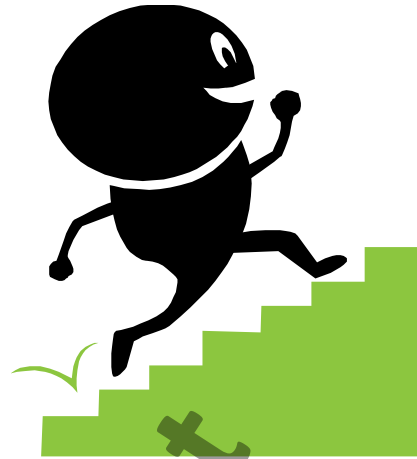


# Easy Steps



## **Unit 27642 (v1)**

Use a pivot table to display data

*with*

**Microsoft Excel 2013**

- ☒ Easy to follow
- ☒ Step-by-step instructions
- ☒ Covers Unit Standard Criteria

*A Cheryl Price Publication*

## **Unit Standard 27642 (Version 1)**

### **Use a pivot table to display data - Excel 2013**

This book covers the course outline for the following New Zealand Qualifications Authority Unit Standard:

Unit Standard 27642 (v1) - BUSINESS ADMINISTRATION (Level 4, Credit 5)  
Use a pivot table to display data

All topics in this Unit Standard are included in this book.

Retrievable exercise files are used with this book and listed on page ix. These are available as a free download from our web site at [www.cherylprice.co.nz](http://www.cherylprice.co.nz). Instructions for downloading the exercises are included on page x.

This book has been written using Microsoft Excel 2013 with Windows 8.1.

Free Resource: A free resource "What is a Spreadsheet" (with manual exercises) is available on our Resources page at [www.cherylprice.co.nz](http://www.cherylprice.co.nz). This is an excellent resource for total beginners to spreadsheets or for those students who have difficulty understanding spreadsheet concepts.

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Cheryl Price  
T.Dip.WP, T.Dip.T

**CODE: CP27642V1E2013-0714**

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PO Box 187  
Matakana  
Auckland 0948

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

### **Web address:**

[www.cherylprice.co.nz](http://www.cherylprice.co.nz)

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Sample Document

# Introduction

---

Welcome to Unit Standard 27642 v1 Use a pivot table to display data with Microsoft Word 2013.

This book has been written using Microsoft Excel 2013 with Windows 8.1. (The Windows 7 operating system can be used. However screen shots will differ slightly from those shown in this book.)

## Retrieval Exercise Files

Some exercise files have been created for you to prevent time in keying in many exercises. You can then open these files and use the features of Excel to manipulate and format text.

A list of these files is shown on page ix and instructions for downloading these files from our web site are included on page x.

## What you will learn

In this course you will learn how to –

Use a pivot table to display data:

- Create and edit a pivot table
- Create a pivot table report including a pivot chart

## How you will learn

This book is divided into sections. Each section page lists the learning outcomes for that section. You will work through each section and do all exercises (or those instructed by your tutor).

Revision theory is included at the end of each section. A Practice Assessment is included at the end of Section 3. Our books include accumulation and consolidation of learning which carries across each section.

After you have completed the book your tutor will give you the actual Unit Standard Assessment.

## Word meaning boxes

Sometimes you will see a box at the left side of the page of a line that has dotted underlining. This box will contain information to help you understand the meaning of the underlined word (or how that word is formed). An example is shown below.

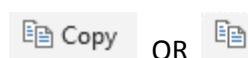
forecast  
= to  
calculate a  
future  
result

Data can therefore be altered to re-calculate budgets and to forecast results using different sales figures. Worksheets can be saved, opened and printed as required.

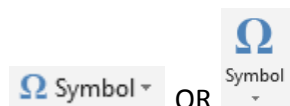
## Different Excel buttons

Depending on the size of your Excel screen, buttons on the ribbon may vary to those shown in this book. The icon with the word of that feature may show, or the icon only.

For example, the Copy button in the Clipboard group on the Home tab may be displayed in either of the following ways.




The Symbol button can show as either -



## Shortcut keys

Shortcut keys are indicated in the left margin, usually the first time they are used. An example follows.

- Ctrl S    1    Click on the Save button  on the Quick Access Toolbar  .
- 2    Type a file name for your document then click on Save.

## Glossary

Generally when a word(s) is first used that is a technical term or a word that you may not know that relates to an exercise, or a particular Excel 2013 feature, a description is given. You will also see that such words are in **SMALL CAPS**.

These terms are listed on each section page, an example is shown below. Explanations are also included in the Glossary at the end of the book.



*In this section you will come across the following words highlighted in bold. This indicates that the word is included in the Glossary at the end of the book together with a description of that word.*

**AUTOCORRECT**

**CLIPBOARD**

**CORRECTION SIGNS**

**CUT**

**DRAW AND DROP**

**FIND**

**FORMAT**

**MICROSOFT OFFICE HELP**

**MOVE TEXT**

**NAVIGATION PANE**

**PROOF-READING**

**REDO**

**REPLACE**

**SELECTING TEXT**

**SYNONYMS AND THESAURUS**

**TYPING REPLACES SELECTION**

**UNDO**

## Icons used in this book

---

This book contains icons to help guide you in your learning.

The following list shows the icon and its meaning.



### **Learning Outcomes**

Learning Outcomes are displayed on the section page and describe what you will learn in that section.



### **EXERCISE 1**

These are the exercises that you are required to do. Often there will be an introduction sentence to tell you what you will be doing in that exercise.



