Section 2

Advanced Cell Formatting

By the end of this Section you should be able to:

Apply Wrap Text
Use Merge and Shrink to Fit
Change Text Orientation
Remove Cell Formatting
Use the Format Painter
Use Paste Special
Add and Remove Conditional Formatting
Use AutoCalculate
Use AutoCorrect

Exercise 9 - Wrap Text

Guidelines:

Wrap Text is used to fit data into cells without widening the columns, by using more than one row within a cell. The row height is increased automatically, if not previously set manually.

Actions:

1. Open the workbook **League**. This is an Ice Hockey league table.

2. The numbers in the centre of the table are small but the titles are relatively long. Select columns **B** to **I** and change all the column widths to **9.00 (68 pixels).**

3. Display the **Home** tab, select the range **B3:I3** and **Center** align the labels.

4. With the range still highlighted, click the **Wrap Text** button,  , found in the **Alignment** group. Where necessary the text in the cells has been wrapped onto a new line so that it can all be seen, the row height is adjusted automatically.

	A	B	C	D	E	F	G	H	I
1	*Ice Hockey League Table*								
2									
3	Team	Games Played	Won	Drawn	Lost	Goals For	Goals Against	Goal Difference	Points
4	Sweden	6	1	0	5	2	11	-9	2
5	Italy	5	2	0	3	4	10	-6	4
6	Spain	5	3	1	1	10	3	7	7
7	France	6	2	2	2	12	10	2	6
8	England	6	3	1	2	15	8	7	7
9	USA	6	4	1	1	16	7	9	9
10	Canada	6	5	1	0	17	3	14	11
11									

Note: If the row height had previously been set manually, then as with adding a larger font, the row height would have to be adjusted manually.

5. Print a copy of the worksheet.

6. Leave the workbook **League** open.

Exercise 10 - Shrink to Fit

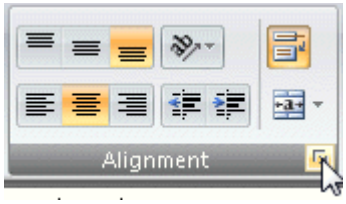
Guidelines:

Shrink to Fit is another way to display all the text in a cell. It reduces the size of the font so that the contents fit into the cells.

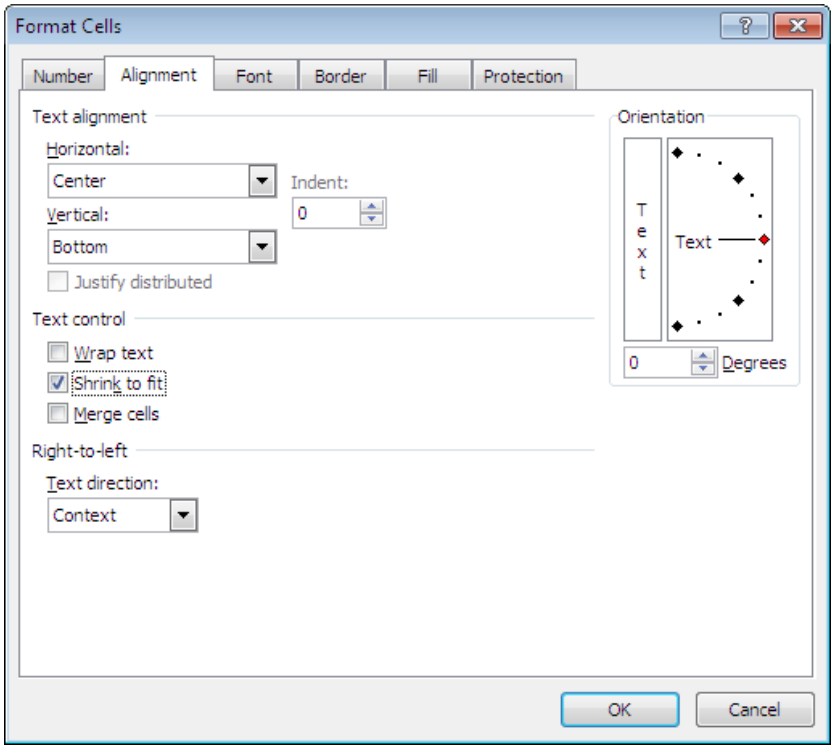
Actions:

1. Open the workbook **League**, if not already open.

2. Highlight the range **B3:I3** and click the **Alignment** tab dialog box launcher to display the **Format Cells** dialog box.



