

Easy Way



Teach yourself...

Microsoft Excel 2010

(Level 3)

- ☒ Easy to follow
- ☒ Step-by-step instructions
- ☒ Written in plain English

A Cheryl Price Publication

Easy Way - Microsoft Excel 2010 (Level 3)

This book is designed to teach advanced spreadsheet concepts in Microsoft Excel 2010. It contains step-by-step exercises for Level 3 topics, eg Pivot Tables, Pivot Charts, Scenario Manager, data tables, database etc.

There are dozens of exercises including consolidation exercises, both theory and practical at the end of each section.

The process of consolidation and accumulation of learning is unique to the Cheryl Price books.

Retrievable exercise files are used with this book. These are available for free download from our web site at www.cherylprice.co.nz. Instructions for downloading are included on the next page.

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Author:
Cheryl Price
T.Dip.WP, T.Dip.T

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Cherylprice.co.nz Limited

PO Box 187
Matakana
Auckland 0948

Phone: (09) 422 7230
Mobile: 021 715566
Fax: (09) 422 7236

Web address:

www.cherylprice.co.nz

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Downloading Exercise Files

Exercise files can be downloaded from the Cheryl Price web site as follows:


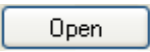




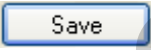
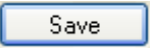
1	In your web browser, type: www.cherylprice.co.nz
2	Press Enter on the keyboard to display the Cheryl Price website.
3	Click on the Resources tab as shown at the right. 
4	Click on <u>Easy Way – Microsoft Excel 2010</u>
5	Under the Exercise Files heading click on the underlined blue hyperlink , ie Excel 2010, Level 3 <u>Free Download</u> The File Download dialog box will display.
6	If you have Winzip use the following instructions otherwise move to step 7.
	a Click on  .
	b Click on the  of the  button.
	c If My Documents folder is not displayed click on Set default unzip folder at the bottom of the list. Ensure My Documents is selected then click on Select Folder .
	d Click on the  of the  button and click on the My Documents folder. The files will be unzipped.
7	Click on  and ensure My Documents folder is displayed. Click on 
8	Click on Open Folder which will display My Documents folder. Right click on the zipped exercise file and select Extract All. Click on Extract. A folder will be created containing the exercise files. You will need to double click on this folder to use the exercise files in this book.

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Exercise Files used in this book

(Instructions are at the front of this book for downloading retrievable files from our web site.)

Names of files	
Auckland, Jan-Mar	Mykas - Adelaide
Balance Sheet	Mykas - Brisbane
Bonus	Mykas - Melbourne
Busy Bee Company	Mykas - Sydney
Charts - Classes	November - Eats and Treats
Charts - Cleantec	Outdoor Life - October
Charts - Goodwins	PC Sales
Classic Images Income	PC Sales – Pivot Chart
Company List	PivotChart 2
Computer Consumables Ltd	PivotTables
Cookery and Gardening Book Sales	Real Estate Sales
Corp1	Rep Sales
Engineering Course	Spartacus - Adelaide
Exclusive Services – Quarterly Report	Spartacus - Brisbane
Fire Shop - Brisbane	Spartacus - Melbourne
Fire Shop - Melbourne	Spartacus - Sydney
Fire Shop - Perth	Sports Sales
Fire Shop - Sydney	Staff Listing
Forms - Investment Calculator	Supermarket
Glen Miller - Writer	Target Sales
Gym Membership	VitaHealth Products
Hats Income Statement	Wellington, Jan-Mar
Investment Calculator	Williams - Brisbane
Kite Extreme	Williams - Cairns
Learning Cheques	Williams – Canberra
Lifestyle Images Products	Williams - Sydney
Loan Calculations	
Mid Semester Exam	

Sample Document


Learning Outcomes

At the end of this section you should be able to -

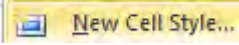

- ☐ Modify and copy styles
- ☐ Use and modify supplied templates
- ☐ Insert and remove hyperlinks
- ☐ Create and delete custom views
- ☐ Use outlines to show and hide row and column data
- ☐ Set up and clear a print area
- ☐ Insert, adjust and remove page breaks
- ☐ Consolidate data

Styles



A style is a named set of formatting instructions that can be applied easily to text, values and

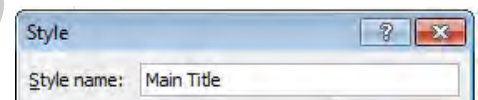
formulas. A style can be applied using  in the Styles group on the Home tab. There are many styles supplied with Excel, but you can also create your own. If the “properties” of a style are changed then all occurrences of that style will automatically be updated.


