

Roller Coaster Lab: Part 2

Name _____ Date _____ Block _____

CALCULATED DATA TABLE 2

Position (cm)	Potential Energy (J)	Kinetic Energy (J)	Total Energy (J)

Sample Calculations: show formula and one example using your data

Graph as a class

Enter your data on the class spreadsheet (computer at front)

Position (x-axis)

Kinetic E_k and Potential E_p (2 different y-axes)

Conclusion Questions

Looking at the class graph, what relationship do you see between the marble's kinetic energy and potential energy?

Where is the marble's velocity the greatest? EXPLAIN your answer.

State the law of conservation of energy and apply it to the class graph.

Limitations of experimental design: What worked well and why? What didn't work well and why? You could also discuss numbers that are incorrect.

Suggestions for improvements: What would you do differently next time?
