Name: _____   Date: _____

Section 4.4 Achievement Check Rubric

Category	Level 1	Level 2	Level 3	Level 4
Knowledge/ Understanding	• demonstrates limited knowledge of the features of the graph $y = a(x - h)^2 + k,$ how to construct the graph, and how to determine its equation	• demonstrates some knowledge of the features of the graph $y = a(x - h)^2 + k,$ how to construct the graph, and how to determine its equation	• demonstrates considerable knowledge of the features of the graph $y = a(x - h)^2 + k,$ how to construct the graph, and how to determine its equation	• demonstrates thorough knowledge of the features of the graph $y = a(x - h)^2 + k,$ how to construct the graph, and how to determine its equation
Thinking	• uses planning and critical thinking processes with limited effectiveness (e.g., little evidence of inference in analysing the shape of the graph)	• uses planning and critical thinking processes with some effectiveness (e.g., some evidence of inference in analysing the shape of the graph)	• uses planning and critical thinking processes with considerable effectiveness (e.g., considerable evidence of inference in analysing the shape of the graph)	• uses planning and critical thinking processes very effectively (e.g., detailed evidence of inference in analysing the shape of the graph)
Communication	• expresses and organizes mathematical thinking with limited effectiveness • uses mathematical vocabulary and notation with limited effectiveness	• expresses and organizes mathematical thinking with some effectiveness • uses mathematical vocabulary and notation with some effectiveness	• expresses and organizes mathematical thinking with considerable effectiveness • uses mathematical vocabulary and notation with considerable effectiveness (e.g., uses good form for presenting answers and describing the path of the rocket)	• 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 answers and describing the path of the rocket)
Application	• applies knowledge to this context with limited effectiveness (e.g., applies steps to determine the equation of the rocket's path with limited effectiveness)	• applies knowledge to this context with some effectiveness (e.g., applies steps to determine the equation of the rocket's path with some effectiveness)	• applies knowledge to this context with considerable effectiveness (e.g., applies steps to determine the equation of the rocket's path with considerable effectiveness and provides mathematical support)	• applies knowledge to this context with a high degree of effectiveness (e.g., applies appropriate steps to determine the equation of the rocket's path and provides detailed mathematical support)