



The right conditions

Stephen Wells presents **conditional formatting** in its true colours.

In my email bag each month there are always variations on the question of how to have a spreadsheet automatically display a response to a specified result. Here, the Excel 97 feature, Conditional Formatting, comes into its own. At last, you can call attention to a cell based on a value in another cell.

Take a common example. Say your column A displays a list of participants in a tournament, exam, ballot or whatever, and column B shows their scores out of 100. If the score is 39 or below, we'll colour the adjacent name cell coral; scores between 40 and 64 will be coloured marine; 65 to 84, pale blue; and scores of 85 and above will be yellow.

1 Format all the cells with names in them, pale blue. This is because you can only specify three conditions at once. So we'll make pale blue the default

colour, or a

2 Now select the first name cell A2.

Choose Format, Conditional Formatting, to display the

dialogue box shown in Fig 1. A condition can either start 'Cell value is' or 'Formula is'. Select the latter.

3 The formula must evaluate to a logical value of TRUE or FALSE.

We need the IF function and we have to enter it as

`=IF(B2<=39,1,0)`

This means that if the score in cell B1 is 39 or less, then 1; otherwise, 0. To Excel, 1 means True, 0 means False.

4 Click on Format, Patterns and pick a colour for this condition. At this stage there's an Add button available to pick a second condition. We click that and enter

`=IF(B2>=40, IF(B2<=64,1,0))` for Condition 2. If that condition is true, the background colour will be marine.

5 Finally, Condition 3 will read as follows:

`=IF(B2>=85,1,0)`

If that is True, the colour will be yellow. Logically then, if B2 is 65 to 84, the colour will be the default condition, pale blue.

This completes the formatting for A2. Just select that cell, click on the Format Painter button, then paint down the cells holding the other names. This copies both the default format and conditional formats to those cells.

Heads and tails

Several readers have asked me how to format headers and footers in Excel 9. The following procedure will also be recognised by Excel 7 and 8 (Excel 95 and 97), although in the later versions option buttons are offered in the Header/Footer dialogue box.

You can specify a font by entering it in double quotes preceded by an ampersand. The point size is entered as &nn. So, if you want to print a company name in 12pt Curlz MT (assuming this is a font you have available) you would enter it as

`&"Curlz MT" &12 The Jones Co`

In Excel 97 you can enter the company name, or anything else, under File, Properties, Summary, Author and it will appear among the built-in headers and footers in a drop-down box. You can then choose Custom and Edit and reformat it there.

In any version, you can enter text and format it using ampersand codes:

Code	Format
&B	turns bold on and off
&I	turns italic on and off
&F	prints the workbook name
&A	prints the worksheet tab name
&D	prints the date
&T	prints the time

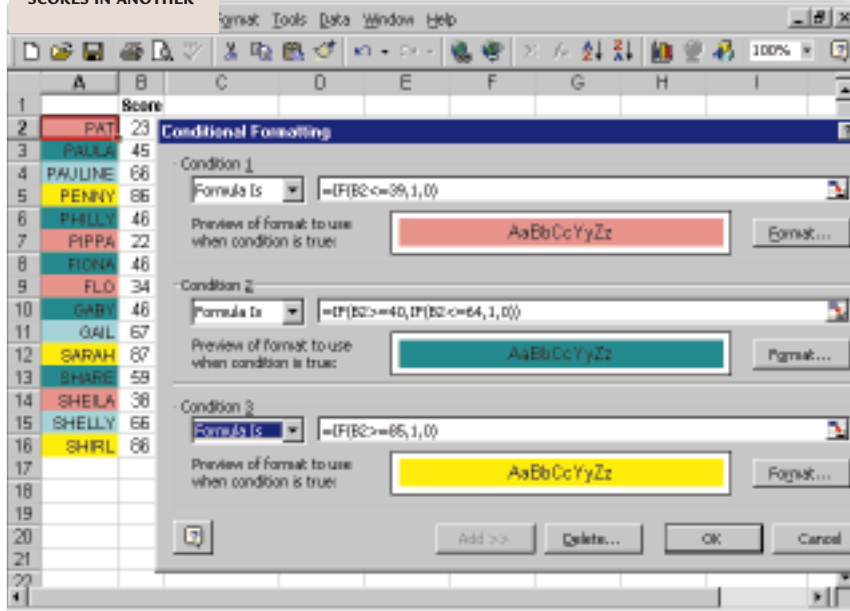
Items to include in headers can easily be made to appear at the top of every page — at least, in Excel 97 — by automatically printing the top one or more rows. Choose File, Page Set-up, and then click the Sheet tab. Click Rows to repeat at the top and then enter the row numbers of those to be repeated. If you want the path on every page, just enter

`=CELL("Filename")`

in cell A1 and use this option.

