Steps on How to Draw a Line Graph

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| **Step** | **What to Do** | **How to Do It** |
| **1** | Identify **Variables** | * Independent Variable
	+ Controlled by the experimenter, causes a change
	+ Goes on the X axis (horizontal)
* Dependent Variable
	+ Monitored by the experimenter, shows the effect
	+ Goes on the Y axis (vertical)
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| **2** | Determine the variable **ranges** | * Subtract the lowest data value from the highest data value.
* Do each variable separately
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| **3** | Determine the **scale** of the graph | * Determine a scale, (the numerical value for each square)that best fits the range of each variable.
* Spread the graph to use MOST of the available space.
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| **4** | Draw, number and label each **axis** | * Must use a ruler!
* This tells what data the lines on your graph represent.
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| **5** | **Plot** the data points (include a key if necessary) | * Plot each data value on the graph with a dot or a cross.
* Use different colours/shapes for different data sets. Include a key if this is the case.
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| **6** | Draw a **line of best fit** | * Draw a curve or a line that best fits the data points.
* Most graphs of experimental data are not drawn as "connect-the-dots"
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| **7** | **Title** the graph | * Your title should clearly tell what the graph is about
* E.g. “the effect of x-variable on y-variable”
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