GRAPHING CHECKLIST

Graphing is an important skill to master so that you can represent results in a clear and easy to understand format. Your choice of graph type is dependent upon the data that you are trying to represent.

Line Graphs / Scatter Plots – should be used to compare how two variables affect one another. These are great when showing changes over time.

Bar Graphs - should be used when showing a change in amounts of a specific variable. These are great when showing comparisons.

Pie Charts – should be used when comparing parts to a total. These are great when showing percentages.

Graphing Checklist (ICATS) - these should be present in all bar and line graphs

- ❏ I - Intervals
    - ❏ Spacing is consistent (data should not be squished)
    - ❏ Intervals and scale are even and labeled along each axis
- ❏ C - Color
    - ❏ Colors have meaning - A key is included to show this meaning
- ❏ A - Axis
    - ❏ The x- and y-axis are both labeled correctly AND include units
    - ❏ The Independent Variable is on the x-axis
    - ❏ The Dependent Variable is on the y-axis
- ❏ T - Title
    - ❏ The title is clearly placed at the top of the graph
    - ❏ The title is descriptive and uses both variables
- ❏ S - Spacing / Size
    - ❏ The graph uses most of the paper

Line Graph / Scatter Plot Only
- ❏ The line should begin at the first data point.
- ❏ Data should be written so that the LINES of the graph paper represent specific intervals.

Bar Graph Only
- ❏ Bars should be between the lines along the x-axis
- ❏ Bars should be neat and organized

Pie Charts Only
- ❏ Pie segments should be accurately divided
    - ❏ Should calculate percentages ahead of time and divide the chart accordingly
- ❏ Each pie segment should include the correct label and percentage