

Microsoft Excel 2010 – Level 1

4 – Selecting ranges



CORPORATE LEARNING & DEVELOPMENT

SELECTING RANGES

INFocus

Excel works on a *select* and then *do* concept - you select a cell or range of cells and then you do something with or to the selected cell(s). For example, if you wish to bold the heading in a worksheet you must first tell Excel which cell contains the heading. Telling Excel which cell or cells to work with is referred to as *selecting*.

Cells are formed at the intersection of a row and a column. A *range* is actually a group of cells in the worksheet that forms either a square or a rectangle. A range is usually many cells but can also be represented by just a single cell.

In this booklet you will:

- ✓ gain an understanding of the difference between ranges and cells
- ✓ learn how to select contiguous ranges in a worksheet
- ✓ learn how to select a non-contiguous range in a worksheet
- ✓ learn how to use *Excel's* more specialised selection techniques
- ✓ learn how to select larger ranges in a worksheet
- ✓ learn how to select rows in a worksheet
- ✓ learn how to select columns in a worksheet

UNDERSTANDING CELLS AND RANGES

When you want to format, chart, sort, or perform virtually any activity on existing data it would be tedious to have to perform these operations on each and every cell. Excel allows you to work with multiple cells

1 The Active Cell

When you click on a cell it becomes the active cell. It is also the selected cell because it is active. The address of the active cell is shown in the address bar.

2 A Range

A range is made up of one or more selected (highlighted) cells. A range is addressed using the cell address at the top left and the cell address at the bottom right and is written with the two separated by a colon (:). In the example shown, the range would be written as **B7:D10**. Note also that in most circumstances the active cell will also be somewhere in the range.

3 A Non-Contiguous Range

A range can be made up of nonadjacent cells and ranges – these types of ranges are known as noncontiguous ranges. They are addressed as normal ranges separated by commas. For example, the range shown would be written as **B7:B10**, **D7:D10**.

4 Range Calculations

One of the nice things with ranges is the ability to see informal calculations based on the ranges. Providing that the calculations have been switched on, they will appear in the status bar whenever a range in the worksheet is selected. known as *ranges*. Ranges are addressed using the cell address for the top left of the range and the cell address for the bottom right of the range.

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	A		В	С	D	E	F			
1	Alpheiu	s Glob	al En	terprise	es					
2	Annual Sale	25								
3	Health Serv	vices								
4										
5			Week 1	Week 2	Week 3	Week 4	Week 5			
6	Midweek									

	B7 ▼ (f _x 21412								
	Α	B C		D	E	F			
1	Alpheius Glob								
2	Annual Sales								
3	Health Services								
4									
5		Week 1	Week 2	Week 3	Week 4	Week 5			
6	Midweek								
7	Tuesday	21,412	25,942	24,944	53,624	35,241			
8	Wednesday	20,824	31,288	37,456	48,569	45,214			
9	Thursday	20,722	29,782	35,963	25,126	75,963			
10	Friday	49,254	64,750	125,811	75,863	15,429			
11									
12	Subtotal	112,212	151,762	224,174	203,182	171,847			
13									

