# How to Use Microsoft EXCE 2010



A basic guide with step-by-step instructions for the complete beginner

# **How to Use Excel 2010**

| 0          | An introduction to the basics of Microsoft Excel 2012.                         |
|------------|--|
| 0          | It can be used by professionals, teachers, parents or children.                |
| 0          | It shows you how spreadsheet may be used in a range of different situations.   |
| o<br>pace. | It is divided in a series of lessons/chapters which you can follow at your own |
| -          |  |

o You will need no additional assistance.



#### Contents

# Chapter 1.....<u>What is a Spreadsheet?</u>

# Chapter 2.....Formulae

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# Chapter 4.....Functions

# Chapter 5.....Bar Charts

# Chapter 6.....Pie Charts

# Chapter 7.....<u>Creating a Form</u>

# Chapter 8......Moving and Copying

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Contact; mrgerardstrong@gmail.com

# **Chapter 1**

#### What is a Spreadsheet.....

o Open Microsoft Excel

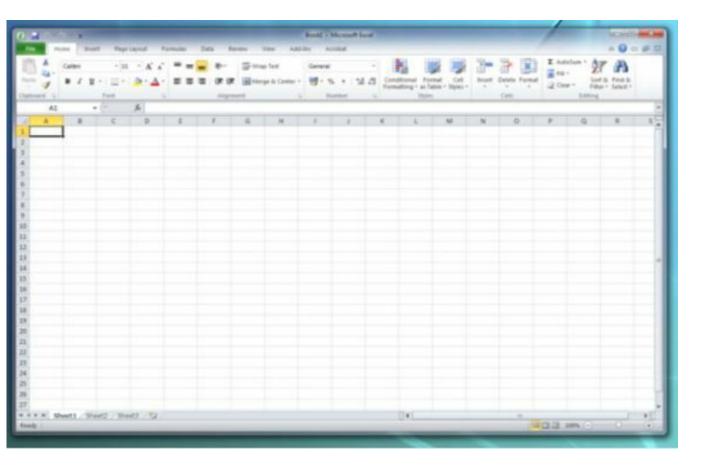
Either double click on the short cut which looks like this.



Or you can open it from the start button on the bottom left hand side of the screen.



o When you open Excel it will look like this.



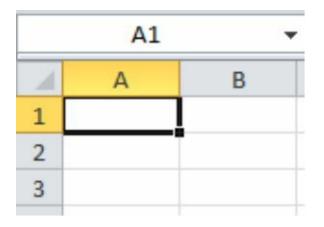
o The main area is called the **Worksheet**. You can see it has been divided into a grid with **columns** and **rows**. Each box is called a **Cell**.

o The **rows** go across the worksheet and are labelled as **numbers**. The **columns** are vertical and are labelled as **letters**.

o The **active cell** is the one highlighted and is called **A1**, as it is in column A and in row 1.

|   | А | В | С | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 |   |   |   |   |   |   |   |
| 2 |   |   |   |   |   |   |   |
| 3 |   |   |   |   |   |   |   |
| 4 |   |   |   |   |   |   |   |
| 5 |   |   |   |   |   |   |   |
| 6 |   |   |   |   |   |   |   |
| 7 |   |   |   |   |   |   |   |
| 8 |   |   |   |   |   |   |   |
| 9 |   |   |   |   |   |   |   |

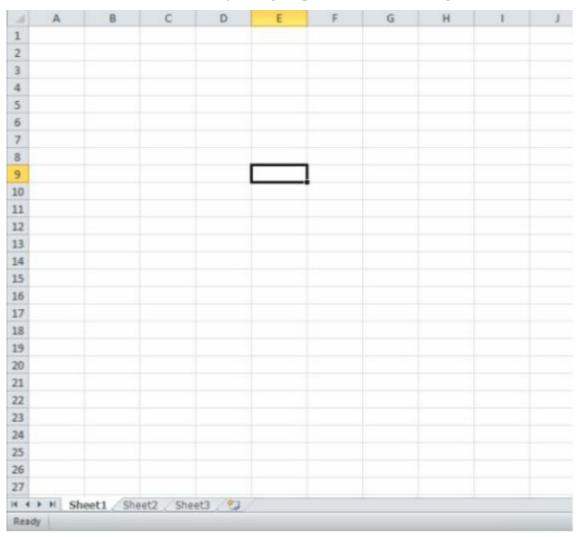
o You can see the name of the **active cell** in the white box above the



o The workbook contains blank worksheets named Sheet 1, Sheet 2, Sheet 3 etc. You can see the name of these on the tabs at the bottom of your worksheet.

| Rea  | ady        |     |          |            |          |   |
|------|------------|-----|----------|------------|----------|---|
| 14 4 | ( <b>)</b> | She | et1 / Sh | neet2 / Sh | eet3 🏑 🞾 | / |
| 27   |            |     |          |            |          |   |
| 26   |            |     |          |            |          |   |
| 25   |            |     |          |            |          |   |
| 24   |            |     |          |            |          |   |
| 23   |            |     |          |            |          |   |

- o Use your left button on your mouse to click in any other cell.
- o Use the arrow keys to go up, down, left, or right.



o Use the Page Up or Page Down keys (notice the row numbers on the left hand side).

### **Entering Data**

Suppose we are going to make a list of data in Excel with the number of pens your friends have on their desk. Your job is to make a **text** list of their names and the **number** of pens each person has. The **cell reference** is the name of each cell.

- o Click in Cell A1 (cell reference)
- o Type the name John(or your own name)
- o Press the right arrow key.
- o Type the number 8 in cell B1
- o Press Enter, Excel will move the active cell down to the one under B2.

o Copy the Rest of the list. If you make a mistake we will correct them after the rest of the list is done.

|   | B6     | • ( | - |
|---|--------|-----|---|
| 1 | А      | В   | С |
| 1 | John   | 8   |   |
| 2 | Ali    | 2   |   |
| 3 | Simon  | 4   |   |
| 4 | Jenson | 1   |   |
| 5 | Mary   | 0   |   |
| 6 | Kaled  | 12  |   |
| 7 |        | Ī   |   |

### **Editing Data**

o Click on the cell containing the Name **Simon**. You will see that the name appears in the formula bar. The formula bar is above the worksheet and you can see where the text shows Simon.

| City | ki Dibodi |     | i uni |                | ю.<br>Ж | All |
|------|-----------|-----|-------|----------------|---------|-----|
|      | A3        | • ( | m     | <i>f</i> ∗ Sim | on      |     |
| 1    | A         | B   | С     | D              | E       | F   |
| 1    | John      | 8   |       |                |         | 2   |
| 2    | Ali       | 2   |       |                |         |     |
| 3    | Simon     | 4   |       |                |         |     |
| 4    | Jenson    | 1   |       |                |         |     |
| 5    | Mary      | 0   |       |                |         |     |
| 6    | Kaled     | 12  |       |                |         |     |
| 7    |           |     |       |                |         |     |
| 8    |           |     |       |                |         |     |

o Click in the **formula** bar

|   | A3     | - ( | - × ✓ | ′ <i>f</i> ∗ Sim |   |
|---|--------|-----|-------|------------------|---|
| 1 | A      | В   | С     | D                | E |
| 1 | John   | 8   |       |                  |   |
| 2 | Ali    | 2   |       |                  |   |
| 3 | Sim    | 4   |       |                  |   |
| 4 | Jenson | 1   |       |                  |   |
| 5 | Mary   | 0   |       |                  |   |
| 6 | Kaled  | 12  |       |                  |   |
| 7 |        |     |       |                  |   |

o Use the **Backspace** key to delete the Name **Simon**. You will see that the text in cell A3 will change at the same time.

|   | A3     | • ( | - × < | f <sub>x</sub> |   |
|---|--------|-----|-------|----------------|---|
| 1 | А      | В   | С     | D              | E |
| 1 | John   | 8   |       |                |   |
| 2 | Ali    | 2   |       |                |   |
| 3 |        | 4   |       |                |   |
| 4 | Jenson | 1   |       |                |   |
| 5 | Mary   | 0   |       |                |   |
| 6 | Kaled  | 12  |       |                |   |
| 7 |        |     |       |                |   |

o Type Stephen in the formula bar

|   | A3      | •  | (= × • | / fx Step | hen |
|---|---------|----|--------|-----------|-----|
|   | А       | В  | С      | D         | E   |
| 1 | John    | 8  |        |           |     |
| 2 | Ali     | 2  |        |           |     |
| 3 | Stephen | 4  |        |           |     |
| 4 | Jenson  | 1  |        |           |     |
| 5 | Mary    | 0  |        |           |     |
| 6 | Kaled   | 12 |        |           |     |
| 7 |         |    |        |           |     |

o Another way to change text in a cell is to type over it, click in the **cell reference** A6.

