Lecture 13

APPLYING GENERAL FORMATTING

The **Number Format** command in the **Number** group on the **HOME** tab contains a drop arrow that provides a gallery of the more co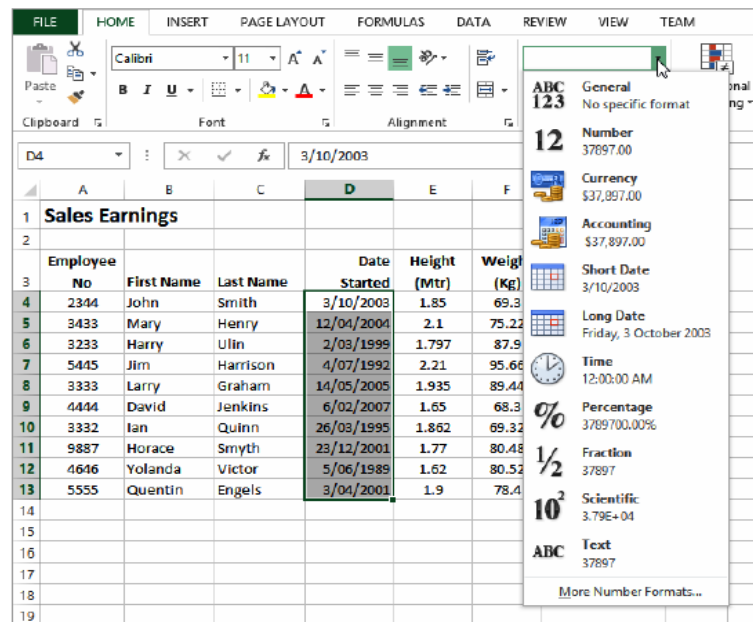mmonly used number formats. You can apply these formats easily and quickly to a selected cell or range of cells in the worksheet.

Try This Yourself:

Open File

Before starting this exercise you MUST open the file E1315 Number Formatting_1.xlsx…

1 Click in cell **D4**, hold down `Shift`, then click in cell **D13** to select the range containing dates

2 Click on the **HOME** tab, then click on the drop arrow for **Number Format** in the **Number** group to see a gallery of number formats

3 Click on **Long Date** to make the short dates in the selected range appear as long dates

4 Click in cell **E4**, hold down `Shift`, then click in cell **E13** to select the range containing units of measure

5 Click on the drop arrow for **Number Format**, then select **Number** to display these as numbers with **2** decimal places

6 Repeat the above steps to change **G4:G13** to **Currency**

7 Repeat the above steps and change the following ranges as shown:

H4:H14   **Percentage**
I4:I4   **Accounting**
G15:I15   **Currency**

	A	B	C	D	E	F
1	**Sales Earnings**					
2						
3	**Employee No**	**First Name**	**Last Name**	**Date Started**	**Height (Mtr)**	**Weight (Kg)**
4	2344	John	Smith	3/10/2003	1.85	69.3
5	3433	Mary	Henry	12/04/2004	2.1	75.22
6	3233	Harry	Ulin	2/03/1999	1.797	87.9
7	5445	Jim	Harrison	4/07/1992	2.21	95.66
8	3333	Larry	Graham	14/05/2005	1.935	89.44
9	4444	David	Jenkins	6/02/2007	1.65	68.3
10	3332	Ian	Quinn	26/03/1995	1.862	69.32
11	9887	Horace	Smyth	23/12/2001	1.77	80.48
12	4646	Yolanda	Victor	5/06/1989	1.62	80.52
13	5555	Quentin	Engels	3/04/2001	1.9	78.4

Number Format gallery:

- **General** No specific format
- **Number** 37897.00
- **Currency** $37,897.00
- **Accounting** $37,897.00
- **Short Date** 3/10/2003
- **Long Date** Friday, 3 October 2003
- **Time** 12:00:00 AM
- **Percentage** 3789700.00%
- **Fraction** 37897
- **Scientific** 3.79E+04
- **Text** 37897
- More Number Formats...