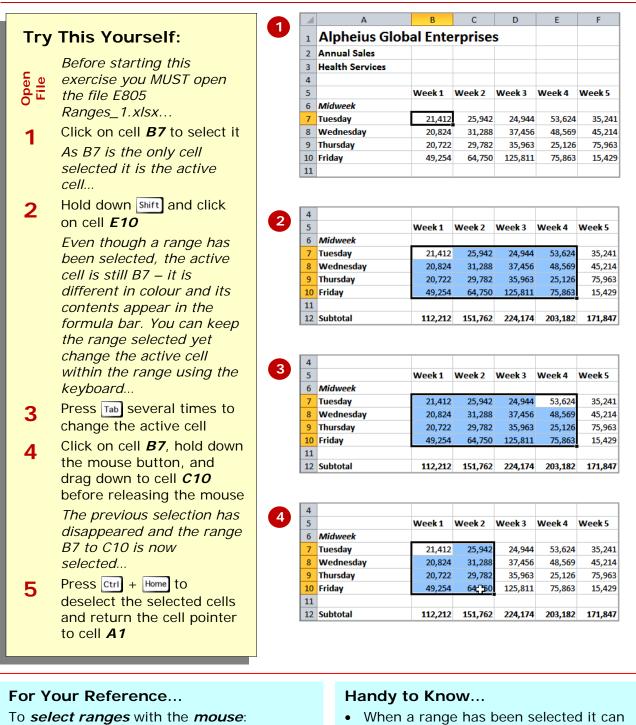
4						
5		Week 1	Week 2	Week 3	Week 4	Week 5
6	Midweek					
7	Tuesday	21,412	25,942	24,944	53,624	35,241
8	Wednesday	20,824	31,288	37,456	48,569	45,214
9	Thursday	20,722	29,782	35,963	25,126	75,963
10	Friday	49,254	64,750	125,811	75,863	15,429
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1	Alpheius Glob									
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6	Midweek									
7	Tuesday	21,412	21,412 25,942 24,		53,624	35,241				
8	Wednesday	20,824	31,288	37,456	48,569	45,214				
9	Thursday	20,722	29,782	35,963	25,126	75,963				
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14 4	Sheet1 Sheet	2 <u>Sheet3</u>			<u>i</u> 4					
Rea	ady 🔠	Averag	Average: 28,053 Count: 4 Sum: 112,212							
		1				J —				

SELECTING CONTIGUOUS RANGES

A *contiguous range* is any group of selected cells that form either a square or a rectangle. A single cell that is selected is also considered to be a range. Ranges can

be selected using the mouse, the keyboard or a combination of the two. Once selected, you can use the range for data input, apply formatting, or copy the cells as required.



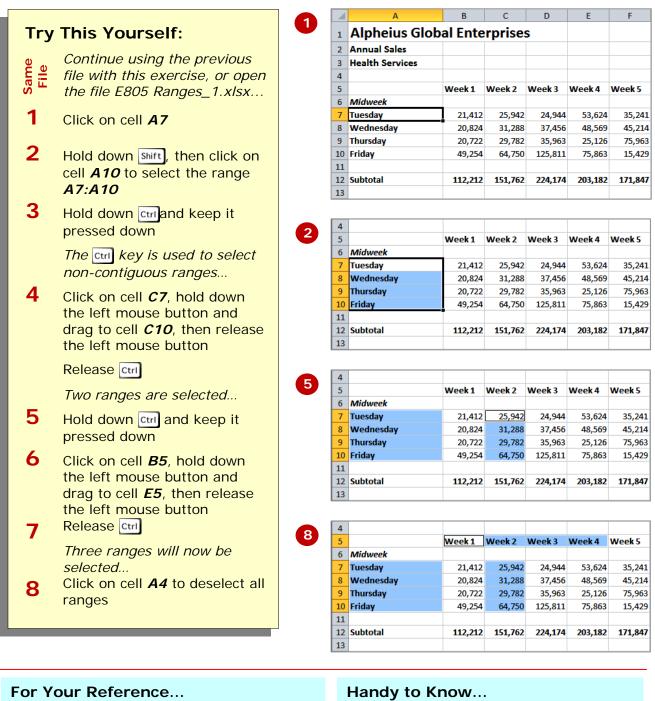
- 1. Click on the left-most cell of the range
- 2. Hold down **Shift** and click in the last cell

OR

- 3. Drag the mouse pointer to the bottom right cell of the range
- When a range has been selected it can be used as an *input range*. You can then enter data into the active cell and move the active cell to either the cell below by pressing Enter, or the adjacent cell by pressing Tab.

SELECTING NON-CONTIGUOUS RANGES

Excel allows you to select more than one range at a time. When this is done the selected ranges are known as noncontiguous ranges because they are not joined together. Selecting non-contiguous ranges is done by selecting the first range in the normal way and then holding down ctri while selecting the remaining ranges.



To select non-contiguous ranges:

- 1. Select the first range
- 2. Hold down Ctrl
- 3. Select the subsequent ranges by dragging across the cells

Apart from using the mouse to select a cell range you can also use the keyboard. Click in the first cell, hold down **Shift** and use the arrow keys

 $(\leftarrow, \rightarrow)$, \uparrow and \downarrow) to extend the selected range.