| lip | board 🗔 |     | Font |                             | - Gi |   |  |
|-----|---------|-----|------|-----------------------------|------|---|--|
|     | A6      | • ( | 0    | <i>f</i> <sub>x</sub> Kaled |      | 1 |  |
| A   | А       | В   | С    |                             | D    | E |  |
| 1   | John    | 8   |      |                             |      |   |  |
| 2   | Ali     | 2   |      |                             |      |   |  |
| 3   | Stephen | 4   |      |                             |      |   |  |
| 4   | Jenson  | 1   |      |                             |      |   |  |
| 5   | Mary    | 0   |      |                             |      |   |  |
| 5   | Kaled   | 12  |      |                             |      |   |  |
| 7   |         |     |      |                             |      |   |  |
| В   |         |     |      |                             |      |   |  |

|   | A6      | •  | 🔻 💿 🗙 🖌 🖍 🛛 Tasha |   |   |  |  |
|---|---------|----|-------------------|---|---|--|--|
| 1 | A       | В  | С                 | D | E |  |  |
| 1 | John    | 8  |                   |   |   |  |  |
| 2 | Ali     | 2  |                   |   |   |  |  |
| 3 | Stephen | 4  |                   |   |   |  |  |
| 4 | Jenson  | 1  |                   |   |   |  |  |
| 5 | Mary    | 0  |                   |   |   |  |  |
| 6 | Tasha   | 12 |                   |   |   |  |  |
| 7 |         |    |                   |   |   |  |  |

o Press Enter

## **Deleting the contents of a cell**

To delete the contents of a cell, click on the cell and press the Delete key on the keyboard.

o Delete the name Ali

|   | A2      | • ( | - | ∫x Ali |
|---|---------|-----|---|--------|
| 1 | А       | В   | С | D      |
| 1 | John    | 8   |   |        |
| 2 | Ali     | 2   |   |        |
| 3 | Stephen | 4   |   |        |
| 4 | Jenson  | 1   |   |        |
| 5 | Mary    | 0   |   |        |
| 6 | Tasha   | 12  |   |        |
| 7 |         |     |   |        |
| 8 |         |     |   |        |
| 9 |         |     |   |        |

o It will now look like this.

| 1 | А                                       | В  | С | 1 |
|---|---|----|---|---|
| 1 | John                                    | 8  |   |   |
| 2 |   | 2  |   |   |
| 3 | Stephen                                 | 4  |   |   |
| 4 | Jenson                                  | 1  |   |   |
| 5 | Mary                                    | 0  |   |   |
| 6 | Tasha                                   | 12 |   |   |
| 7 |   |    |   |   |
| 8 |   |    |   |   |
|   | 1 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( |    |   |   |

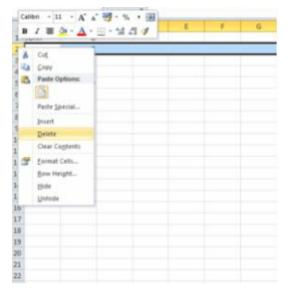
#### **Inserting and deleting rows and columns**

We can delete the whole row 2 so that no gap is left.

o Left click on the row heading 2.

| 1  | A       | В  | С | D |
|----|---------|----|---|---|
| 1  | John    | 8  |   | 1 |
| 2  |         | 2  |   |   |
| 3  | Stephen | 4  |   |   |
| 4  | Jenson  | 1  |   |   |
| 5  | Mary    | 0  |   |   |
| 6  | Tasha   | 12 |   |   |
| 7  |         |    |   |   |
| 8  |         |    |   |   |
| 9  |         |    |   |   |
| 10 |         |    |   |   |

o Right click on the number 2 heading for the row. Select Delete from the menu which appears.

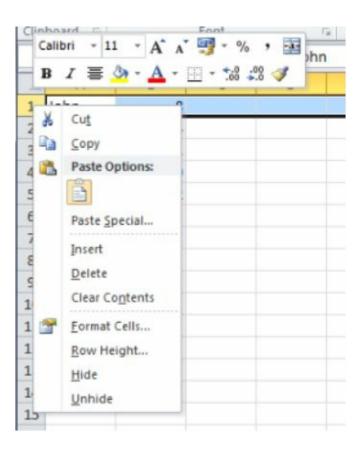


The row for Stephen moves up to Row 2.

|   | A2      | • ( | m | ∫x Step |
|---|---------|-----|---|---------|
|   | A       | B   | С | D       |
| 1 | John    | 8   |   |         |
| 2 | Stephen | 4   |   |         |
| 3 | Jenson  | 1   |   |         |
| 4 | Mary    | 0   |   |         |
| 5 | Tasha   | 12  |   |         |
| 6 |         |     |   |         |
| 7 |         |     |   |         |
| 8 |         |     |   |         |
| 0 |         |     |   |         |

Now you are going to add a heading at the top of the worksheet. We need to insert a row.

o Right Click in the row header for row 1



o Select Insert from the menu and left click on the mouse.

| 1 | A       | В  | С | D |
|---|---------|----|---|---|
| 1 |         |    |   |   |
| 2 | John    | 8  |   |   |
| 3 | Stephen | 4  |   |   |
| 4 | Jenson  | 1  |   |   |
| 5 | Mary    | 0  |   |   |
| 6 | Tasha   | 12 |   |   |
| 7 |         |    |   |   |
| 8 |         |    |   |   |

o Type Pens on Desk in cell A1. Press Enter.

|   | A2         | •   | (* | f: |
|---|------------|-----|----|----|
| 1 | А          | В   | С  |    |
| 1 | Pens on De | esk |    |    |
| 2 | John       | 8   |    |    |
| 3 | Stephen    | 4   |    |    |
| 4 | Jenson     | 1   |    |    |
| 5 | Mary       | 0   |    |    |
| 6 | Tasha      | 12  |    |    |
| 7 |            |     |    |    |
| 8 |            |     |    |    |
| 9 |            |     |    |    |

Insert another blank line below the title.

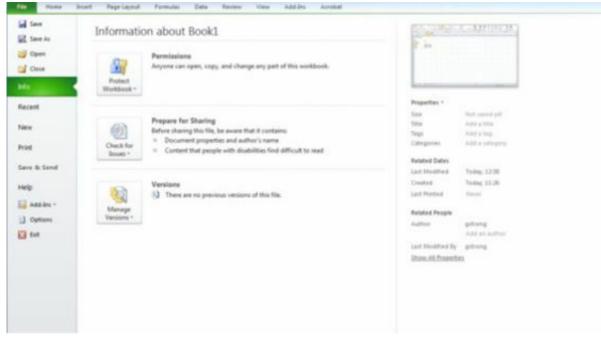
o Right click on Row 2 header. Select insert.

| - 24 | А         | В   | С |
|------|-----------|-----|---|
| 1    | Pens on D | esk |   |
| 2    |           |     |   |
| 3    | John      | 8   |   |
| 4    | Stephen   | 4   |   |
| 5    | Jenson    | 1   |   |
| 6    | Mary      | 0   |   |
| 7    | Tasha     | 12  |   |
| 8    |           |     |   |

# Saving your work

If you want to keep your work so that you can look at it again or change it in the future, you need to save it.

o Click File on the tabs at the top of the window.



#### o Click on Save.

| Save As           |                       |                 | Real Property    | ×     |
|-------------------|-----------------------|-----------------|------------------|-------|
| LA                | braries + Documents + | * 49            | Search Documents | P     |
| Organize - Ne     | tw folder             |                 |                  | . 0   |
| Z Microsoft Excel | Documents libr        | rary            | Arrange by: Fold | ler * |
| 🔆 Favorites       | 1                     |                 |                  |       |
| Cibraries         |                       |                 |                  |       |
| Documents         |                       |                 |                  |       |
| Music             |                       |                 |                  |       |
| Pictures          |                       |                 |                  |       |
| Videos            |                       |                 |                  |       |
| _                 | • *                   |                 |                  |       |
| File name:        | Book1                 |                 |                  |       |
| Save as type:     | Excel Workbook        |                 |                  |       |
| Authors           | gstrong               | Tags: Add a tag |                  |       |
|                   | Save Thumbnail        |                 |                  |       |
|                   |                       | Tools -         | Open Ca          |       |

o Excel gives your workbook the default name Book1.xls. The name appears in the **File name** box.

- o Find a location where you are happy to save the file.
- o Type a new name PensOnDesk

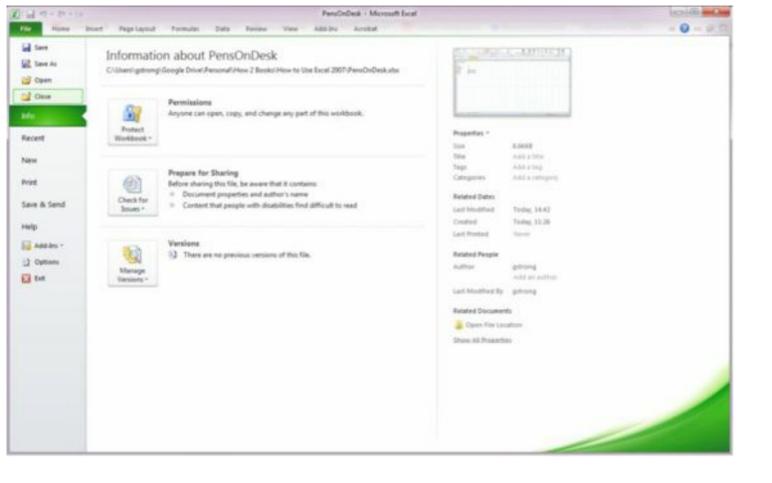
| File name:    | PensOnDesk     |                 |     |      | •      |
|---------------|----------------|-----------------|-----|------|--------|
| Save as type: | Excel Workbook |                 |     |      | •      |
| Authors:      | gstrong        | Tags: Add a tag |     |      |        |
|               | Save Thumbnail |                 |     |      |        |
| Hide Folders  |                | Tools           | • • | Save | Cancel |

Microsoft will add an extension to the name you choose. This shows that the file is a spreadsheet created using Microsoft Excel.

o Click on the **save** button. This saves the document and closes the save window.

| Save | Cancel |
|------|--------|
| Jave | Cancel |

o Close your workbook by selecting the File tab.



o Click on Close.

