Target: I can construct quality graphs and charts to communicate data effectively

General Guidelines

• Use the space provided!
  *No tiny graphs!
  *No tiny charts!

• Use a ruler!
  Make it look like you put in the time and effort to care!

• Write clearly, neatly, large enough!
Graphing and Data Table Expectations

1. Informative
2. Descriptive
3. Professional
Time Heated vs Temperature of Sample

- **#1** – Descriptive title
- **#2** – Labels
- **#3** – Units
- **#4** – Uniform Scale
- **#5** – Large visible data points
Time Heated vs Temperature of Sample

What else is missing?!
#6 Line of Best Fit!

Don’t play “connect the dots!”
Not always liner

Line of best fit can be a “smooth curve”
#1 – DESCRIPTIVE title
Mass and Temperature Data for Heat Transfer from Unknown Metal Block to Water

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mass of Metal Block (g)</th>
<th>Mass of Water (g)</th>
<th>Starting Temp of Water (°C)</th>
<th>Ending Temp of Water (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15.25</td>
<td>100</td>
<td>22.4</td>
<td>45.3</td>
</tr>
<tr>
<td>2</td>
<td>25.61</td>
<td>102</td>
<td>21.8</td>
<td>50.1</td>
</tr>
<tr>
<td>3</td>
<td>22.88</td>
<td>100</td>
<td>22.1</td>
<td>29.6</td>
</tr>
</tbody>
</table>

#2 – Labels for every column (or row)

#3 – Units for every column (or row)

#4 – Data written largely and clearly

#5 – Include decimals if possible
# Mass and Temperature Data for Heat Transfer from Unknown Metal Block to Water

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mass of Metal Block (g)</th>
<th>Mass of Water (g)</th>
<th>Starting Temp of Water (°C)</th>
<th>Ending Temp of Water (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15.25</td>
<td>100</td>
<td>22.4</td>
<td>45.3</td>
</tr>
<tr>
<td>2</td>
<td>25.61</td>
<td>102</td>
<td>21.8</td>
<td>50.1</td>
</tr>
<tr>
<td>3</td>
<td>22.88</td>
<td>100</td>
<td>22.1</td>
<td>29.6</td>
</tr>
</tbody>
</table>