These are notes for your information.



### **Revision**

---

This appears at the end of each section and contains theory revision questions relating to features learnt in that section.



### **Practice Assessment**

---

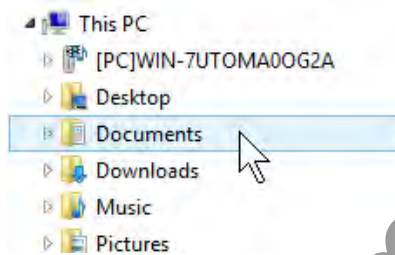
The Practice Assessment at the end of Section 3 covers consolidation of topics learnt in this book and provides practice for students prior to sitting the actual Unit Standard Assessment.

## Save Options

---

When a document is saved you will be requested to select the location, ie Computer then click on the Browse button and select the folder required. You can eliminate this procedure by selecting the location and saving directly to the Save dialog box and therefore bypass Backstage view.

For the purposes of this book we have used the Documents folder within This PC as the default folder. This folder is shown below which is the shortcut for the actual path name of C:\Users\User Name\Documents. This means that files you open and save will be on your hard drive.



Use the following instructions to specify the Documents folder as the default file location:

- 1 Click on the **FILE** tab then click on **Options**.
- 2 Click on **Save** at the left.
- 3 Ensure that the Documents folder is displayed as the Default local file location as shown below.

- ☒ Don't show the Backstage when opening or saving files
- ☐ Show additional places for saving, even if sign-in may be required.
- ☐ Save to Computer by default

Default local file location:

C:\Users\Cheryl\Documents\

Browse...

- 4 Also ensure that *Don't show the Backstage when opening or saving files* option displays a tick.
- 5 Remove the tick from the next option *Show additional places for saving, even if sign-in may be required*.
- 6 Click on OK.



If you wish to open and save files to OneDrive (ie the cloud) use instructions on the next page.

If you have Windows 8, or have updated to Windows 8.1 from Windows 8, SkyDrive may be displayed instead of OneDrive but is essentially the same.



# OneDrive

---

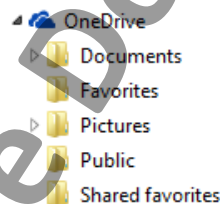
OneDrive is a cloud storage application from Microsoft. It is one of the major online file storage options competing with Dropbox and Google Drive.



Because files are stored “in the cloud” (in addition to your hard drive) it means that you can access those files from anywhere in the world because you will always have access to the OneDrive application and your files. You do however need an Internet connection for the files to be updated from your hard drive to OneDrive.



## Saving to OneDrive

OneDrive is automatically set up when Microsoft Office 2013 (ie Office 365) is installed on your computer. A OneDrive folder will be displayed on the Navigation Pane in Windows Explorer as below.



Files can be saved manually by clicking on the Save button  on the Quick Access Toolbar, specifying a name for your file then clicking on the  OneDrive icon (you may wish to double click on Documents and save to that folder).

## OneDrive as the Default File Location

Use the following instructions if you wish to specify OneDrive as your default file location.

- 1 Click on the **FILE** tab then click on **Options**.
- 2 Click on **Save** at the left.
- 3 Ensure that the C:\Users\User Name\OneDrive\Documents folder is displayed as the Default local file location as shown on the next page. (You may need to retype the location)
- 4 Also ensure that *Don't show the Backstage when opening or saving files* option displays a tick.

- 5 Remove the tick from the next option *Show additional places for saving, even if sign-in may be required.*

- ☒ Don't show the Backstage when opening or saving files  
☐ Show additional places for saving, even if sign-in may be required.  
☐ Save to Computer by default

Default local file location:

C:\Users\Cheryl\OneDrive\Documents

Browse...

- 6 Click on OK.

## OneDrive Website

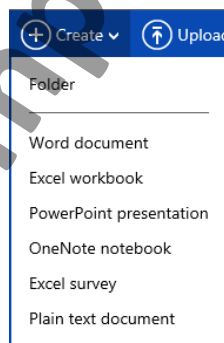
You can log in to the OneDrive website using your web browser with your login name and password.

The website is [www.OneDrive.live.com](http://www.OneDrive.live.com).



You can upload photos and use files and share files.

New files can be created through OneDrive by clicking on **Create** and selecting the program you wish to use, eg Excel (web applications in OneDrive are slightly cut-down versions of Office 2013 programs).



## Sharing Files

From within Excel 2013 you can save files to OneDrive (usually to the Documents folder) and then share those files. You can then click on the **FILE** tab, on **Share** and invite people to share files in OneDrive.

Alternatively, you can right click on a file in the OneDrive website (see above) and select Sharing.

Use Google in your web browser to search for additional information on OneDrive.

## Exercise Files used in this book

---

(Instructions are included on the following page for downloading retrievable files from our web site at [www.cherylprice.co.nz](http://www.cherylprice.co.nz))

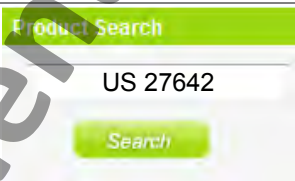


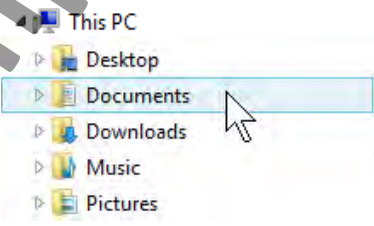

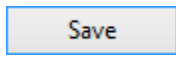

Names of files	
Cavanagh Industries	PC Sales – PivotChart 2
Home Ideas (Categories) 2	PC Sales – PivotChart
Home Ideas (Categories)	PC Sales 2
Home Ideas	PC Sales
Mykas – Adelaide	PivotChart 2
Mykas – Brisbane	PivotTables
Mykas – Melbourne	PivotTables - Group
Mykas – Sydney	Real Estate Sales
Organic Foods Co 2	Rep Sales
Organic Foods Co 3	Sports Galore Orders

## Downloading Exercise Files

The exercise files listed on the previous page can be downloaded from the Cheryl Price web site using the instructions below.



