

Name: _____

Period: _____

“Free Fall Lab” Scoring Sheet

+ / 25

Final Draft Quality: (+1 pt. each)

- + /3
- Is my full lab report is typed and computer processed? (*Nothing written in*)
 - Did I include a Heading (*name, partner(s), period, teacher, and date*) & a Lab Title? (*centered & bold/underlined*)
 - Is my lab in the correct order? (*raw data tables, processed data tables, sample calculations, graphs, and conclusion*)

Data Analysis Presentation: (+2 pt. each)

- + /4
- Have I completed my sample calculations in a readable manner by using an equation editor?
 - Have I completed both of my graphs in LoggerPro?

Tables and Graphs (+½ pt. each) – Table 1: Raw Data

- + /15
- Do I list the diameter of the marble?
 - 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 and trials?
 - Do I have the appropriate units in the column headings (and not in the table itself)? (*position in cm*)
 - Have I included 3-5 trials for all manipulations nested underneath appropriate column heading?
 - Have I made sure there are no calculated values included in my table? (*no averages or conversions!*)
 - Do I have the correct level of precision for each of my measurements?
 - Do I have the correct uncertainties for each type of measurement?
 - Is all required data is present and easy to interpret?
 - Does my table have grid lines that are clear?
 - Are column headings distinct from the content? (*i.e. colored background for the headings and not for the rest*)

Table 2: Calculated Data

- 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? (*velocity is in meters/second*)
- Are all required calculated values are present in the table
- My table has grid lines that are clear
- Have I included a CORRECT sample calculation and SIG FIGS of average time through photogate B?
- Have I included a CORRECT sample calculation and SIG FIGS of average total time from Gate A to B?
- Have I included a CORRECT sample calculation and SIG FIGS of instantaneous velocity?

Graph 1: Velocity – Time for steel marble

- Do I have an appropriate title and number on my graph?
- Do I have appropriate axis labels on each of my axes?
- Do I have the appropriate units included on each of my axes?
- 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 variables (*i.e. – replace x and y*)??

Graph 2: Velocity – Time for plastic marble

- Do I have an appropriate title and number on my graph?
- Do I have appropriate axis labels, with the correct units, on each of my axes?
- 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 variables (*i.e. – replace x and y*)?
- Have I included the slope (with units) of my best fit line on the graph itself?

Conclusion: (+1 pt. each)

- + /3
- Have I included my acceleration for the marble (#1)?
 - Have I included my correct calculation of percent error for the marble (#2)?
 - Have I included my answer to Question #3?