

Score	A / 4.0	B / 3.0	C / 2.0	D / 1.0 to F / 0.0
<b>Assessment</b>	<i>Masterful, fully engaged, able to generate new ideas</i>	<i>Proficient, skilled, competent, meeting expectations; engaged</i>	<i>Possessing of some skill, but still practicing; not fully engaged</i>	<i>Not yet proficient or unable to assess; not engaged</i>
<i>Visual presentation</i>	Written work <b>generates a new idea</b> that goes beyond the expectations of the assignment; poster is <b>suitable for use as a model</b> for future students; poster could be <b>easily read and understood</b> by a person with no access to information or instructions with regards to the project	Writing <b>meets grade-level standards</b> ; all <b>core components</b> of the report are easy for a fellow student to read and understand; and relate to one another in a logical way; layout is <b>clean and easy to follow</b> ; tables, charts, and graphs are <b>informative</b> and well-designed	Writing may not meet grade-level standards; work may contain <b>substantial errors in communication</b> , including in overall layout, flow, units, significant figures, equations, tables, charts and/or graphs	Incomplete or poorly written material; student requires <b>review of fundamental concepts</b> and methods; missing core components; or reader is unable to assess work
<i>Oral communication</i>		Student clearly <b>understands</b> and <b>can discuss</b> in detail the laboratory work being presented; student demonstrates <b>confidence</b> in his or her work & conclusions; student can <b>respond</b> to probing <b>questions</b> regarding this work		
<i>Scientific methodology</i>	Procedure <b>transcends or exceed expectations</b> in some insightful and unique way; student demonstrates <b>fluency</b> in the scientific method; procedure demonstrates <b>deep understanding</b> of the limitations of the equipment or data set; in addressing any apparent difference between the predictions of theory and the experimental results, the student's analysis <b>generates new hypotheses</b> and suggests <b>new experiments</b> ; the work closes some doors while opening others	The work is <b>grounded in the scientific method</b> ; experiment is designed to include <b>adequate controls</b> ; enough <b>trials</b> are performed to reduce error; reader has <b>direct access to the data</b> in question; the results of the experiment <b>clearly support</b> (or <b>clearly fail to support</b> ) the hypothesis; errors are <b>addressed</b> and accounted for; theory and experiment are compared in a <b>logical</b> way; suggestions for <b>improvement</b> of the experiment are offered; analysis of error is taken seriously	Work is <b>lacking in one or more aspects</b> of the scientific method; procedure <b>lacks adequate controls</b> or <b>sufficient trials</b> to reduce error; reader cannot <b>fully and independently evaluate</b> the procedure; <b>some care</b> was taken to account for and reduce errors; however, review and analysis of errors during the experiment should have led the student to experimental <b>redesign</b> or <b>repetition</b> ; analysis of error is treated as an afterthought	Work does not demonstrate <b>competency</b> in the scientific method; or the results are not reliable; analysis of experimental results and errors is <b>incomplete</b> or <b>missing</b> ; or the experimental results are not <b>clearly related</b> to the hypothesis; or reader is unable to assess work