

Penny Density Lab Peer Grading Rubric

Whose lab report are you grading? _____

Grader's Name _____ Date _____ Period _____

***Take off at least one point for each box that is not checked in the table below.

<u>Requirements</u>	<u>Earned Points</u>	<u>Possible Points</u>	<u>Comments</u>
Heading <ul style="list-style-type: none"> <input type="checkbox"/> Experiment title <input type="checkbox"/> Lab partner(s) <input type="checkbox"/> Date of experiment 		3	
Pre-lab <ul style="list-style-type: none"> <input type="checkbox"/> Purpose Protocol <input type="checkbox"/> Numbered steps <input type="checkbox"/> Imperative <input type="checkbox"/> Detailed enough to follow 		4	
Data <ul style="list-style-type: none"> <input type="checkbox"/> "Density of Metals" Table (-1/2 if no title) <input type="checkbox"/> Table includes: Mass, Volume, Density (experimental and actual) <input type="checkbox"/> Penny data Table (-1/2 if no title) <input type="checkbox"/> Table includes Mass, Volume and Density for pre-1982 and post 1983 pennies <input type="checkbox"/> Appropriate units in the header <input type="checkbox"/> Legible and organized 		6	
Data Processing <ul style="list-style-type: none"> <input type="checkbox"/> All calculations clearly labeled Percent Error for each metal <ul style="list-style-type: none"> <input type="checkbox"/> %error = $(\text{Theo}-\text{Expt})/\text{Theo} \times 100$ (1 point) Substitution Boxed Answer with % units <ul style="list-style-type: none"> o Aluminum (2 points) o Zinc (2 points) o Copper (2 points) o Lead (2 points) Pre-1982 Percent Error <ul style="list-style-type: none"> <input type="checkbox"/> Substitution <input type="checkbox"/> Boxed answer with % Post-1983 Percent Error <ul style="list-style-type: none"> <input type="checkbox"/> Substitution <input type="checkbox"/> Boxed answer with % 		24	

<p>Slope formula</p> <ul style="list-style-type: none"> <input type="checkbox"/> $(y_2 - y_1) / (x_2 - x_1)$ <input type="checkbox"/> Substitution <input type="checkbox"/> Boxed answer <p>Graph</p> <ul style="list-style-type: none"> <input type="checkbox"/> Title - "The Effect of Volume on Mass" <input type="checkbox"/> 2 Best fit lines drawn thru origin (2 points) <input type="checkbox"/> 4 data points for each line <input type="checkbox"/> Legend <input type="checkbox"/> Labeled Axes <input type="checkbox"/> Units <input type="checkbox"/> Scale 			
<p>Analysis/ Conclusion and Evaluation</p> <ul style="list-style-type: none"> <input type="checkbox"/> Complete Sentences <input type="checkbox"/> Correct spelling and grammar <p>Paragraph 1: (4 points)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Appropriate topic sentence <input type="checkbox"/> Makes claim on what metal the post-1983 pennies are made out of (the core) <input type="checkbox"/> Provides evidence that supports claim <input type="checkbox"/> Explains the slope of the graph and how that demonstrates precision <p>Paragraph 2: (4 points)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Discuss the % error for the different metal samples. <input type="checkbox"/> Discuss the % error for penny densities <input type="checkbox"/> Discuss the degree of accuracy <input type="checkbox"/> How can the results be improved? 		10	
<p>Presentation</p> <ul style="list-style-type: none"> <input type="checkbox"/> Well-organized, sections clearly labeled <input type="checkbox"/> Neat, legible writing <input type="checkbox"/> Table of contents includes information <input type="checkbox"/> Page numbers included <input type="checkbox"/> Lab is written in ink <input type="checkbox"/> Errors properly crossed out, no white out <input type="checkbox"/> Writes on one side of the page only 		3	

Total points earned: _____ / 50

Write two things the student did well in this lab report:

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Write two things that the student could do to improve the lab report:

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