Zachary Sins

Hookes Law Spring Constant Lab

Objective: find “k” value of the spring

Make graph of weight (mg) vs. displacement (x)

y= F= -kx

Procedure: add weight to spring and record the points of equilibrium for each weight

Find the slope of the resulting line and use it to determine the value of k

|  |  |
| --- | --- |
| Displacement(x) | Weight(mg) |
| 0.185 | 0 |
| 0.215 | 1.47 |
| 0.222 | 1.666 |
| 0.231 | 1.862 |
| 0.237 | 2.058 |
| 0.245 | 2.254 |

K=37.542 N/m