For the purposes of this book we have specified Exercise files to be downloaded to the Documents folder within This PC which is the shortcut for the actual pathname of C:\Users\User Name\Documents. This is where files will be opened from and saved to.

1	In the address bar of Internet Explorer, type: <b>www.cherylprice.co.nz</b>
2	Press Enter on the keyboard to display the Cheryl Price website.
3	Click in the Product Search box and type the number of this unit standard, as shown at the right. <div>  </div>
4	Click on 
5	Click on <a href="#">US 27642</a>
6	Under the <b>Exercise Files</b> heading click on the underlined blue hyperlink, ie Book Exercise Files – V1 Excel 2013 <a href="#">Free Download</a> The File Download dialog box will display.
7	<p>a Click on  <b>Save as</b> then</p> <p>b Change file name to <i>US27642 v1 Excel 2013 Book Exercise Files</i>.</p> <p>c Click on the Documents folder shown below.</p> <div>  </div> <p> The Documents folder under This PC is the shortcut for C:\Users\User Name\Documents</p> <p>d Click on .</p>
8	<p>a Click on .</p> <p>b Right click on the zipped exercise file and select Extract All. Click on Extract. A folder will be created containing the exercise files.</p> <p>c Delete the Compressed (zipped) Folder.</p>

# NZQA Outcomes and Evidence Requirements

## Unit Standard 27642 (Version 1)

<b>Title</b>	Use a pivot table to display data		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to: create and edit a pivot table; and create a pivot table report.
----------------	----------------------------------------------------------------------------------------------------------------------

<b>Classification</b>	Business Administration > Business Information Management
-----------------------	-----------------------------------------------------------

<b>Available grade</b>	Achieved
------------------------	----------

### Explanatory notes

- 1 Definitions  
*A pivot table* summarises data to display data in different views.  
*Software help function* includes all online or offline proprietary support and tutorials.
- 2 Assessment against this unit standard must be based on an existing spreadsheet that may be provided by the assessor or created by the candidate.
- 3 Any commonly used proprietary or open-source spreadsheet software may be used for assessment provided it includes the features, or their equivalents, specified in the range statements of evidence requirements 1.1 and 1.2.

### Outcomes and evidence requirements

#### Outcome 1

Create and edit a pivot table.

#### Evidence requirements

- 1.1 Pivot table is created in accordance with computer textbooks and/or the software help function.  
  
Range includes but is not limited to – selecting the data range, define the category field list, adding and removing fields, adding row labels, adding column labels, adding data labels.

- 1.2 Pivot table is edited in accordance with computer textbooks and/or the software help function.
- Range includes but is not limited to – applying styles, formatting value fields, rearranging table, determining lay-out options, collapsing and expanding items, sorting fields, adding second value fields, removing fields.
- 1.3 Pivot table items are grouped in accordance with computer textbooks and/or the software help function.
- 1.4 Report filter is added in accordance with computer textbooks and/or the software help function.

## Outcome 2

Create a pivot table report.

### Evidence requirements

- 2.1 Pivot table report is created, including a pivot chart, in accordance with computer textbooks and/or the software help function.

<b>Planned review date</b>	31 December 2016
----------------------------	------------------

### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	17 November 2011	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0113
------------------------------------------------------------	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

## Section

# 1

## PivotTables



### Learning Outcomes

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

- ☐ Summarise data with PivotTables
- ☐ Understand the Pivot Cache
- ☐ Group and Ungroup data in a PivotTable
- ☐ Change the values calculated in a PivotTable
- ☐ Use a PivotTable for data consolidation
- ☐ Choose and apply a style to a PivotTable
- ☐ Change the PivotTable Layout



*In this section you will come across the following words highlighted in bold. This indicates that the word is included in the Glossary at the end of the book together with a description of that word.*

CLASSIC PIVOTTABLE LAYOUT  
COLUMN  
EXCEL LIST  
GROUP DATA  
NORMAL LAYOUT  
OUTLINE  
PIVOT CACHE  
PIVOTTABLE

PIVOTTABLE AREA  
PIVOTTABLE FIELDS LIST  
PIVOTTABLE REPORT  
PIVOTTABLE STYLES GALLERY  
PIVOTTABLE TOOLS CONTEXTUAL TAB  
REFRESHING  
REPORT LAYOUTS  
ROW

SHORTCUT MENU  
SOURCE DATA  
STYLES  
SUBTOTALS  
VALUE FIELD SETTINGS  
VALUES FIELD

# PivotTables

A **PivotTable** is an interactive worksheet table that provides a method of summarising and grouping large amounts of data from an **EXCEL LIST**. Data can be formatted, and summarised using various calculations. A PivotTable is also referred to as a **PivotTable REPORT**.

rotated  
=  
turned  
around

PivotTables are so called because row and column headings can be rotated around the data area to allow different views of the source data to be displayed. The fields from the list are placed around the PivotTable skeleton to define how the summarised information is shown and calculated.

