

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**BLM 8.7.2**

# Achievement Check Rubric

Category	Level 1	Level 2	Level 3	Level 4
<b>Knowledge/ Understanding</b>	<ul style="list-style-type: none"> <li>demonstrates limited knowledge of surface area and volume of square-based prisms, cylinders, and spheres</li> </ul>	<ul style="list-style-type: none"> <li>demonstrates some knowledge of surface area and volume of square-based prisms, cylinders, and spheres</li> </ul>	<ul style="list-style-type: none"> <li>demonstrates considerable knowledge of surface area and volume of square-based prisms, cylinders, and spheres</li> </ul>	<ul style="list-style-type: none"> <li>demonstrates a thorough knowledge of surface area and volume of square-based prisms, cylinders, and spheres</li> </ul>
<b>Thinking</b>	<ul style="list-style-type: none"> <li>uses planning and critical-thinking processes with limited effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>uses planning and critical-thinking processes with some effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>uses planning and critical-thinking processes with considerable effectiveness (e.g., finds dimensions and volumes in an organized way)</li> </ul>	<ul style="list-style-type: none"> <li>uses planning and critical-thinking processes with a high degree of effectiveness (e.g., finds dimensions and volumes in an organized way and considers alternative choices in choosing the package design)</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>expresses and organizes mathematical thinking with limited effectiveness</li> <li>uses mathematical vocabulary and notation with limited effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>expresses and organizes mathematical thinking with some effectiveness</li> <li>uses mathematical vocabulary and notation with some effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>expresses and organizes mathematical thinking with considerable effectiveness</li> <li>uses mathematical vocabulary and notation with considerable effectiveness [e.g., expresses solutions clearly and supports reasoning for parts b) and c)]</li> </ul>	<ul style="list-style-type: none"> <li>expresses and organizes mathematical thinking with a high degree of effectiveness</li> <li>uses mathematical vocabulary and notation with a high degree of effectiveness [e.g., expresses solutions very clearly and supports reasoning for parts b) and c) with detailed description]</li> </ul>
<b>Application</b>	<ul style="list-style-type: none"> <li>applies knowledge to this context with limited effectiveness (e.g., needs considerable prompting to find a few calculations)</li> </ul>	<ul style="list-style-type: none"> <li>applies knowledge to this context with some effectiveness (e.g., needs some prompting to find calculations)</li> </ul>	<ul style="list-style-type: none"> <li>applies knowledge to this context with considerable effectiveness [e.g., applies formulas correctly and provides some mathematical support for factors discussed in part c)]</li> </ul>	<ul style="list-style-type: none"> <li>applies knowledge to this context with a high degree of effectiveness [e.g., applies formulas correctly and provides detailed mathematical support for factors discussed in part c)]</li> </ul>