## Rubric for Successful Demonstration of Learning

**Course/Subject/Grade:** Physical Science  
**Important Learning:** Science reasoning  
**Year:**

<table>
<thead>
<tr>
<th>Element</th>
<th>4 Exceeds</th>
<th>3 Fully Meets</th>
<th>2 Partially Meets</th>
<th>1 Does Not Meet</th>
</tr>
</thead>
</table>
| **Making Inferences**    | In addition all descriptors in “fully meets,” shows insights that connect additional information beyond the immediate text. | • Identifies assumptions in a text.  
• Draws correct inferences from charts, graphs, and other pictorial representations. | Identifies assumptions and draws correct inferences that are simpler and more concrete. | Cannot identity even simpler assumptions. Draws incorrect conclusions from graphic representations. |
| **Evaluating Information** | In addition all descriptors in “fully meets,” can explain and weigh the relative importance of the criteria on which the evaluation is based. | • Can judge suitability of a proposed experimental method to verify or prove a hypothesis.  
• Can evaluate a conclusion based on presented data.  
• Identifies when there is insufficient information for answering a questions and or solving a problem.  
• Can estimate reasonableness of conclusions | Identifies that not all information is relevant and/or accurate for explaining phenomena and solving problems, but misses instances where this is true. | Takes information presented as all of equal value. |
| **Forming Hypotheses**   | In addition all descriptors in “fully meets,” hypothesis indicates understanding of concepts and structures beyond the immediate content or text. | • Can formulate a credible hypothesis based on available information, observation, and questions. | Can formulate a simple hypothesis connected to the available information. | Cannot formulate a hypothesis. Functions on a purely descriptive level when engaged in inquiry or dealing with data. |
| **Explaining Reasons**   | In addition all descriptors in “fully meets,” reasons present a coherent understanding that connects the data to larger concepts. | Can explain his/her reasons for drawing a conclusion in a clear and orderly way that accounts for all the data. | Gives some credible reasons for drawing conclusions based on data. | Draws conclusions without regard to observed data. |