

9. How does angle of launch affect the projectile motion?

a. Draw an example(s)

10. Were you able to control the kinetic energy by changing variables?

11. Could you increase distance traveled without increasing potential energy? How?

DATA ANALYSIS: (You have 15 minutes to independently analyze your data in your journal.)

Graph the data of the solution for each group in your science journal:

Group	Elastic Potential Energy	Angle of Launch	Test Response to
	(stretch distance of rubber band: cm)	(degrees)	Procedures
	(,,,,,,, -	(***8:****)	(X or \textcircled{O})
А			
В			
С			
D			

INDEPENDENT ANALYSIS: Answer the following questions independently in your journal using the class data.

- 1. Which group(s) found a solution to the problem?
- 2. Were all solutions the same?
- 3. Was any of the potential energy lost during the demonstration? Explain.
- 4. How would you evaluate to determine the most efficient solution to the problem?

Hint: Consider the production of potential energy as a cost factor, such as the cost of fuel in a rocket launch.

5. What further testing would you like to conduct?

EXTENSION ACTIVITY:

Write a predicted procedure for hitting the trash can if it is moved 1 meter forward, basing this only on their test data without any further testing.

Predict the procedure for hitting it if it is moved ½ meter closer.



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