

Guided Energy Loss Lab

<https://www.thephysicsaviary.com/Physics/Programs/Labs/EnergyLossGuidedLab/index.html>

Complete this in your lab notebook.

Part A: Digital Component

Follow the Guided Energy Loss Activity at the link above. Answer the questions below as you go.

1. What materials will you need for the ball drop lab? What measurement will each item provide? How will you use this measurement?
2. Write the procedure for the ball drop in OAIM format. Note: You may need combine multiple steps to form a full OAIM step.
3. Create a data table for the measurements in each step.
4. Create a graph of your data. Label the x- and y-axis and provided appropriate titles and scales.
5. Why do you subtract the slope from one?

Part B: The Real Lab

Materials:

- Meterstick
- Ball
- Measuring device

Replicate the lab that you did digitally using real objects. Follow the procedure you wrote in Part A. Record the data using a data table like the one you created in Part A. Then, create a graph similar to that from Step A.

Conclusion: Why is there a loss in energy? Explain using 3-5 sentences.