## Chapter 5 Problem Wrap-Up Rubric

## BLM 5-13

Categories	Level 1	Level 2	Level 3	Level 4
<ul> <li>Knowledge and Understanding</li> <li>Understands concepts of amplitude, period, and phase shift</li> <li>Provides accurate graphs to illustrate examples</li> </ul>	<ul> <li>Demonstrates limited under- standing of concepts of amplitude, period, and phase shift</li> <li>Does not provide graphs or provides inaccurate graphs to illustrate examples</li> </ul>	<ul> <li>Demonstrates some under- standing of concepts of amplitude, period, and phase shift</li> <li>Provides one or two somewhat accurate graphs to illustrate examples</li> </ul>	<ul> <li>Demonstrates considerable understanding of concepts of amplitude, period, and phase shift</li> <li>Provides mostly accurate graphs to illustrate examples</li> </ul>	<ul> <li>Demonstrates thorough under- standing of concepts of amplitude, period, and phase shift</li> <li>Provides thorough and highly accurate graphs to illustrate examples</li> </ul>
<ul> <li>Thinking</li> <li>Prepares a plan to solve the problem</li> <li>Carries out the plan</li> </ul>	• Needs extensive assistance to organize a plan and needs some steps to follow	• Needs some assistance to organize and implement an effective strategy	• Needs minimal assistance to organize and implement an effective strategy	• Needs no assistance to organize and implement an effective strategy
<ul> <li>Communication</li> <li>Clearly explains and fully justifies solution</li> <li>Clearly labelled graphs</li> </ul>	<ul> <li>Does not clearly explain or justify solution</li> <li>Uses limited labelling on graphs</li> </ul>	<ul> <li>Explains or justifies the solution somewhat</li> <li>Uses some labelling on graphs</li> </ul>	<ul> <li>Explains or justifies the solution fully</li> <li>Graphs are well labelled</li> </ul>	<ul> <li>Explains, justifies, and shows insight into the complexities of the solution</li> <li>Graphs are fully and clearly labelled</li> </ul>
<ul> <li>Application</li> <li>Makes connections between the mathematical concepts (amplitude, period, and phase shift) and real-life examples pertaining to sound and music</li> </ul>	• Has limited understanding of the connection between the mathematical concepts and real- life examples pertaining to sound and music	• Has some understanding of the connection between the mathematical concepts and real- life examples pertaining to sound and music	• Has considerable understanding of the connection between the mathematical concepts and real- life examples pertaining to sound and music	• Has thorough understanding of the connection between the mathematical concepts and real- life examples pertaining to sound and music