3. Uncheck **Wrap text** and check **Shrink to fit** under **Text control**.



4. Click **OK**. The text reverts to a single line and the font size is reduced where necessary so that all the text can be seen in each cell. This is rarely used for a range of cells, as different cells will have different sized fonts.

5. Click **Undo** to remove the **Shrink to fit** and re-apply the **Wrap text**.

6. Leave the workbook open.

Exercise 11 - Merge Cells

Guidelines:

Merge cells is used to combine two or more cells into one. Very useful when creating a form, e.g. an order or invoice with variable width columns, or when placing a title across several columns.

Actions:

1. Open the workbook **League**, if not already open.

2. To centre the title across columns **A** to **I**, highlight the range **A1:I1** and click the **Merge and Center** button,  in the **Alignment** group.

	A	B	C	D	E	F	G	H	I
1	*Ice Hockey League Table*								
2									
3	*Team*	*Games Played*	*Won*	*Drawn*	*Lost*	*Goals For*	*Goals Against*	*Goal Differenc*	*Points*
4	*Sweden*	6	1	0	5	2	11	-9	2
5	*Italy*	5	2	0	3	4	10	-6	4

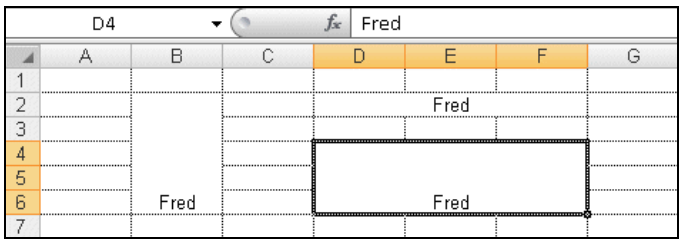
3. The cells are **Merged** to make one cell, **A1**.

4. To remove the merging, the **Merge and Center** button can be used again. Click on cell **A1** and click the **Merge and Center** button,  again.

*Note: Merging can also be controlled using the **Format Cells** dialog box, check or uncheck the **Merge cells** option.*

5. Make **Sheet2** active. This blank sheet is to be used for experimenting with **Merge cells**. Select the range **B2:B6** and click the **Merge and Center** button,  , (apply another type of alignment if centre is not appropriate).

6. Enter **Fred** in cell **B2**. Merge the ranges **D2:F2** and **D4:F6**. Enter **Fred** in cells **D2** and **D4**.



7. With cell **D4** selected, click the **Middle Align** button,  , to place **Fred** in the centre of the merged range **D4:F6**.

8. Click on cell **D2** and remove the cell merging.

9. Leave the workbook open.

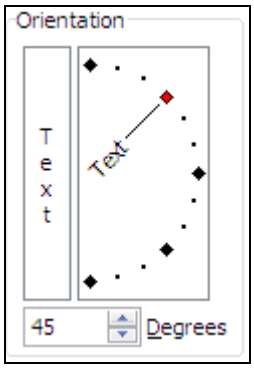
Exercise 12 - Text Orientation

Guidelines:

Cell contents can be displayed vertically or at any angle in the cell. This is called **Orientation**.

Actions:

1. Open the workbook **League**, if it is not already open.
2. On **Sheet2**, click on the merged cell **D4** and click the **Orientation** button,  and select **Angle Counterclockwise**. This turns the text through 45 degrees.
3. If greater control is required, with **D4** still selected, click the **Orientation** button and select **Format Cell Alignment**. The **Orientation** box controls the angle at which the cell contents are displayed.



4. To rotate the contents, either type a number of degrees in the **Degrees** box, use the **Degrees** spinner, drag the line round in the picture or click the markers around the semicircle. Change the angle of the text to **30** degrees, using any method. Click **OK**.
5. Click on the merged cell **B2** and change the contents so that it reads vertically down, letter by letter, by clicking the **Orientation** and choosing **Vertical Text**.
6. Click the **League Table** sheet tab. Highlight the range **B3:I3** and rotate the text through **90** degrees, using the **Orientation** button and **Rotate Text Up**.
7. Change the widths of columns **B** through to **I** to **4.00** units. Right align the contents. This method of text orientation is used for record sheets, where names are displayed across the top and marks or grades are entered underneath.
8. Print a copy of the worksheet, centred horizontally.
9. Leave the workbook **League** open.