USING SPECIAL SELECTION TECHNIQUES

There are several methods that you can use to *select a range of cells*. The method that you use will depend on personal preference and the type of range that you want to select. You can use the keyboard in conjunction with $\frac{\text{Shift}}{\text{Shift}}$, a combination of $\frac{\text{Shift}}{\text{Shift}}$ and the mouse, or select a discrete range using $\frac{\text{Ctrl}}{\text{H}} + \frac{\text{Shift}}{\text{Shift}}$ and $\frac{\text{M}}{\text{Shift}}$.

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,			2	Annual Sales		p	_		
	Continue using the		3	Health Services					
Same File	previous file with this		4						
File	exercise, or open the file		5		Week 1	Week 2	Week 3	Week 4	Week 5
ິ –	E805 Ranges_1.xlsx		6	Midweek					
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- - -			9	Thursday	20,722				
2	Hold down Shift, press End		10 11	Friday	49,254	4 64,750	125,811	75,863	15,429
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	immediately below cell A7	-		is Global Enterprises					
3	Hold down Shift, press End,		ial Sale						
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		3							
	and return to A1								
	You can also select a range								
	around the current active	5	4						week r
	cell		5	Midweek	Week 1	Week 2	Week 3	Week 4	Week 5
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5	Click on cell D8 to select it		8	Wednesday	20,824	-	37,456	i	
			9	Thursday	20,722	-			-
6	Hold down Ctrl and Shift		10	Friday	49,254	64,750	125,811	75,863	15,429
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-	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data	6	13 3 4 5	Health Services	112,212 Week 1	2 151,762 Week 2	224,174 Week 3		171,847 Week 5
7	located at the top of the numeric pad) to select all cells adjacent to D8 and	6	13 3 4	Health Services Midweek	Week 1	Week 2	Week 3	Week 4	Week 5
7	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data	6	13 3 4 5 6 7	Health Services Midweek Tuesday	Week 1 21,412	Week 2 2 25,942	Week 3 24,944	Week 4 53,624	Week 5 35,241
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7	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data	6	13 3 4 5 6 7 8 9	Health Services Midweek Tuesday Wednesday Thursday	Week 1	Week 2 2 25,942 4 31,288 2 29,782	Week 3 24,944 37,456 35,963	Week 4 53,624 48,569 25,126	Week 5 35,241 45,214 75,963
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7	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data	6	13 3 4 5 6 7 8 9 10 11	Health Services <i>Midweek</i> Tuesday Wednesday Thursday Friday	Week 1 21,412 20,824 20,722 49,254	Week 2 2 25,942 4 31,288 2 29,782 4 64,750	Week 3 24,944 37,456 35,963 125,811	Week 4 53,624 48,569 25,126 75,863	Week 5 35,241 45,214 75,963 15,429
7	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data	6	13 3 4 5 6 7 8 9 10 11 12	Health Services <i>Midweek</i> Tuesday Wednesday Thursday Friday	Week 1 21,412 20,824 20,722 49,254	Week 2 2 25,942 4 31,288 2 29,782 4 64,750	Week 3 24,944 37,456 35,963 125,811	Week 4 53,624 48,569 25,126 75,863	Week 5 35,241 45,214 75,963 15,429
7	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data Click on cell A1	6	13 3 4 5 6 7 8 9 10 11 12	Health Services Midweek Tuesday Wednesday Thursday Friday Subtotal	Week 1 21,412 20,824 20,722 49,254 112,212	Week 2 2 25,942 4 31,288 2 29,782 4 64,750 2 151,762	Week 3 24,944 37,456 35,963 125,811	Week 4 53,624 48,569 25,126 75,863	Week 5 35,241 45,214 75,963 15,429
7	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data	6	13 3 4 5 6 7 8 9 10 11 12	Health Services <i>Midweek</i> Tuesday Wednesday Thursday Friday	Week 1 21,412 20,824 20,722 49,254 112,212	Week 2 2 25,942 4 31,288 2 29,782 4 64,750 2 151,762	Week 3 24,944 37,456 35,963 125,811	Week 4 53,624 48,569 25,126 75,863	Week 5 35,241 45,214 75,963 15,429
7 or Y	located at the top of the numeric pad) to select all cells adjacent to D8 and which contain data Click on cell A1		13 3 4 5 6 7 8 9 10 11 12	Health Services Midweek Tuesday Wednesday Thursday Friday Subtotal	Week 1 21,412 20,824 20,722 49,254 112,212	Week 2 2 25,942 4 31,288 2 29,782 4 64,750 2 151,762	Week 3 24,944 37,456 35,963 125,811 224,174	Week 4 53,624 48,569 25,126 75,863 203,182	Week 5 35,241 45,214 75,963 15,429 171,847