# **Chapter 2**

The really good thing about Excel is when you start to use **formulae.** Using a formula Excel will make calculations for you automatically. To learn how to use formula in Excel, we will do a page of sums. We use these symbols in Excel.

+ add

- subtract
- \* multiply
- / divide
- () brackets are used whenever necessary

Create a worksheet to do calculations

- o Open a new Excel work book.
- o Type ADD in cell A1, SUBTRACT in cell C1, DIVIDE in cel E1, Multiply in cell G1.

| d. | A   | В | C        | D | E      | F | G        | н | I. |
|----|-----|---|----------|---|--------|---|----------|---|----|
| 1  | ADD |   | SUBTRACT |   | DIVIDE |   | MULTIPLY |   |    |
| 2  |     |   |          |   |        |   |          |   |    |
| 3  |     |   |          |   |        |   |          |   |    |
| 4  |     |   |          |   |        |   |          |   |    |
| 5  |     |   |          |   |        |   |          |   |    |
| 6  |     |   |          |   |        |   |          |   |    |

o Type all the numbers shown in te correct cells.

|   | G3  |   | • (*     | $f_x = 4$ |        |   |          |
|---|-----|---|----------|-----------|--------|---|----------|
| À | A   | В | C        | D         | E      | F | G        |
| 1 | ADD |   | SUBTRACT |           | DIVIDE |   | MULTIPLY |
| 2 | 200 |   | 60       |           | 300    |   | 50       |
| 3 | 300 |   | 54       |           | 6      |   | 4        |
| 4 |     |   |          |           |        |   |          |

# **Selecting Cells to format**

In order to change the look of certain cells by making the grid lines bold or to change the font, you must **select** the cells.

o To make a change to the whole workbook select the tope left header.

| M 10 - 0 - 1  |                                    |                |               | Book2 - Mere | ult Goal |        |                             |                   |            | 00                                   | -    |
|---------------|------------------------------------|----------------|---------------|--------------|----------|--------|-----------------------------|-------------------|------------|--------------------------------------|------|
| ten Plane (18 | Incerl Fegriayout                  | Folimates Data | Anima line Ad | the kenter   |          |        |                             |                   |            | + Q +                                | - 61 |
|               | - 10 - 16<br>R - 12 - 10-1<br>Feet |                | n Browned     |              | 34 8     | Ra all | nut Call B<br>Dis+ Styles - | tan               | E Adolan * | Sort.N. Find B.<br>Filles = Salest + |      |
| AL            | + - A A                            | 400            |               |              |          |        |                             |                   | 1          |                                      |      |
|               | C P                                |                | 0 #           | 1            | X        |        | M                           | N 0               | * Q        | *                                    | 1    |
| A00           | SUBTRACT                           | DEVICE         | MULTIPLY      |              |          |        |                             |                   |            |                                      |      |
| 200           | 60<br>34                           | 300            | 58            |              |          |        |                             |                   |            |                                      |      |
|               |                                    |                |               |              |          |        |                             |                   |            |                                      |      |
|               |                                    |                |               |              |          |        |                             |                   |            |                                      |      |
| F F Sheet]    | Peer2 / PeerD / 3                  | 2              |               |              |          | D+1    |                             | 1<br>12 Sec.10 10 |            |                                      | •    |

o To make a change to a whole column select the header for the column.

|      |          |         |         |        | Formulas | _      |           |            |
|------|----------|---------|---------|--------|----------|--------|-----------|------------|
|      | Å.       | Calibri | - 11    | - A    | A" = =   | = 3)·· | Wrap      | Text       |
| Pat  | te 🚽     | BI      | u • 🖽 • | 3+ - A |          | 1 (F   | 🗱 🔜 Merge | & Center * |
| Clip | board 15 |         | Font    |        | -        | Alig   | anment    | 19         |
|      | C1       |         | • (*    | fx SU  | ETRACT   |        |           |            |
| 1    | A        | B       | C       | D      | E        | F      | G         | н          |
| 1    | ADD      |         | SUBTRAC | 1      | DIVIDE   |        | MULTIPLY  |            |
| 2    | 200      |         | 60      |        | 300      |        | 50        |            |
| 3    | 300      |         | 54      |        | 6        |        | 4         |            |
| 4    |          |         |         |        |          |        |           |            |
| 5    |          |         |         |        |          |        |           |            |
| 6    |          |         |         |        |          |        |           |            |
| 7    |          |         |         | -      |          |        |           |            |
| 8    |          |         |         |        |          |        |           |            |
| 9    |          |         |         |        |          |        |           |            |
| 10   |          |         |         |        |          |        |           |            |
| 11   |          |         |         |        |          |        |           |            |
| 12   |          |         | -       |        |          |        |           |            |
| 13   |          |         |         |        |          |        |           |            |
| 14   |          |         |         |        |          |        |           |            |
| 16   |          |         |         |        |          |        |           |            |
| 10   |          |         |         |        |          |        |           |            |

o To make a change to a whole row, select the row header.

| Č. | 10 | 4.15 | laine |   |         | 88  |   | * | -    |     |   | 1 |          | ted.         | Gen |   |   | -   | 1          | 1          | 4         | 3-  | 3     | <u>()</u> | X Autobum | 21      | A                 |  |
|----|----|------|-------|---|---------|-----|---|---|------|-----|---|---|----------|--------------|-----|---|---|-----|------------|------------|-----------|-----|-------|-----------|-----------|---------|-------------------|--|
| -  | -  | -    | B . 2 |   | Tard.   | 1   |   | 4 | -    |     |   |   | N of the | illi Caritar |     | - | - | 8.2 | Formatting | - at Takin | - 39/80 * | - C | Calle | 1         | Q Dear 1  | fider * | Find R<br>Saled * |  |
|    |    | 44   |       | • | C       | -   | 6 | _ |      | _   |   |   | _        |              |     |   |   | _   | _          | _          |           |     | _     | _         | -         | _       |                   |  |
|    | 00 |      | -     |   | C USTRA | ACT | P |   | N/DE |     | ' | - | (TIP(3)  |              |     |   | 1 |     |            |            |           |     |       |           | 1         | 9       |                   |  |
|    |    | 200  |       |   |         | 50  |   |   | 1    | 100 |   |   | 50       |              |     |   |   |     |            |            |           |     |       |           |           |         |                   |  |
| Ē  | _  |      |       | _ |         | -   |   |   |      |     |   |   | _        |              | _   |   |   |     | _          |            |           |     | -     |           |           |         |                   |  |

o Select cel A1 and hold down the left mouse button.

|   | A1  | - | (° )     | fx AD | ADD    |   |          |  |  |  |
|---|-----|---|----------|-------|--------|---|----------|--|--|--|
| 1 | A   | В | С        | D     | E      | F | G        |  |  |  |
| 1 | ADD |   | SUBTRACT |       | DIVIDE |   | MULTIPLY |  |  |  |
| 2 | 200 |   | 60       |       | 300    |   | 50       |  |  |  |
| 3 | 300 |   | 54       |       | 6      |   | 4        |  |  |  |
| 4 |     |   |          |       |        |   |          |  |  |  |
|   |     |   |          |       |        |   |          |  |  |  |

o Drag the mouse across cells A1 to G1

|   | A1  | * | (* )     | fx Al | DD     |   |          |   |
|---|-----|---|----------|-------|--------|---|----------|---|
| 1 | A   | В | C        | D     | E      | F | G        | н |
| 1 | ADD |   | SUBTRACT |       | DIVIDE |   | MULTIPLY |   |
| 2 | 200 |   | 60       |       | 300    |   | 50       |   |
| 3 | 300 |   | 54       |       | 6      |   | 4        |   |
| 4 |     |   |          |       |        |   |          |   |
| 5 |     |   |          |       |        |   |          |   |

o Press the Bold button on the home tab to show the menu ribbon to change the font.

|   | A1  | ۲ | ( )      | AD | D      |   |          |   |   |
|---|-----|---|----------|----|--------|---|----------|---|---|
|   | A   | В | С        | D  | E      | F | G        | Н | L |
| 1 | ADD |   | SUBTRACT |    | DIVIDE |   | MULTIPLY |   |   |
| 2 | 200 |   | 60       |    | 300    |   | 50       |   |   |
| 3 | 300 |   | 54       |    | 6      |   | 4        |   |   |
| 4 |     |   |          |    |        |   |          |   |   |
| 5 |     |   |          |    |        |   |          |   |   |

o Select the Cell A4 and hold down Ctrl, while you have Ctrl held down select C4, E4 and G4.

