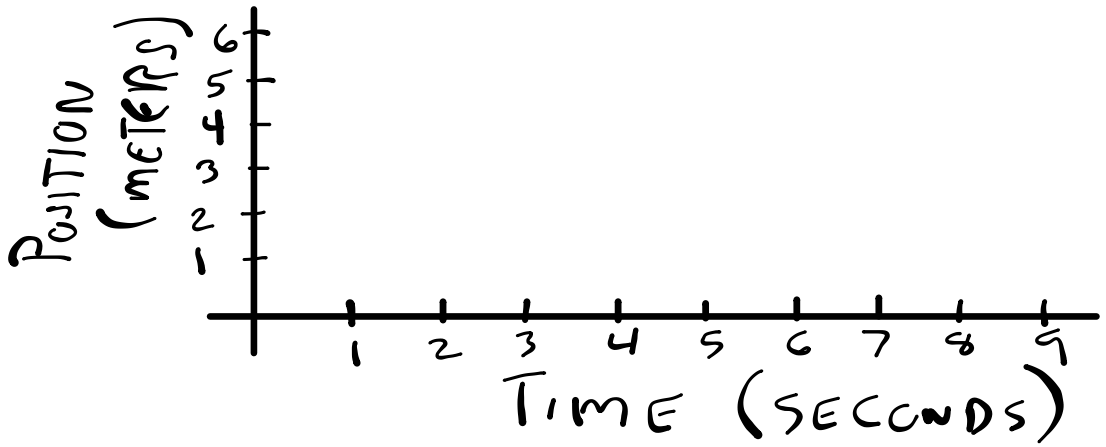
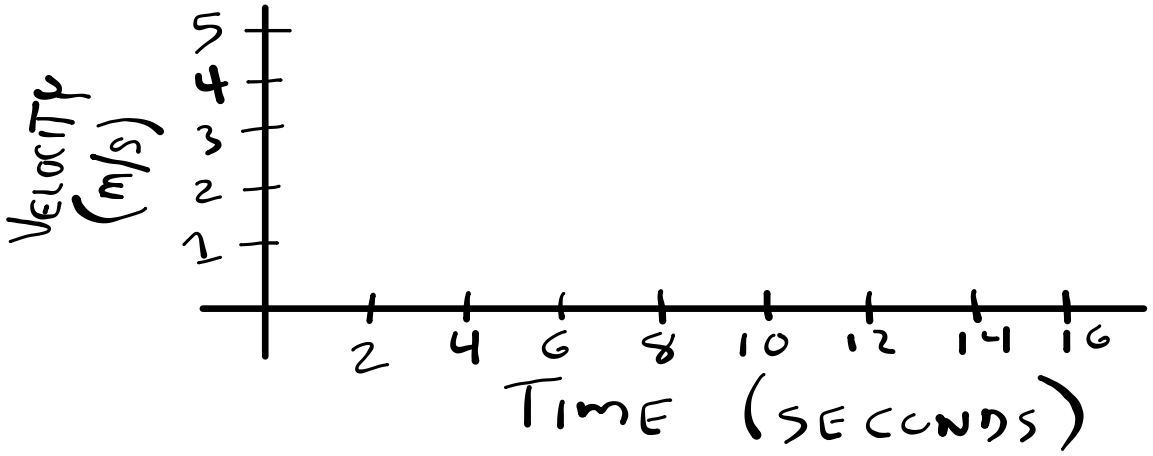
12/10/12 Communicating Motion

- To describe motion w/o words, we use graphs.
  - Position vs. Time Graph
    - Displays / plots the position of an object at every point in time.



- VELOCITY VS. TIME GRAPH
  - DISPLAYS / PLOTS AN OBJECT'S VELOCITY AT ALL POINTS IN TIME.



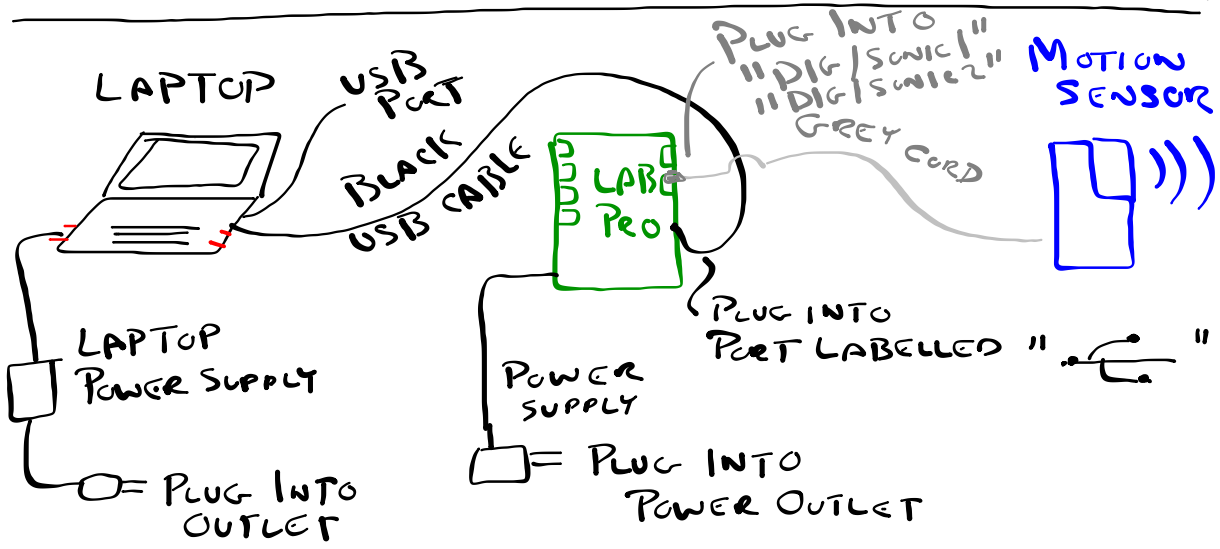
For Position vs Time Graphs:

- The steeper the graph, the faster the object is moving.
- A flat graph = no motion, an object stays put.
- When the slope is +, the object gets further away;
- When the slope is −, the object gets closer

For a Velocity vs. Time Graph:

- A flat line = Constant Velocity
- A positive rate = Moving Away
- A negative rate = Moving Toward
- A slope = A changing Velocity
  = Acceleration

How To Hook Up The Motion Sensor



- LabPro should beep when it is plugged into power.
- Open "Logger Pro" on the computer when everything is plugged in
- To record motion, hit the green "Collect" button.