Graphing Data in Science

1. The graph should be as **large** as possible—as large as the space will allow.
2. The **origin** should be visible and each **axis scaled uniformly**—no discontinuities. (Logger Pro: Right click, Autoscale from Zero)
3. The **horizontal** axis should contain the **independent (manipulated)** variable and the **vertical** axis should contain the **dependent (responding)** variable. (i.e. "y" should depend on what happens with "x")
4. Each **axis** should have a **descriptive label** that includes appropriate **units of measurement.** (Logger Pro: Right click, Column Options, X or Y)
5. The graph should have a **title** describing how the data was obtained or what physical system the data describe. *The title should not contain words that are used in the axes labels.* Often the **controlled variable (constant)** is included in the title. (Logger Pro: Right click, Graph Options, Title)
6. Please do not simply "connect the dots." (Logger Pro: Right click, Graph Options, Uncheck Connect Dots, Check Point Protectors/Symbols)
7. The graph will often contain a **curve or line of best fit**. The equation describing this curve or line should be included and constants in the equation interpreted. (Logger Pro: Curve Fit Tool) (For ease of reading Logger Pro graphs, check the boxes for "Display Larger Text on Screen" and "Thick Graph Trace Lines" in the Preferences Menu--under Logger Pro or File Tab.)