

**Project Title** (e.g., Mathematical Modeling, The Can Project) \_\_\_\_\_

**Project Topic** (e.g., Linear programming, volume-surface area optimization) \_\_\_\_\_

**Teacher or External Evaluator (circle one)** \_\_\_\_\_ **Date** \_\_\_\_\_

**Overall evaluation** \_\_\_\_\_ **Signature** \_\_\_\_\_

07/10

<b>Performance Indicators</b>	<b>Outstanding</b>	<b>Good</b>	<b>Competent</b>	<b>Needs Improvement</b>
<b>Problem Solving</b>	<p>Selects appropriate and efficient strategies to solve non-routine problems.</p> <p>Executes conceptually sound mathematical procedures accurately.</p>	<p>Selects appropriate and efficient strategies to solve non-routine problems.</p> <p>Executes conceptually sound mathematical procedures with minor computational errors.</p>	<p>Selects appropriate, but inefficient, strategies, and executes conceptually sound mathematical procedures with minor computational errors.</p> <p>or</p> <p>Selects appropriate and efficient strategies but executes mathematical procedures with minor conceptual and computational errors.</p>	<p>Selects an inappropriate strategy.</p> <p>or</p> <p>Makes major conceptual errors or procedural errors.</p>
<b>Reasoning and Proof</b>	<p>Justifies all mathematical statements in an efficient and accurate manner, and draws valid conclusions.</p> <p>Constructs, uses, and tests one or more generalizations, and makes predictions.</p>	<p>Justifies most mathematical statements accurately, and draws valid conclusions.</p> <p>Constructs a generalization and uses it to make predictions.</p>	<p>Justifies some of the mathematical statements accurately, and draws valid conclusions.</p>	<p>Does not justify mathematical statements accurately, and does not draw valid conclusions.</p>

<b>Performance Indicators</b>	<b>Outstanding</b>	<b>Good</b>	<b>Competent</b>	<b>Needs Improvement</b>
<b>Communication</b>	<p>Always uses mathematical terminology and notation appropriately.</p> <p>Eloquently communicates process and solution.</p> <p>Writing is sophisticated and interesting to read.</p>	<p>Mostly uses mathematical terminology and notation appropriately.</p> <p>Clearly communicates process and solution.</p>	<p>Limited use of appropriate mathematical language and notation.</p> <p>Explains process and solution with limited clarity.</p>	<p>Little or no use of mathematical language and notation.</p> <p>Little or no coherent explanation of process and solution.</p>
<b>Connections</b>	<p>Discusses, in depth, how mathematical concepts interconnect and build on each other.</p> <p>Thoroughly applies concepts to real-world situations.</p>	<p>Discusses how math concepts interconnect and build on each other.</p> <p>Applies concepts to real-world situations</p>	<p>Discusses superficially how math concepts interconnect and build on each other.</p> <p>Attempts to apply concepts to real-world situations.</p>	<p>Does not discuss the interconnection between concepts.</p> <p>Does not attempt to apply concepts to real-world situations.</p>
<b>Representation</b>	<p>Creates appropriate models, inherent to the task, that represent the problem accurately and elegantly.</p>	<p>Creates appropriate models, inherent to the task, that represent the problem accurately.</p>	<p>Creates appropriate models, inherent to the task, that represent the problem with minor errors.</p>	<p>Does not create appropriate models, inherent to the task.</p>