Styles can be created:

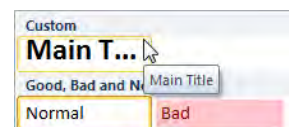
- By example – formatting is applied to a cell or group of cells which you then save as a style.
- By defining the style using the  option on the  button.

Exercise 1

- 1 Start a new blank workbook.
- 2 In cell A1 type: **Susan** then press Ctrl Enter.
- 3 Change the Font Size to 24 pt, bold.
- 4 Click on  and select  **New Cell Style...**
- 5 In the Style dialog box type: **Main Title** as the Style name.
- 6 Click on OK.



Note The new style name can be seen by clicking on . It is displayed at the top of the Style Gallery as a Custom style as shown at the right.



- 7 A style will now be created called **Totals**. This style will display a single line above the cell, a double line at the bottom of the cell and grey shading. The totals will display as currency with two decimal places and bold.

- a Click in an unformatted cell in the worksheet.

- b Click on  and select  **New Cell Style...**

- c Type: **Totals** in the Style name: box then click on .

- d On the Number tab select Currency, 2 decimal places and \$.

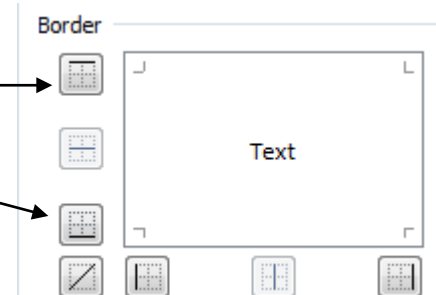
- e Click on the Font tab and select Bold.

- f Click on the Border tab, then click on the Top Border button to apply a single line style as shown at the right.

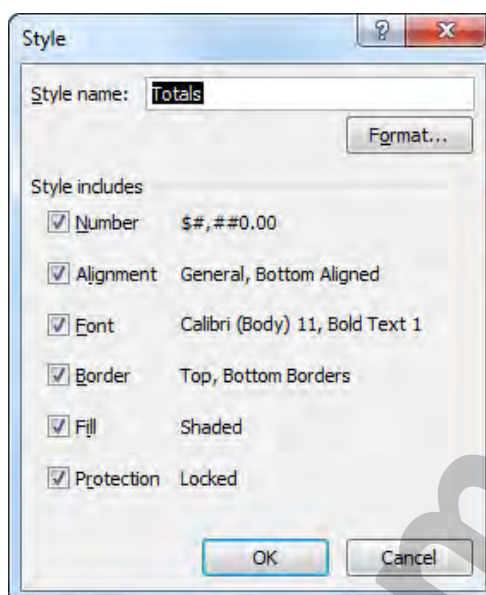
- g Select a double line style from the Style: box. Click on the Bottom Border button as shown at the right.

- h Click on the Fill tab and select a light grey colour.

- i Click on OK.

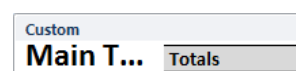


The style “properties” will be displayed in the Style dialog box shown below.



- 8 Click on OK.

The **Totals** style is displayed in the Styles Gallery as shown at the right.

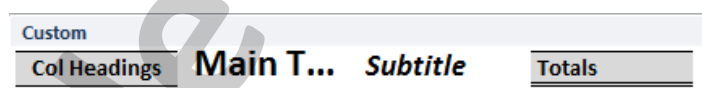


- 9 Use either method of creating a style (ie by example or using the Style dialog box) to add the following styles.

Subtitle Calibri (Body) font, 14 pt, bold, italics

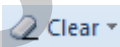
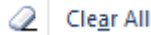
Col Headings Calibri (Body) font, 11 pt, bold, centred, border top and bottom, grey shading

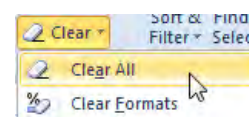
All the styles you have created are displayed in the Styles Gallery on the  button as shown below.



- 10 Click on the Select All button at the top left corner of the worksheet.



- 11 On the Home tab click on  in the Editing group and select  as shown at the right.



- 12 Create the following worksheet, using Sum functions in B10 and C10.