D	E	F	G	H	I
Date Started	**Height (Mtr)**	**Weight (Kg)**	**Total Sales**	**Com'n %**	**Commission**
Friday, 3 October 2003	1.85	69.3	$8,220,266.00	2.00%	$ 164,405.32
Monday, 12 April 2004	2.10	75.22	$12,771,833.00	2.00%	$ 255,436.66
Tuesday, 2 March 1999	1.80	87.9	$35,324,399.00	2.00%	$ 706,487.98
Saturday, 4 July 1992	2.21	95.66	$17,338,194.00	2.00%	$ 346,763.88
Saturday, 14 May 2005	1.94	89.44	$9,670,630.00	2.00%	$ 193,412.60
Tuesday, 6 February 2007	1.65	68.3	$6,152,310.00	3.00%	$ 184,569.30
Sunday, 26 March 1995	1.86	69.32	$36,973,644.00	3.00%	$ 1,109,209.32
Sunday, 23 December 2001	1.77	80.48	$10,755,146.00	3.00%	$ 322,654.38
Monday, 5 June 1989	1.62	80.52	$5,061,883.00	4.00%	$ 202,475.32
Tuesday, 3 April 2001	1.90	78.4	$13,329,586.00	5.00%	$ 666,479.30
			$155,597,891.00		$4,151,894.06

7

CHANGING FONT SIZE

One way that text can be emphasised is by changing the *size* of the font. For example, if your normal text is 11 pt, you may like to make the headings 13 pt or larger. Font size may also be changed for small detailed items, such as comments or a caption. Main headings in a worksheet usually appear in a slightly larger font size compared to the rest of the data.

Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file E722 Font Formatting_2.xlsx...

1 Click in cell **A1** to make the cell with the main heading the active cell

2 Click on the drop arrow next to the **Font Size** command Space in the **Font** group on the **Home** tab to display a gallery of available sizes

3 Point to various sizes and notice how **Live Preview** shows you how the heading will look

4 Click on **16** to change the heading to **16 pt**

You can also change the font size of parts of a document, and you can use the Mini toolbar...

5 Click in cell **A2**

6 Click with the right-mouse button to display the mini-toolbar and the shortcut menu

7 Click on the drop arrow next to **Font Size** Calibri and click on **14**

8 Click in cell **A3** to hide the toolbar

1

	A	B	C	D	E
1	Alpheius Global Enterprises				
2	Revenue				
3					
4		London	Dublin	Melbourne	New York

2

	A	B	C	D	E
1	Alpheius Global Enterp				
2	Revenue				
3					
4		Lon		Dublin	Melbourne	New
5					
6	January	1,050,		1,547,000	1,488,369	1,523,12
7	February	1,524,		1,685,548	1,599,854	1,789,55
8	March	3,521,		2,985,448	2,741,221	2,521,4
9	1st Quarter	6,096,		6,217,996	5,829,444	5,834,1
10					

8

	A	B	C	D	E
1	Alpheius Global Enterprises				
2	Revenue				
3					
4		London	Dublin	Melbourne	New York
5					
6	January	1,050,254	1,547,000	1,488,369	1,523,124
7	February	1,524,294	1,685,548	1,599,854	1,789,552
8	March	3,521,487	2,985,448	2,741,221	2,521,447
9	1st Quarter	6,096,035	6,217,996	5,829,444	5,834,123
10					

UNDERSTANDING BORDERS

Borders are lines that are placed around the edges of individual cells or ranges. The lines may be thin, thick, solid, dashed, black or coloured, or even double lines. The reason for using borders is that the lines can be used to group together data or indicate totals, or to draw the user's attention to critical cells that may need special data entry. Here are some examples.

A Worksheet without and with Borders

Borders can be used to apply a structure. Here's the same worksheet shown without borders and then with borders applied. The use of borders helps to highlight the totals and separate them from the other data.

Border Variations

Borders can be applied to all four sides of a cell, or to individual sides of a cell. The following examples show a cell without a border, with an outside border and a top and double bottom border.

APPLYING A BORDER TO A RANGE

You can apply a border to a *range* of cells. This allows you to place an outline around them to indicate that the cells are somehow related to each other, or to place borders between cells to indicate that they are in separate groups. Borders can be used in ranges of cells to create a more form-like appearance. The borders available for single cells can also be applied to ranges.