Exercise 13 - Remove Cell Formatting

Guidelines:

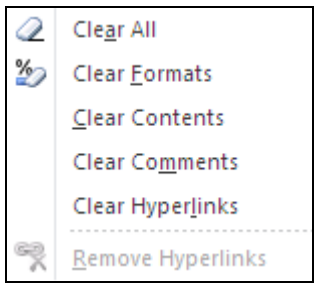
Formatting affects the way a cell and its contents appear. Individual formatting can be changed by applying different options, e.g. applying a different font style. The **Clear** command has options to remove: content but not formatting; formatting but not content; or both formatting and content.

Actions:

1. The workbook **League** should still be open, if it is not, open it.

2. On **Sheet2**, click on cell **B2**. This cell has formatting in the form of merged cells and text orientation applied.

3. Click the **Clear** button,  , in the **Editing** group.



4. Select **Clear Formats**. All the formatting is removed, but the content remains in cell **B2**.

5. Click on cell **D4** and press <**Delete**>. This is the equivalent of the command **Clear Contents**.

6. With the **D4** still selected type **George** and press <**Enter**>. The formatting of this cell has remained even though the content was removed.

7. Select **D4**, click **Clear** and select **Clear All**. The content and formatting are removed. Enter the text **George** again to prove that the formatting is no longer applied.

8. Click the **League Table** sheet tab and clear the formatting from the cell **E3** and the range **A4:A10**.

9. Leave the workbook **League** open.

Exercise 14 - Format Painter

Guidelines:

When several different formats have been added to a cell, these formats can be painted to any other cells using the **Format Painter**.

Actions:

1. The workbook **League** should still be open, if it is not, open it.
2. On the **League Table** sheet, click on cell **D3**. This is a cell that has all the formatting still applied.
3. On the **Home** tab, click the **Format Painter** button,  in the **Clipboard** group. The cursor changes to a  . To apply the formatting, click on cell **E3**. All the formatting features from **D3** are now applied to **E3**.
4. Click on cell **A3**.
5. Click the **Format Painter** button,  and then click and drag the range **A4:A10** to paste the formats to the range.
6. Click on cell **B4**, change the font colour to **Orange** and the font size to **12pt**.
7. Double click on the **Format Painter** to activate it for multiple use.
8. Click on cell **C4**. The formats are pasted and the **Format Painter** is still active.
9. Click on cell **D4**. The formats are pasted again.
10. Click and drag the range **E5:H5** on releasing the mouse the formats are applied to that range.
11. Click on any cells and select any ranges in the table to paste the formats.
12. Press <**Esc**> or click the **Format Painter** button, again to cancel it.
13. Close the workbook without saving.

Exercise 15 - Paste Special

Guidelines:

When using **Copy** and **Paste** or **Cut** and **Paste**, the default is to paste the cell exactly as it was originally. **Paste Special** is used to paste cell information when a complete copy is not required. For example, **Paste Special** can:

Paste only formulas, values or formats. Pasting values from cells that contain formulas is a way of fixing the data, as it will never then be recalculated.

Combine with existing values using an operation, e.g. adding, subtracting, etc.

Transpose ranges (change a spreadsheet round by converting rows to columns and columns to rows).

Paste links to the original data (covered in a later section).

Actions:

1. Open the workbook **Finances**.
2. Open the workbook **Outgoings** and select the range **A1:L10** and click on the **Copy** button,  , in the **Clipboard** group.
3. Click on the icon representing the **Finances** workbook on the **Taskbar** to make it active.
4. Click on cell **B5**. Click the **Paste** button to paste the contents normally.
5. Data can be pasted using a mathematical operation. Open the file **Income**.
6. Highlight the range **A1:L2**, the income figures.
7. Click the **Copy** button.
8. Switch back to **Finances** using the *Excel* icon on the **Taskbar**.
9. The income figures are to go into the range **B2:M3** but this range already contains data, which would be overwritten if a normal paste was used. To add the new data to the original data, select cell **B2** then click the **Paste** drop down arrow and select **Paste Special**.

