Simeon Nordlander

AP Physics

Pendulum Lab

Purpose: Our purpose was to find g from T^2 = (4π^2/g)\*[((1/12)+d^2)/d]

Materials: meter stick, photo gate, calculator, wooden blocks, C-clamp, modeling clay, paper clip.

Data:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| d (m) | ((1/12)+d^2)/d (m) | | T^2 (s^2) | T(s) |
| 0.15 | 0.7056 |  | 2.8224 | 1.68 |
| 0.25 | 0.5833 |  | 2.3747 | 1.541 |
| 0.5 | 0.6667 |  | 2.6896 | 1.64 |

|  |  |
| --- | --- |
| (4π/g) = 3.7758 | |
| g = 10.4 |  |

Percent Error: 6.58 percent