Remember, Filename is a keyword in the CELL function. Similarly, if you use 'Width', the CELL function will return the width of the cell in the average number of digits in the default text font for the worksheet.

▼ Fig 1 USING THE CONDITIONAL FORMATTING FACILITY, EXCEL 97 CAN CHANGE THE BACKGROUND COLOUR OF THE NAMES IN ONE CELL BASED ON THE SCORES IN ANOTHER



NIMBLE SYMBOLS

Every now and then, you need to use a symbol on your spreadsheet. Thanks to regular reader Shane Devenshire, of California, here is a simple way to keep a good selection in front of you:

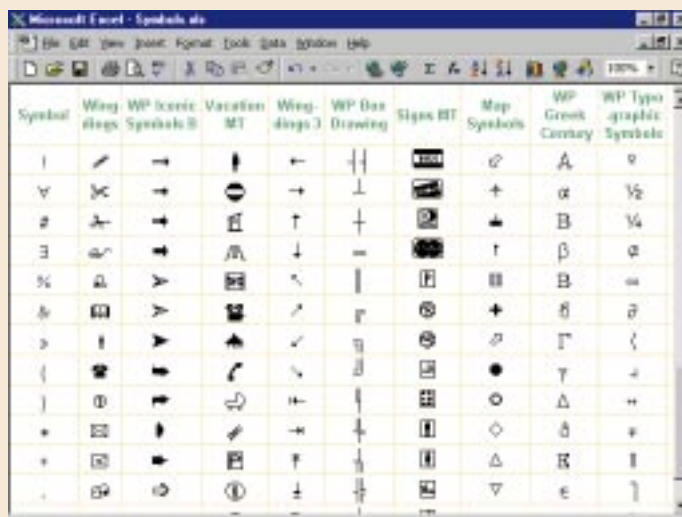
In cell A1, enter:

=CHAR(ROW())

and drag this down to A255.

Select the same range and change the font to Symbol, then copy this across several columns. Select each range (like B1 to B255, and so on) and change each column to a different specialist font.

When you need a symbol, you can open this worksheet and copy and paste from it.



Questions & answers

Q I have sold a bungalow for £96,750 which I bought for £66,500 cash, seven years ago. How can I calculate the annual average percentage increase in value?

a Enter the recent sales price in cell A1, the original purchase price in A2, and the number of years you held the property in A3. In Lotus 1-2-3 you can use the straightforward RATE function: @RATE(A1,A2,A3). Then format the cell as percent. The answer is, the bungalow increased 5.5% in value each year. Excel has a RATE function, but it is intended for calculating the interest rate per

period of an annuity, so you have to enter the arguments this way: =RATE(A3,-A2,A1). This function's arguments are entered in reverse. The number of years goes first, then two commas, then minus the purchase price, another comma, then the sales price. This is undocumented, but it works.

Q How can I automatically increase a date series in quarters?

a Enter your date (say, Jan-99) in the first cell. Right-click on the lower right-hand corner of the cell and drag down as many cells as you need. Choose Series at the bottom of the shortcut menu. In the dialogue box under Date unit, select Month, and under Step

value enter 3. Your column will read Jan-99, Apr-99, Jul-99 etc.

Q Like Word, Excel lets me Send To a Mail or Routing Recipient or to an Exchange folder but does not offer Fax Recipient. How can I fax an Excel worksheet directly?

a Just choose File, Print, and then drop down the arrow by the printer in use. This will offer Microsoft Fax or any other available fax driver. The wizard which starts and lets you select the fax number from your address book, is part of Windows. Before you use it, adjust your Excel page sizes to print on A4 paper.

Q Does Excel offer a Full Screen opportunity like Word?

a Well, yes, almost. You should press Alt+V, U to lose the toolbars, formula bar and the taskbar. Unlike Word, though, the scroll bars and menu bar are retained. Click on the floating button to return.

Q Whereabouts on my keyboard can I find the euro symbol?

a On UK and Irish keyboards you can press AltGr+4 or otherwise Alt+4. Most continental keyboards use AltGr+e. Obviously, your fonts have to include the symbol and your printer must be able to recognise it. You can read more about this subject at www.microsoft.com/windows/euro.asp and the www.microsoft.com typography web sites.

■ Stuck in the rough

I have received several intended solutions to the golfing problem which appeared in the December '98 column. While I am grateful to those who tried their hands at this, none have really cracked it. Lengthy accompanying explanations use phrases such as 'Unfortunately this doesn't quite

do what you want it to...' and 'My mistake was to mis-read your article as the results of the matches do not matter.'

So, if any other readers out there would like to have a go, take my advice — first read the column carefully! Then, send me your formulas in a text email, to the

address below, and please do not send any attachments with your emails.

PCW CONTACTS

Stephen Wells can be contacted via the PCW editorial office (address, p10) or email spreadsheets@pcw.co.uk