Try This Yourself:

Same File *Continue using the previous file with this exercise, or open the file E730 Applying Borders_2.xlsx...*

1 Select the range **A5:A11**

2 Click on the drop arrow for **Borders** [G] and select **Outside Borders**

**3** Click away from the range to see the border

An outline has been placed around the cells...

4 Repeat steps **1** and **2** to apply an outline border to each of the following ranges in the order that they are listed:

B5:B11, C5:C11, D5:D11, E5:E11, F5:F11, G5:G11, H5:H11, I5:I11, A5:I5, A11:I11

B13:B19, C13:C19, D13:D19, E13:E19, F13:F19, G13:G19, H13:H19, I13:I19, A13:I13, A19:I19

You can hold down **11** ▾ *and select several of these ranges at once before applying the border...*

5 Click away from the last selected range to see the result

1

	Sales	Jan	Feb	Mar	Apr	
5	Sales	Jan	Feb	Mar	Apr	
6	Auckland	$105,025	$154,700	$148,837	$163,721	
7	Dublin	$152,429	$168,555	$159,985	$175,984	
8	Melbourne	$352,149	$298,545	$274,122	$301,534	
9	New York	$253,123	$262,189	$245,400	$269,940	
10						
11	Total Sales	$862,726	$883,989	$828,344	$911,179	$:
12						

3

	Sales	Jan	Feb	Mar	Apr	
5	Sales	Jan	Feb	Mar	Apr	
6	Auckland	$105,025	$154,700	$148,837	$163,721	
7	Dublin	$152,429	$168,555	$159,985	$175,984	
8	Melbourne	$352,149	$298,545	$274,122	$301,534	
9	New York	$253,123	$262,189	$245,400	$269,940	
10						
11	Total Sales	$862,726	$883,989	$828,344	$911,179	$:
12						

|	A	B	C	D	E	F	G	H	I
1				Alpheius Global Enterprises					
2	Budget Forecast for Year								
3									
4									
5	Sales	Jan	Feb	Mar	Apr	May	Jun	Total $AUS	Total $US
6	Auckland	$105,025	$154,700	$148,837	$163,721	$180,099	$198,102	$950,477	$807,906
7	Dublin	$152,429	$168,555	$159,985	$175,984	$193,592	$212,941	$1,063,476	$903,955
8	Melbourne	$352,149	$298,545	$274,122	$301,534	$331,688	$364,957	$1,922,894	$1,634,460
9	New York	$253,123	$262,189	$245,400	$269,940	$296,934	$326,627	$1,654,212	$1,406,080
10									
11	Total Sales	$862,726	$883,989	$828,344	$911,179	$1,002,297	$1,102,526	$5,591,060	$4,752,401
12									
13	Costs	Jan	Feb	Mar	Apr	May	Jun	Total $AUS	Total $US
14	Auckland	$55,100	$85,055	$81,887	$90,076	$99,084	$108,992	$520,195	$442,165
15	Dublin	$88,822	$92,678	$87,911	$96,703	$106,373	$117,010	$584,497	$496,822
16	Melbourne	$193,688	$164,155	$150,777	$165,855	$182,441	$200,685	$1,057,602	$898,961
17	New York	$139,267	$144,145	$134,955	$148,451	$163,296	$179,625	$909,738	$773,278
18									
19	Total Costs	$471,877	$486,033	$455,531	$501,085	$551,193	$606,312	$3,072,031	$2,611,227
20									
21	Gross Income	$390,849	$397,955	$372,813	$410,094	$451,104	$496,214	$2,519,029	$2,141,175
22									
23	Fixed Costs	$2,000	$2,200	$2,420	$2,662	$2,928	$3,221	$15,431	$13,117
24									
25	Net Income	$388,849	$395,755	$370,393	$407,432	$448,175	$492,993	$2,503,598	$2,128,058
26									
27									
28									
29	Exchange Rate	85%							
30									

5

Microsoft Excel

WRAPPING AND MERGING TEXT

Microsoft Excel will allow long cell entries to spill across to other adjacent cells to the right as long as those cells are empty. If those cells contain data the spill-over will be chopped off. If you need to place long text entries in a cell you can arrange for Microsoft Excel to wrap the text within the cell and also merge that cell with others to accommodate the longer text entry.