	A	B	C
1	Abacus Limited		
2	Sales for January and February		
3			
4	Product	January	February
5			
6	1100	560.65	885.56
7	1101	650.95	660.62
8	1102	985.65	450.34
9			
10	Totals	2197.25	1996.52



13 Using the Style Gallery from the  button apply your custom styles as follows:

- a Select cell A1 and apply *Main Title*.
- b Select cell A2 and apply *Subtitle*.
- c Select cells A4 to C4 and apply *Col Headings*.
- d Select cells A10 to C10 and apply *Totals*.

14 Select cells A6 to A8 and left align the product codes.

15 Widen columns as necessary.

	A	B	C	D
1	Abacus Limited			
2	<i>Sales for January and February</i>			
3				
4	Product	January	February	
5				
6	1100	560.65	885.56	
7	1101	650.95	660.62	
8	1102	985.65	450.34	
9				
10	Totals	\$2,197.25	\$1,996.52	

16 Save as **Abacus Ltd.**

The styles are saved with the workbook.


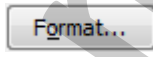
Modifying a Style

The properties of a style can be modified using Cell Styles.

Exercise 2

Change the Totals style font size to 12 pt as follows.



- 1 Click on .
- 2 In the Custom Styles area right click on Totals and select Modify....
- 3 Click on  in the Style dialog box.
- 4 Click on the Font tab then on 12 in the Size: section. Click on OK.
- 5 Click on OK again.

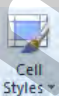

All cells to which this style has been applied are modified automatically. Widen columns as required.

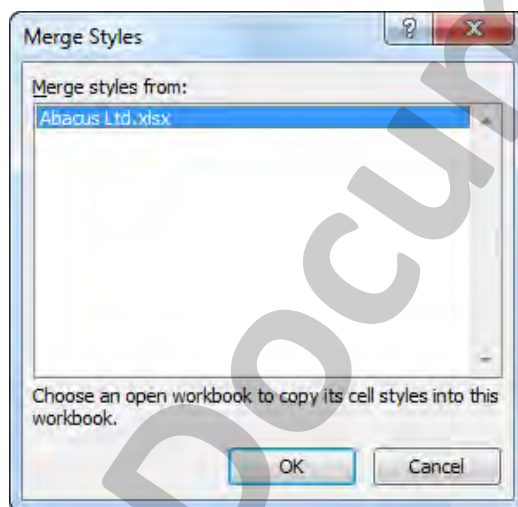
- 6 Save the workbook.

Copying Styles to Another Workbook

Any custom styles that you create can only be used in the workbook that you used to create them. If you want the styles to be available in another workbook, you must **Merge** the styles to that workbook.

Exercise 3

- 1 Ensure the **Abacus Ltd** workbook is open.
- 2 Open the workbook called **Computer Consumables Ltd**.
- 3 With the Computer Consumables Ltd workbook displayed, click on  and select  **Merge Styles...**
- 4 In the Merge styles from: box ensure Abacus Ltd is selected as shown below.



- 5 Click on OK. (Click on Yes if requested to merge styles that have the same names.)
- 6 Practise applying styles in the **Computer Consumables Ltd** workbook as follows.
 - Cell A1 - apply the *Main Title* style.
 - Add a heading in cell A2 of **Sales - January** and apply the *Subtitle* style.
 - Cells A4 to C4 - apply *Col Headings* style.
 - Cell C14 - apply *Totals* style.
- 7 Format cells C5 to C12 to display two decimal places.
- 8 Save the workbook as **Styles - Computer Consumables Ltd**.
- 9 Close both workbooks.

	A	B	C	D
1	Computer Consumables Ltd			
2	Sales - January			
3				
4	Product	Type	Amount	
5	Keyboards	Hardware	3,156.00	
6	Computer Paper	Consumables	750.00	
7	Mouse	Hardware	995.00	
8	Windows 95	Software	5,500.00	
9	Toner Cartridges	Consumables	1,250.00	
10	Microsoft Office	Software	6,950.00	
11	Monitors	Hardware	3,550.00	
12	Backup Tapes	Consumables	595.00	
13				
14			\$22,746.00	
15				

Notes When styles are modified or created and saved in a template they will be available in all workbooks based on that template.

Applying the Normal style will remove all formatting from selected cells.

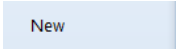



Custom styles can be available to every workbook if they are stored in the default template **book.xlt** (see page 9).

