

Lab: Swings and Springs

Wednesday, July 19, 2017 12:25 PM

TASK: Make the pendulum and mass-spring system provided by your teacher on the challenge oscillate with the same period.

Parameters

- You will need to take data both in the physical space (using equipment provided) and in the computing space (Phet simulation) to support your claims.

Deliverables

- Lab Report (below)

Evaluation - For teacher use only	
Skill	
Questioning - I can develop a scientific question and plan an experiment by identifying variables and explaining how to measure those variables.	
Investigating - I can collect experimental data accurately and communicate the data using tables and graphs.	
Analyzing - I can analyze data to identify patterns or relationships.	
Argumentation (CER) I can make claims, support and justify them with evidence and communicate my reasoning	

Questioning

In the space below, write a **4-5 sentence procedure** for how to conduct this experiment in order to find the values for the variables so that the pendulum and spring system have the same period.

Investigating

In the space below provide any data (organized in a well-communicated way) and graphs made from data.

Analyzing

In the space below explain how each of the graphs or sets of data enabled you to accomplish the task. In this space you can include words descriptions, derivations of equations, explanations of equations, etc.

Argumentation

Your argumentation section will be written **in class** following this lab as a Summative Assessment of the CER skill. For this **in-class assignment** you may use your **lab write up and notes from the class debrief** to answer the given prompt related to this lab.