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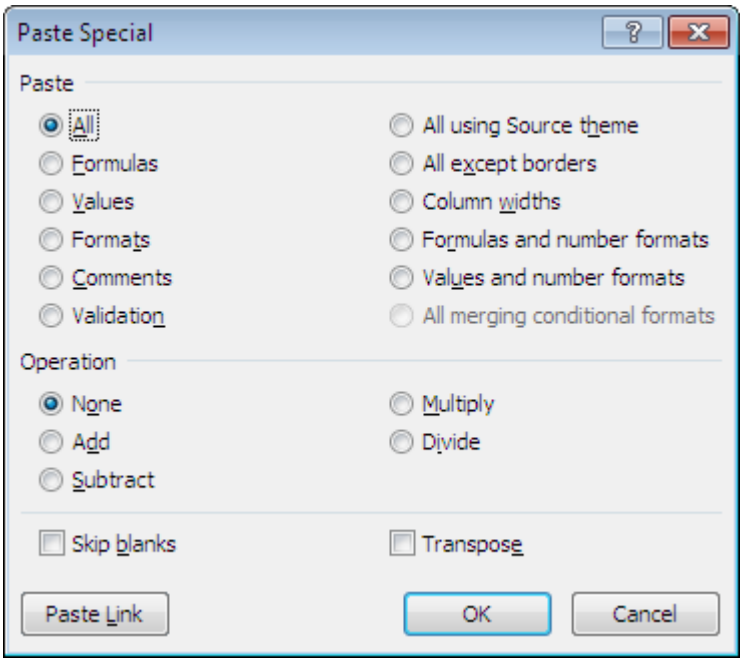
Exercise 15 - Continued



10. Under **Operation** click **Add** to add the two sets of figures together, then click **OK**. The data is now combined.

*Note: The **Add** operation was used in this example. **Subtract**, **Multiply** and **Divide** work in a similar way.*

11. It may be necessary to convert formulas to values because the numbers are final, e.g. a VAT return or expenditure after the month end, etc. Using the **Finances** workbook, January has ended and the figures in column B are required to be converted to values. Check the cells **B4**, **B15** and **B16** to see that they currently contain formulas.

12. Select the range **B2:B16** and click the **Copy** button,  .

13. Without moving the selection, click the **Paste** drop down and select **Paste Special**.

14. Under **Paste**, select the **Values** option and click **OK**. Press <**Esc**> to remove the selection.

15. Check that the cells **B4**, **B15** and **B16** now contain values.

Note: Remember that this process removes formulas and therefore the worksheet cannot be used again. If repeated use is required, create and use a template.

16. Save the workbook as **Finances2** and close it.

17. Close the workbooks **Income** and **Outgoings** without saving.

Exercise 16 - Conditional Formatting

Guidelines:

As well as applying formatting to certain cells, it is possible to apply different formatting to cells depending on the values within those cells. Selected cells can be compared to a value, or the results of a formula, to decide which format should be used. This is called **Conditional Formatting**.

Multiple conditions can be used to determine the formatting for the same cell, so for example, a cell could be coloured red if it is below a certain value and blue if it is greater than another value.

Actions:

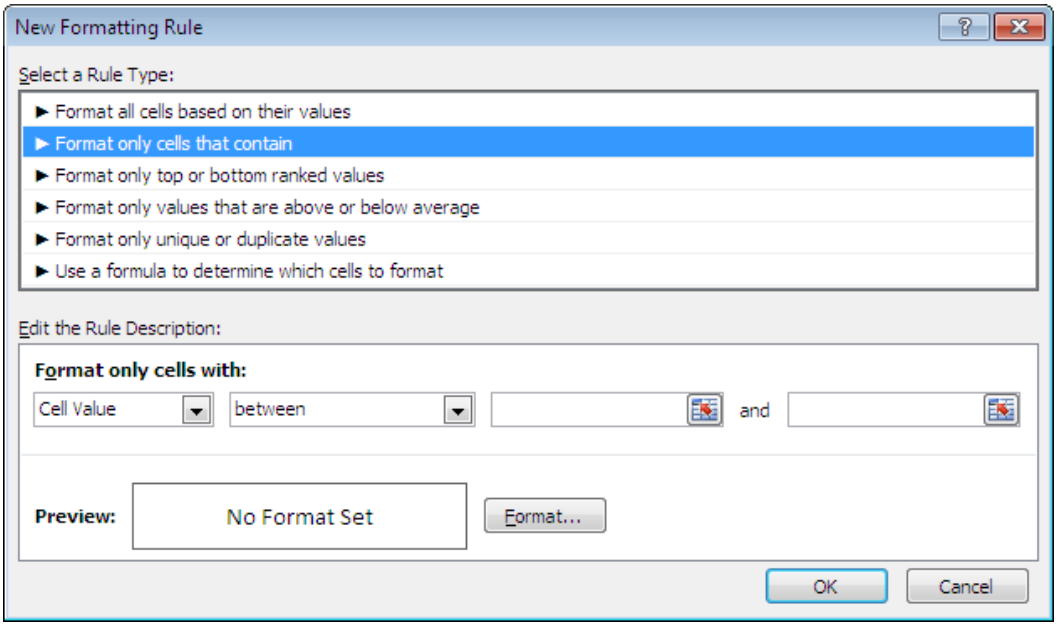
1. Open the workbook **Retail**.

