written analysis after the in class performance of your mousetrap car. The analysis will include calculations about the motion of the car made from measurements taken during the performance. **THERE WILL BE A 30 POINT DEDUCTION IF A RATTRAP IS USED!!** There will be also be 3 categories for extra credit in each class period. To be eligible for extra credit there must be no errors in the calculations used to obtain the values.

* Greatest acceleration during the first 2.0 seconds.
* Largest average speed for the whole trip
* Greatest straight line displacement. (distance away from the center line will be subtracted from the maximum displacement measured along the center line.