

FOCUSED HOLISTIC SCORING RUBRIC (LAB REPORTS)

Science Performance Tasks

EXCELLENT PERFORMANCE: (10-12 points)

The response reflects excellent problem solving and science process skills. The problem is clearly stated. The independent and dependent variables are clearly identified. The experimental design matches the stated problem. Variables are controlled. All procedures are clear, complete and replicable. A control is included when appropriate. Data are accurate, complete, well organized and presented in an appropriate manner. Conclusions are related to the stated problem and fully supported by data. Validity of conclusions is thoroughly discussed.

PROFICIENT PERFORMANCE: (7-9 points)

The response reflects proficient problem solving and science process skills. The problem is adequately stated. The independent and dependent variables are adequately identified. The experimental design generally matches the stated problem. An attempt at controlling variables is made. Procedures are generally complete. Minor modifications or clarifications may be needed. Data are generally accurate, complete, organized, and presented in an appropriate manner. Minor omissions or errors may be present. Conclusions are generally related to the stated problem and supported by data. Minor errors in interpretation of results may be present. Discussion of validity of conclusions is limited.

MARGINAL PERFORMANCE: (4-6 points)

The response reflects marginal problem solving and science process skills. The problem is poorly stated. The independent and dependent variables are poorly identified. The experimental design matches the stated problem to some extent. Little attempt at controlling variables is made. Procedures are incomplete. Major modifications or clarifications may be needed. Data are somewhat inaccurate, incomplete, poorly organized or presented in an inappropriate manner. Conclusions are related to the stated problem and supported by data to a limited extent. Major errors in interpretation of results may be present. Little discussion of validity of conclusions.

UNSATISFACTORY PERFORMANCE : (0-3 points)

The response reflects unsatisfactory problem solving and science process skills. The statement of the problem is very limited or missing. The independent and dependent variables are not identified. The experimental design does not match the stated problem, is very incomplete or missing. No attempt to control variables. Data are highly inaccurate, incomplete, poorly organized or presented in an inappropriate manner or missing altogether. Conclusions are not related to the stated problem, not supported by data or are missing. No discussion of validity of conclusions.

ANALYTIC SCORING RUBRIC
Science Performance Tasks

<u>DIMENSION</u>	<u>SCORE</u>
<u>PROBLEM DEFINITION</u>	
• The problem is stated clearly. Clear identification of independent and dependent variables.	3
• The problem is stated adequately. Adequate identification of independent and dependent variables.	2
• The problem is poorly stated. Poor identification of independent and dependent variables.	1
• The statement of the problem is very limited or missing altogether. No identification of independent and dependent variables.	0
<u>EXPERIMENTAL DESIGN</u>	
• The experiment matches the stated problem. Variables are controlled. The procedures are clear, complete and replicable. A control is included when appropriate.	3
• The experimental design generally matches the stated problem. Attempt at controlling variables is made. Procedures are generally complete. Minor modifications or clarifications may be needed.	2
• The experimental design matches the stated problem to some extent. Little attempt to control variables. Procedures are incomplete. Major modifications or clarifications may be needed.	1
• The experimental design does not match the stated problem, is very incomplete or missing. No attempt to control variables.	0
<u>DATA PRESENTATION</u>	
• Data are accurate, complete, well-organized and presented in an appropriate manner.	3
• Data are generally accurate, complete, organized and presented in an appropriate manner. Minor errors or omissions may be present.	2
• Data are somewhat inaccurate, incomplete, poorly organized and presented in an inappropriate manner. Major errors or omissions may be present.	1
• Data are highly inaccurate, incomplete, poorly organized or presented in an inappropriate manner or missing altogether.	0
<u>CONCLUSIONS</u>	
• Conclusions are related to the stated problem and fully supported by the data. Validity of conclusions is thoroughly discussed.	3
• Conclusions are generally related to the stated problem and fully supported by the data. Minor errors in the interpretation of the results may be present. Discussion of validity of conclusions is limited.	2
• Conclusions are related to the stated problem and supported by the data to a limited extent. Major errors in interpretation of results may be present. Little discussion of validity of conclusions.	1
• Conclusions are not related to the stated problem, not supported by data or are missing. No discussion of validity of conclusions.	0

LAB REPORT SCORE OUT OF 12:

Percentage Score = (Lab report score out of 12 X 4) + 52%