

Using Computers

Spreadsheet Module

Task 5

In the spreadsheets we have produced so far, the end product has been a chart or graph. Because of this, we have not yet looked at formatting data on the spreadsheet itself. In many cases it is the actual spreadsheet which is the end product. Excel® can add borders and colours / shading to cells as well as changing fonts and alignments etc. You can also enhance the appearance of your spreadsheet by adding pictures and clip art.

Task 5

Produce a sales invoice. You can make up the name and business that your invoice is for or use the example provided. As well as formatting the receipt, use formulas to calculate the VAT @ 17.5%, the total costs etc. In addition, add a shipping cost field to add a charge of £20 for orders of £100 or less. The idea is that all that needs to be filled in on the completed spreadsheet is the description of goods, the cost of a single item and the quantity purchased, the spreadsheet will then calculate the vat, the totals etc.

Methodology

Getting started

Look at the example spreadsheet. At first it looks more like a document that has been produced in a word processing or desktop publishing package. Imagine all of the columns of the table are projected the full length of the paper... these are the spreadsheet columns. Similarly each line of text or spaces for text form the spreadsheet rows. So, if you want to start by producing the centre table (probably the best way to go), start off by typing the heading *Description of Goods* in cell B10. This leaves nine rows above the table for the heading and all of column A for a coloured margin.

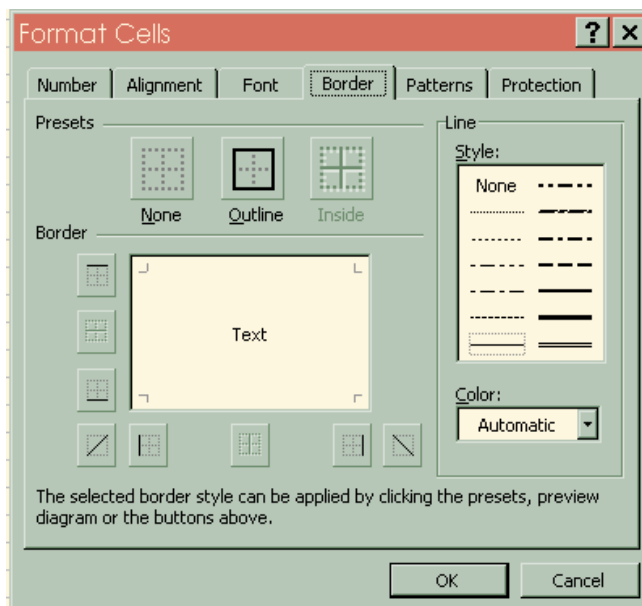
Now enter the description of the first item in cell B11 (A4 folder on the example), its cost in cell C11 and quantity in D11. All of the other columns are calculated from these two numbers. In cell E11 (*Goods*) you want to multiply the price by the quantity so enter the formula `=C11*D11` notice again that the spreadsheet, indeed all computer applications, uses the * symbol (shift+8) for multiply; this is to avoid confusion with the letter x. When you have entered the formula click on the green tick and the answer will be displayed.

To calculate the shipping cost we need a formula that first decides if the cost of the goods is over a certain value and then adds the appropriate amount. The formula in this case (in cell G40) is `=IF(G38<=100,20,0)` this looks very complex but if you break it down it is not a difficult as it first seems.

`=IF`(tells the spreadsheet we want to assign a value based upon another cell... so we need to tell it which cell... G38. Next we need to tell it what we want to know about cell G38... `<=100` says is the cell less than or equal to 100 (£100 exactly or less). The next number tells the spreadsheet what to put if the question we have asked is true and the final one tell it what to put if the answer is not true...in this case 20 (£20) for true and 0 for false.

The final calculation in G41 simply adds the three cells above it together to give a total cost. You can either use AutoSum or enter the formula `=sum(G38:G40)`.

You have now set up all of the calculations needed for this task. The second part of the task is to format the spreadsheet by adding colours, borders etc. All of the format options are accessed through the Format + Cells option. This displays a panel with tags for the various options.



When formatting borders and colours you can only select a rectangular shape of cells at a time. Start by selecting the cells A1 to A51. Select Format + Cells and click the pattern tab. Select a colour. Don't panic when the cells you have selected are not the colour you picked... this just shows that they are still selected.

Click in a different cell to see the cells are the selected colour. Next repeat the process with the top section, B1 to H10. Work around the sheet until all of the outside area is in the colour you pick. Next add all of the remaining text.



Use the font, size, bold etc icons to control the appearance of the text. Finally, add the borders to the cells in the centre section. Select **Format + Cells** and click the border tab. Select the border type you like from the range in the right hand box then click the Outline icon. This puts the border around the range of cells selected. To add the column line click the centre button below the preview. Next click OK. Experiment with this function, it gives a great deal of control over border appearance.

When you are happy with your spreadsheet save it as task 5 and print a copy for your course file.

Things to note:

- When calculating formulas, the most common symbols that are use are:

+ to add	* to multiple
- to subtract	/ to divide
- Pictures can be added to improve forms to make it look more interesting. These can be access from various sources i.e. clipart from the computer or from the various sites off the Internet. Look back at your Word module on how to insert pictures.
- When you create spreadsheets, the width of each column is automatically set to fit approximately 8 numbers. You may need to adjust the columns to accommodate changes in text styles, decreases or increases in cell values or to save worksheet spaces. If you change the font or number sizes, and the text or number becomes too large, you will notice that the cell will have (#####) in it. You will then need to hover between the columns until you get the think black cross with the double-ended arrows. Click and then drag with the mouse to the left or right. A quick way to do this is to double click when you see the cross and the column will adjust automatically.

Humberside Stationary Supplies

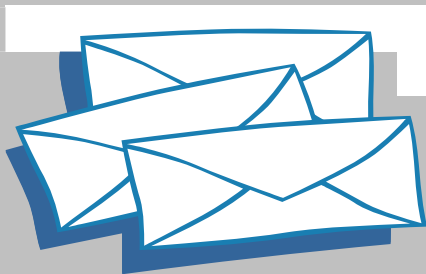
823 St. Annes Road
 Kingston Upon Hull
 East Yorkshire
 HU6 8GH

Customer _____
 Date _____

tel 01482 749012
 fax 01482 749010

Sales Invoice

Description of goods	Unit Price	Quantity	Goods	VAT	Total Cost
A4 Folder	£1.99	10	£19.90	£3.48	£23.38
3.5" Floppy Disk - 10 pack	£5.99	3	£17.97	£3.14	£21.11
HP51625A printer cartridge	£23.78	1	£23.78	£4.16	£27.94
Cost of Goods					£61.65
VAT					£10.79
Shipping Cost					£20.00
Total Cost					£92.44



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