

## Science Lab Report Rubric

### SCIENCE PROCESS

	Exceeding the Standard	Meeting the Standard	Approaching the Standard	Not Meeting the Standard
Purpose/ Hypothesis (if applicable)	<ul style="list-style-type: none"> <li>Focus for the investigation is clearly established and testable.</li> <li>Hypothesis is reasonable and includes a detailed explanation using relevant background information.</li> </ul>	<ul style="list-style-type: none"> <li>Focus for the investigation is clearly established and testable.</li> <li>Hypothesis is reasonable and includes a simple explanation using relevant background information.</li> </ul>	<ul style="list-style-type: none"> <li>Focus for the investigation is established and testable.</li> <li>Hypothesis is incomplete (doesn't address entire purpose) or does not include an explanation using relevant background information.</li> </ul>	<ul style="list-style-type: none"> <li>Focus for the investigation is not clear and/or not testable.</li> <li>Hypothesis is irrelevant.</li> </ul>
Materials	<ul style="list-style-type: none"> <li>Materials list is complete.</li> </ul>	<ul style="list-style-type: none"> <li>Materials list is missing 1 or 2 minor items.</li> </ul>	<ul style="list-style-type: none"> <li>Materials list is missing 1 or 2 major items or several minor items.</li> </ul>	<ul style="list-style-type: none"> <li>Materials list is missing several major and minor items.</li> </ul>
Procedure	<ul style="list-style-type: none"> <li>The procedure is a fair test designed to answer the question</li> <li>Procedure states, in a clear and logical order, the steps taken to complete the lab. Steps include enough exact detail to make the lab repeatable.</li> <li>Includes detailed, labeled diagrams where appropriate (to appeal to different styles of processing information).</li> <li>Detailed safety tips and guidelines are included in the steps, to anticipate problems or mistakes.</li> <li>All variables are identified and controlled for.</li> </ul>	<ul style="list-style-type: none"> <li>The procedure is a fair test designed to answer the question.</li> <li>Procedure states, in a clear and logical order, the steps taken to complete the lab.</li> <li>Includes simple diagrams where appropriate (to appeal to different styles of processing information).</li> <li>Safety tips and guidelines are included in the steps, to anticipate problems or mistakes.</li> <li>Major variables are identified and controlled for.</li> </ul>	<ul style="list-style-type: none"> <li>Procedure shows some connection to the question.</li> <li>Procedure is unorganized, lacking detail, or contains irrelevant information.</li> <li>Includes incomplete diagrams where appropriate (to appeal to different styles of processing information).</li> <li>A few safety tips and guidelines are included in the steps, to anticipate problems or mistakes.</li> <li>Several major variables are overlooked.</li> </ul>	<ul style="list-style-type: none"> <li>Procedure shows little to no relevant connection to the question.</li> <li>Procedure is incomplete.</li> <li>No evidence of controlling variables.</li> </ul>
Data and/or Observations	<ul style="list-style-type: none"> <li>Data is accurate and units are labeled.</li> <li>Data is represented in an organized table, graph, illustration etc. (see graphing rubric)</li> <li>Observations are detailed and complete.</li> <li>Calculations, when appropriate, are shown.</li> <li>Student goes above and beyond by summarizing results and identifying trends.</li> </ul>	<ul style="list-style-type: none"> <li>Data is accurate and units are labeled.</li> <li>Data is represented in an organized table, graph, illustration etc. (see graphing rubric)</li> <li>Observations are complete.</li> <li>Calculations, when appropriate, are shown.</li> </ul>	<ul style="list-style-type: none"> <li>Some data is incorrect or missing unit labels.</li> <li>Data is represented in a table, graph, illustration etc. (see graphing rubric)</li> <li>Observations are basic.</li> </ul>	<ul style="list-style-type: none"> <li>Data and observations are missing or incomplete.</li> <li>Data representation is unorganized (see graphing rubric)</li> </ul>

