

Name \_\_\_\_\_ Period \_\_\_\_\_

**Grading Rubric for:**

**La Report: Determining the Acceleration of a Golf Ball While in Nonuniform Motion**

<b>Category:</b>	<b>5</b>	<b>3</b>	<b>1</b>
Appearance/Organization	Lab report is neatly typed and uses headings to visually organize the material. Data tables have borders. It also includes a cover page and blank rubric is attached. Part 1 of the lab report is done first, then Part 2 of the lab report.	Lab report is neat and organized but does not include a cover page or rubric.	Lab report is neat but does not include headings or data tables do not have borders. -OR- Parts are not in order as suggested in the "5" category.
Spelling/punctuation & grammar	One or fewer errors in spelling, punctuation and grammar in the report.	Two or three errors in spelling, punctuation and grammar in the report.	More than 3 errors in spelling, punctuation and grammar in the report.
Purpose	Purpose is accurate and is clearly stated in your own words and is 1-2 sentences in length. (There is one purpose for both parts—not two purposes. See title of report to give you a clue about the purpose.)	Purpose is too lengthy.	Your purpose does not make sense.
Drawings/Diagrams	Clear, accurate diagrams are included and make the experiment easier to understand. Diagrams are labeled neatly and accurately. The procedure is clearly understood by someone who has never done this lab before.	Diagrams are neat but do not include enough information to perform the lab. -OR- Missing sketches for one of the parts of the lab.	Diagrams are very sloppy and/or very limited. You are missing necessary diagrams or labels.
Data	All tables are included (3 data tables for Part 1 and 4 data tables for Part 2). Each table has a title and each column is labeled correctly with units.	You are missing one or more data tables but the ones that are included are labeled correctly and titled.	One or more of your data tables are not titled or are not properly labeled.
Graphs	Both of your graphs are included and they each have: a title, x-axis label with units, y-axis label with units, and best fit line. Your graphs are in the negative quadrant. You included the correct trendline for each part. Excel was used to generate these graphs.	One or more of your graphs have a title, are completely labeled with units, but do not include the correct trendline.	Your graphs are incomplete due to missing a title or labels or units or best fit line. -OR- your graphs are titled and labeled but you connected the dots rather than including a trendline.
Part 1 Slope calculations	Your slopes are correctly calculated (as indicated by increasing magnitude— indicate the time you calculated each slope for). Your slopes have units.	Your slopes do not increase in magnitude as time goes on.	Your slopes are missing units.
Accelerations	For both parts, you used your equations from Excel to correctly determine your accelerations. Your accelerations include units and account for sig figs.	One or both of your accelerations do not account for sig figs. -OR- You incorrectly determined one of your accelerations	You incorrectly determined both of your accelerations -OR- Your accelerations do not include units

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	(1 sig fig for Part 1 and 2 sig figs for Part 2) Your accelerations include direction.	-OR- Your accelerations include the wrong units -OR- Your accelerations due not include direction.	
Equations	Your equations are displayed on the graph. They are modified to be in terms of d and t for Part 1 & v and t for Part 2.	One of your equations are still in the form of y and x.	Both of your equations are still in the form of y and x. -OR- you are missing one of your equations.
Predictions  <i>Use your equations from your graphs to make these predictions:</i> <i>Part 1: If the golf ball rolled down the ramp for 2.4 s, what distance did it cover?</i> <i>Part 2: What would the velocity of the golf ball be when the timer reads 1.5 s?</i>	You correctly used your equations to determine these predictions and your work was clearly shown. Units are included when plugging numbers into equation. Units are included in the answers.	You successfully determined only one of these predictions. -OR- You did not successfully include units when plugging numbers into your equations. -OR- You did not include units in your answers (or the units are incorrect).	You incorrectly determined both of these predictions.
Conclusion	Your conclusion is 3-5 sentences in length and relates the lab to your purpose. It sums up how you accomplished your purpose. (There is only one conclusion for both parts—not two conclusions)	Your conclusion does not sum up how you accomplished your purpose.	Your conclusion is too short and does not sum up how you accomplished your purpose.
Scientific Concepts	Report illustrates an accurate and thorough understanding of scientific concepts underlying the lab.	Report illustrates an accurate understanding of most scientific concepts underlying the lab.	Report illustrates inaccurate understanding of scientific concepts underlying the lab.
Participation	Used time well in lab and focused attention on the experiment.	Used time pretty well. Stayed focused on the experiment most of the time.	Did the lab but did not appear very interested. Focus was lost on several occasions.

Total Possible Points: 60

Points you earned: \_\_\_\_\_

Your Percentage: \_\_\_\_\_