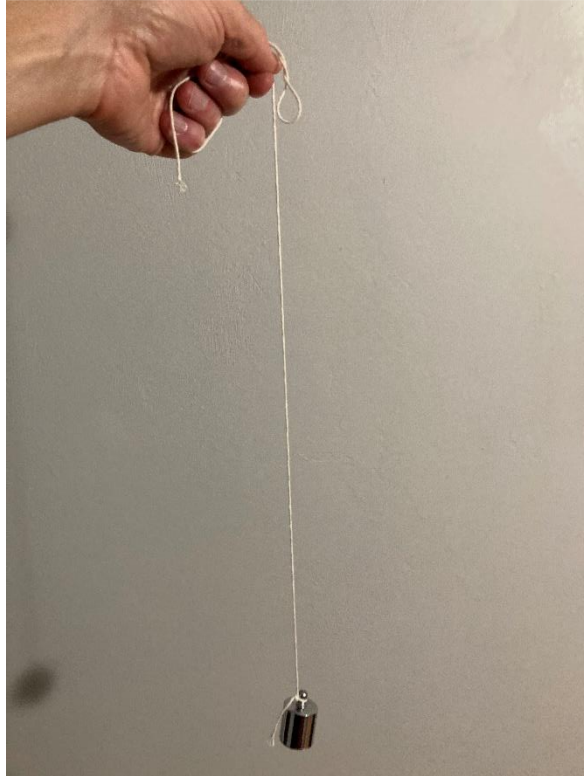


Pendulum Lab (with jeweler's masses and string)

Purpose: The purpose of this lab is to investigate the periodic motion of an object suspended from a string, forming a simple pendulum. Do the amplitude of the motion, the mass of the object and/or the length of the string affect the period of the motion?

By tying string to your jeweler's masses, measure the periods of pendulums that have 100 g, 50 g and 20 g masses and several lengths from 0.25 m to 1.00 m. It's best to time at least ten full oscillations for each pendulum to ensure reasonably accurate measurements.



Record the periods you measure in a Word file.

Then answer these questions in the Word file:

- 1) Does the period of pendulum depend on the mass of the pendulum bob?
- 2) Does the period depend on the length of the string?
- 3) Can you reproduce the periods of the pendulums with the equation from your text?

Then submit your Word file via Canvas.