

Chapter 4 Problem Wrap-Up Rubric

Category	Level 1	Level 2	Level 3	Level 4
Knowledge/ Understanding	<ul style="list-style-type: none"> demonstrates limited knowledge of the properties of quadratic relations and features of $y = 2^x$ 	<ul style="list-style-type: none"> demonstrates some knowledge of the properties of quadratic relations and features of $y = 2^x$ 	<ul style="list-style-type: none"> demonstrates considerable knowledge of the properties of quadratic relations and features of $y = 2^x$ (e.g., graphs data, finds a curve of best fit, determines the equation of the related quadratic relation, extrapolates values for a quadratic relation, finds values of ordered pairs for $y = 2^x$) 	<ul style="list-style-type: none"> demonstrates thorough knowledge of the properties of quadratic relations and features of $y = 2^x$ (e.g., graphs data, finds a curve of best fit, determines the equation of the related quadratic relation, extrapolates values for a quadratic relation, finds values of ordered pairs for $y = 2^x$)
Thinking	<ul style="list-style-type: none"> uses planning and critical thinking processes with limited effectiveness 	<ul style="list-style-type: none"> uses planning and critical thinking processes with some effectiveness 	<ul style="list-style-type: none"> uses planning and critical thinking processes with considerable effectiveness (e.g., considerable evidence of inference in the analysis of the graph of the quadratic model and the related equation) 	<ul style="list-style-type: none"> uses planning and critical thinking processes with a high degree of effectiveness (e.g., detailed evidence of inference in the analysis of the graph of the quadratic model and the related equation)
Communication	<ul style="list-style-type: none"> expresses and organizes mathematical thinking with limited effectiveness uses mathematical vocabulary and notation with limited effectiveness 	<ul style="list-style-type: none"> expresses and organizes mathematical thinking with some effectiveness uses mathematical vocabulary and notation with some effectiveness 	<ul style="list-style-type: none"> expresses and organizes mathematical thinking with considerable effectiveness uses mathematical vocabulary and notation with considerable effectiveness (e.g., uses good form for presenting graphs and justifications/arguments) 	<ul style="list-style-type: none"> expresses and organizes mathematical thinking with a high degree of effectiveness uses mathematical vocabulary and notation with a high degree of effectiveness (e.g., uses very good form for presenting graphs and justifications/arguments)
Application	<ul style="list-style-type: none"> applies knowledge to this context with limited effectiveness 	<ul style="list-style-type: none"> applies knowledge to this context with some effectiveness 	<ul style="list-style-type: none"> applies knowledge to this context with considerable effectiveness (e.g., applies knowledge to find an appropriate quadratic model, extrapolates, manipulates a simple exponential relation) 	<ul style="list-style-type: none"> applies knowledge to this context with a high degree of effectiveness (e.g., applies knowledge to find an appropriate quadratic model, extrapolates, manipulates a simple exponential relation)