Try This Yourself:

Open File
Before starting this exercise you MUST open the file E723 Cell Alignment_9.xlsx...

1 Click in cell **A5**

This cell contains a long text entry that spills across several columns…

2 Click on the **Expand Formula Bar** tool `Ctrl` to the right of the formula bar to see all of the text

3 Click on the **Wrap Text** command in the **Alignment** group on the **Home** tab to wrap the text in cell **A5**

Notice how the row height has now increased…

4 Hold down the key and click in cell **E5** to select the range **A5:E5**

5 Click on the drop arrow for **Merge & Centre** in the **Alignment** group and select **Merge Cells** to merge the cells in the range

6 Move the mouse pointer to the bottom of the row **5** heading border and drag the row height up until you reach **30** points

THE CHARTING PROCESS

Charts provide a way of seeing trends in the data in your worksheet. The charting feature in Excel is extremely flexible and powerful and allows you to create a wide range of charts from

any of the *Insert* commands in the *Charts* group on the

Inserting Charts

The first step when creating a chart is to select the data from the worksheet that you want to chart. It is important to remember that the selected range (which can be either contiguous or non-contiguous), should include *headings* (e.g. names of months, countries, departments, etc). These become *labels* on the chart. Secondly, the selected range should not (normally) include totals as these are inserted automatically when a chart is created.

The second step is to create a chart using the *INSERT* tab on the ribbon. You can choose a *Recommended Chart* where Excel analyses the selected data and suggests several possible chart layouts.

Alternatively you can create the chart yourself from scratch by choosing one of the *Insert* commands in the *Charts* group. Charts that you create in Excel can be either *embedded* into a worksheet, or they can exist on their own sheets, known as *chart sheets*.

Embedded Charts

Charts that appear within a worksheet are known as embedded charts. A chart is really an object that sits on top of the worksheet – unlike numbers and letters, charts are not actually placed into worksheet cells.
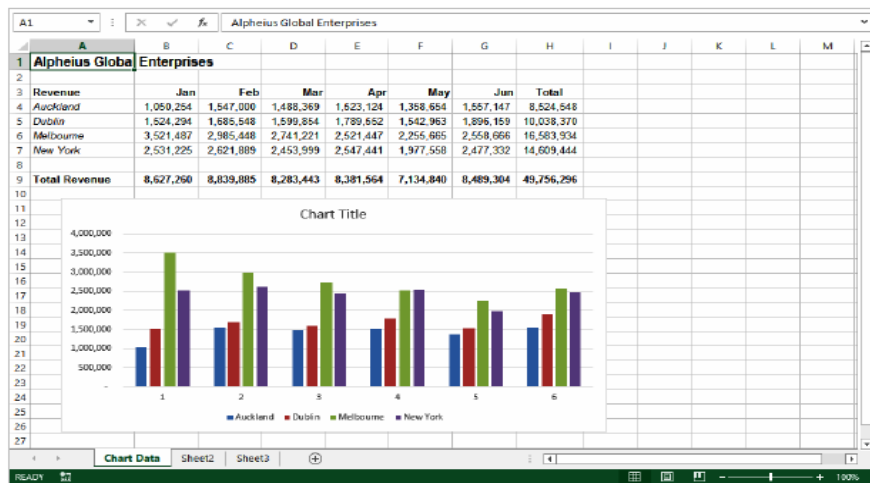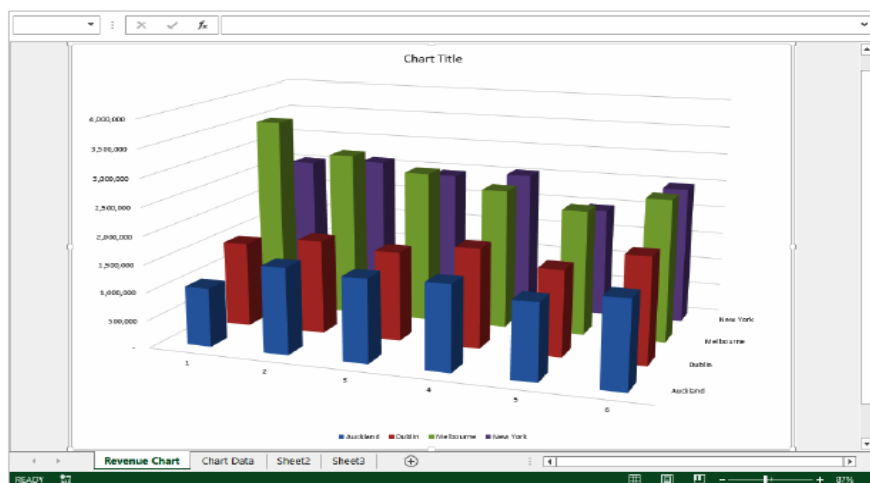