When source data changes, the PivotTable can be updated.

## Excel List

For the best results when creating a PivotTable your Excel list should have the following characteristics.

- The first row of the list contains the headers that identify the data in each column. The list does not have to start in row 1 of your worksheet or in column A.
- Each **COLUMN** (field) contains unique data.
- Each **ROW** (record) contains one set of data for a single item.
- There should be no blank rows or columns in the list.

The PC Sales workbook (which you will use in the first exercise), is a good example of such a list.

	A	B	C	D	E	F	G
1	Product	Year	Month	Sales	Units	Salesperson	Region
2	Hardware	2011	Dec	7686	5563	Green	Brisbane
3	Software	2010	Sep	2956	1242	Hindley	Sydney
4	Software	2011	Oct	8165	983	Hindley	Melbourne
5	Hardware	2010	Jan	4448	3833	Hindley	Brisbane
6	Hardware	2010	Sep	75	3216	Hindley	Perth
7	Software	2010	Feb	4923	8160	Green	Melbourne
8	Hardware	2010	Dec	2733	2790	Green	Sydney
9	Software	2010	Apr	450	9265	Green	Perth
10	Software	2011	Jul	797	3868	Hindley	Brisbane
11	Hardware	2010	Mar	8751	1773	Hindley	Sydney
12	Hardware	2010	Mar	2741	6290	Green	Brisbane
13	Software	2010	Dec	7047	9888	Evans	Sydney
14	Software	2011	Oct	7191	39	Green	Brisbane
15	Hardware	2011	Jun	5575	9970	Green	Perth
16	Hardware	2011	Jul	7612	3656	Evans	Melbourne
17	Hardware	2011	Aug	4873	2730	Hindley	Brisbane
18	Hardware	2010	Feb	8076	3670	Green	Melbourne
19	Hardware	2011	Oct	3338	1695	Green	Sydney
20	Hardware	2010	Jan	6544	9550	Green	Sydney
21	Software	2010	Oct	6955	8722	Hindley	Perth
22	Software	2010	Feb	4138	4661	Green	Perth
23	Software	2011	Aug	8447	8056	Hindley	Perth



## Why Create a PivotTable?

summarise  
= to  
condense  
or reduce

If you want to summarise data from an Excel list you could possibly use the automatic **SUBTOTALS** feature. For example, in the PC Sales workbook you could display Sales subtotals for each Region.

You would first have to sort the data by Region, then apply the Subtotal feature (Data Tab, Outline Group).

1	2	3	A	B	C	D	E	F	G	H
1	Product	Year	Month	Sales	Units	Salesperson	Region			
2	Hardware	2011	Dec	7686	5563	Green	Brisbane			
3	Hardware	2010	Jan	4448	3833	Hindley	Brisbane			
4	Software	2011	Jul	797	3868	Hindley	Brisbane			
5	Hardware	2010	Mar	2741	6290	Green	Brisbane			
6	Software	2011	Oct	7191	39	Green	Brisbane			
7	Hardware	2011	Aug	4873	2730	Hindley	Brisbane			
8	Software	2011	Jan	5594	9025	Hindley	Brisbane			
9	Software	2010	Sep	668	3448	Green	Brisbane			
10	Hardware	2010	Jan	6081	9185	Green	Brisbane			
11	Software	2011	Jan	9662	9441	Green	Brisbane			
12	Hardware	2011	Feb	5010	3030	Hindley	Brisbane			
13	Hardware	2010	Feb	3571	5178	Hindley	Brisbane			
14	Software	2010	Oct	2428	3981	Hindley	Brisbane			
15	Software	2010	Nov	8670	2891	Hindley	Brisbane			
16	Hardware	2011	Sep	66	6740	Green	Brisbane			
17				69486	75242		<b>Brisbane Total</b>			
18	Software	2011	Oct	8165	983	Hindley	Melbourne			
19	Software	2010	Feb	4923	8160	Green	Melbourne			
20	Hardware	2011	Jul	7612	3656	Evans	Melbourne			
21	Hardware	2010	Feb	8076	3670	Green	Melbourne			
22	Hardware	2010	Sep	2420	4873	Hindley	Melbourne			
23	Software	2010	Oct	7347	5881	Green	Melbourne			
24	Software	2011	May	9566	7406	Green	Melbourne			
25	Software	2010	Oct	2516	9191	Hindley	Melbourne			
26	Hardware	2011	Jul	9082	8966	Green	Melbourne			

Using the automatically applied **OUTLINE** you could show or hide data levels, but if you required subtotals based on other fields you would have to re-sort the list and apply the Subtotal feature again.

When you summarise your data in a PivotTable, you can display different views of the data without having to recreate the table each time.

## Creating a PivotTable

### The Pivot Cache


When a PivotTable is created, it is not directly linked to the data source. This is because when you begin the process, the first step that Excel takes is to create a duplicate copy of the data source and store it in a *Pivot Cache*. This occurs every time you create a PivotTable from a data source, which automatically increases the file size and the amount of memory being used.