2. Highlight the **Turnover** figures, the range **B4:M4**.

3. With the **Home** tab displayed, from the **Styles** group, click **Conditional Formatting**.

4. There are several types of preset formatting available from the list but select **New Rule**. The **New Formatting Rule** dialog box is displayed.

5. Select **Format only cells that contain**.



6. In the drop down criteria box (**between**) select **less than or equal to**. Enter the value **19000** in the next box.

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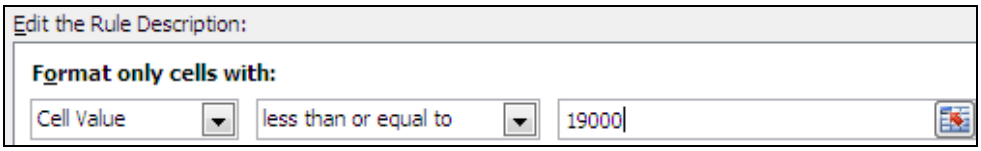
Exercise 16 - Continued

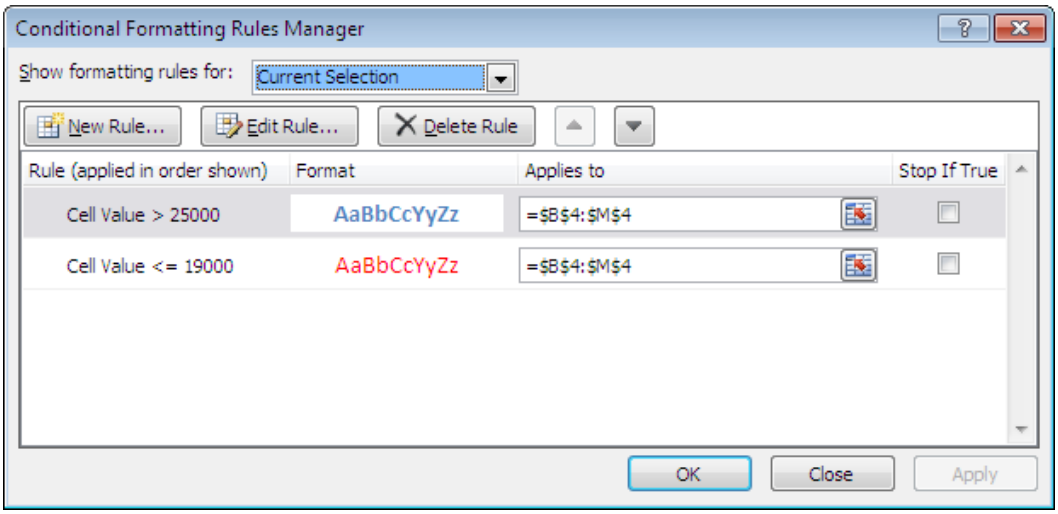


7. Click the **Format** button and select the text colour **Red**. Click **OK**. Click **OK** again to apply the rule.

8. To add another condition to the same range, click the **Conditional Formatting** icon and select **New Rule**. Select **Format only cells that contain**, again. Select **greater than** and enter **25000** in the next box. Format the text to be **bold** and **blue**. Click **OK** and **OK** again to apply the formatting.

9. Highlight the range **B14:M14**, apply the conditional formatting, values **less than** the average of the range **=Average($B$14:$M$14)**. Format the range with a **pale green** cell shading using the **Fill** tab and **More Colors** option. Click **OK, OK** and **OK** again.

