**Physical Science – Chapter 2 Motion– Section 1**

*Using Excel to Plot/Graph Data*

Learning Targets:

You will use Excel to plot data points and create a graph.

You will export the graphs & data tables to a word document.

You will use graphs to describe the motion of objects.

**Part 1 – Inputting Data into Excel**

We will only place one data set on each graph.

We will input our data into column A & B.

Cells A & B should contain the quantity & unit of your data.

Column A is your independent (horizontal axis) and Column B is your dependent (vertical axis).

Data Set A

|  |  |
| --- | --- |
| Time (s) | Position (m) |
| 0 | 0 |
| 1 | 6 |
| 2 | 12 |
| 3 | 18 |
| 4 | 24 |

**Part 2 – Creating Your Graph**

Click on your trackpad/mouse and select just the numbers of the data you typed in.

Click on Chart.

Click on the arrow next to Scatter and then choose Marked Scatter.

You should see your data show up on a graph as a scatter plot!

Click on Chart Layout.

Add Axis Titles & a Chart Title

Now – we need to draw a curve/”connect the dots”! This is called line of best fit or Trendline.

Click on Trendline and select Trendline Option

Look at your points – are they linear (a line) or something else?

If it is linear – select it.

Select Options (below Type)

Check the following boxes (Set intercept = 0, Display Equation on Chart, Display R-squared value.)

Drag these items to a clear spot on the graph.

Select your chart – it will be highlighted.

Right click the chart & and select “Save as Picture” to your desktop with the following convention – First.Last.DataSet A, etc.