**Accelerated Motion Lab**

**\*\*\*Lab instructions are on p.387\*\*\***

 Use the provided ramps, rather than tilting the tables.

**Reading Ticker Tape**

 Ticker tape machines run at 60Hz. This means every 6 dots is 0.1s.



1. Measure how far it is from the start to 0.1s.
2. Measure how far it is from the start to 0.2s.

The tape will often start with a very cramped section of dots. Ignore them.



**Data:**

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| --- |
| **Accelerated Motion** |
| **Time (s)** | **Position (cm)** | **Velocity (cm/s)**$$v=\frac{∆d}{∆t}$$ |
| 0.0 |  |  |
| 0.1 |  |  |
| 0.2 |  |  |
| 0.3 |  |  |
| 0.4 |  |  |
| 0.5 |  |  |
| 0.6 |  |  |
| 0.7 |  |  |
| 0.8 |  |  |
| 0.9 |  |  |
| 1.0 |  |  |

Graph both data sets onto two separate grids. Properly label your axes. Try to connect the position vs. time graph with a smooth curve.

Complete the What Did You Find Out questions.

Position vs. Time Graph

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Velocity vs. Time Graph

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Use a best fit line for the velocity vs. time graph