Create

Introduction to Microsoft Office Excel 2013

In this course we will show you some of the basic functionality of Microsoft Office Excel by using simple calculations.

For your reference the terms "spreadsheet" and "workbook" mean the same thing when mentioned in this document
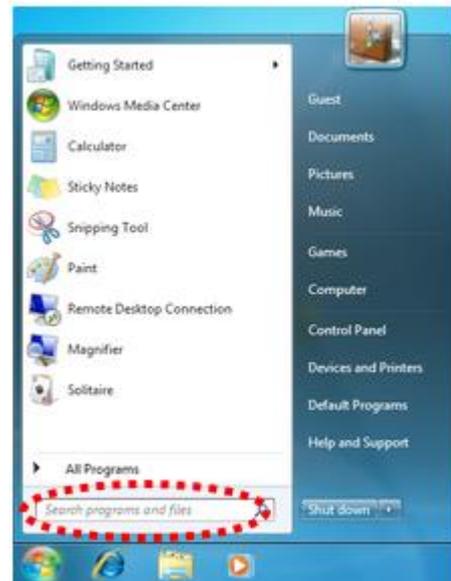
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Lesson 1: Creating A New Blank Document and Introduction To The Ribbon

1. From the "Desktop" click on the "Start" button a the bottom left of screen

2. With the left mouse button click once in the box that says "Search programs and files" and type "Excel"

3. The programme "Microsoft Excel" should appear at the top of the list. Click on the icon with the left mouse button and the programme should open.

4. Once Excel opens you will be given a list of recently opened files on the left hand side and a set of templates you can use. Double click on "Blank Workbook".
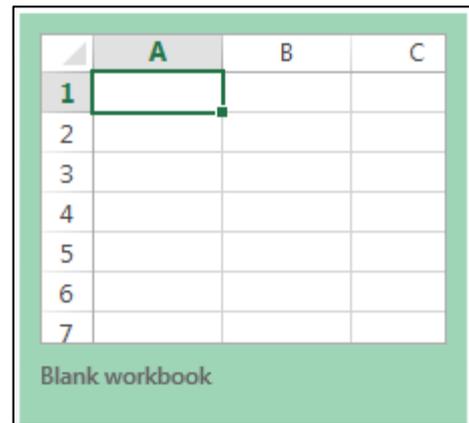
5. You can now see "The Ribbon" at the top of the page. In the next few lessons we will take a look at how The Ribbon works.
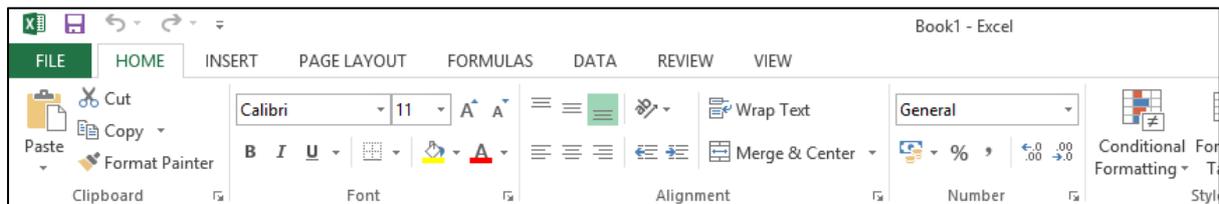
Lesson 2: Tabs

1. Look at the top of the page, you can see that the Ribbon is divided up in at least 9 headers ("File", "Home", "Insert" etc). Click on any of these headers; a new set of tools and options appear below it. You can tell which section you're in as the header is slightly darker and outlined with blue.

HOME	INSERT	PAGE LAYOUT

2. Make sure you are on the "Home" tab. You can see is further divided into different sections such as "Clipboard", "Font", "Alignment" etc.

    Paste Format Painter   B I U ▾   ▾   ▾ A ▾   ≡ ≡ ≡   ← →   Merge & Center ▾

   Clipboard   Font   Alignment
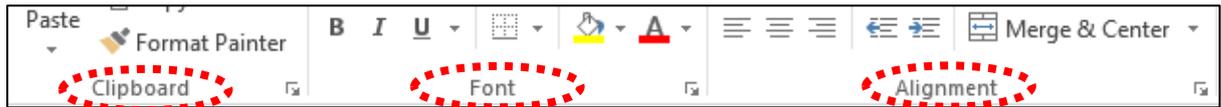
    Each of these sections are logical collections of buttons that have similar functions (we will be looking at some of these buttons later).

