

(This is the STEM version template for the energy unit – data collection is from video analysis)

Title of Experiment: \_\_\_\_\_

Wild Guess Statement: \_\_\_\_\_

Wild Guess Prediction: \_\_\_\_\_

Research Question:

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Hypothesis: Graph form:

In Words:




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**IV:**

**DV:**

**Controls:**  
(With Numbers)

Procedure:

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Height (m)	Time (s)	Velocity (m/s)	Acceleration (m/s <sup>2</sup> )	Gravitational Potential Energy (kg*m <sup>2</sup> /s <sup>2</sup> )	Kinetic Energy (kg*m <sup>2</sup> /s <sup>2</sup> )	Total Energy (kg*m <sup>2</sup> /s <sup>2</sup> )
1	0	0	0		0	
0.8						
0.6						
0.4						
0.2						
0						

Equation:

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Graph:

Gravi  
tatio  
nal  
Pote  
ntial  
Ener  
gy  
(kg\*m  
²/s²)


Kinetic Energy (kg\*m²/s²)

Conclusion needs to include:

1) Pattern found; 2) Relationship between variables; 3) Mathematical formula; 4) Data driven prediction and confidence; 5) Reasoning for the level of confidence; 6) Redesign- if you were to redesign this experiment, what enhancements would you make? 7) Describe a real life application of the concepts explored in this lab.

[illegible]