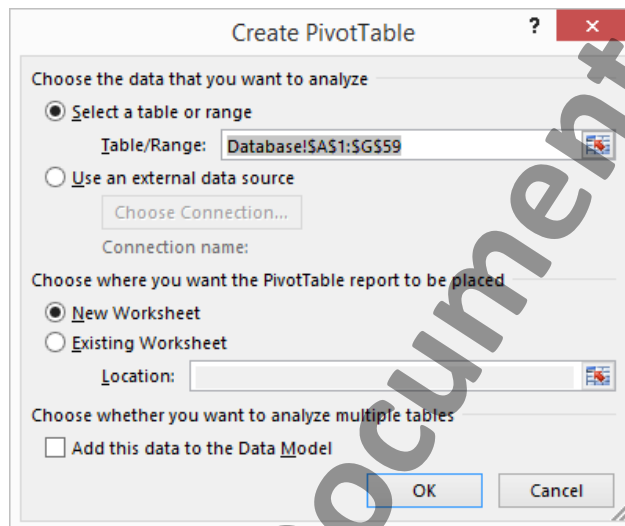
When you make changes to the data source, this is not automatically reflected in the PivotTable. This is easily managed by **REFRESHING** the data.

Efficient use of the **PIVOT CACHE** and how to refresh data is covered later in this section.



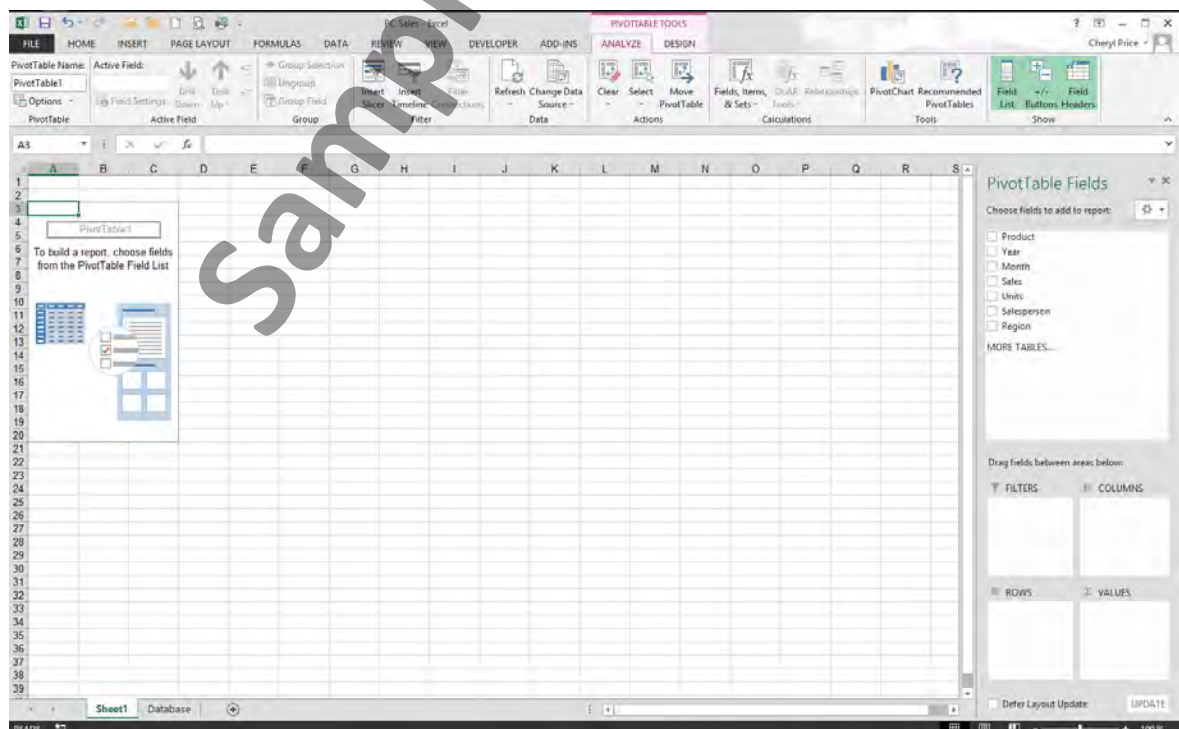
## EXERCISE 1

- 1 Open the workbook called **PC Sales**
- 2 Ensure the **Database** worksheet is displayed.
- 3 With the cursor anywhere within the list, click on the **INSERT** tab then on . The Create PivotTable dialog box is displayed.
- 4 Ensure the *Select a table or range* and *New Worksheet* options are selected and that the Table/Range is as shown below.



- 5 Click on OK.




A new sheet is inserted to the left of the Database worksheet (Sheet1); a **PIVOTTABLE AREA** is displayed, together with the **PIVOTTABLE FIELDS LIST** Task Pane (at the right) and the PivotTable Tools, Analyze and Design tabs as shown below.



There are two ways in which a PivotTable can be used and manipulated:

- **NORMAL LAYOUT** as shown on the previous page.
- **CLASSIC PIVOTTABLE LAYOUT** which displays a grid – fields displayed in the PivotTable Fields list can be dragged onto the grid (see illustration on next page).

6 Change the PivotTable layout view to Classic PivotTable Layout as follows:

- a On the PivotTable Tools, Analyze tab, click on  Options .
- b In the PivotTable Options dialog box click on the Display tab.
- c Ensure a tick is displayed in this option:  
 **Classic PivotTable layout (enables dragging of fields in the grid)**
- d Click on OK.



This applies the Classic PivotTable layout to the current PivotTable only.


The PivotTable area is displayed showing all the field areas in the PivotTable.

