

Section 5.5 Achievement Check Rubric

BLM 5-10

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding <ul style="list-style-type: none"> • makes a scatter plot • graphs the model function and comments on the fit • performs a sinusoidal regression using technology and compares the equation with the model 	<ul style="list-style-type: none"> • demonstrates limited understanding of modelling trigonometric functions, producing an inaccurate scatter plot and/or function, finding an unreasonable regression and making faulty comparisons 	<ul style="list-style-type: none"> • demonstrates some understanding of modelling trigonometric functions, producing an adequate scatter plot and/or function, finding a regression and making some comparisons 	<ul style="list-style-type: none"> • demonstrates considerable understanding of modelling trigonometric functions, producing an accurate scatter plot and function, finding a reasonable regression and making adequate comparisons 	<ul style="list-style-type: none"> • demonstrates thorough understanding of modelling trigonometric functions, producing an accurate scatter plot and function, finding and justifying a reasonable regression and making complete comparisons
Thinking <ul style="list-style-type: none"> • prepares a plan to solve the problem • carries out the plan 	<ul style="list-style-type: none"> • needs extensive assistance to begin organizing a plan and needs clearly laid out steps to follow 	<ul style="list-style-type: none"> • needs some assistance to begin organizing a plan and needs some steps to follow 	<ul style="list-style-type: none"> • needs minimal assistance to organize and implement an effective strategy 	<ul style="list-style-type: none"> • needs no assistance to organize and implement an effective strategy
Communication <ul style="list-style-type: none"> • Correctly uses mathematical language. • Clearly explains and fully justifies solution. 	<ul style="list-style-type: none"> • maintains the correct language in some of the solution • does not clearly explain or justify solution 	<ul style="list-style-type: none"> • maintains the correct language throughout most of the solution • explains and justifies solution somewhat 	<ul style="list-style-type: none"> • maintains the correct language throughout the solution • explains and justifies solution fully 	<ul style="list-style-type: none"> • maintains the correct language throughout the solution • explains, justifies and shows insight into the complexities of the solution
Application <ul style="list-style-type: none"> • writes a sinusoidal function to model the data • interprets the changes that would occur for the cat breathing faster and for the cat increasing the volume of air taken into its lungs 	<ul style="list-style-type: none"> • interprets the information ineffectually, finding an unreasonable sinusoidal function, and misinterpreting the effect of the changes to the scenario 	<ul style="list-style-type: none"> • interprets the information somewhat effectually, finding an adequate sinusoidal function, and presenting one of the effects of the changes to the scenario 	<ul style="list-style-type: none"> • interprets the information with considerable effectiveness, finding a reasonable sinusoidal function, and presenting both effects of the changes to the scenario 	<ul style="list-style-type: none"> • interprets the information with a high degree of effectiveness, finding and justifying a reasonable sinusoidal function, and presenting and supporting the effects of the changes to the scenario