Travelling IT Notes

Excel – Creating a Workbook (Part 1)

This exercise is designed to allow the entry of meter readings for electricity, gas and water on a monthly basis and the calculation of the cost monthly and annually.

We will create a worksheet of each utility and a summary sheet. In addition there will be a sheet to hold the variables of standing cost and price per unit.

Start by creating a sheet for one utility.

In cell A2 enter Jan (short for January). Copy this cell down and produce a list of months from January to December.

Next add the column titles as shown below.

	A	B	C	D	E	F	G
1		Initial Meter Reading	Final Meter Reading	Units used	Cost per Unit	Cost of Units Used	
2	Jan						
3	Feb						
4	Mar						
5	Apr						
6	May						
7	Jun						
8	Jul						
9	Aug						
10	Sep						
11	Oct						
12	Nov						
13	Dec						
14							

The text in row 1 is formatted to wrap and is centred and bold. To do this, first increase the depth of the row (approx. 3 times) and then click on the row number (1) to select the row.

Click the wrap button and the centre and bold buttons.

It is obvious that the meter reading at the beginning of Feb will be the same as that at the end of Jan. Thus the value entered in C2 needs to be re-entered in B3. We can make this automatic by putting a simple formula in B
3. To do this, put the cursor on C3; press = to start a formula; then click on C2. (This will enter the cell reference in the formula and it should read =C2). Press the Enter key.

Since this will be the same for each subsequent month, we can copy this formula down to all months. (Use the copy handle; double click on it and it will copy down to the bottom of the previous column)

For Jan, the units used is the difference between the initial and the final meter readings. This should go in cell D2.

Put he cursor in D2 and press the = key to start a formula. Click on C2 to enter this cell ref in the formula. Then press the – key and click on B2. The formula should read =C2-B2. Press the enter key.
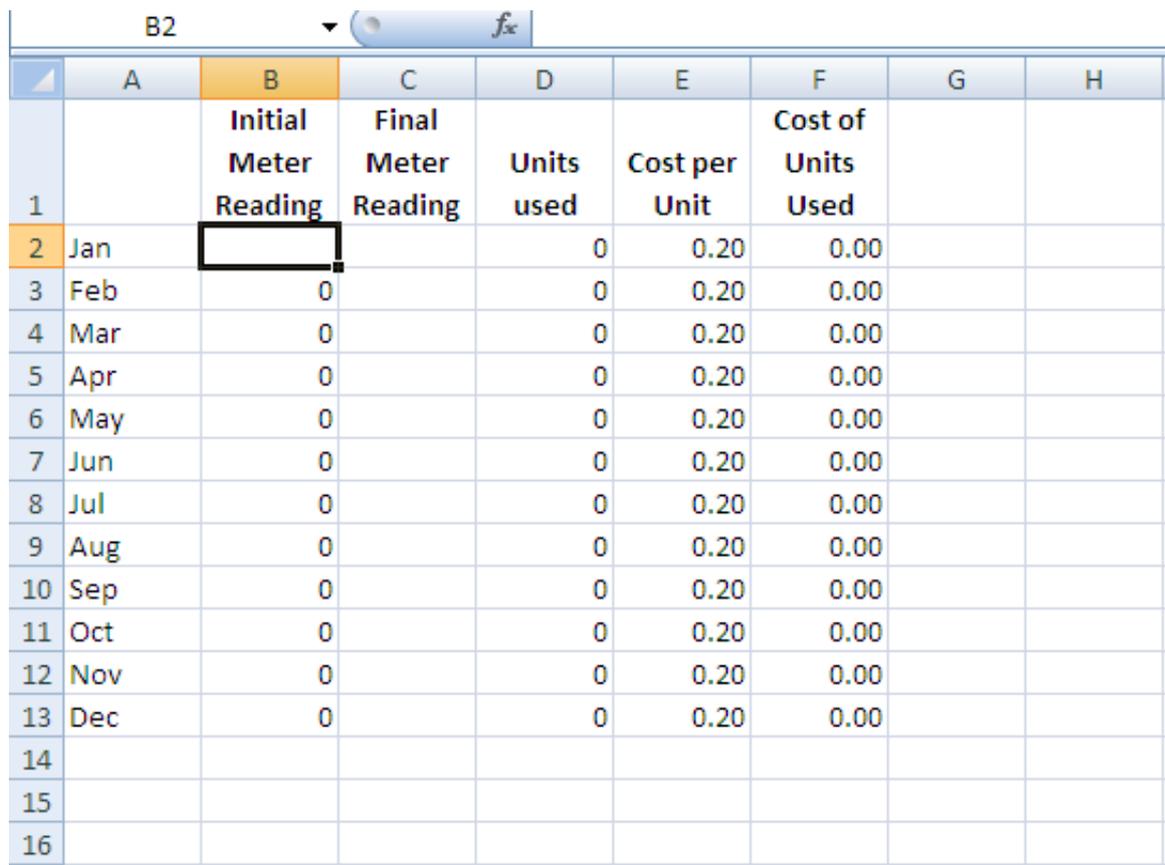
Since each month will use the same calculation, use the copy handle to copy the formula down to each month. It will have to be "dragged" down because there is nothing in the previous column yet.

Let's, for the time being, assume that the cost per unit is 20p. This is entered as 0.20 but will appear as 0.2   To correct this, format the column to 2 decimal places as follows.

Right click on the column label (E) and select format cells. Select number in the category box and then click the OK button.

The cost of unit used is calculated by multiplying the number of units used by the cost per unit. Put the cursor in F2 (where the answer is to go). Press = to start a formula and then click on D2. Press the * key and then click on E2. The formula should read =D2*E2. Press the enter key.

The spreadsheet will now look like this.

	B2			f_x			
	A	B	C	D	E	F	G	H
1		Initial Meter Reading	Final Meter Reading	Units used	Cost per Unit	Cost of Units Used		
2 Jan				0	0.20	0.00		
3 Feb		0		0	0.20	0.00		
4 Mar		0		0	0.20	0.00		
5 Apr		0		0	0.20	0.00		
6 May		0		0	0.20	0.00		
7 Jun		0		0	0.20	0.00		
8 Jul		0		0	0.20	0.00		
9 Aug		0		0	0.20	0.00		
10 Sep		0		0	0.20	0.00		
11 Oct		0		0	0.20	0.00		
12 Nov		0		0	0.20	0.00		
13 Dec		0		0	0.20	0.00		
14								
15								
16								