3. Take five minutes to click on each Tab and familiarise yourself with the different buttons available. If you hover your mouse over each button a little white box of text will appear confirming its name.

Lesson 3: Expanding Sections

1. Look closely and you will notice at the bottom right of some sections there is a little icon that looks like this:
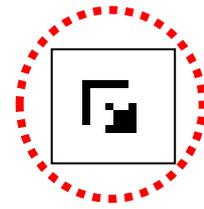
2. If you click on any of these icons and a box will open up. For this lesson we will focus on the "Font" section in the "Home" tab but you can open further sections once we have finished the lesson. Once you click on the icon this box should appear:
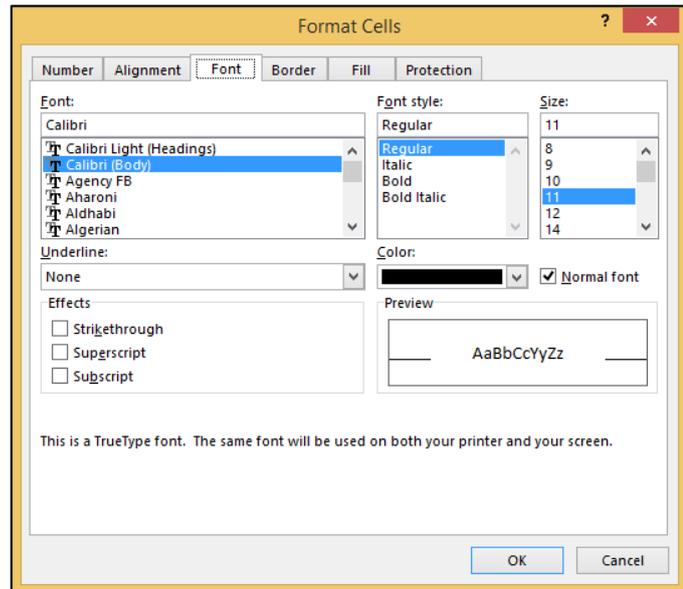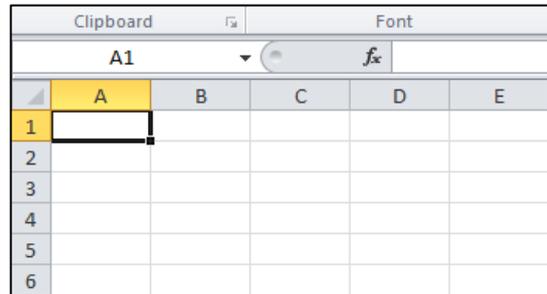
3. As you can see, this is an expanded version of the options currently available in the "Font" section. If you ever find yourself struggling to find a function, it's always a good idea to expand each section you think it's likely to be under and look around.

4. Once you are finished click "Cancel" and move onto the next lesson.

Lesson 4: Cells, Rows, Columns and Navigation

1. Now we've opened a new workbook you can see that the page is laid out as a grid with letters along the top and numbers down the side providing reference points for each **"Cell"**. **"Cells"** are where you enter information into your workbook – this information can be text or numbers which you can further format. The letters represent information that flows down the page which are known as **"Columns"**. The numbers represent information that flows across the page and are known as **"Rows"**. At this point cell **"A1"** is selected and ready to have information typed into it – you can tell which cell is selected as it is outlined with a green or dark border (depending on which version of Excel you are using).