Chart Sheets

If you want to keep your chart separate from the data you can move the chart to its own sheet. Chart sheets make it easier and more convenient to work with your chart because you'll see more of it on the screen – since the data is not there!

CHOOSING THE RIGHT CHART

A chart is far more effective at communicating results, outcomes or trends than a table of figures displaying the same information. Different *chart types* have been created to communicate different types of information. Some charts show simple relationships between values, while others are designed for quite technical purposes. Here is a summary of the use of different chart types.

Column, Bar

These chart types, either in 2D or 3D, are used to compare values across categories. For example, they could compare the populations of different countries.

Line, Area

Lines in 2D or 3D are useful for showing trends such as sales or employment figures. An area chart is a line chart with the area below the line filled in.

Surface

The surface chart plots trends in two dimensions. You could use this to plot departmental sales figures over time. The chart then shows you the trends between departments, as well as the sales trends over time.

Pie, Doughnut

If you want to show proportion, such as the sales figures from different departments that make up a total, then the pie and doughnut charts are for you. The only variation between the doughnut chart and the pie chart is that the doughnut chart can display more than one series of values.

Stock

The stock chart type has been designed to show the stock figures for a day, and the trend over time. At its simplest, you can plot the high, low and close figures, and at its most complex, the volume, open, high, low, and close. It can be adapted to show the relationships between any five sets of values.

XY (Scatter)

Scatter diagrams are used to display the relationship between two variables. For example, you could research the age and price of a series of cars, and plot the values you find. You could also investigate the height and weight relationship of a group of people.

Radar

A radar diagram is designed to show the change in values from a central point. For example, it can be used to show mobile telephone coverage, including multiple networks and multiple measurements.

USING A RECOMMENDED CHART

If you are undecided about the best type of chart for the data you have selected to graph, then you may wish to use Excel's *Recommended Charts* feature. This feature analyses your selected data and presents you with what it considers to be the best way to chart that data. Several alternatives are presented and you simply choose the one you like most.

Try This Yourself:

Open File

Before starting this exercise you MUST open the file E1317 Charting_1.xlsx…

1 Click in cell **A3**, hold down Shift, then click in cell **G7** to select the range **A3:G7**

2 Click on the **INSERT** tab, then click on **Recommended Charts** in the **Charts** group

The Insert Chart dialog box will display with a number of recommended chart options…

3 Click on each of the alternatives in the left pane to see a preview of how the chart will appear in the right pane and spend a few moments reading the descriptions

4 Click on **Line chart** (the second alternative in the left pane), then click on **[OK]** to embed the chart in the worksheet

5 Point to the top border of the chart, then click and drag the chart immediately below the data

6 Click in cell **A1** to deselect the chart

	A	B	C	D	E	F	G	H
1	Alpheius Global Enterprises							
2								
3	Revenue	Jan	Feb	Mar	Apr	May	Jun	Total
4	Auckland	1,050,254	1,547,000	1,488,369	1,523,124	1,358,654	1,557,147	8,524,548
5	Dublin	1,524,294	1,685,548	1,599,854	1,789,552	1,542,963	1,896,159	10,038,370
6	Melbourne	3,521,487	2,985,448	2,741,221	2,521,447	2,255,665	2,558,666	16,583,934
7	New York	2,531,225	2,621,889	2,453,999	2,547,441	1,977,558	2,477,332	14,609,444
8								
9	Total Revenue	8,627,260	8,839,885	8,283,443	8,381,564	7,134,840	8,489,304	49,756,296
10								

1 *You can also use the Quick Analysis tool that appears at the bottom right corner of a selected range to create a quick chart. However, this method will not allow you to preview a wide variety of charts.*

2