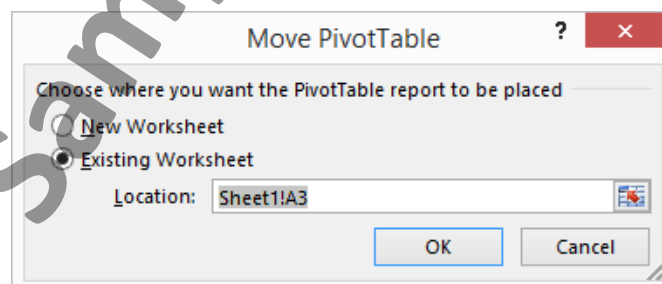
The fields in the database are listed in the PivotTable Fields list Task Pane at the right of the screen.

### ***PivotTable Location Notes***

When creating a PivotTable you specify where you want it located in the Create PivotTable dialog box. The usual recommendation (which is the default option in the Create PivotTable dialog box) is that it is placed on a new worksheet.

If you decide later that you want to move a PivotTable to a different location, follow these steps:

- 1 Select a cell in the PivotTable.
- 2 In the Actions group on the PivotTable Tools, Analyze tab, click on  Move PivotTable .  
The Move PivotTable dialog box is displayed.



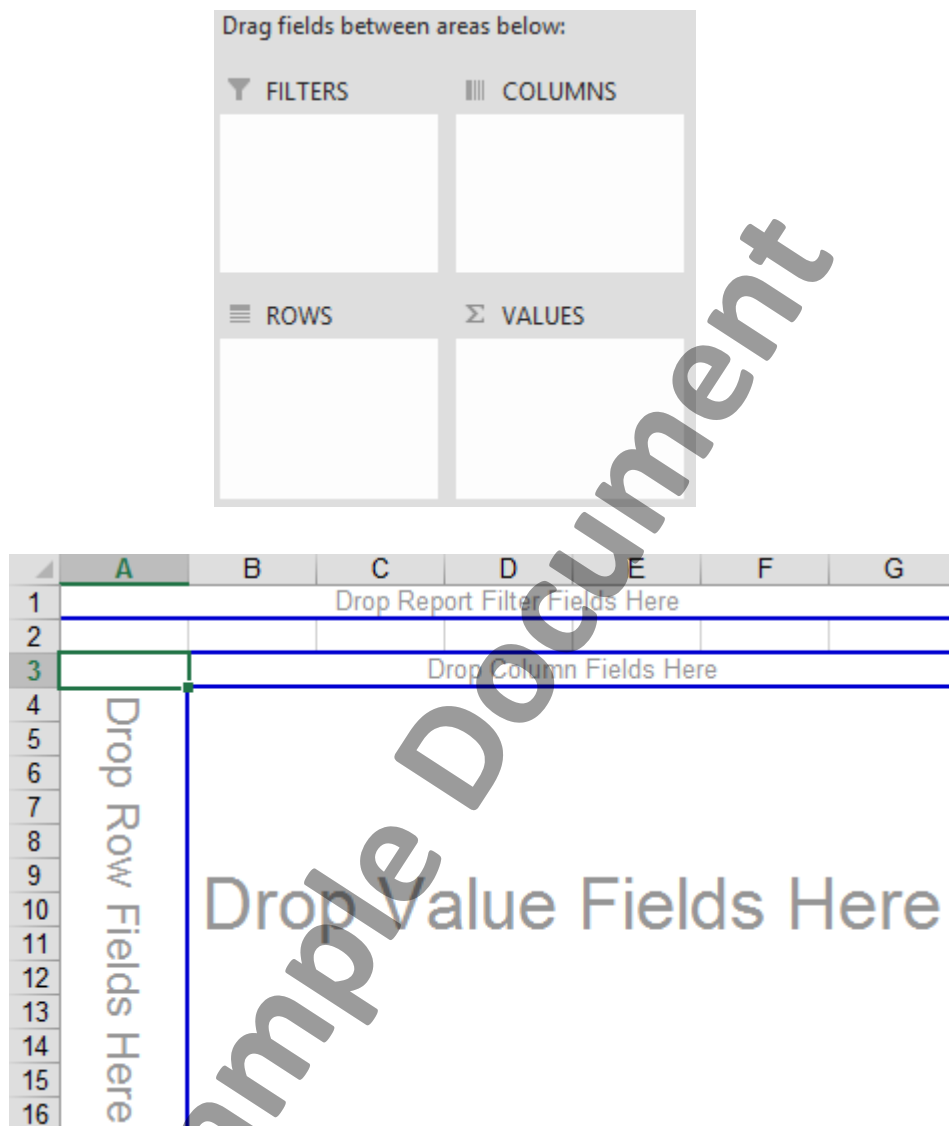
- 3 Specify where you want the PivotTable moved to, then click on OK.

## PivotTable Organisation

You specify the fields you want to include in the PivotTable by either dragging them to the appropriate area in the lower half of the Task Pane

OR

To the PivotTable area itself (if you are displaying the Classic PivotTable layout).



The four areas that make up a PivotTable are described on the next page. These are shown in the PivotTable Area and also in the lower half of the PivotTable Fields list.



The names used in the PivotTable Area are slightly different to those used in the PivotTable.

filtered  
=  
sorted,  
extracted

### *Report Filter/Filters*

This contains the field(s) that control how the data is presented and how it can be filtered.

In effect, individual PivotTables are created for each possible value in the Report Filter Field as well as for all the values.

For example, in **PC Sales** the Report Filter Field could be **Year**, which would produce three pivot tables:

- one for 2010
- one for 2011
- one for both years combined

Only one of these PivotTables is displayed at any given time, depending on which Report Filter Field value is selected.

