

Name: \_\_\_\_\_

Date: 9/25/18

# GRAPHING NOTES

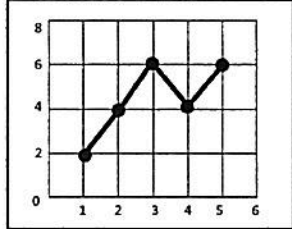
**GRAPHING REMINDERS!**

y axis  
y to the sky!  
the dependent axis  
A.K.A. "the effect"

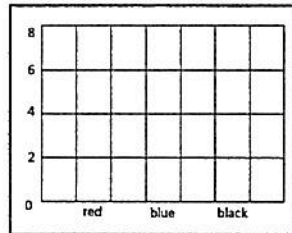
x axis  
x to the left!  
the independent axis  
A.K.A. "the cause"

The purpose of a graph is to show a visual representation of relationships between various quantities, parameters or variables.

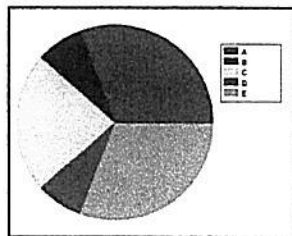
## 3 TYPES OF GRAPHS



1. Line graph: A graph that uses points that are connected by lines. This graph is to be drawn so that the independent data are on the horizontal x-axis and the dependent data are on the vertical y-axis. Line graphs are used to track changes over short and long periods.



2. Bar Graph: A graph that uses bars to show comparisons between categories of data. A bar graph will have two axes and is a way to visually represent a set of data. Bar graphs are useful for data that is easy to categorize. The category is traditionally placed on the x-axis, and the values are put on the y-axis.



3. Pie Chart: A chart (or a circle chart) is a circular graphic divided into slices to display data, information, and statistics in an easy-to-read 'pie-slice' format. A pie chart with varying slice sizes will show how much of one data element exists, hence the bigger the slice, the more of that particular data was gathered. Good for percentages and fractions.

## DATA TABLE

A collection of related data that is presented in columns and rows.

*Plot on x axis (Independent Variable)*

Data Table	
x	y

*Plot on y axis (Dependent Variable)*

## ELEMENTS OF A GOOD GRAPH FOLLOW THE SULTAN METHOD

<b>S</b>	scale	Number the axes on the graph Common numbers (0,2,4,6,8) Clearly written, neat and easy to read
<b>U</b>	units	Relays what the numbers stand for Written in parenthesis Examples: (m), (s), (cm), (mL)
<b>L</b>	labels	Describes what is being measured on each axis
<b>T</b>	title	Place across top of graph Clearly states purpose of the graph Includes information about the x & y axes
<b>A</b>	accuracy	Plots points are precise Lines are drawn with a ruler
<b>N</b>	neatness	Written clearly Ruler used for lines