

Newton's Laws Laboratory Template

Directions:

Design your own experiment that illustrates or that solves a problem related to one of Newton's laws of motion.

Your experiment must include all of the components below. Your final document must be typed using MS Word 97.

You may work alone or with one partner. I strongly suggest you brainstorm ideas in your journal and provide the teacher with a list of materials you will need as soon as possible.

Title – Give your lab a title that describes the problem you are solving.

Purpose: (Write in your own words. Explain the reasons why you are doing the lab. May be written as a hypothesis)

Materials: (List all materials you actually use. Describe what each item is used for if necessary)

Pre – lab questions: (Prepare three questions that another student would answer in preparation for your lab.)

Procedure: (A sequential list of steps taken to do the lab. Written in your own words.)

Sketch: (Draw a simple sketch of what the experiment / apparatus looks like when properly set up.)

Data/Observations: (Organized data tables to record measurements. Complete, detailed descriptions of qualitative observations.)

Calculations: (Show an example of each type of calculation needed for the experiment. Include appropriate equations.)

Analysis: (Prepare three questions that another student would answer to demonstrate what they learned in your lab.)

Conclusions: (Write a paragraph summarizing what you learned, further investigations you would like to make, sources of error in the experiment and recommendations to improve the lab.)

Homework: Visit the local library and research Newton's Laws. You must turn in bibliographic information on at least two sources. Write a paragraph for each source that describes the information that can be found in it related to Newton's Laws