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# "Uniform Accelerated Motion with a Car and Ramp" Scoring Sheet

#### **Final Draft Quality:**

- Full lab report is typed and computer processed. (Nothing written in)
- Heading (name, partner(s), period, teacher, and date) & Lab Title (centered & bold/underlined)
- Correct order (Scoring sheet, raw data tables, processed data tables, graphs, analysis questions, and conclusion)

### Table s and Graphs - Table 1: Raw Data

- Do I have an appropriate title and number (sequentially)? ("Raw Data" is NOT an appropriate title)
- Do I have each column properly labeled with headings that are distinct (i.e. colored background)
- Do I have the units and uncertainties in the column headings (and not in the table itself)?
- Have I included 3-5 trials for all manipulations which are nested underneath the headings?
- Did I make sure I have no calculated values are included in my table (no averages!)?
- Do I have the appropriate level of precision for all my data?
- Is all required data is present and easy to interpret?
- Does my table have grid lines that are clear?

### Table 2: Averages and Velocities

- Do I have an appropriate title and number (sequentially)? ("Calculated Values" is NOT an appropriate title)
- Do I have each column properly labeled with heading including units?
- All required calculated values are present in the table
- □ My table has grid lines that are clear
- Have I included a sample calculation of average time through photogate A?
- Have I included a sample calculation of average time through photogate B?
- □ Have I included a sample calculation of average total time from photogate A to B?
- □ Have I included a sample calculation of initial velocity?
- □ Have I included a sample calculation of final velocity?

Graph 1: Position – Time (Make sure that your graphs' axes are scaled appropriately so there isn't empty space)

- Do I have an appropriate title and number on my graph?
- □ Do I have appropriate labels, including units, on each of my axis?
- $\Box$  Are my variables on the correct axis?
- □ Have I included a best fit line/curve?
- Did I include the equation for my line with the appropriate units? (i.e. replace x with t)

### Graph 2: Velocity - Time

- Do I have an appropriate title and number on my graph?
- Do I have appropriate labels, including units, on each of my axis?
- □ Are my variables on the correct axis?
- □ Have I included a best fit line/curve?
- Did I include the equation for my line with the appropriate units? (i.e. replace x with t)
- Did I include the slope for the graph on the graph itself including proper units?

### Graph 3: Position - (Time)<sup>2</sup>

- Do I have an appropriate title and number on my graph?
- Do I have appropriate labels, including units, on each of my axis?
- □ Are my variables on the correct axis?
- □ Have I included a best fit line/curve?
- Did I include the slope for the graph on the graph itself with proper units?

### Graph 4: (Velocity)<sup>2</sup> - Position

- Do I have an appropriate title and number on my graph?
- Do I have appropriate labels, including units, on each of my axis?
- □ Are my variables on the correct axis?
- □ Have I included a best fit line/curve?
- $\hfill\square$  Did I include the slope for the graph on the graph itself with proper units?

# **Analysis and Conclusion**

- □ Have I included my answer to Question #3?
- **/3** Have I included my answer to Question #6?
  - □ Have I included my answer to Question #7? (Show calculation)
  - Have I included a 1-2 sentence conclusion with my value for acceleration and the percent error?
  - Have I included 2 sources for error for this lab? Have I included an improvement to avoid each error in the future?

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