Similarly, if **Region** was specified as the Report Filter Field, the data for all regions or for individual regions could be displayed.

### *Column Fields/Columns*

Column Fields are used to create the horizontal axis of the PivotTable.

If more than one field is placed in the Column Labels area you should place them in descending order of importance.

For example, you would place **Month** below **Year** in the Column Labels box in the PivotTable Fields list so that sub-totals for each month within each year could be created.

### *Row Fields/Rows*

Row Fields are used to create the Vertical Axis of the PivotTable.

You can place more than one field in the Row Labels area using the same method as described above for placing multiple Column Fields.

### *Value Fields/Values*

Field(s) placed in the Values area contain the data to be summarised using any of the available functions such as Sum, Average, etc.

A PivotTable must have at least one **VALUES FIELD**.

### *Totals and Subtotals*

When a PivotTable is created, subtotals and grand totals are automatically generated. These can be deleted or hidden if required.

Because these totals are produced based on the data in the list, you should ensure that the list does not also contain subtotals.



## EXERCISE 2

The PivotTable will initially be set up to display the sales for all products for each salesperson within each region.

- 1 Drag the **Product** field to the Filters area as shown below.

Drag the Product field from here down to the Filters area

The Product field is now displayed in the Filters area

The Product field is also displayed in the PivotTable grid as shown below.

	A	B	C	D	E	F	G
1	Product (All) ▼						
2							
3			Drop Column Fields Here				
4	Drop Row Fields Here	Drop Value Fields Here					
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

- 2 Drag the **Salesperson** field to the Rows area.
- 3 Drag the **Region** field to the Columns area.
- 4 Drag the **Sales** field to the Values area. This will be labelled *Sum of Sales* – Sum is the default function.

The fields are also displayed in the actual PivotTable area on your worksheet.

If you are using the Classic PivotTable layout you can also drag the fields onto the appropriate section of the PivotTable area.

If you place a field in the wrong area, simply drag it to the correct area.

The PivotTable is displayed as shown below.

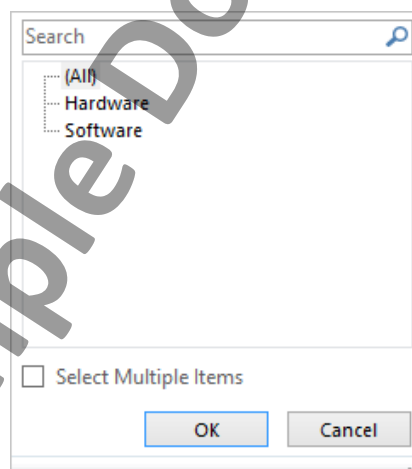
The screenshot shows an Excel spreadsheet with a PivotTable and the PivotTable Fields task pane on the right. The PivotTable is located in the range B3:F8. The task pane shows the following configuration:

- Choose fields to add to report:** Product, Year, Month, Sales, Units, Salesperson, Region.
- Drag fields between areas below:**
  - FILTERS:** Product
  - COLUMNS:** Region
  - ROWS:** Salesperson
  - VALUES:** Sum of Sales
- Defer Layout Update:** ☐ UPDATE

Product	(All)				
Sum of Sales	Region				
Salesperson	Brisbane	Melbourne	Perth	Sydney	Grand Total
Evans		8973	6028	18229	33230
Green		34095	49970	32385	26371
Hindley		35391	16207	26289	32632
Grand Total		69486	75150	64702	77232

- 5 Rename the worksheet **PivotTable 1**.
- 6 Click on the Product (All) down arrow in cell B1.


The options shown below will be displayed.



- 7 Select Hardware to view only hardware sales. Click on OK.

	A	B	C	D	E	F
1	Product	Hardware				
2						
3	Sum of Sales	Region				
4	Salesperson	Brisbane	Melbourne	Perth	Sydney	Grand Total
5	Evans		7612	6028	8516	22156
6	Green		16574	28134	22077	12615
7	Hindley		17902	2420	10858	22746
8	Grand Total		34476	38166	38963	43877

The down arrow button now shows as , indicating that the PivotTable is filtered.

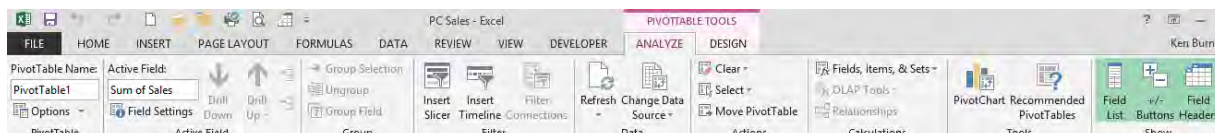
- 8 Click on the Product , select Software and click on OK.

## PivotTable Tools Contextual Tab

When you select any cell in a PivotTable, the **PIVOTTABLE TOOLS CONTEXTUAL TAB** is displayed on the ribbon. It includes two tabs – Analyze and Design.

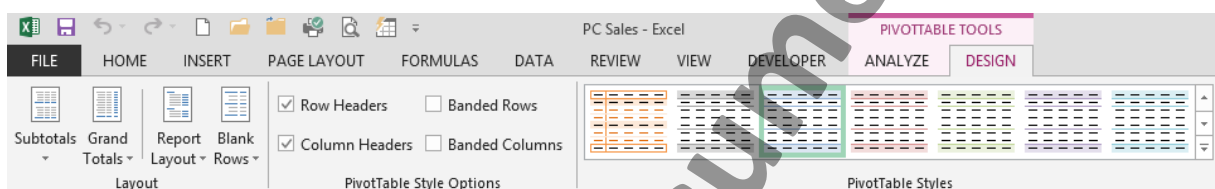
### The Analyze Tab

The Analyze tab includes a wide range of options that allow you to modify calculations, update the table data, show or hide elements of the PivotTable, etc.



