

The Volume of that is ...

Physics - Honors

The objectives of this activity will be to understand the difference between precise measurements, accurate measurements, parallax, significant figures, and dimensional analysis.

For this activity you will find the volume of this classroom with a unit of measurement that you invent. You will use dimensional analysis to convert your invented unit to the correct equivalent unit in the metric system.

You will turn in your results in a typed report that will be due no later than 10 days from the beginning of the activity. Your typed report will include the differences and/or similarities between precise and accurate measurements and how parallax was or was not a factor in your measurements. Your report will include your measurements and calculations with correct significant figures. You will also show your calculations for dimensional analysis from your invented units to the metric system.

Measurement Project - Honors Physics - Grading Rubric

Name: _____ Due Date: _____

I. Introductory Paragraph (11 points)				
A. Cover page that includes title, names, course, and teacher	1	0		
B. Topic Sentence that clearly indicates objective of report	5	3	0	
C. Brief description of your procedures	5	3	0	
II. Paragraph that details the defines measurement terms (25 Points)				
A. Precise measurements described	5	3	0	
B. Accurate measurements described	5	3	0	
C. Parallax defined	5	3	0	
D. Significant figures defined	5	3	0	
E. Dimensional analysis defined	5	3	0	
III. Paragraph that details your unit (25 points)				
A. Clear definition and origin of your unit of measurement	5	3	0	
B. Details of how you measured the classroom	5	3	0	
C. Discuss how you confirmed that your measurements are precise	5	3	0	
D. Discuss how you confirmed that your measurements are accurate	5	3	0	
E. Discuss how parallax was/was not an issue	5	3	0	
IV. Paragraph that describes the math (30 Points)				
A. Your mathematic results of your unit (show your work)	10	7	4	0
B. Dimensional analysis results (show your work)	10	7	4	0
C. Correct significant figures	10	7	4	0
V. Conclusion (10 points)				
A. Restatement of purpose and project description	5	3	0	
B. Self analysis for improvement	5	3	0	
VI. Over all format and neatness (24 points)				
A. Written in 3 rd person / Grammar / Spelling / typographical errors	10	7	4	0
B. Overall neatness and organization (sections labeled, properly divided)	10	5	0	
C. Form (left justified), margins (1"), page numbers	4	2	0	
Total Possible points				_____ (125 pts)

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