

PHYSICS LABORATORY: The Vibrating Ruler

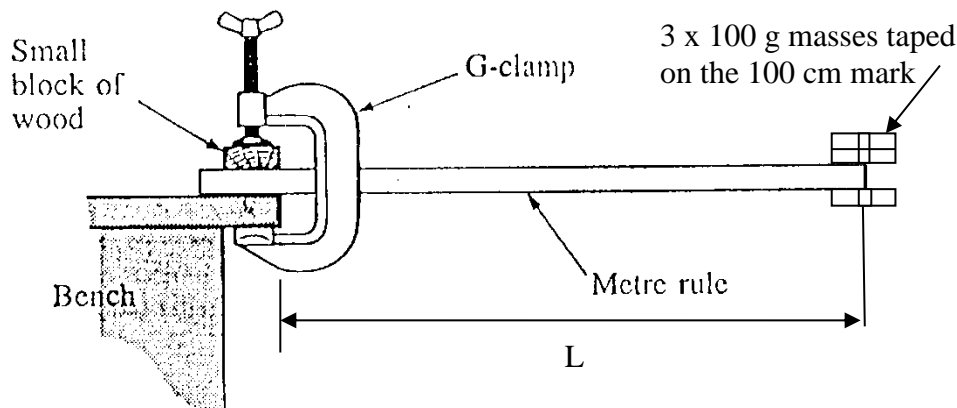
Background Information and Purpose

Refer to your notes and readings for background information on Simple Harmonic Motion and the equations governing it before starting this laboratory.

A fellow student has suggested that the period of oscillation (T), of weighted meter rule shown below and the length (L) hanging over the length of the table are related in the following way:

$$T^2 = k L^3$$

where k is a constant for the ruler.



Your job is to perform an experiment to see if this is true and if so, to find a value of k .

Data Processing and Collection (DCP)

Up to you!

Conclusion and Evaluation (CE)

Up to you!

Remember:

1. Refer to the 'Physics Lab Report Guide' before submitting your report.
2. Attach the 'Physics Lab Report Rubric' as a cover page to your paper copy.
3. Turn in a paper copy to Mr Smith AND upload your report electronically.

You will be marked on Data Collection and Processing (DCP) and Conclusion and Evaluation (CE) for this lab.