- 1. Click on any cell within the desired range
- 2. Press Ctrl + Shift + *

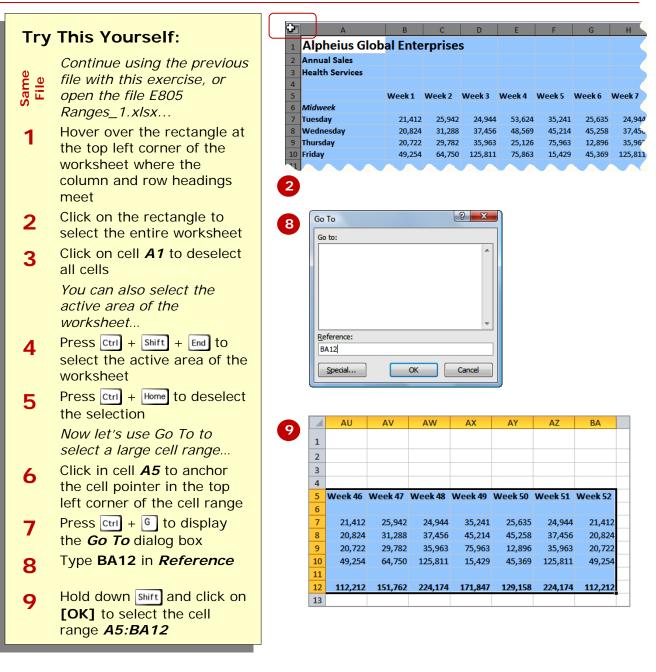
Apart from using the mouse to select a cell range you can also use the keyboard. Click in the first cell, hold down shift and use the arrow keys

 $(\leftarrow, \rightarrow, \uparrow)$ and \downarrow) to extend the range.

SELECTING LARGER RANGES

Selecting ranges that go beyond the boundaries of the screen presents a special set of problems. Using the mouse you can inadvertently scroll beyond the desired location and have other problems zeroing

in on the precise location. Excel provides some useful techniques for *selecting larger ranges* most of which involve pressing the appropriate key on the keyboard.



For Your Reference...

To select larger ranges:

- Click on the grey square at the top left corner to select the entire worksheet
- Click on *A1* and press <u>Ctrl</u> + <u>shift</u> + End to select the active area
- Hold down shift when using Go To

Handy to Know...

 It would be presumptuous of us to tell you which technique, mouse or keyboard to use when selecting cells. Generally you will find that you will use all techniques in various circumstances. Use the method that you feel most comfortable with.

to the left of the row. Remember that any

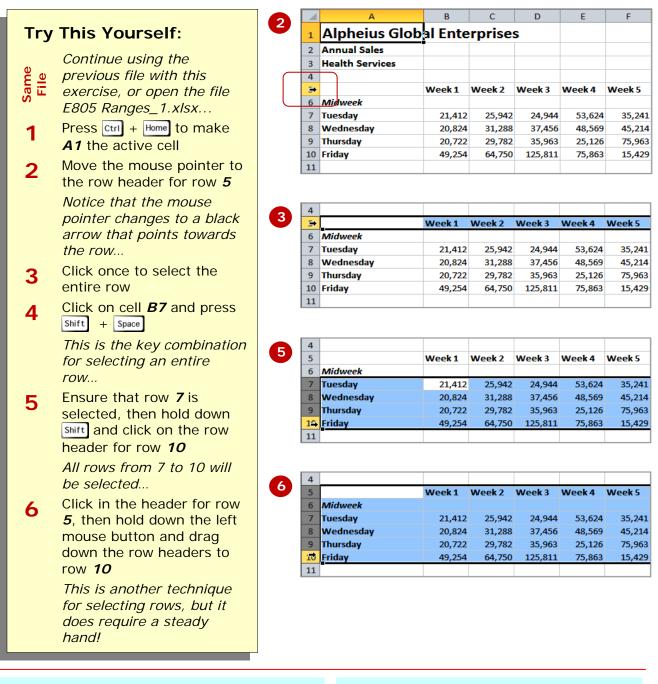
be careful.

changes you make will apply to every cell in

the row all the way across to column XFD, so

SELECTING ROWS

If you want to make changes to an *entire row*, such as bolding all of the headings in a row or changing the font of all the cell entries, you must first *select the row*. This is done by clicking on the row header



For Your Reference...