2. You can either select cells with the left button of your mouse or you can use your cursor keys to navigate around. Try both of these and then select cell "A1" again.
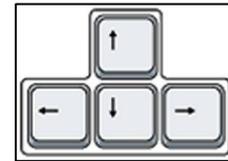
3. Once you have selected cell "A1" type "This is my first Excel spreadsheet". As you can see the text has extended across cells "B1" "C1" and "D1".
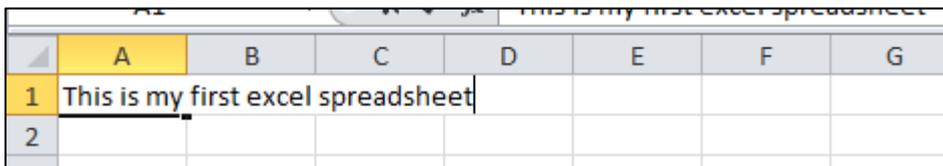
4. Once you have finished typing hit the "Enter" key. You will see that cell "A2" is then selected. Any time you are finished typing information into a cell press "Enter" and you will automatically move down to the cell below.
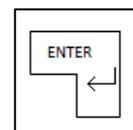
   Note: If you were to hit the "Tab" key once you finished typing you would automatically move to the cell immediately to the right, this is useful to note when entering data across several rows
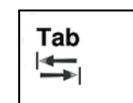
5. Navigate to cell "B1", type "1234" and hit enter. You will see that the text "This is my first Excel Spreadsheet" has disappeared behind the "1234". Don't worry, the text isn't lost, it's just sitting behind cell "B1".
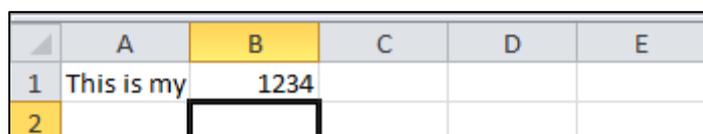
6. We can resize the column to ensure that all the text is showing. To do this hover your mouse on the line between the "A" and the "B" column. You will see your pointer turns into a black cross with two arrows at the side.

7. Double click with your mouse and you will see that the row has automatically resized so it is the length of the text in cell "A1". When you perform this action when there is text in each cell of row A it will automatically resize to the longest text/number in that row

8. Navigate to cell "B1" again and type "4567" and press the enter key. You will see that the text has replaced the "1234" that was already there.

   Any time you select a cell and type anything it will remove the current contents and replace it with whatever you have typed. If you ever want to edit the current contents of a cell you need to double click on it with your mouse **OR** navigate to it with your cursors and then press the "F2" button at the top of your keyboard.

   Once you do this you will see the blinker or "insertion point" appears with the cell and you can move around the contents of that cell with either your cursors or click around it with your mouse.

9. Navigate to cell "A1" and type "This text will not stay" and then press the "Escape" key on your keyboard. You will see that the "This will not stay" disappears and the original "This is my first Excel Spreadsheet" reappears. Hitting "Escape" cancels any typing you have done as long as you have not hit the "Enter" key. This is handy if you realise you've made a mistake and want to start again or realised that you are typing into the wrong cell.

10. Navigate to cell "A1" and press the "Delete" key on your keyboard. This clears the contents of the cell. Do the same for cell "B1".

11. Close the file without saving.

<u>Lesson 5: Undo/Redo</u>

These are two of the most important buttons you'll find in Microsoft Excel (and most programs that you use in fact):

Undo: Undoes the last action. If you've just deleted some cells by accident, this button will put it back!

Redo: Re-does anything that you have undone; you can only redo something that you have undone (if that makes sense!)

The best way to see how it works is to give it a try, so feel free!

Lesson 6: Creating a Simple Workbook

1. Open a new blank workbook and enter the information into the cells as it is shown below. Be sure to resize the rows to fit any length of text. Be sure that you enter each bit of information into the correct cell – you can ensure this by looking at the grid references. If you are unsure of anything just ask your tutor who will talk you through the process

	A	B	C	D	E
1					
2	Catering Invoice				
3	Fiddlers Elbow Ltd				
4					
5	Item	Quantity	Cost	Total	
6	Red Wine	25	5		
7	White Wine	25	5		
8	Soft Drinks	30	1.25		
9	Bottled Beer	100	2.3		
10	Sandwiches	150	1.75		
11	Orange Juice	45	1.2		
12	Canapes	300	0.75		
13			Grand Total		
14					

2. Let's make the "Catering Invoice" a main header. First we will centre at the top of the workbook. First we're going to "Merge" the cells at the top of the page and centre the header. With your mouse click and hold the left button on cell "E2" and carefully drag the mouse across to cell "A2". You will see that the four cells are highlighted with a green OR dark border.