10. To remove **Conditional Formatting**, select the range **B4:M4**, click **Conditional Formatting** menu and select **Manage Rules**.



*The current selection has two rules applied to it. To view all the rules, select **This Worksheet** from the **Show formatting rules for** box.*

11. Select the **Cell Value > 25000** rule and click the **Delete Rule** button, 

. Click **OK**. All values of over **25000** should now not be **blue** or **bold**.

12. Experiment with adding and removing conditional formats to experience the power of the feature to highlight results in a way that had not been possible before.

13. Close the workbook without saving.

Exercise 17 - AutoCalculate

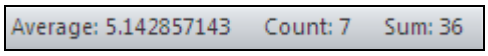
Guidelines:

AutoCalculation displays the results of common mathematical functions on the **Status Bar** without the need to enter them.

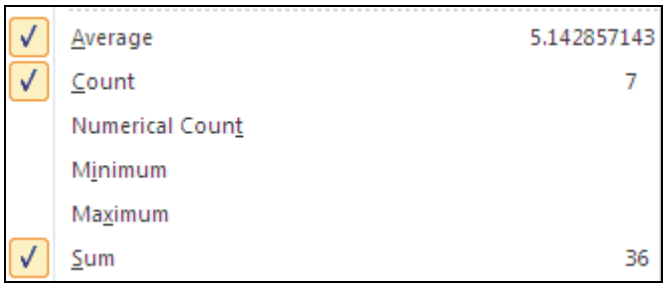
Actions:

1. In a blank workbook, enter a list of numbers from **B2** to **B8**.

2. Select this range **B2:B8** and note the **AutoCalculation** in the **Status Bar** at the right, given as **Average: …. Count: ….. Sum: …**. An example is shown below:



3. With this range still selected, click the right mouse button on the **Status Bar** to display a list of **Status Bar** options. Mathematical options are listed near the bottom.



4. Options can be checked or not as required. Click **Maximum** and then click away from the shortcut menu. **Max** is added to the display.

5. Right click on the **Status Bar** and uncheck **Maximum** to remove it. Close the shortcut menu.

6. Close the workbook without saving.

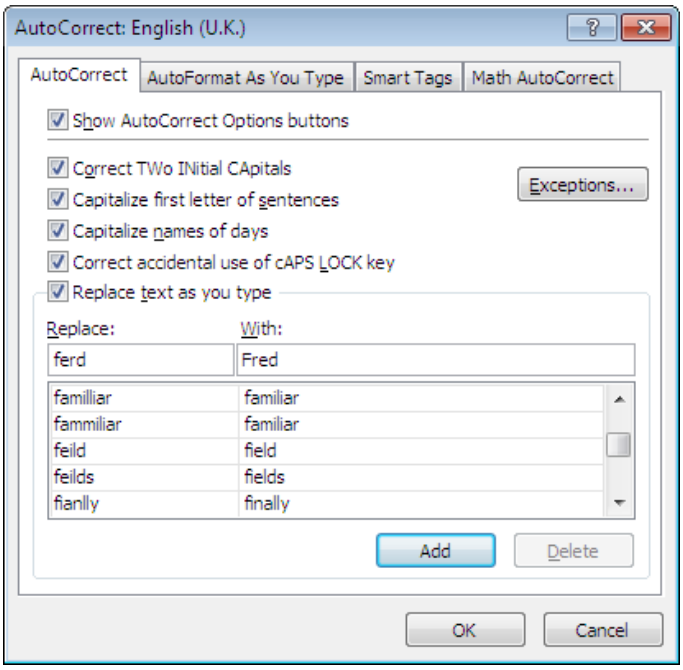
Exercise 18 - AutoCorrect

Guidelines:

Common spelling or typing errors can be corrected automatically using **AutoCorrect**. Corrections for personal errors can be added. Any entries will remain programmed until deleted.

Actions:

1. In a blank workbook, click the **File** tab then **Options**.
2. Display the **Proofing** section and click the **AutoCorrect Options** button.
3. In the **Replace** box, type **ferd** and in the **With** box type **Fred**.