To *select* an *entire row*:

- 1. Click on the row header of the row that you want to select
- OR
 - Click in any cell in the row and press
 Shift + Space

Handy to Know...

When *every cell* in a row or column is selected, the corresponding row or column header is filled in dark grey. When only *some* of the cells are selected, the row or column header is filled in orange. These indicators help you locate the active cell(s) on the worksheet.

35,241

45,214

75,963

15,429

35.241

45.214

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15,429

35,241

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column header directly above the column.

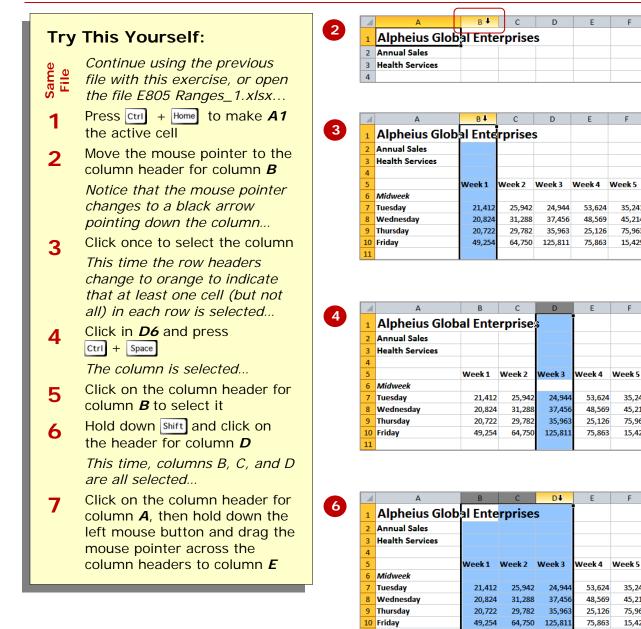
down to row 1,048,576!

Remember that any changes you make will

apply to every cell in the column all the way

SELECTING COLUMNS

If you want to make changes to an entire column, such as bolding all of the headings in a column or changing the font of all the cell entries, you must first select the column. This is done by clicking on the



For Your Reference...

To *select* an *entire column*:

- 1. Click on the column header of the column that you want to select OR
 - 1. Click in any cell in the column and press Ctrl + Space

Handy to Know...

Make sure that you check your worksheet carefully after you've made changes to entire columns. Remember that all of the cells in that column are affected - even those in rows below the visible area.

CONCLUDING REMARKS

Congratulations!

You have now completed the **Selecting ranges** booklet. This booklet was designed to get you to the point where you can competently perform a variety of operations as listed in the objectives on page 2.

We have tried to build up your skills and knowledge by having you work through specific tasks. The step by step approach will serve as a reference for you when you need to repeat a task.

Where To From Here...

The following is a little advice about what to do next:

- Spend some time playing with what you have learnt. You should reinforce the skills that you have acquired and use some of the application's commands. This will test just how much of the concepts and features have stuck! Don't try a big task just yet if you can avoid it small is a good way to start.
- Some aspects of the course may now be a little vague. Go over some of the points that you may be unclear about. Use the examples and exercises in these notes and have another go these step-by-step notes were designed to help you in the classroom and in the work place!

Here are a few techniques and strategies that we've found handy for learning more about technology:

- visit CLD's e-learning zone on the Intranet
- read computer magazines there are often useful articles about specific techniques
- if you have the skills and facilities, browse the Internet, specifically the technical pages of the application that you have just learnt
- take an interest in what your work colleagues have done and how they did it we don't suggest that you plagiarise but you can certainly learn from the techniques of others
- if your software came with a manual (which is rare nowadays) spend a bit of time each day reading a few pages. Then try the techniques out straight away over a period of time you'll learn a lot this way
- and of course, there are also more courses and booklets for you to work through
- finally, don't forget to contact CLD's IT Training Helpdesk on **01243-752100**