

1 Below Standard	2 Approaching Standard	3 Meets Standard	4 Exceeds Standard
Research			
<p>Research fails to address major elements of the subject</p> <p>Citations misplaced or absent</p> <p>References section absent*</p> <p>Note: The assignment will receive a score of "0" if references are missing</p>	<p>Research addresses most points, or is not focused on the study/experiment</p> <p>Narrative does not flow smoothly from general to specific, relevant information.</p> <p>In-text citations missing or incorrect</p> <p>Sources questionable</p> <p>References incomplete, lacking, or improperly formatted (not APA)</p>	<p>Research addresses all points and is relevant to study/experiment being conducted</p> <p>Narrative flows smoothly from general to specific information</p> <p>In-line citations complete</p> <p>Sources reputable & Academic (CRAAP)</p> <p>References section complete</p>	<p>Research shows evidence of advancing understanding of subject</p> <p>Sources cited are thoroughly summarized into narrative</p> <p>Thorough background research is evident</p>
Experimental Design			
<p>Control group absent or not identified</p> <p>Ind./Dep. variables absent</p> <p>Controlled variables absent</p> <p>Hypothesis absent or in error</p>	<p>Experimental and/or control group(s) absent or misidentified</p> <p>Ind./Dep. variables incorrect/missing</p> <p>Controlled variables insufficiently addressed</p> <p>Hypothesis is not relevant, explicit or not specific to the data being collected</p> <p>Experimental design does not address research question posed</p>	<p>Experimental and/or control group(s) clearly identified</p> <p>Ind./Dep. variables identified naturally in the narrative</p> <p>Controlled variables identified and addressed</p> <p>Hypothesis is explicit and predicted results are described</p> <p>Experimental design addresses question posed</p>	<p>Hypothesis is justified using background data or prior knowledge</p> <p>Reasoning behind controls is addressed</p> <p>Evidence of scientifically sound experimental design is clear</p>
Materials and Methods			
<p>List of materials is incomplete</p> <p>Procedure is not reproducible</p>	<p>Units or exact measurements are missing</p> <p>Procedure excludes steps or details</p> <p>Procedure reads as a recipe or directive</p> <p>Steps are given incompletely</p>	<p>List of materials is complete, and clear</p> <p>All relevant units, details and measurements included</p> <p>Procedure is sequential and replicable</p> <p>Procedure complete and in complete sentences</p>	<p>Methods section is written as a past-tense narrative in complete sentences</p> <p>Steps are sequential, but unnumbered or quantified</p> <p>Sentences do not begin with numbers</p>
Results and Data			
<p>Qualitative data absent</p> <p>Units are absent</p> <p>Evidence of careful data collection absent</p> <p>Graphs and tables not referenced in narrative</p>	<p>Qualitative data lacking and/or unorganized</p> <p>Data present only in table or graph</p> <p>Units are incorrect or missing</p> <p>Evidence of careful data collection and analysis lacking</p>	<p>Qualitative data are thorough and organized</p> <p>Statistical comparison of data (i.e. comparison to control) included</p> <p>Units are present and correct; values reasonable</p> <p>Experimental results are thoroughly described</p> <p>Figures/tables cited in the narrative</p>	<p>Thorough statistical data are present (ex. increase over control, ranges of data) are included</p> <p>Evidence of careful and thorough data description is clear</p>

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Graphs/Tables			
Graphs/tables missing Figure captions absent Figures not scientifically formatted	Graph types or relationships between variables are incorrect Figure captions lacking Graphs/table labels absent or incomplete Formatting errors present	Graphs and tables accurately show relationships Figure captions thoroughly describe figures All figures properly labelled with units Formatting errors absent	Graphs do not include legends, data sets are described in figure caption Evidence of professional data presentation is clear
Conclusions			
Hypothesis not explicitly addressed Conclusive statement of results absent Sources of error not addressed Suggestions for improvement are absent Validity not addressed	Hypothesis is evaluated, but in unscientific terms (i.e. <i>correct</i> or <i>incorrect</i>) Conclusive statement of results is missing or not related to hypothesis Sources of error are general/unspecific Suggestions for improvement are lacking Validity of experiment is addressed, but not supported	Hypothesis is overtly supported or refuted Conclusive statement references hypothesis Sources of error are specifically connected to data points/procedure (i.e. not just human error) Suggestions for improvement are specific and relevant (not just more trials) Validity of experiment is properly addressed	Conclusions explicitly follow directly from qualitative and quantitative data Results are compared with other published findings/studies Specific data points are addressed as pertinent or outliers Evidence of connection to coursework and subject is clear
Style and Writing			
Grammar and spelling errors common Tone informal Personal pronouns common Contractions/abbreviations Improper use of vocabulary Tense inconsistent	Grammar and spelling errors present Report includes incomplete sentences Tone is mostly formal; informal terminology used Personal pronouns rare Vocabulary is mostly used correctly Statements are unclear and/or difficult to follow Subject-verb agreements incorrect	Report is free from grammar and spelling errors Tone is formal and academic Personal pronouns absent Vocabulary is used correctly Statements are clear and understandable All sections flow and are easily interpretable by the reader	Vocabulary terms are used properly with evidence of meaning and connection to coursework Final product is quality, polished work Evidence of proficiency in technical writing is clear