	A	B	C	D	E	F
1						
2	Catering Invoice					
3	Fiddlers Elbow Ltd					

3. Click the "Merge and Center" button in the "Alignment" section of the "Home" tab. You will see that the four cells have merged into one and the text has been centred within it. Do the same for the "Fiddlers Elbow Ltd" sub-header.
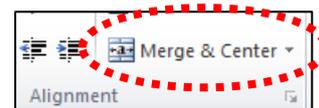
	A	B	C	D	E	F
1						
2	Catering Invoice					
3	Fiddlers Elbow Ltd					

4. Let's make the main header more pronounced. First of all we'll change the background of the cell to black. Click on the cell that contains the "Catering Invoice" header. In the "Font" section of the header section click on the arrow to the right of the paint pot symbol which represents the "Fill Colour". Click on the black square from the drop-down. You will notice that the cell is now completely black
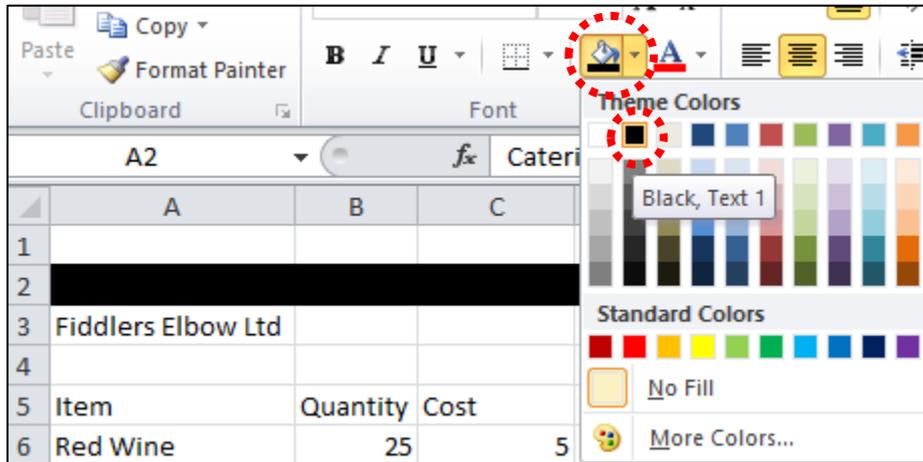
5. Now click on the arrow beside the "A" with red line below it which represents "Font Color". Choose the white box from the dropdown. You will notice that the text now shows up as white against the black background. Change the "Font Size" to "18" and make it "Bold".
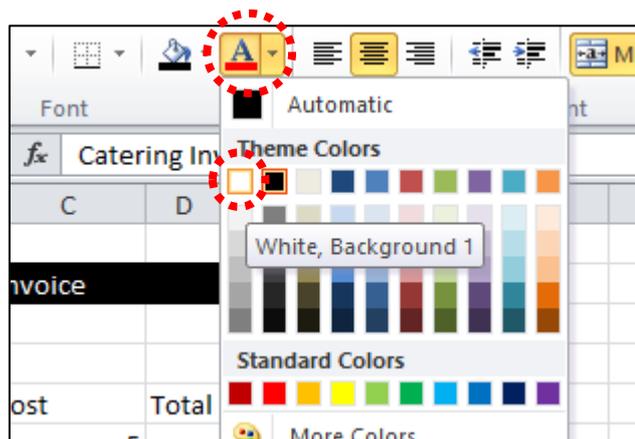
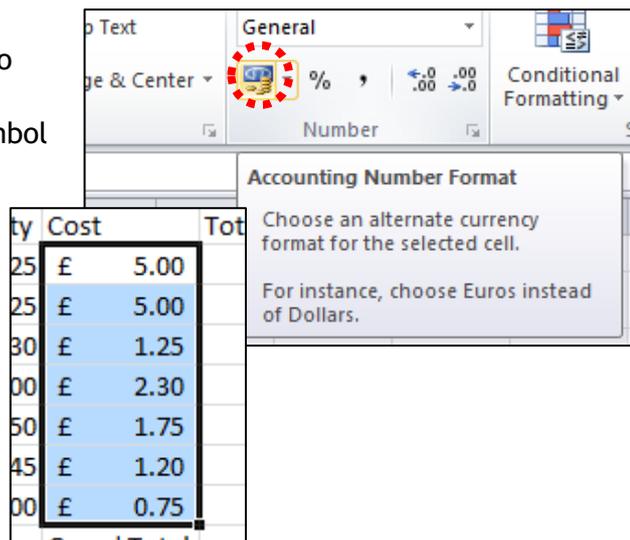6. Click on the cell that contains the "Fiddlers Elbow Ltd" text and make it "Bold" and "Underlined". It should now look like this:

7. Now highlight cells C6 to C12 by click and holding the left mouse button over cell C6 and then dragging down to cell C12 and then releasing the mouse button so that they are surrounded by a dark or green border.