### The Design Tab

The Design tab allows you to adjust the layout of the table, apply preset styles to the table, etc.



The PivotTable Fields list is also displayed whenever your active cell is within the PivotTable.



### EXERCISE 3


- Click outside the PivotTable. The PivotTable Tools contextual tab and the PivotTable Fields list are hidden.

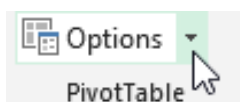
## Displaying Report Filter Pages

Individual PivotTables for each unique value in the Filters field can be created on separate sheets (pages) in the workbook.



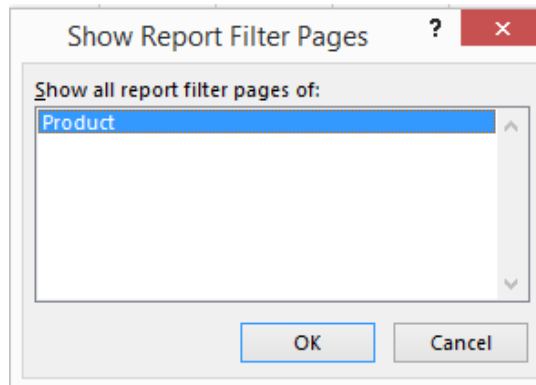
### EXERCISE 4

- 1 Select a cell in the table, click on the Product down arrow  in cell B1 and select (All).
- 2 Click on OK.
- 3 On the PivotTable Tools, Analyze tab, click on the Options button down arrow in the PivotTable group.



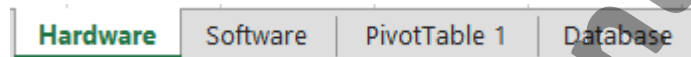
- 4 Select  **Show Report Filter Pages...**





- 5 Click on OK.

Two new worksheets will be inserted into the workbook, one for each Product category.



- 6 Review the Hardware and Software worksheets, and then return to PivotTable 1 (which shows All).

## Changing the Layout

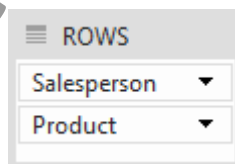
In the following exercise the PivotTable layout will be changed to display the product sales for each salesperson with a subtotal for each salesperson.



### EXERCISE 5

The lower half of the PivotTable Fields list will be used to reorganise the fields by dragging them from one box to another.

- 1 Drag the Product field which is in the Filters box so it is under the Salesperson field in the Rows section of the PivotTable Fields list as shown below.



The table will be displayed as follows.

	A	B	C	D	E	F	G
1	Drop Report Filter Fields Here						
2							
3	Sum of Sales		Region				
4	Salesperson	Product	Brisbane	Melbourne	Perth	Sydney	Grand Total
5	Evans	Hardware		7612	6028	8516	22156
6		Software		1361		9713	11074
7	Evans Total			8973	6028	18229	33230
8	Green	Hardware	16574	28134	22077	12615	79400
9		Software	17521	21836	10308	13756	63421
10	Green Total		34095	49970	32385	26371	142821
11	Hindley	Hardware	17902	2420	10858	22746	53926
12		Software	17489	13787	15431	9886	56593
13	Hindley Total		35391	16207	26289	32632	110519
14	Grand Total		69486	75150	64702	77232	286570

- Rearrange the fields as follows.

FILTERS		COLUMNS	
Salesperson	▼		
Product	▼		
ROWS		VALUES	
Region	▼	Sum of Sales	▼

The PivotTable is now displayed as shown below.

	A	B
1	Salesperson	(All) ▼
2	Product	(All) ▼
3		
4	Sum of Sales	
5	Region ▼	Total
6	Brisbane	69486
7	Melbourne	75150
8	Perth	64702
9	Sydney	77232
10	Grand Total	286570

- Click on the Salesperson (All) down arrow ▼, select Evans and click on OK.
- Click on the Product (All) down arrow ▼, select Software, and click on OK.

	A	B
1	Salesperson	Evans ▼
2	Product	Software ▼
3		
4	Sum of Sales	
5	Region ▼	Total
6	Melbourne	1361
7	Sydney	9713
8	Grand Total	11074

- Redisplay the data for all Salespersons and Products.
- If necessary, click in the PivotTable to show the PivotTable Fields list.

Rearrange the PivotTable to display as shown below. (See if you can do this on your own – then look at the next page to see how the fields are positioned in each field box.)

	A	B	C	D	E	F	G
1							
2	Salesperson	(All) ▼					
3							
4	Sum of Sales		Region ▼				
5	Product ▼	Year ▼	Brisbane	Melbourne	Perth	Sydney	Grand Total
6	Hardware	2014	16841	17525	16783	32947	84096
7		2015	17635	20641	22180	10930	71386
8	Hardware Total		34476	38166	38963	43877	155482
9	Software	2014	11766	14786	11543	19144	57239
10		2015	23244	22198	14196	14211	73849
11	Software Total		35010	36984	25739	33355	131088
12	Grand Total		69486	75150	64702	77232	286570