## SCIENCE CONCEPTS

	Exceeding the Standard	Meeting the Standard	Approaching the Standard	Not Meeting the Standard
Conclusion	<ul style="list-style-type: none"> <li>All appropriate scientific vocabulary is used accurately.</li> <li>Direct connections between the experiment and class discussions are made.</li> <li>Connects the question and hypothesis</li> <li>States whether or not the hypothesis (or question, if there was no hypothesis) was supported by specific data.</li> <li>Discusses/ identifies relevant sources of error and how they could affect the outcome of the experiment.</li> <li>Applies information to the real world.</li> <li>Asks additional questions for further investigation.</li> <li>All claims or hypothesis are clearly stated and supported by specific evidence from data/ observations</li> </ul>	<ul style="list-style-type: none"> <li>Most scientific vocabulary is used accurately.</li> <li>Direct connections between the experiment and class discussions are made.</li> <li>Connects the question and hypothesis</li> <li>States whether or not the hypothesis (or question, if there was no hypothesis) was supported by the data with specific evidence.</li> <li>Discusses/ identifies relevant sources of error.</li> <li>Claims are stated and supported by general evidence from data/observations.</li> </ul>	<ul style="list-style-type: none"> <li>Some scientific vocabulary used but not always accurate.</li> <li>Vague connections between the experiment and class discussions are made.</li> <li>Connects the question and hypothesis</li> <li>States whether or not the hypothesis (or question, if there was no hypothesis) was supported by the data.</li> <li>No sources of error discussed/ sources of error are not relevant.</li> <li>Some claims are stated.</li> </ul>	<ul style="list-style-type: none"> <li>Science vocabulary is not used or not accurate.</li> <li><b>Missing one or more of the following:</b> <ul style="list-style-type: none"> <li>Direct connections between the experiment and class discussions.</li> <li>Connects the question and hypothesis</li> <li>States whether or not the hypothesis (or question, if there was no hypothesis) was supported by the data.</li> <li>Claims are missing or incomplete</li> </ul> </li> </ul>

## WRITTEN COMMUNICATION

	Exceeding the Standard	Meeting the Standard	Approaching the Standard	Not Meeting the Standard
Purpose	<ul style="list-style-type: none"> <li>Focus (hypothesis/ purpose) is clearly stated and consistently referred to throughout the piece.</li> <li>Context clearly established.</li> </ul>	<ul style="list-style-type: none"> <li>Focus (hypothesis/ purpose) is clearly stated and referred to throughout the piece.</li> <li>Context clearly established.</li> </ul>	<ul style="list-style-type: none"> <li>Focus (hypothesis/ purpose) is unclear and/ or is not referred to throughout the piece.</li> <li>Sufficient context provided.</li> </ul>	<ul style="list-style-type: none"> <li>Focus (hypothesis/ purpose) is unclear and is not referred to throughout the piece.</li> <li>Little context provided.</li> </ul>
Organization	<ul style="list-style-type: none"> <li>Uses a variety of transitions effectively and is written in a logical sequence.</li> </ul>	<ul style="list-style-type: none"> <li>Uses transitions effectively and is written in a logical sequence.</li> </ul>	<ul style="list-style-type: none"> <li>Uses few transitions and is written in a logical sequence.</li> </ul>	<ul style="list-style-type: none"> <li>Use of transitions is ineffective or work is not written in a logical sequence.</li> </ul>
Voice	<ul style="list-style-type: none"> <li>Consistently uses a strong, formal voice that is reflective of a scientist throughout the lab report.</li> <li>Is appropriate and engaging to the audience.</li> <li>Student uses appropriate scientific vocabulary throughout the lab report.</li> </ul>	<ul style="list-style-type: none"> <li>Uses a formal voice that is reflective of a scientist throughout the lab report.</li> <li>Is appropriate and engaging to the audience.</li> <li>Uses appropriate scientific vocabulary throughout the lab report.</li> </ul>	<ul style="list-style-type: none"> <li>Voice is not consistently reflective of a scientist.</li> <li>Does not engage audience.</li> <li>Uses limited scientific vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>Fails to use a voice that is reflective of a scientist.</li> <li>Inappropriate for audience.</li> <li>Fails to use scientific vocabulary.</li> </ul>
Conventions	<ul style="list-style-type: none"> <li>Demonstrates mastery of grammar usage, mechanics, and spelling.</li> <li>Uses a variety of sentence structures.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates control of grammar, usage, mechanics, and spelling.</li> <li>Some attempts at sentence variety.</li> </ul>	<ul style="list-style-type: none"> <li>Contains some intrusive errors in grammar usage, mechanics and spelling.</li> <li>Little sentence variety.</li> </ul>	<ul style="list-style-type: none"> <li>Contains excessive intrusive errors in grammar usage, mechanics, or spelling.</li> <li>Lacks sentence variety.</li> </ul>