Templates

Using Supplied Templates

Supplied templates are stored in the Templates folder. The normal pathname for this folder is *C:\Users\Owner\AppData\Roaming\Microsoft\Templates*. If supplied templates are not installed Excel will install each individual template the first time it is selected.

Exercise 4

- 1 On the File tab click on .
- 2 In the Available Templates – Office.com Templates section click on .
- 3 Click on .
- 4 With Basic Invoice selected click on  to open a new workbook with the template copied into it. The worksheet is shown below.

Enter your own company details here

Your Company, Inc. **INVOICE**

Address
City, State, ZIP (555) 555-555

SOLD TO:
Name
Address
City, State, ZIP

SHIPPED TO:
Same

Sales Tax Rate:

INVOICE NUMBER 536524
INVOICE DATE October 4, 2011
OUR ORDER NO. 726278
YOUR ORDER NO. 1892727
TERMS Net 30
SALES REP Name
SHIPPED VIA Air
F.O.B. City, State
PREPAID or COLLECT COLL

Subtotal: 2,400.00
TAX: 120.00
FREIGHT: \$2,520.00
PAY THIS AMOUNT

DIRECT ALL INQUIRIES TO:
Name
(555) 555-555
email: someone@somename.com

MAKE ALL CHECKS PAYABLE TO:
Your Company, Inc.
Attn: Accounts Receivable
Address
City, State, ZIP

THANK YOU FOR YOUR BUSINESS!

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
120	Product	10.00	\$1,200.00
120	Product	10.00	1,200.00
		SUBTOTAL	2,400.00
		TAX	120.00
		FREIGHT	
			\$2,520.00

- Type the information below replacing the generic data.

Sparkle Software Ltd		INVOICE
PO Box 1223 45 Rosedale Road, Albany 0632	(09) 415 5678	

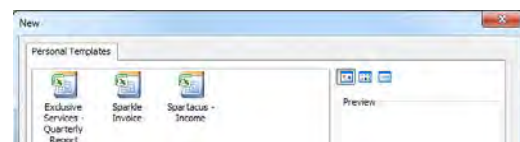
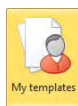
- Click on the View tab then in the Headings check box to display row and column headings.
- Edit the Sales Tax Rate cell (B18) and change it to Goods and Services Tax: Change the Rate in cell D18 to 15%, ie **Goods and Services Tax: 15.00%**
- Right click on the Invoice Date cell (I9) and select **Format Cells...**. Click on Number then on Date. Select the format shown at the right then click on OK. **INVOICE DATE 4/10/2011**
- Delete text from cells H10 and I10, ie **OUR ORDER NO. 726278**
- Delete the number from YOUR ORDER NO. cell I11, ie **1892727**.
- Changed the SHIPPED VIA from Air to Courier (ie cell I14), ie **SHIPPED VIA Courier**
- Delete rows 15 and 16 which will remove the F.O.B. and PREPAID or COLLECT cells.
- Delete the data in the Quantity, Description and Unit Price columns.
- Edit the section at the bottom of the invoice as shown below.

DIRECT ALL ENQUIRIES TO:
Peter Roberts
021 556 780
peter@sparkle.co.nz

MAKE ALL CHEQUES PAYABLE TO:
Sparkle Software Ltd
Attn: Accounts Receivable
PO Box 1223
Albany 0632

- Click in the Invoice Number cell (I8), ie **536524**. Delete the invoice number and leave the cursor in that cell.
- On the File tab choose Save As, and select *Excel Template* from the Save as type: list.
- Type: **Sparkle Invoice** as the file name. Save and close the template.

Exercise 5



- On the File tab click on New. Click on .
- Double click on **Sparkle Invoice** in the New dialog box.
- Fill in the information shown below (the date is entered automatically).

Invoice No. 1001
Sold To Paper Products
35 Keith St
Northcote 0627

Your order No 408
Sales Rep Max Cleary

Qty	Description	Unit Price
30	Boxes of Plain A4 Paper	55.00 (press Tab)
5	Reams of Bright Yellow A4 Paper	8.00 (press Tab)

- Scroll down and you will notice that the Total and GST have been calculated automatically.
- Add Freight of 20.00.
- Save as an Excel Workbook with the name **Sparkle Invoice 1001** and close it.

Look at other templates to see how they can be amended and customised for your use.


