Creating an Excel Worksheet

Enter Data and Formulas into Worksheet

Start EXCEL and enter the column headings and data in the worksheet as shown below.

Calculations

In columns A3 – A7, calculate dilutions of the stock concentration in E1. To do this, enter the formulas in the cells as shown below. The = signals the start of a calculation. You will not see the formula when you press <return>; the result of the calculation will be displayed. In C2, enter the formula shown.
To repeat the same calculation in C3 – C7 click and hold the button in the black square in the bottom, right corner of the cell you wish to copy and drag the mouse to outline cells C3 – C7. The formula will be copied, but the referenced cell, B2, will be changed to B3 – B7 automatically.

The spreadsheet should now look like:

![Spreadsheetcreenshot](attachment:image.png)

**Formatting Cells – Appearance and significant figures.**

1. Highlight A1, B1 and C1 by clicking in A1 and, holding down the mouse button, drag until C1 is shaded. Select *Format → Cells*…

   a. Click the **Alignment** tab. In the **Horizontal**: pull down menu, chose **Center**.
b. Click the **Border** tab. In the **Line/Style**, select the double line, the click the underline, in the **Border** window. Click **OK**.

2. Highlight D1 and E1 and put a thick line border around the two cells.

3. Set the correct number of significant figures for all the data by selecting the data to be formatted and using **Format → Cells.../Number tab/Number or Scientific/Decimal places**: Use the up and down arrows to pick the number of places past the decimal point. Click **OK**. The spreadsheet should look like the figure below when you are done.

You are now ready to plot the data. Plot column C (as y) versus column A (as x). The Title of the graph might be “Calibration Curve of Red Dye at 502 nm”. The x axis can be labeled “Concentration (M)” and the y axis “Absorbance”.