**Graphing Notes**

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| **Types of Graphs:**   1. **Line Graphs** are used to indicate trends over time and trends. 2. **Bar graphs** are usually used to compare groups. Data does not need to be continuous.      1. **Pie charts** are best to use when you are trying to compare parts of a whole. They do not show changes over time.   **NINE COMMANDMENTS FOR MAKING A GRAPH:**   1. MAKE IT BIG. Graph must take up a minimum of half a page. 2. Use GRAPH PAPER. 3. Use a RULER to draw the x and y axis. 4. **T**ITLE  * concise but descriptive, indicating what the graph is about. * Don’t just say “distance vs time”. * Placed *above* the graph.  1. LABEL EACH **A**XIS, with UNITS  * **D**ependent (**R**esponding) Variable on the **Y**-axis (vertical). (DRY) * (**M**anipulated) **I**ndependent Variable on the **X-**axis, horizontal (eg. time, temperature, distance). (MIX)  1. PROPER **S**CALE.  * Decided by your minimum and maximum data points for each variable * Does not have to start with zero. * X and Y scales may be different from each other.  1. **I**NTERVAL  * Decided by your scale * Subtract and divide by how spaces you have * 1, 2, or 5 squares are easiest to work with * X and Y do not need to be the same * Must be consistent (not change within the graph)  1. Connect the dots or draw a “BEST FIT LINE” for a Line Graph.   Colour in you bars for a bar graph. LEGEND if using more than one data set, use multiple symbols/colours. TAILS, DRY MIX |