

**Boyle's Law Lab Self-Evaluation:** For many of our labs, we are going to need to save precious time by not having to write long formal lab reports. But, that does not mean we should not have high (i.e. IB) standards for our raw data, processed data, graphs, conclusion, and error analysis.

	NO	NEEDS WORK	YES
Is raw data presented in its own table?			
Is raw data numbered and titled? (title should mention variables or measurements included in table)			
Do column heading show both units and measurement uncertainties?			
Are decimal places consistent between measurements and with uncertainties?			
Is processed data clearly separated from raw data with its own number and title?			
Are their calculated uncertainties for the processed data table?			
Is there a graph of PRESSURE vs. VOLUME that shows a neat curve?			
Is the graph labeled as a "FIGURE" with a number and descriptive title?			
Is any text on the graph LARGE enough to be read clearly by your teacher?			
Are the axes labeled correctly with units?			
Are there reasonable error bars for BOTH the x and y variables?			
Is there a LINEARIZED GRAPH with a number and title?			
Again, is the text on the graph large enough to legible?			
Are the axes labeled correctly?			
Are error bars visible?			
Is the slope of the straight line meaningful / useful in terms of answering the question??			
Is there a short explanation under the linearized graph that explains how linearization was carried out and what the slope means?			

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	NO	NEEDS WORK	YES
Is there a SHORT and CONCISE conclusion that answers the purpose or RQ (what is 'n') and refers to the graph(s) as evidence?			
Does the stated value for 'n' have an uncertainty with it based on the min and max lines, and is this EXPLAINED?			
Is there a comment on the quality of the data (error bar size, best fit lines correlation etc..)?			
Is there any mention of real or potential errors (both random and systematic) that could or did impact the data?			
Is there any mention of sloppy measuring or confusion with reading instruments as a source of error? (THERE SHOULD NOT BE - VERY UNPROFESSIONAL)			
Are there suggestions for improvements that address these errors?			
Are there any final question you were supposed to answer? Did you answer them?			

Comments: What will you do differently next time? For full credit, please submit this document, saved as a PDF, with screenshots of your data tables and graphs attached. Thank you.