

AP PHYSICS B

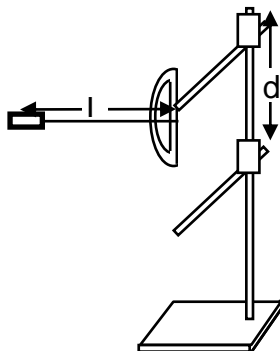
Lab: The Peg and the Pendulum

Name _____

Date _____ Period _____

Purpose: To find the minimum distance that a peg must be located below a pendulum to allow the pendulum to swing completely around.

Procedure: Adjust the position of the peg until a pendulum released at 90° will go completely around in a circle. Measure the length of the pendulum and the distance from the pendulum's support point to the peg. Use conservation of energy to calculate the value of d . Compare to the measured value. Repeat with the pendulum at 45° . Record all data below and be sure to show all work and units to receive full credit.



L = _____

For 90°
 $d_{\text{exp}} =$ _____ $d_{\text{theo}} =$ _____ % diff = _____

For 45°
 $d_{\text{exp}} =$ _____ $d_{\text{theo}} =$ _____ % diff = _____