8. As the numbers in these cells represent currency we're going to "format" them so that they automatically add a currency symbol to the values entered into them. Click the "Currency" button in the "Number" section of the "Home" tab. You will notice that the numbers in the cells we selected now have the "£" symbol added.

Accounting Number Format

Choose an alternate currency format for the selected cell.

For instance, choose Euros instead of Dollars.

ty	Cost		Tot
25	£	5.00	
25	£	5.00	
30	£	1.25	
00	£	2.30	
50	£	1.75	
45	£	1.20	
00	£	0.75	

Note that if you click on the arrow beside the "Currency" button you are given the option of applying different currency symbols, not just the "£" symbol.

<u>Lesson 7: Simple Formulas</u>

1. Click into cell D6 and type the following:

=sum(B6*C6)

Then press the "Enter" key. You will see that the cell has the value "£125" in it.

2. The formula that you typed into the cell was a set of instructions for the Excel program to follow so that it can perform a calculation. Let's examine these:

- The **"=sum"** section is telling Excel that we want it to perform a certain calculation or function. There are other functions such as "=max" or "=average" that we can use (we will examine these later).
- The open bracket is used to contain the calculation we're about to type, these can be used for perform more complex calculations (such as adding several numbers and then multiplying them by another set of added numbers).
- **"B6"** and **"C6"** are the grid reference points for the cells we want to perform that calculation on.
- The **"*"** represents a "multiplication" or "times" symbol. We can also use **"/"** to represent "divide by", **"-"** to represent "minus" and **"+"** to represent plus.

So to conclude, the formula we typed is telling Excel to multiply the value in cell B6 by the value in the cell C6.

> **We could repeat the above process in cells D7 through to D12 to calculate the other values but fortunately Excel has a few time saving functions that mean we don't have to!! Below we shall take you through the two main ones.**

3. <mark>Copying and Pasting:</mark> Click on cell D6 and then click "Copy" from the "Clipboard" section of the "Home" tab. You will notice that the cell now has a dotted line surrounding it is flashing. Now click and hold the left mouse button on cell D7 and drag down to cell D12 and release the mouse button to highlight the cells. Then click on "Paste" in the "Clipboard" section of the "Home Tab".
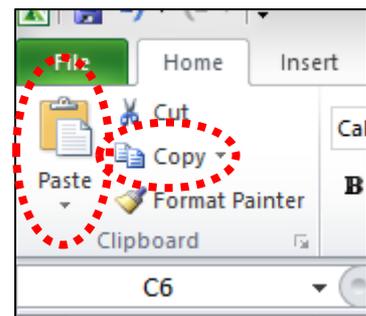
4. You will see that the cells are now populated with the formula BUT they have been adjusted to suit the rows that they are in. Row 7 for example has changed the formula "=sum(B6*C6)" to "=sum(B7*C7)" and so on. You can check what formula

is in a cell by looking at the white box sitting below the ribbon
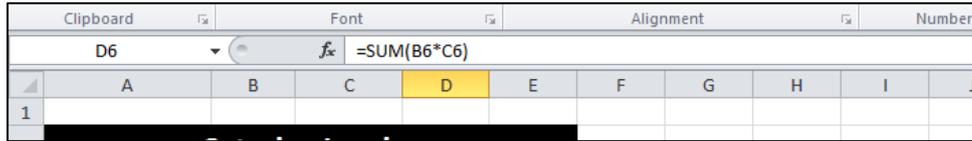
5. **Autofill:** Press the "Undo" button at the top left of the window to remove the formulas we just pasted in step 3. Click onto cell D6 and then move your mouse to the bottom right corner of that cell. You will see that your mouse pointer becomes a black cross

6. Click and hold the left mouse button and drag it down to cell D12 and release the mouse button. You will see that the formula has been copied downwards into these cells.