|   | G4  | 17 | • (*     | fx |        |   |          |
|---|-----|----|----------|----|--------|---|----------|
| 1 | A   | В  | С        | D  | E      | F | G        |
| 1 | ADD |    | SUBTRACT |    | DIVIDE |   | MULTIPLY |
| 2 | 200 |    | 60       |    | 300    |   | 50       |
| 3 | 300 |    | 54       |    | 6      |   | 4        |
| 4 |     |    |          |    |        |   |          |
| 5 |     |    |          |    |        |   |          |
| 6 |     |    |          |    |        |   |          |

o Select the small arrow next to the border button to show a small drop down menu.

| Fi       |          | me Inser | , ray     | ge Layout Formulas Da       | ata | Review   | View      |
|----------|----------|----------|-----------|-----------------------------|-----|----------|-----------|
| 1        | 3 8      | Calibri  | *         | 11 * A* A* = = =            | 39  | ** 🖥 V   | /rap Text |
| Pas      | te       | BIU      | • (B)     | A - E = =                   | 1   | (建 114 M | lerge & C |
| Clint    | board Ta |          | Fe Bor    | ders                        |     | unment   |           |
|          | A1       | -        | 6 HB      | Bottom Border               |     |          |           |
| 1        | A        | В        | EB        | Tog Border                  |     | G        | 1         |
| -        | ADD      |          | sui 🗄     | Left Border                 |     | MULTIP   |           |
| 2        | 200      |          | EB        | Right Border                |     |          | 50        |
| 3        | 300      |          | EB.       | No Border                   |     |          | 4         |
| 4        |          |          | E         | All Borders                 |     |          |           |
| 5        |          |          |           | Outside Borders             |     |          |           |
| 6        |          |          |           | Thick Box Border            |     |          |           |
| 7        |          |          |           |                             |     |          |           |
| 8        |          |          | <u>50</u> | Bottom Double Border        |     |          |           |
| 9        |          |          | <u>EE</u> | Thick Bottom Border         |     |          |           |
| 10       |          |          | 144       | Top and Bottom Border       |     |          |           |
| 11       |          |          | <u> </u>  | Top and Thick Bottom Border |     |          |           |
| 12       |          |          | <u> </u>  | Top and Double Bottom Bord  | er  |          |           |
| 13       |          |          | Dra       | w Borders                   |     | -        |           |
| 14       |          |          | 1         | Draw Border                 |     | -        |           |
| 15       |          |          | 2         | Draw Border Grid            |     |          |           |
| 16<br>17 |          |          | 2         | Erase Border                |     |          | -         |
| 1/       |          |          | 1         | Line Color                  |     |          |           |
| 10       |          |          |           | Line Style                  | ×   |          |           |
| 13       |          |          |           |                             |     |          |           |

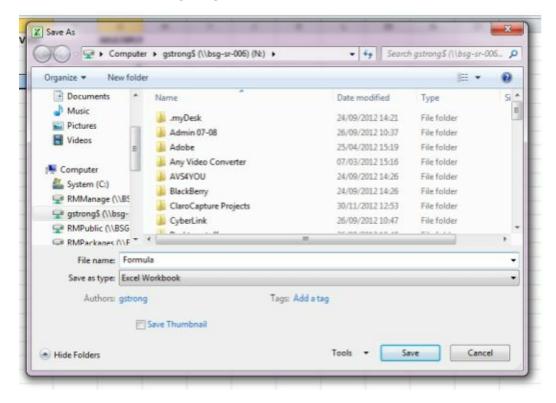
#### o Select option to have a top and thick bottom border

| 1    | ile He   | me      | Insert     | Pag | ge Layout Formulas Data       |    | Review   | VI VI | ew    |
|------|----------|---------|------------|-----|-------------------------------|----|----------|-------|-------|
|      | *        | Calibri |            | *   | 11 - A' A' = = =              | æ, |          | Wrap  | Text  |
| Pa   | ste 🦪    | BI      | <u>u</u> - |     | • <u>ð</u> • <u>A</u> • ≡ ≡ ≡ | 彈  | (# B     | Merge | 8. Ce |
| Clip | board Ta |         | Fo         | Bor | ders                          |    | gnment   |       |       |
|      | G4       |         | - (*       | 83  | Bottom Border                 |    |          |       |       |
| À    | А        | В       |            | H   | Top Border                    |    |          | G     | Н     |
| 1    | ADD      |         | SU         | Bi  | Left Border                   |    | MUL      | TIPLY |       |
| 2    | 200      | )       |            | 33  | <u>R</u> ight Border          |    |          | 50    |       |
| 3    | 300      | )       |            | 83  | No Border                     |    |          | 4     |       |
| 4    |          |         |            | Ħ   | All Borders                   |    |          |       |       |
| 5    | 1        |         |            |     | Outside Borders               |    |          |       |       |
| 6    |          |         |            |     | Thick Box Border              |    |          |       |       |
| 7    |          |         |            | _   |                               |    |          |       |       |
| 8    |          |         |            |     | Bottom Double Border          |    |          |       |       |
| 9    | 1        | _       | _          | 89  | Thick Bottom Border           |    |          | _     |       |
| 10   |          |         |            | Ŧ   | Top and Bottom Border         |    |          | _     |       |
| 11   |          |         | _          | E   | Top and Thick Bottom Border   |    | <u> </u> | _     |       |
| 12   |          |         | _          |     | Top and Double Bottom Border  |    |          |       |       |
| 13   |          |         |            | Dra | w Borders                     |    |          |       |       |
| 14   |          |         | _          | 1   | Draw Border                   |    | 1        |       |       |
| 15   |          |         | _          | 10  | Draw Border Grid              |    |          |       |       |
| 16   |          |         |            | 2   | Erase Border                  |    |          |       |       |
| 17   |          |         | _          | 1   | Line Color                    |    |          | -     |       |
| 18   | -        |         |            | _   | Line Style                    |    | -        |       |       |
| 19   | 4        |         | -          | -   |                               |    | -        | _     |       |
| 20   |          |         |            |     | More Borders                  | _  | 1        |       |       |

This gives a neat finish to the area for your calucations.

|   | G4  |   | • (°     | fx |        |   |          |   |
|---|-----|---|----------|----|--------|---|----------|---|
| 2 | A   | В | С        | D  | E      | F | G        | Н |
| 1 | ADD |   | SUBTRACT |    | DIVIDE |   | MULTIPLY |   |
| 2 | 200 |   | 60       |    | 300    |   | 50       |   |
| 3 | 300 |   | 54       |    | 6      |   | 4        |   |
| 4 |     |   |          |    |        |   |          |   |
| 5 |     |   |          |    |        |   |          |   |
| 6 |     |   |          |    |        |   |          |   |
| - |     |   |          |    |        |   |          |   |

o Now we are going to Save our Workbook. Call the file Formula.



o Click on Save.

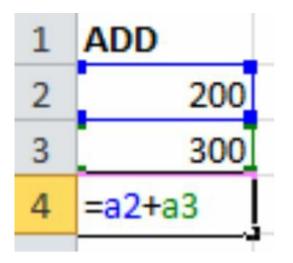
# **Entering the Formula**

We are going to use the cell references.

- o Click in cell A4
- o Type an equals sign = to tell Excel that you are going to use a calculation/formula

| - 24 | А   | В | C        |
|------|-----|---|----------|
| 1    | ADD |   | SUBTRACT |
| 2    | 200 |   | 60       |
| 3    | 300 |   | 54       |
| 4    | =   |   |          |
| 5    |     |   |          |

o Then type a2+a3 so that the formula looks like this;



o Press Enter and the answer will appear

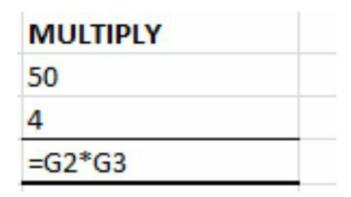
o In cell C4 type =c2-c3 and press enter

| JBTRACT |   |
|---------|---|
| )       |   |
| 1       |   |
| C2-C3   |   |
| 2.00    | - |

o In cell E4 type =e2/e3 and press enter

| DIVIDE |  |
|--------|--|
| 300    |  |
| 6      |  |
| =E2/E3 |  |
|        |  |

o In cell G4 type =g2\*g3 and press enter



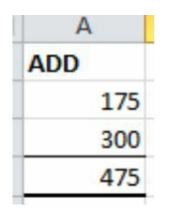
o Your worksheet will now look like this;

|   | G4  |   | - (* .   | f <sub>x</sub> | =G2 | *G3    |   | _        |   |
|---|-----|---|----------|----------------|-----|--------|---|----------|---|
| Å | A   | В | С        | j.             | D   | E      | F | G        | н |
| 1 | ADD |   | SUBTRACT |                |     | DIVIDE |   | MULTIPLY |   |
| 2 | 200 |   | 60       |                |     | 300    |   | 50       |   |
| 3 | 300 |   | 54       |                |     | 6      |   | 4        |   |
| 4 | 500 |   | 6        |                |     | 50     |   | 200      |   |
| 5 |     |   |          |                |     |        |   |          |   |
| 6 |     |   |          |                |     |        |   |          |   |

## **Automatic re-calculation**

The best main thing about spreadsheet is that once you have entered the formula, yu can change the contents of the other cells and answers will still be right.