Embedding Cell References in a Formula

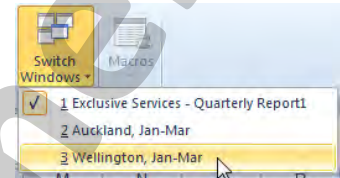
Exercise 6

- 1 Open the workbooks **Wellington, Jan-Mar** and **Auckland, Jan-Mar**.
- 2 Create a new workbook based on **Exclusive Services - Quarterly Report** template in the New from existing folder in Available Templates..

The new workbook will be opened with the name Exclusive Services - Quarterly Report1 displayed at the top of the screen.

- 3 In cell B6 type: =

- 4 On the View tab click on  and select **Wellington, Jan-Mar** as shown at the right, to switch to that workbook.



- 5 Click in B9 and type: +

- 6 Switch windows to **Auckland, Jan-Mar**.

- 7 Click in B9 and press Ctrl Enter. The calculation will display in the Formula bar as:

`='[Wellington, Jan-Mar.xlsx]Income Statement'!B9+'[Auckland, Jan-Mar.xlsx]Income Statement'!B9`

The workbook name is in brackets, followed by the worksheet name, and then the absolute cell reference – for example, cell B9 of the Income Statement sheet in the Wellington, Jan-Mar workbook.

- 8 Delete the \$ absolute reference indicators from the formula, and copy it to the February and March columns using the fill handle.
- 9 Add similar formulas to cells B8:D8 to calculate Total Operating Expenses for the three months.

	A	B	C	D	E
1	Exclusive Services Ltd				
2	QUARTERLY REPORT				
3					
4		January	February	March	YTD
5					
6	Net Sales	\$80,000	\$86,000	\$74,000	\$240,000
7					
8	Total Operating Expenses	\$48,800	\$56,100	\$50,600	\$155,500
9					
10	Operating Income	\$31,200	\$29,900	\$23,400	\$84,500
11					

The formulas in the Operating Income row have automatically recalculated.

- 10 Save the workbook as **Quarterly Report – Wellington, Auckland** and close it.
- 11 Close the remaining workbooks.

Updating Embedded Cell References

Exercise 7

- 1 Open the workbook **Wellington, Jan-Mar**.
- 2 Change the Net Sales for February to \$60,000. Save and close.
- 3 Open the **Quarterly Report - Wellington, Auckland**. Click on **Enable Content** if required.


The February Net Sales are now \$98,000 and the Operating Income for February has increased to \$41,988 as shown below.

	A	B	C	D	E
1	Exclusive Services Ltd				
2	QUARTERLY REPORT				
3					
4		January	February	March	YTD
5					
6	Net Sales	\$80,000	\$98,000	\$74,000	\$252,000
7					
8	Total Operating Expenses	\$48,800	\$56,100	\$50,600	\$155,500
9					
10	Operating Income	\$31,200	\$41,900	\$23,400	\$96,500
11					


Because these cells are linked the results will change according to the changes in the attached workbooks.

- 4 Save and close the **Quarterly Report - Wellington, Auckland** workbook.

Creating a Default Template

When you click on the New button  a new workbook will be created based on the default blank workbook template called **book.xltx**.

Exercise 8


- 1 Create a new blank workbook.
- 2 On the Page Layout tab, click on the Page Setup Dialog Box Launcher .
- 3 Change the following settings using the tabs in the Page Setup dialog box.

Tab	Setting
Page	Orientation – Landscape: Paper Size - A4.
Margins	Change Top, Bottom, Left and Right Margins to 2 cm, Center on Page Horizontally and Vertically.
Header/Footer	Custom Header - Display the file name in the Centre section. Custom Footer – Display the Sheet name in the Left section and the Page number preceded by the word <i>Page</i> in the Right section.

- 4 Click on OK.

- 5 On the File tab choose Save As.
- 6 From the Save as type: list select Excel Template.
- 7 Starting from C Drive navigate to the XLSTART folder as indicated below.

Users ► Owner ► AppData ► Roaming ► Microsoft ► Excel ► XLSTART

- 8 Type: **Book** in the File name: box. The template will be called **Book.xltx** and saved in the XLSTART folder.
- 9 Save and close the template.
- 10 Click on the New button .
- 11 Click on the Margins button in the Page Setup group and confirm that the four margins are now set to 2 cm. Click on the Orientation button to confirm Landscape orientation is set.
- 12 Click on OK.
- 13 Close the workbook without saving it.

Deleting the Default Template

To remove the Default Template you have specified, delete the **Book** template from the XLSTART folder as follows. Excel will then revert to its original default settings.

