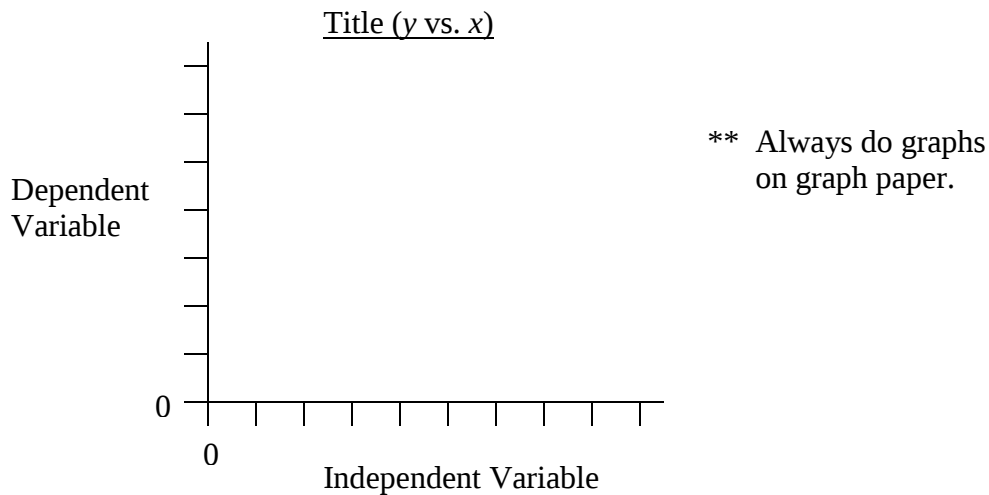


GRAPHING

One of the easiest ways to visually show data collected from an experiment is by using a graph.

Types: bar graph
pie / circle graph
line graph

In science, the most frequently used type of graph is the line graph. It shows how the dependent variable is affected by changing the independent variable.



- Step 1 Determine an appropriate scale.
- Step 2 Draw x and y axis, mark off scale (no units).
- Step 3 Label x and y axis (including units).
- Step 4 Title graph (include units and underline).
- Step 5 Plot data points.
- Step 6 Use a ruler to draw a line of best fit (use dashed line for section outside of the known data points).

Ex: Data from a 5 km run.

Distance (km)	Time (min)
0	0
1	4
2	9
3	13
4	19
5	23

** Do on graph together using blank overhead graph paper.

- Interpolate to estimate a value between two known points.
- Extrapolate to estimate a value outside two known points.
 - You can extend your line or use the math equation $y = mx + b$ (we will learn how to use this equation later in the course)