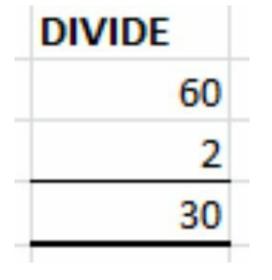
o Change cell A2 to 175



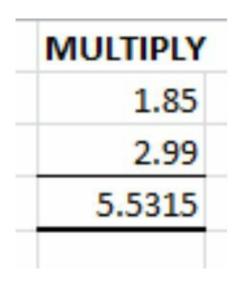
o Delete the contents of cells c2 and c3. Select each cell and press the delete key. Now what is the answer in cell C4?

|   | D6  |   | <b>▼</b> (m |
|---|-----|---|-------------|
| 1 | A   | В | С           |
| 1 | ADD |   | SUBTRACT    |
| 2 | 175 |   |             |
| 3 | 300 |   |             |
| 4 | 475 |   | 0           |
|   |     |   |             |

o What is 60 divided by 2? Use your spreadsheet to find out.



o What is 1.85 x 2.99? Type 1.85 into cell G2 and 2.99 into cell G3



# **Entering formula by pointing**

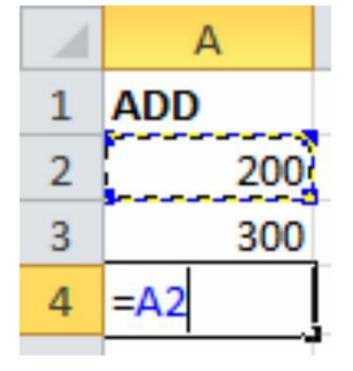
You use the mouse to point to the cells in the formula instead of typing in a formula.

o Change the numbers on the worksheet to be like this

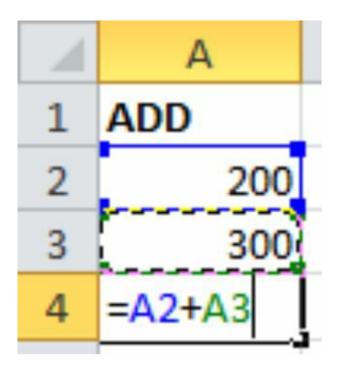
|   | H6  |    | (m       | f <sub>x</sub> |        |   |                                       |
|---|-----|----|----------|----------------|--------|---|---------------------------------------|
| À | A   | В  | С        | D              | E      | F | G                                     |
| 1 | ADD |    | SUBTRACT |                | DIVIDE |   | MULTIPLY                              |
| 2 | 200 |    | 60       |                | 300    |   | 50                                    |
| 3 | 300 |    | 54       |                | 6      |   | 4                                     |
| 4 | 500 |    | 6        |                | 50     |   | 200                                   |
|   | 1 A | 22 |          |                |        |   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |

Delete the formula in Row 4.

- o Click in cell A4 and press delete.
- o Click in cell C4 and press delete.
- o Click in cell E4 and press delete.
- o Click in cell G4 and press delete.
- o In cell A4 type = and then click the mouse in cell A2.



o Type + and the click the mouse in cell A3.



- o Press Enter
- o Try to enter the other formula in the same way
- o When you have finished save your workbook again.

# **Chapter 3**

# **Columns of Data**

Now you are going to find out how to control the way numbers are displayed, and make Excel automatically calculate columns totals.

You are going to create a spread to hold data about the height, weight and foot size of people in a group.

- Norm
   <th
- o Open a new Excel workbook. Select File and the click on New.

- o Select Blank workbook and click on **Create**.
- o Type the word Measurements in cell A1. It will overflow the cell, but that's OK.
- o Press Enter

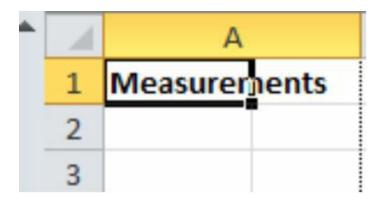
o Select Cell A1 again and make it bold by clicking the **BOLD** button on Font section of the home tab.

| F | File  | Home                      | Ins          | sert  | Pa          | ge Lay     |
|---|-------|---------------------------|--------------|-------|-------------|------------|
| ų | ste 🛷 | Cut<br>Copy *<br>Format P | Painter<br>ក |       | ibri<br>] I | <u>u</u> - |
|   |       | A1                        |              | • (** |             | f          |
| 1 | A     |                           | В            |       | С           |            |
| 1 | Meas  | urernen                   | ts           |       |             |            |
| 2 |       |                           |              |       |             |            |
| 3 |       |                           |              |       |             |            |

o Position the pointer with your mouse so that it is on the line between column headers A and B. The pointer will change to a double-headed arrow.

|   | A1 - (* |           |      |   |  |  |  |  |  |  |
|---|---------|-----------|------|---|--|--|--|--|--|--|
| - |         | А         | В    | С |  |  |  |  |  |  |
|   | 1       | Measurern | ents |   |  |  |  |  |  |  |
|   | 2       |           |      |   |  |  |  |  |  |  |
|   | 3       |           |      |   |  |  |  |  |  |  |
|   | 4       |           |      |   |  |  |  |  |  |  |
|   | 5       |           |      |   |  |  |  |  |  |  |
|   | 6       |           |      |   |  |  |  |  |  |  |

o Use the left mouse button and hold it down while you drag to the right. The column will widen. Make it wide enough to fit the heading.



o Now type the other headings in the top row, use your own name. Make up a group name for the title in C1.

| 1 | A            | В | C         | D  | E     | F        | G    |
|---|--------------|---|-----------|----|-------|----------|------|
| 1 | Measurements |   | Group Nat | me | Name: | Your own | name |
| 2 |              |   |           |    |       |          |      |
| 2 | 2            |   |           |    |       |          |      |

o Highlight the whole row 1

|                | A                     | В                       | С     | D  | E     | F             | G |
|----------------|-----------------------|-------------------------|-------|----|-------|---------------|---|
| 1 Measurements |                       | Measurements Group Name |       | me | Name: | Your own name |   |
| 2              | and the second second |                         | 11111 |    |       |               |   |
| 3              |                       |                         |       |    |       |               |   |
| A              |                       |                         |       |    |       |               |   |

o Click on the bold button on the home tab.

| A | A            | В | C        | D  | E     | F        | G    |
|---|--------------|---|----------|----|-------|----------|------|
| 1 | Measurements |   | Group Na | me | Name: | Your own | name |
| 2 | -            |   |          |    |       |          |      |
| 3 |              |   |          |    |       |          |      |

o Now we are going to widen the column a second way. Position the pointer between the column headers F and G containing your name.

o Double click. The column automatically widens so that the name will fit the cell.

| 1 | A B          |  | С          | D | E     | F             | G |  |
|---|--------------|--|------------|---|-------|---------------|---|--|
| 1 | Measurements |  | Group Name |   | Name: | Your own name |   |  |
| 2 | -            |  |            |   |       |               |   |  |
| 3 |              |  |            |   |       |               |   |  |

o Save your workbook, call it Measurements.

| Organize - Ne   | ne folder  |                |              |         | 11 ·          |   |
|-----------------|------------|----------------|--------------|---------|---------------|---|
| K Mcrosoft Ecol | 1          | Nerre          | Date me      | difed   | Туре          | 5 |
| 😭 Faverilas     |            | E Measurements | 87/52/28     | 1219-06 | Monark Ecol W |   |
| Decuments       |            |                |              |         |               |   |
| Music           |            |                |              |         |               |   |
| Videos          |            |                |              |         |               |   |
|                 | - 1        | -              |              |         |               |   |
| Fierame         | 1.000      | 1212           |              |         |               |   |
| Seve as type:   | Securi dia | rkbook         |              |         |               |   |
|                 |            |                | <br>Ad a teg |         |               |   |

## Formatting

o Fill in the rest of your workbook like this

| .4 | A              | В         | C           | D        | E      | F             |
|----|----------------|-----------|-------------|----------|--------|---------------|
| 1  | Measurements   |           | Group Nam   | e        | Name:  | Your own name |
| 2  |                |           |             |          |        |               |
| 3  | Name           | Height(cm | Weight(kg F | oot leng | th(cm) |               |
| 4  | Bob Harrison   | 131.5     | 32.5        | 19       |        |               |
| 5  | Hussen Pettit  | 126       | 31          | 18.2     |        |               |
| 6  | Sophie Cornish | 136       | 37.9        | 18.8     |        |               |
| 7  | Joe Girard     | 123.5     | 32.7        | 21       |        |               |
| 8  | Kerry Reeves   | 132.9     | 40          | 18.3     |        |               |
| 9  | Steve Jobs     | 127.5     | 31          | 21       |        |               |
| 10 |                |           |             |          |        |               |
| 11 | TOTAL          |           |             |          |        |               |
| 12 |                |           |             |          |        |               |
| 13 | AVERAGE        |           |             |          |        |               |
| 14 |                |           |             |          |        |               |
| 15 | MAXIMUM        |           |             |          |        |               |
| 16 | -              |           |             |          |        | 2             |
| 17 | MINIMUM        |           |             |          |        | 6             |
| 10 |                |           |             |          |        |               |

o You will need to make the columns wider to fit the headings. Use the double click on the header to make the column width change automatically.

| A  | A              | В          | С          | D               | E     | F             |
|----|----------------|------------|------------|-----------------|-------|---------------|
| 1  | Measurements   |            | Group Name |                 | Name: | Your own name |
| 2  |                |            |            |                 |       |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |       |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19              |       |               |
| 5  | Hussen Pettit  | 126        | 31         | 18.2            |       |               |
| 6  | Sophie Cornish | 136        | 37.9       | 18.8            |       |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21              |       |               |
| 8  | Kerry Reeves   | 132.9      | 40         | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5      | 31         | 21              |       |               |
| 10 |                |            |            |                 |       |               |
| 11 | TOTAL          |            |            |                 |       |               |
| 12 |                |            |            |                 |       |               |
| 13 | AVERAGE        |            |            |                 |       |               |
| 14 |                |            |            |                 |       |               |
| 15 | MAXIMUM        |            |            |                 |       |               |
| 16 |                |            |            |                 |       | )             |
| 17 | MINIMUM        |            |            |                 |       |               |

Notice that the cells that have numbers are on the right of the cell, this is called right justified. The text you enter is always left justified.

