Excel Terms:

- **Autofill**: function in some computer applications or programs, typically those containing forms, which fills in a field automatically.
- **Categories**: in Excel these are the x-axis values.
- **Cell**: A box formed by the intersection of a row and column in a worksheet or a table, in which you enter information.
- **Column**: a set of data values of a particular simple type, one for each row of the table. Columns run up and down. Each column expects a data value of a particular type.
- **Delimited**: separating the values in each row with specific delimiter characters.
- **Equation**: the formula used to calculate a particular value, this is the default paste option when copying and pasting a value that was calculated.
- **Filter tab**: quick and easy way to find and work with a subset of data in a range of cells or table.
- **Freeze panes**: this holds the header or top row constant while you scroll through your data in a worksheet.
- **Function bar**: A toolbar at the top of the Microsoft Excel spreadsheet window that you can use to enter or copy an existing formula into cells or charts. It is labeled with function symbol (fx). By clicking the Formula Bar, or when you type an equal (=) symbol in a cell, the Formula Bar will activate.
- **Header**: supplemental data placed at the beginning of a block of data being stored or transmitted.
- **Row**: a data record within a table. Each row, which represents a complete record of specific item data, holds different data within the same structure.
- **Series**: (y-values) Related data points that are plotted in a chart and originate from datasheet rows or columns. Each data series in a chart has a unique color or pattern. You can plot one or more data series in a chart. Pie charts have only one data series.
- **Value**: The actual number output from a formula. When pasting special, value pastes only the number and not the formula used to obtain the number.
- **Workbook**: A spreadsheet program file that you create in Excel. A workbook contains worksheets of rows and columns in which you can enter and calculate data.
- **Worksheet**: The primary document that you use in Excel to store and work with data. Also called a spreadsheet. A worksheet consists of cells that are organized into columns and rows; a worksheet is always stored in a workbook.
Statistics and Graphing Terms:

- **Average**: refers to the sum of a list of numbers divided by the size of the list, in other words the arithmetic mean.
- **Column/bar graph**: a chart with rectangular bars with lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. A vertical bar chart is sometimes called a column bar chart.
- **Degrees of Freedom**: (overly simplified definition) the number of independent variables.
- **Dependent variable**: what you measure in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. It is called dependent because it "depends" on the independent variable. In a scientific experiment, you cannot have a dependent variable without an independent variable.
- **Independent variable**: the variable you have control over, what you can choose and manipulate. It is usually what you think will affect the dependent variable.
- **Qualitative data**: information about qualities; information that can't actually be numerically measured. Some examples of qualitative data are the color of your eyes, the sex of an individual, and handedness.
- **Quantitative**: information about quantities; that is, information that can be measured and written down with numbers. Some examples of qualitative data are your height, your shoe size, and the length of your fingernails.
- **R squared value**: a fraction between 0.0 and 1.0, and has no units. An \( r^2 \) value of 0.0 means that knowing \( X \) does not help you predict \( Y \). There is no linear relationship between \( X \) and \( Y \), and the best-fit line is a horizontal line going through the mean of all \( Y \) values. When \( r^2 \) equals 1.0, all points lie exactly on a straight line with no scatter. Knowing \( X \) lets you predict \( Y \) perfectly.
- **Scatter plot**: data is displayed as a collection of points, each having the value of one variable determining the position on the horizontal axis and the value of the other variable determining the position on the vertical axis.
- **Standard deviation**: measures the amount of variation or dispersion from the average.\(^1\) A low standard deviation indicates that the data points tend to be very close to the mean; a high standard deviation indicates that the data points are spread out over a large range of values.
- **Trendline**: a line indicating the general tendency of the data.
- **X-axis**: The axis on a graph that is usually drawn left to right and usually shows the range of values of an independent variable.
- **Y-axis**: The axis on a graph that is usually drawn from bottom to top and usually shows the range of values of variable dependent on one other variable.