Exercise 9

- 1 Ensure all workbooks are closed.
- 2 Click on the Open button In the Open dialog box or Windows Explorer and locate the XLSTART folder.
- 3 Select the **Book** template and delete it.
- 4 Click on Yes to confirm the deletion, then close the dialog box.

Exercise 10

- 1 Open the workbook called **Cookery and Gardening Book Sales**.
- 2 Delete the Production Target numbers (G8:G13), leaving formulas intact.
- 3 Save the file as an Excel Template in the Templates folder with name **Book Sales**.
- 4 Close the template.

Note To use the template, select New on the File tab, click on My Templates, select the **Book Sales template**, then click on OK. When the workbook has been completed save it with an appropriate workbook file name.

Consolidation Exercise

Scenario

Hillside College has mid semester exams for its students to assess their levels of Accuracy, Display, and Time Management.

A workbook has been set up with the student information for your class and you will create formulas where grades can be used to assess overall results.

	A	B	C	D	E	F	G	H	I
1	Mid Semester Exam								
2									
3	Student	Accuracy		Display		Time Management		Overall	Final Result
4	Barnett, Jane	B-		A-		B			
5	Morris, George	A+		B+		A			
6	Sholes, Roger	C+		C-		B			
7	Larkins, Edward	C+		A-		C			
8	Greenall, Stephen	B+		B+		B			
9	James, Colleen	B		C+		C			
10	Turner, Jackie	A		D		A			
11	Emery, John	A-		A+		D			
12	Willis, Michael	C+		B-		E			
13	Spence, Paul	B+		C		A			

Functions will be used to insert actual marks according to grades for students.

A table has been created on a separate sheet to show marks for each grade.

You will use a VLOOKUP function to enter the marks from this table.

The Overall column will hold the total marks and a column chart will be created to display these results.

An IF function will be used in the Final Result column to display the achievement category. IF the mark is -

>37 display **Merit**
 >25, <=37 display **Pass**
 <=25 display **Fail**

The completed worksheet will appear as shown on the next page.

	A	B
1	Lookup Table	
2	A+	15
3	A	14
4	A-	13
5	B+	12
6	B	11
7	B-	10
8	C+	9
9	C	8
10	C-	7
11	D+	6
12	D	5
13	D-	4
14	E+	3
15	E	2
16	E-	1

	A	B	C	D	E	F	G	H	I
1	Mid Semester Exam								
2									
3	Student	Accuracy		Display		Time Management		Overall	Final Result
4	Barnett, Jane	B-		10 A-		13 A+		15	38 Merit
5	Morris, George	A+		15 B+		12 A		14	41 Merit
6	Sholes, Roger	C+		9 C-		7 B		11	27 Pass
7	Larkins, Edward	C+		9 A-		13 C		8	30 Pass
8	Greenall, Stephen	B+		12 B+		12 B		11	35 Pass
9	James, Colleen	E		2 C+		9 C		8	19 Fail
10	Turner, Jackie	A		14 D		5 A		14	33 Pass
11	Emery, John	A-		13 A+		15 D		5	33 Pass
12	Willis, Michael	C+		9 B-		10 E		2	21 Fail
13	Spence, Paul	B+		12 C		8 A		14	34 Pass
14									
15									
16	Results								
17	Merit		2						
18	Pass		6						
19	Fail		2						

The COUNTIF function will be used to count the number of students in each achievement category. This will be displayed in a Results section of the worksheet as shown here. From this data you will create a pie chart. Marks will then be changed and the pie chart will be updated.

The charts will be linked to a Word memo and the linking between Excel and Word will be checked.

It is important that ranges are named as instructed throughout these exercises, and formulas are checked thoroughly.

Naming the Lookup Table

Exercise 11

- Open the workbook called **Mid Semester Exam**.
This workbook contains exam marks on Sheet1 and a table on Sheet2 that will be used to look up marks.
- Double click on the Sheet1 tab and type the name **Exam Results**.
- Rename Sheet2 as **Lookup Table**.
You will assign a range name for the lookup table as follows.
- With the Lookup Table sheet displayed, select cells A2 to B6.
- Click in the Name box and type: **lookup** as shown below. Press Enter.

Name box

lookup	
1	Lookup Table
2	A+ 15
3	A 14
4	A- 13
5	B+ 12
6	B 11

- Click on the Exam Results sheet tab.