The measurements would look much easier to read if they were all shown to 1 decimal place. Excel will ignore if you enter 127.0 and display 127.

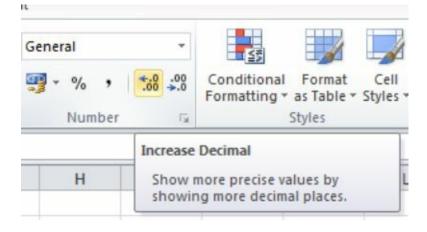
o Select the cells B4 to D17 by clicking in B4 and holding down your left mouse button and dragging down to D17

|    | A              | В          | C          | D               | E     | F             |
|----|----------------|------------|------------|-----------------|-------|---------------|
| 1  | Measurements   |            | Group Name |                 | Name: | Your own name |
| 2  |                |            |            |                 |       |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) | 11    |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19              |       |               |
| 5  | Hussen Pettit  | 126        | 31         | 18.2            |       |               |
| 6  | Sophie Cornish | 136        | 37.9       | 18.8            |       |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21              | 1     |               |
| 8  | Kerry Reeves   | 132.9      | 40         | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5      | 31         | 21              |       |               |
| 10 |                |            |            |                 | 3     |               |
| 11 | TOTAL          |            |            |                 |       |               |
| 12 | 100            |            |            |                 |       |               |
| 13 | AVERAGE        |            |            |                 |       |               |
| 14 |                |            |            |                 |       |               |
| 15 | MAXIMUM        |            |            |                 |       |               |
| 16 |                |            |            |                 |       |               |
| 17 | MINIMUM        |            |            |                 |       |               |
| 18 |                |            |            |                 |       |               |
| 19 |                |            |            |                 |       |               |

o Click on the home tab and look for the section called number.

| 1        | A CH               | Cal   | ilen i |       | - 11        | ·         |      | -    | æ-   | The sea lot |         | General |        | N 10 10                    |
|----------|--------------------|-------|--------|-------|-------------|-----------|------|------|------|-------------|---------|---------|--------|----------------------------|
|          | atte<br>Charlosard |       | 1.1    | I - 1 | 11 - 1<br>4 | >. ↓.     | **   |      |      | Storge & Co | enter - |         | - 18.2 |                            |
|          | 84                 |       |        | 5.    | 131.5       |           |      |      |      |             |         |         | Increa | ne Decimal                 |
|          | A                  |       |        |       | c           | 0         |      | 1    |      | 1           | 6       | 1 10    | 100    | er more presiter values by |
| 1 2      | Measurements       |       |        | Group | p Name      |           |      | Name | r Yo | or own name |         |         | 140    | aing moie decimal places.  |
| 3        | Name               | Heigh | tioni  | Weigh | trikg)      | Foot leng | (mi) |      |      |             |         |         |        |                            |
| 4        | Bob Harrison       |       | 131.5  |       | 32.5        |           | 15   |      |      |             |         |         |        |                            |
| 5        | Hussen Pettit      |       | 126    |       | 1           | 1         | 18.2 |      |      |             |         |         |        |                            |
| ŝ        | Sophie Cornish     |       | 136    |       | 373         | 5         | 18.8 |      |      |             |         |         |        |                            |
| 7        | Joe Girard         |       | 123.5  |       | 32.         | 7         | 21   |      |      |             |         |         |        |                            |
| 8        | Kerry Reeves       |       | 132.9  |       | - 4         | 8         | 18.3 |      |      |             |         |         |        |                            |
| ,        | Steve Jobs         |       | 127.5  |       | 1           | 1         | 21   |      |      |             |         |         |        |                            |
| 10       | (1997)             |       |        |       |             |           |      |      |      |             |         |         |        |                            |
| ti       | TOTAL              |       |        |       |             |           |      |      |      |             |         |         |        |                            |
| ù        |                    |       |        |       |             |           |      |      |      |             |         |         |        |                            |
| ŋ        | AVERAGE            |       |        |       |             |           |      |      |      |             |         |         |        |                            |
| 14       |                    |       |        |       |             |           |      |      |      |             |         |         |        |                            |
|          |                    |       |        |       |             |           |      |      |      |             |         |         |        |                            |
| 16       |                    |       |        |       |             |           |      |      |      |             |         |         |        |                            |
|          |                    |       |        |       |             |           |      |      |      |             |         |         |        |                            |
| 18<br>19 |                    |       |        |       |             |           |      | 1    |      |             |         |         |        |                            |
| 25       |                    |       |        |       |             |           |      |      |      |             |         |         |        |                            |

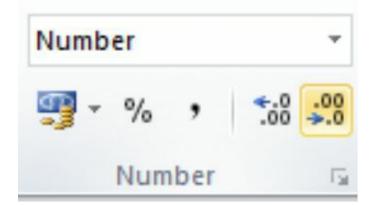
#### o Select the Increase decimal button



It will now look like this.

| 1  | A              | В          | C          | D               |    |
|----|----------------|------------|------------|-----------------|----|
| 1  | Measurements   |            | Group Name |                 | Na |
| 2  |                |            |            |                 |    |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |    |
| 4  | Bob Harrison   | 131.50     | 32.50      | 19.00           |    |
| 5  | Hussen Pettit  | 126.00     | 31.00      | 18.20           |    |
| 6  | Sophie Cornish | 136.00     | 37.90      | 18.80           |    |
| 7  | Joe Girard     | 123.50     | 32.70      | 21.00           |    |
| 8  | Kerry Reeves   | 132.90     | 40.00      | 18.30           |    |
| 9  | Steve Jobs     | 127.50     | 31.00      | 21.00           |    |
| 10 |                |            |            |                 |    |
| 11 | TOTAL          | 1          |            |                 |    |
| 12 |                |            |            |                 |    |
| 13 | AVERAGE        |            |            |                 |    |
| 14 | 101.00         |            |            |                 |    |
| 15 | MAXIMUM        |            |            |                 |    |
| 16 |                |            |            |                 |    |
| 17 | MINIMUM        |            |            |                 |    |
| 18 |                |            |            |                 | 8  |
| 19 |                |            |            |                 |    |
| 20 |                |            |            |                 |    |

o Now click on the decrease decimal button. To show the numbers to 1 decimal place.



o Now your work book should look like this.

|    | Stee<br>Copy -<br>Stee<br>Clipboard | Calibri<br>B Z ] |            |                 |       | ・ 一子 Wrap Text<br>注意 図 Merge & ( |   | Number      | -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | Cond |
|----|-------------------------------------|------------------|------------|-----------------|-------|----------------------------------|---|-------------|---|------|
| -  | B4                                  | • (*             | fx 131.5   |                 |       | - Manusara                       |   | The role of | -   |      |
|    | A                                   | В                | с          | D               | E     | F                                | G | н           | 1   | T a  |
| 1  | Measurements                        |                  | Group Name |                 | Name: | Your own name                    |   |             |   |      |
| 2  |                                     |                  |            |                 |       |                                  |   |             |   |      |
| 3  | Name                                | Height(cm)       | Weight(kg) | Foot length(cm) |       |                                  |   |             |   |      |
| 4  | Bob Harrison                        | 131.5            | 32.5       | 19.0            |       |                                  |   |             |   |      |
| 5  | Hussen Pettit                       | 126.0            | 31.0       | 18.2            |       |                                  |   |             |   |      |
| б  | Sophie Cornish                      | 136.0            | 37.9       | 18.8            | 2     |                                  |   |             |   |      |
| 7  | Joe Girard                          | 123.5            | 32.7       | 21.0            |       |                                  |   |             |   |      |
| 8  | Kerry Reeves                        | 132.9            | 40.0       | 18.3            |       |                                  |   |             |   |      |
| 9  | Steve Jobs                          | 127.5            | 31.0       | 21.0            |       |                                  |   |             |   |      |
| 10 |                                     |                  |            |                 |       |                                  |   |             |   |      |
| 11 | TOTAL                               |                  |            |                 |       |                                  |   |             |   |      |
| 12 |                                     |                  |            |                 |       |                                  |   |             |   |      |
| 13 | AVERAGE                             |                  |            |                 |       |                                  |   |             |   |      |
| 14 | 111                                 |                  |            |                 |       |                                  |   |             |   |      |
| 15 | MAXIMUM                             |                  |            |                 |       |                                  |   |             |   |      |
| 16 |                                     |                  |            |                 |       |                                  |   |             |   | _    |
| 17 |                                     | 2                |            |                 |       |                                  |   |             |   |      |
| 18 |                                     |                  |            |                 |       |                                  |   |             |   |      |

o Save your workbook again.