7. Press the "Undo" button again. Repeat Step 5, and then double click the left mouse button. You will see that this copies the formula down to cell D13 (as there is the "Grand Total" value in cell D13. The value of cell D13 shows as "#VALUE!". This is because it is multiplying the empty cell B13 by the word C13 which has confused Excel (as you can't multiply words of course!!). This is not an issue, just click onto cell D13 and press the Delete key.

8. Now let's calculate the grand total of the figures in column D. Click into cell D13 and type the following formula:

=sum(D6:D12)

And press the "Enter" key and the value "£1,059" should in the cell.

The ":" in the formula function is telling Excel to add all of the values in the range from cell D6 to cell D12, instead of having to type

=sum(D6+D7+D8+D9+D10+D11+D12)

9. An alternative to the method shown above is to click into cell D13 (hit the "Delete" key to remove the current formula). Click on the "Autosum" button in the "Editing" section of the "Home" tab at the top right of the screen.
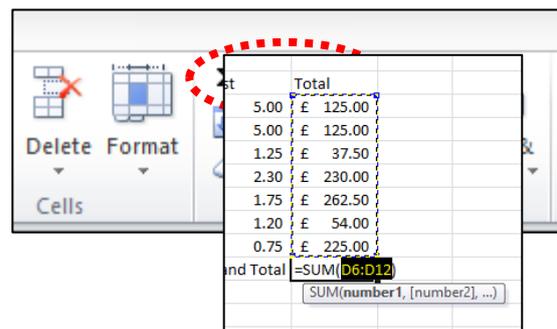
10. You will see that the cell is automatically populated with the formula that we entered in Step 8 (Excel has anticipated what you wanted to do). Press the "Enter" key to confirm

Lesson 8: Exercise 1

1. Create a new blank work and use what you have learned to enter the data and formatting as below:

	A	B	C	D	E	F	G	H
1		**Sales For The Month**						
2	**Sales Rep**	**Product 1**	**Product 2**	**Product 3**	**Product 4**	**Sales Rep Total**		
3	Andrew	£ 400.00	£ 130.00	£ 375.00	£ 480.00			
4	Joanna	£ 255.00	£ 680.00	£ 100.00	£ 300.00			
5	Marc	£ 370.00	£ 300.00	£ 400.00	£ 250.00			
6	Mary	£ 410.00	£ 205.00	£ 190.00	£ 590.00			
7	Bob	£ 160.00	£ 500.00	£ 340.00	£ 530.00			
8	Alex	£ 300.00	£ 190.00	£ 480.00	£ 700.00			
9	Frank	£ 145.00	£ 260.00	£ 560.00	£ 400.00			
10	Larry	£ 580.00	£ 450.00	£ 300.00	£ 610.00			
11	Margaret	£ 200.00	£ 380.00	£ 710.00	£ 160.00			
12	George	£ 390.00	£ 200.00	£ 150.00	£ 1,050.00			
13					Grand Total			
14								

2. Ensure the header is merged and centred with a similar font and size as above

3. Use either formulas or the AutoSum button to calculate the totals.

4. Close the file without saving

Lesson 9: Exercise 2

1. Create a new blank work and use what you have learned to enter the data and formatting as below:

	A	B	C	D	E
1	**Stationary Order**				
2	**Item**	**Quantity**	**Unit Price**	**Total**	
3	BIC Medium Blue	400	£ 130.00		
4	BIC Medium Black	255	£ 680.00		
5	BIC fine red	370	£ 300.00		
6	STABILO fine 0.4 pink	410	£ 205.00		
7	STABILO fine 0.4 green	160	£ 500.00		
8	Coloured Paperclips	300	£ 190.00		
9	PILOT V ball 0.5 blue	145	£ 260.00		
10	PILOT V ball 0.7 blue	580	£ 450.00		
11	ZEBRA Z Grip Medium Blue	200	£ 380.00		
12	FABER_CASTELL Textliner Yellow	390	£ 200.00		
13					

2. Complete the "Totals" column using the appropriate formula

3. Close the file without saving.