

Learning Intentions

- To learn how to run a well-controlled scientific experiment
- To learn how to apply knowledge of static equilibrium to a real-world problem

Assignment

1. Hypothesis, materials, and procedure: Previously submitted.
2. Planning and conducting: Using the feedback from the hypothesis and procedures, run your experiment and collect the data. Be sure that you have eliminated as many sources of error as possible from the design of your experiment.
3. Processing and analyzing data and information: Analyze the results you obtained, using free body diagrams and static equilibrium calculations. Graphs and tables are also useful for displaying your data.
4. Evaluating: What sources of error are there in your experiment? How large of an effect will they have? In which direction do these sources of error push your results?
5. Questioning and predicting: Generate at least 2 new hypotheses based on your results. A good hypothesis will rely on theory (static equilibrium in particular) to create a prediction about the future.
6. Applying and innovating: Find real-world applications for your results and/or new hypotheses. Are there any limitations of your experiment that would limit its application to the real world?
7. Conclusion: Briefly summarize your lab. Was your hypothesis correct?

Assessment

Curricular Competency	Insufficient Evidence	Emerging	Developing	Proficient	Extending
Questioning and predicting					
Planning and conducting					
Processing and analyzing data					
Evaluating					
Applying and innovating					
Communicating					