Try holding down Ctrl and the letter S.

# Adding a column of numbers together

We want to add up the heights of everyone in the group and put the total in cell B11. To do this we use the Autosum button.

The sign  $\sum$  (pronounced Sigma) on the Autosum button is the Greek letter S. Greek letters are used a lot in maths.  $\pi$  is the Greek letter p. The area of a circle  $= \pi r^2$ 

o Click in cell B11 to make it the active cell.

### o Click on the formula tab

| 4  |                |                             |        |        |                                     |        |                    |
|----|----------------|-----------------------------|--------|--------|-------------------------------------|--------|--------------------|
| F  | ile Home       | Insert Page                 | Layout | For    | mulas Data                          | Review | View               |
| In |                | cently Financial<br>sed * * | +      | I Text | Date & Lookup &<br>Time * Reference |        | More<br>unctions * |
|    | B11            | • (=                        | fx     |        |                                     |        |                    |
| 1  | A              | В                           |        | С      | D                                   | E      |                    |
| 1  | Measurements   |                             | Group  | Name   |                                     | Name:  | Your o             |
| 2  |                |                             |        |        |                                     |        |                    |
| 3  | Name           | Height(cm)                  | Weig   | ht(kg) | Foot length(cm                      | )      |                    |
| 4  | Bob Harrison   | 131.5                       |        | 32.5   | 19.                                 | 0      |                    |
| 5  | Hussen Pettit  | 126.0                       |        | 31.0   | 18.                                 | 2      |                    |
| 6  | Sophie Cornish | 136.0                       |        | 37.9   | 18.                                 | 8      |                    |
| 7  | Joe Girard     | 123.5                       |        | 32.7   | 21.                                 | 0      |                    |
| 8  | Kerry Reeves   | 132.9                       |        | 40.0   | 18.                                 | 3      |                    |
| 9  | Steve Jobs     | 127.5                       |        | 31.0   | 21.                                 | 0      |                    |
| 10 |                |                             |        |        |                                     |        |                    |
| 11 | TOTAL          |                             |        |        |                                     |        |                    |

- o Click on the Autosum button
- o Excel will guess which cells you want to sum. Your screen will look like the one below.

| F  | ile Home       | Insert Page                  | Layout For              | mulas Data                            | Review             | View Add-Ins       | A                   |
|----|----------------|------------------------------|-------------------------|---------------------------------------|--------------------|--------------------|---------------------|
|    |                | cently Financial<br>lsed * * | Logical Text            | Date & Lookup &<br>Time * Reference * | Math<br>& Trig * F | More<br>unctions * | た。<br>が<br>の<br>Def |
|    | SUM            | • (* X v                     | ∫ f <sub>×</sub> =SUM(E | 34:B10)                               |                    |                    |                     |
| Å  | А              | В                            | С                       | D                                     | E                  | F                  | -                   |
| 1  | Measurements   |                              | Group Name              |                                       | Name:              | Your own name      |                     |
| 2  |                |                              |                         |                                       |                    |                    |                     |
| 3  | Name           | Height(cm)                   | Weight(kg)              | Foot length(cm)                       |                    |                    |                     |
| 4  | Bob Harrison   | 131.5                        | 32.5                    | 19.0                                  |                    |                    |                     |
| 5  | Hussen Pettit  | 126.0                        | 31.0                    | 18.2                                  |                    |                    |                     |
| 6  | Sophie Cornish | 136.0                        | 37.9                    | 18.8                                  |                    |                    |                     |
| 7  | Joe Girard     | 123.5                        | 32.7                    | 21.0                                  |                    |                    |                     |
| 8  | Kerry Reeves   | 132.9                        | 40.0                    | 18.3                                  |                    |                    |                     |
| 9  | Steve Jobs     | 127.5                        | 31.0                    | 21.0                                  |                    |                    |                     |
| 10 |                | 4                            | 1                       |                                       |                    |                    |                     |
| 11 | TOTAL          | =SUM(B4:B1                   | 0)                      |                                       |                    |                    |                     |
| 12 |                | SUM(numb                     | er1, [number2],         | )                                     |                    |                    |                     |
| 13 | AVERAGE        |                              |                         |                                       |                    |                    |                     |
| 14 |                |                              |                         |                                       |                    |                    |                     |
| 15 | MAXIMUM        |                              |                         |                                       |                    |                    |                     |
| 16 |                |                              |                         |                                       |                    |                    |                     |
| 17 | MINIMUM        |                              |                         |                                       |                    |                    |                     |
| 18 |                |                              |                         |                                       |                    |                    |                     |
| 10 |                |                              |                         |                                       |                    |                    |                     |

- o Press Enter. You will now see the answer.
- o Now do the same in cell C11 to find out the total weight.

| -14 | Α  | В          | С           | D               |
|-----|--|------------|-------------|-----------------|
| 1   | Measurements   |            | Group Name  |                 |
| 2   | and the second s |            |             |                 |
| 3   | Name   | Height(cm) | Weight(kg)  | Foot length(cm) |
| 4   | Bob Harrison   | 131.5      | 32.5        | 19.0            |
| 5   | Hussen Pettit  | 126.0      | 31.0        | 18.2            |
| 6   | Sophie Cornish   | 136.0      | 37.9        | 18.8            |
| 7   | Joe Girard   | 123.5      | 32.7        | 21.0            |
| 8   | Kerry Reeves   | 132.9      | 40.0        | 18.3            |
| 9   | Steve Jobs   | 127.5      | 31.0        | 21.0            |
| 10  | 1000   |            |             |                 |
| 11  | TOTAL  | 777.4      | =SUM(C4:C10 |                 |
| 12  |  |            | SUM(number  | 1, [number2],)  |
| 13  | AVERAGE  |            |             |                 |
| 14  |  |            |             |                 |

o Now do the same in cell D11.

| 1  | A              | В          | C          | D               | E         | F             |
|----|----------------|------------|------------|-----------------|-----------|---------------|
| 1  | Measurements   |            | Group Name |                 | Name:     | Your own name |
| 2  |                |            |            |                 |           |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |           |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            |           |               |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |           |               |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            |           |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |           |               |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |           |               |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |           |               |
| 10 | 1              | 1000       | 103.0776   |                 |           |               |
| 11 | TOTAL          | 777.4      | 205.1      | =SUM(B11:C11)   |           |               |
| 12 |                |            |            | SUM(number1, [  | number2], | )             |
| 13 | AVERAGE        |            |            |                 |           |               |
| 14 | 1.000          |            |            |                 |           |               |
| 15 | MAXIMUM        |            |            |                 |           |               |
| 16 |                |            |            |                 |           |               |
| 17 | MINIMUM        |            |            |                 |           |               |
| 18 |                |            |            |                 |           |               |

This time Excell thinks you want to find the sum total of the cells to the left.

o Select cells D4 to D9 by click in D4 and dragging your mouse down to D9.

| 1  | A              | В          | С          | D               | E         | F             |
|----|----------------|------------|------------|-----------------|-----------|---------------|
| 1  | Measurements   |            | Group Name | 0               | Name:     | Your own name |
| 2  |                |            |            |                 |           |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |           |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            | 1         |               |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |           |               |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            | 1         |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |           |               |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |           |               |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |           |               |
| 10 |                |            |            |                 |           |               |
| 11 | TOTAL          | 777.4      | 205.1      | =SUM(D4:D9)     |           |               |
| 12 |                |            |            | SUM(number1, [  | number2], | )             |
| 13 | AVERAGE        |            |            |                 |           |               |

- o Press Enter and your answer will apear.
- o Save your worksheet

# **Chapter 4**

## **Functions**

| 0 | Make sure you have the Measureme | nts spreadsheet open you | created in the last chapter. |
|---|----------------------------------|--------------------------|------------------------------|
|---|----------------------------------|--------------------------|------------------------------|

|    | B11            | <b>▼</b> (* | fx =SUM(   | 34:B10)         |       |               |
|----|----------------|-------------|------------|-----------------|-------|---------------|
|    | A              | В           | С          | D               | E     | F             |
| 1  | Measurements   |             | Group Name |                 | Name: | Your own name |
| 2  |                |             |            |                 |       |               |
| 3  | Name           | Height(cm)  | Weight(kg) | Foot length(cm) |       |               |
| 4  | Bob Harrison   | 131.5       | 32.5       | 19.0            |       |               |
| 5  | Hussen Pettit  | 126.0       | 31.0       | 18.2            |       |               |
| 6  | Sophie Cornish | 136.0       | 37.9       | 18.8            |       |               |
| 7  | Joe Girard     | 123.5       | 32.7       | 21.0            |       |               |
| 8  | Kerry Reeves   | 132.9       | 40.0       | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5       | 31.0       | 21.0            |       |               |
| 10 |                |             |            |                 |       |               |
| 11 | TOTAL          | 777.4       | 205.1      | 116.3           |       |               |
| 12 |                |             |            |                 |       |               |
| 13 | AVERAGE        |             |            |                 |       |               |
| 14 |                |             |            |                 |       |               |
| 15 | MAXIMUM        |             |            |                 |       |               |
| 16 |                |             |            |                 |       |               |
| 17 | MINIMUM        |             |            |                 |       |               |

The cell highlighted is called B11. You can see the formula in the formula bar **=SUM(B4:B10).** You are going to try to enter the formula in another way.

