

Name: _____

MBF 3C

Project: I Got the Power!

Date: _____

Your completed project can lead to demonstrating your achievement of the following expectations:

_____ makes connections between the numeric, graphical, and algebraic representations of exponential relations

_____ describe and represent exponential relations, and solve problems involving exponential relations arising from real-world applications

The following rubric will be used to determine your level of achievement. **NOTE:** The words in *italics* specify what needs to be shown for Level 3 performance. The remainder of the criteria specifies moving into Level 4.

Part 1-Defining Exponential Relations			
	Levels NL, 1, 2	Level 3	Level 4
KU		I have, as per my own understanding, <i>correctly defined</i> an exponential relation—making sure that I’ve described the relationship between consecutive terms	
KU		I have included an example of a table, graph, and equation (all <i>correctly developed</i>) that represent the same exponential relation—making sure that I’ve tried to show <i>most</i> of the connections between the different representations	
Part 2-Applications of Exponential Relations			
	Levels NL, 1, 2	Level 3	Level 4
APP		I have identified a context (example) that can be modeled by an exponential relation, explaining why it’s exponential	
APP		I have <i>found</i> (or posed) a suitable exponential relations problem and have <i>solved it correctly</i> , making sure to have provided considerable detail (i.e., steps in the solution and explanation)	
Part 3-Modeling with Exponential Relations (“Farm Value of Potatoes” or “Ball Bounce”)			
	Levels NL, 1, 2	Level 3	Level 4
TIPS		I have completed <i>most</i> of the investigation process—generating a <i>graph</i> , a <i>curve</i> that best fits the data, and the equation that defines the curve	
TIPS		I have identified and understood <i>most</i> of the elements important to the solution process—posing <u>a</u> problem and solving using my graph <u>or</u> equation	
TIPS		I have provided <i>appropriate</i> conclusions with supporting evidence	

(Over for Communication→)

Communication Rubric

Did I ...

Criteria	Level NL, 1, 2	Level 3	Level 4
Interpret information <i>correctly</i> and make <i>reasonable</i> statements?			
<i>Consistently</i> use mathematical conventions <i>correctly</i> —use of symbols, key terms, labels, solutions written from top to bottom of page			
<i>Include</i> and <i>integrate</i> both mathematical forms (tables, graphs, equations) and narrative (i.e., descriptive, explanatory) forms			
Provide <i>explanations</i> and justifications that would be <i>clear</i> for a range of audiences (e.g., peers and teacher)			