

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

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

**Chapter 5 Task: Modelling a Rotating Object Rubric****BLM 5–15**

Categories	Level 1	Level 2	Level 3	Level 4
<b>Knowledge and Understanding</b> <ul style="list-style-type: none"> <li>Provides measurements for parts a) and b)</li> <li>Determines the equations for parts c) to f)</li> <li>Graphs the relations found in parts c) to f)</li> </ul>	<ul style="list-style-type: none"> <li>Provides some measurements for parts a) and b)</li> <li>Demonstrates limited understanding of how to find the equations for parts c) to f) and how to graph the relations found in parts c) to f)</li> </ul>	<ul style="list-style-type: none"> <li>Provides all measurements for parts a) and b)</li> <li>Demonstrates some understanding of how to find the equations for parts c) to f) and how to graph the relations found in parts c) to f)</li> </ul>	<ul style="list-style-type: none"> <li>Provides all accurate measurements for parts a) and b)</li> <li>Demonstrates considerable understanding of how to find the equations for parts c) to f) and how to graph the relations found in parts c) to f)</li> </ul>	<ul style="list-style-type: none"> <li>Provides all accurate measurements for parts a) and b)</li> <li>Demonstrates thorough understanding of how to find the equations for parts c) to f) and how to graph the relations found in parts c) to f)</li> </ul>
<b>Thinking</b> <ul style="list-style-type: none"> <li>Prepares a plan to solve the problem</li> <li>Carries out the plan</li> </ul>	<ul style="list-style-type: none"> <li>Needs extensive assistance to organize a plan and needs some steps to follow</li> </ul>	<ul style="list-style-type: none"> <li>Needs some assistance to organize and implement an effective strategy</li> </ul>	<ul style="list-style-type: none"> <li>Needs minimal assistance to organize and implement an effective strategy</li> </ul>	<ul style="list-style-type: none"> <li>Needs no assistance to organize and implement an effective strategy</li> </ul>
<b>Communication</b> <ul style="list-style-type: none"> <li>Clear explanations and justifications</li> <li>Correct use of mathematical language</li> <li>Clearly labelled graphs</li> </ul>	<ul style="list-style-type: none"> <li>Does not clearly explain or justify solution</li> <li>Uses limited mathematical form</li> <li>Uses limited labelling on graphs</li> </ul>	<ul style="list-style-type: none"> <li>Explains or justifies the solution somewhat</li> <li>Uses minimal mathematical form</li> <li>Uses some labelling on graphs</li> </ul>	<ul style="list-style-type: none"> <li>Explains or justifies the solution fully</li> <li>Uses good mathematical form</li> <li>Graphs are well-labelled</li> </ul>	<ul style="list-style-type: none"> <li>Explains, justifies, and shows insight into the complexities of the solution</li> <li>Uses excellent mathematical form</li> <li>Graphs are fully and clearly labelled</li> </ul>
<b>Application</b> <ul style="list-style-type: none"> <li>Discusses and justifies how each equation would change if the direction of rotation is reversed</li> <li>Discusses and justifies how the equation in part c) would change if relating rotation distance travelled to the angle of rotation</li> </ul>	<ul style="list-style-type: none"> <li>Is ineffective in discussing and justifying how each equation would change if the direction of rotation is reversed and how the equation in part c) would change if relating rotation distance travelled to the angle of rotation</li> </ul>	<ul style="list-style-type: none"> <li>Is somewhat effective in discussing and justifying how each equation would change if the direction of rotation is reversed and how the equation in part c) would change if relating rotation distance travelled to the angle of rotation</li> </ul>	<ul style="list-style-type: none"> <li>Provides considerable reasoning to explain how each equation would change if the direction of rotation is reversed and how the equation in part c) would change if relating rotation distance travelled to the angle of rotation</li> </ul>	<ul style="list-style-type: none"> <li>Provides clear and thorough reasoning to explain how each equation would change if the direction of rotation is reversed and how the equation in part c) would change if relating rotation distance travelled to the angle of rotation</li> </ul>