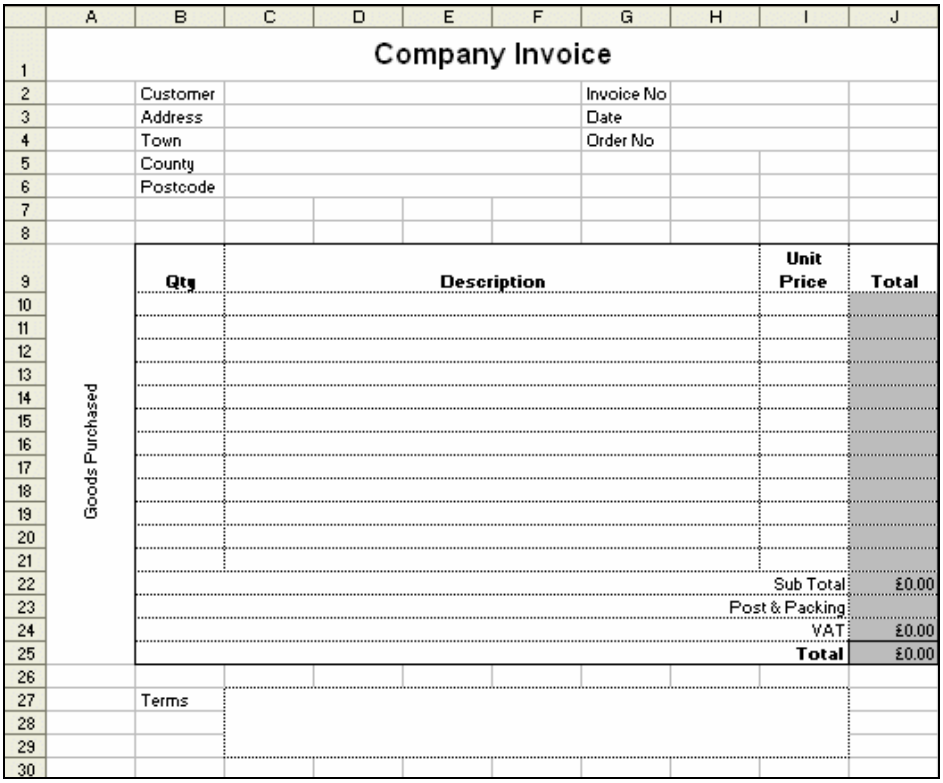
4. Click **Add** to add this replacement to the list. Click **OK**. Click **OK** again to close **Excel Options**.
5. In cell **B2**, type **ferd**, select <**Enter**> and the correction is automatically made.

*Note: This can lead to problems if the text you are replacing is actually required in a cell. To switch the autocorrect feature off, display **Options**, **Proofing** and **AutoCorrect Options** and uncheck the **Replace text as you type** box. Click **OK**.*

6. Display the **AutoCorrect Options** again and find **ferd** in the list. Select it and **Delete** it. Select **OK** to close the dialog box. Click **OK** again.
7. In cell **B4**, enter **ferd**, it now stays unchanged.
8. Close the workbook without saving.

Exercise 19 - Revision: Advanced Cell Formatting

1. Start a new workbook and create the following invoice, using the appropriate cells. The merge cells feature is used extensively.



1		Company Invoice							
2		Customer				Invoice No			
3		Address				Date			
4		Town				Order No			
5		County							
6		Postcode							
9	Goods Purchased	Qty	Description					Unit Price	Total
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22								Sub Total	£0.00
23								Post & Packing	
24								VAT	£0.00
25								Total	£0.00
27		Terms							

2. The borders are gridline thickness, except for a solid line around the invoice block **B9:J25** and the **Terms** block, **C27**.

3. Merge the title across the range **A1:J1** and vertically centre it.

4. The **Customer** and **Invoice** details are merged cells.

5. The item lines are merged into one cell, line by line, including the title **Description**.

6. Apply **Wrap Text** to the box next to **Terms** and the **Unit Price** cell.

7. The cell **A9** is the range **A9:A25** merged, the text is vertically orientated, horizontally and vertically aligned.

8. The **SubTotal** formula in cell **J22** is the sum of the range **J10:J21**. **VAT** in cell **J24** is the **SubTotal** and **Post & Packing** multiplied by **0.175**.

9. The **Totals** for each invoice line are **Qty** multiplied by **Unit Price**. To suppress the display of zeros, display the **File** tab, select **Options** and in the **Advanced** section under **Display options for this worksheet,** uncheck the relevant option. The grand **Total** in cell **J25** is the sum of the three cells above it.

10. Save the workbook as **Created Invoice**, print it and then close it.