

Worksheet 7: Newton's 2nd Law, Part I

Name: _____

Due October 30, 2024

Partner: _____

Pencil only: use of Pen is forbidden.

As usual, turn your Excel document into the Google drive, with one properly formatted plot of m_2 vs a .

For this first week, use Trendline/Linest to force the intercept to be zero.

Use proper formatting (like worksheet #0!) for EVERY NUMBER.

Next week, we'll do the same experiment, starting over with new numbers for everything.

| Quantity | Result |
|--|-----------|
| L_{cart} (cm) | \pm |
| D [photogates] (cm) | \pm |
| m_{total} (g) | \pm |
| m_{clip} (g) | \pm |
| <i>intercept</i> (g) | 0 ± 0 |
| <i>slope</i> ($\text{g} \cdot \text{s}^2/\text{cm}$) | \pm |
| μ_k | 0 ± 0 |
| g_{calc} (cm/s^2) | \pm |