#### o Click in cell B11

o Press the delete key.

#### o Type **=sum(**

- o Now click in cell B4 and hold the left mouse button down while you drag down to cell B10.
- o Type ) to finish the formula.

o Press Enter, Click in cell B11 again and the formula You will see now why we changed this formula.

## **The AVERAGE function**

- o Click in cell B13
- o Type **=average(**
- o Click in cell B4 and drag down to cell B1.

|    |                |             | -             | ge(B4:B9        |       |               |
|----|----------------|-------------|---------------|-----------------|-------|---------------|
| A  | A              | В           | C             | D               | E     | F             |
| 1  | Measurements   |             | Group Name    |                 | Name: | Your own name |
| 2  |                |             |               |                 |       |               |
| 3  | Name           | Height(cm)  | Weight(kg)    | Foot length(cm) |       |               |
| 4  | Bob Harrison   | 131.5       | 32.5          | 19.0            |       |               |
| 5  | Hussen Pettit  | 126.0       | 31.0          | 18.2            |       |               |
| 6  | Sophie Cornish | 136.0       | 37.9          | 18.8            |       |               |
| 7  | Joe Girard     | 123.5       | 32.7          | 21.0            |       |               |
| 8  | Kerry Reeves   | 132.9       | 40.0          | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5       | 31.0          | 21.0            |       |               |
| 10 |                |             |               |                 |       |               |
| 11 | TOTAL          | 777.4       | 205.1         | 116.3           |       |               |
| 12 |                |             |               |                 |       |               |
| 13 | AVERAGE        | =average(B4 | 1:89          |                 |       |               |
| 14 |                | AVERAGE(n   | umber1, [numb | per2],)         |       |               |
| 15 | MAXIMUM        |             |               |                 |       |               |
| 16 |                |             |               |                 |       |               |
| 17 | MINIMUM        |             |               |                 |       |               |
| 18 |                |             |               |                 |       |               |

- o Type **)** to finish the formula
- o Press Enter. The answer will now appear

| 1  | A              | В          | C          | D               | E     | F             |
|----|----------------|------------|------------|-----------------|-------|---------------|
| 1  | Measurements   |            | Group Name |                 | Name: | Your own name |
| 2  |                |            |            |                 |       |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |       |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            |       |               |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |       |               |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            |       |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |       |               |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |       |               |
| 10 | 1111100        |            |            |                 |       |               |
| 11 | TOTAL          | 777.4      | 205.1      | 116.3           |       |               |
| 12 | 111            |            |            |                 |       |               |
| 13 | AVERAGE        | 129.6      |            |                 |       |               |
| 14 |                |            |            |                 |       |               |
| 15 | MAXIMUM        |            |            |                 |       |               |
| 16 |                |            |            |                 |       |               |
| 17 | MINIMUM        |            |            |                 |       |               |
| 10 |                |            |            |                 |       |               |

- o In cell C13 find the average weight in the same way.
- o In cell D13 find the average foot length.

|    | D13            | <b>-</b> (** | fx =AVERA  | AGE(D4:D9)      |       |               |
|----|----------------|--------------|------------|-----------------|-------|---------------|
| 14 | А              | В            | C          | D               | E     | F             |
| 1  | Measurements   |              | Group Name |                 | Name: | Your own name |
| 2  |                |              |            |                 |       |               |
| 3  | Name           | Height(cm)   | Weight(kg) | Foot length(cm) |       |               |
| 4  | Bob Harrison   | 131.5        | 32.5       | 19.0            |       |               |
| 5  | Hussen Pettit  | 126.0        | 31.0       | 18.2            |       |               |
| 6  | Sophie Cornish | 136.0        | 37.9       | 18.8            |       |               |
| 7  | Joe Girard     | 123.5        | 32.7       | 21.0            |       |               |
| 8  | Kerry Reeves   | 132.9        | 40.0       | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5        | 31.0       | 21.0            |       |               |
| 10 |                |              |            |                 |       |               |
| 11 | TOTAL          | 777.4        | 205.1      | 116.3           |       |               |
| 12 |                |              |            | 1.1             |       |               |
| 13 | AVERAGE        | 129.6        | 34.2       | 19.4            |       |               |
| 14 |                |              |            |                 |       |               |
| 15 | MAXIMUM        |              |            |                 |       |               |
| 16 |                |              |            |                 |       |               |
| 17 | MINIMUM        |              |            |                 |       |               |
| 18 |                |              |            |                 |       |               |

## **MAX and MIN functions**

- o Click on cell B15
- o Type **=max(** in the cell
- o Click in cell B4 and drag down to cell B10.

| 0 | Type ) | to finish the formula. |
|---|--------|------------------------|
|---|--------|------------------------|

|    | B15            | - (°       | fx =MAX    | B4:B9)          |       |               |
|----|----------------|------------|------------|-----------------|-------|---------------|
| Ĵ. | A              | В          | С          | D               | E     | F             |
| 1  | Measurements   |            | Group Name |                 | Name: | Your own name |
| 2  |                |            |            |                 |       |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |       |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            |       |               |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |       |               |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            |       |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |       |               |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |       |               |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |       |               |
| 10 | -              |            |            |                 |       |               |
| 11 | TOTAL          | 777.4      | 205.1      | 116.3           |       |               |
| 12 |                |            |            |                 |       |               |
| 13 | AVERAGE        | 129.6      | 34.2       | 19.4            |       |               |
| 14 |                |            |            |                 |       |               |
| 15 | MAXIMUM        | 136.0      |            |                 |       |               |
| 16 |                | 1          |            |                 |       |               |
| 17 | MINIMUM        |            |            |                 |       |               |
| 18 |                |            |            |                 |       |               |

- o Press Enter. The Answer will appear.
- o Complete the other formulas in row 15.

|    | D15            | • (*       | fx =MAX(I  | D4:D9)          |          |               |
|----|----------------|------------|------------|-----------------|----------|---------------|
| 1  | А              | В          | С          | D               | E        | F             |
| 1  | Measurements   |            | Group Name |                 | Name:    | Your own name |
| 2  |                |            |            |                 |          |               |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |          |               |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            |          |               |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |          |               |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            |          |               |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |          |               |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |          |               |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |          |               |
| 10 |                |            |            |                 |          |               |
| 11 | TOTAL          | 777.4      | 205.1      | 116.3           |          |               |
| 12 |                |            |            |                 |          |               |
| 13 | AVERAGE        | 129.6      | 34.2       | 19.4            |          |               |
| 14 |                |            |            |                 | 2        |               |
| 15 | MAXIMUM        | 136.0      | 40.0       | 21.0            | 2.1      |               |
| 16 |                |            |            |                 | <b>.</b> |               |
| 17 | MINIMUM        |            |            |                 |          |               |
| 18 |                |            |            |                 |          |               |

### o Use the Min function to find the minimums.

|    | D17            | • (=       | $f_{x}$ | =MIN(E  | 04:D9)          |       |          |
|----|----------------|------------|---------|---------|-----------------|-------|----------|
| 1  | A              | В          |         | С       | D               | E     | F        |
| 1  | Measurements   |            | Grou    | p Name  |                 | Name: | Your own |
| 2  |                |            |         |         |                 |       |          |
| 3  | Name           | Height(cm) | Weig    | ght(kg) | Foot length(cm) |       |          |
| 4  | Bob Harrison   | 131.5      |         | 32.5    | 19.0            |       |          |
| 5  | Hussen Pettit  | 126.0      |         | 31.0    | 18.2            |       |          |
| 6  | Sophie Cornish | 136.0      |         | 37.9    | 18.8            |       |          |
| 7  | Joe Girard     | 123.5      |         | 32.7    | 21.0            |       |          |
| 8  | Kerry Reeves   | 132.9      |         | 40.0    | 18.3            |       |          |
| 9  | Steve Jobs     | 127.5      |         | 31.0    | 21.0            |       |          |
| 10 |                |            |         |         |                 |       |          |
| 11 | TOTAL          | 777.4      |         | 205.1   | 116.3           |       |          |
| 12 | 4.0            |            |         |         |                 |       |          |
| 13 | AVERAGE        | 129.6      |         | 34.2    | 19.4            |       |          |
| 14 |                |            |         |         |                 |       |          |
| 15 | MAXIMUM        | 136.0      |         | 40.0    | 21.0            |       |          |
| 16 |                |            |         |         |                 |       |          |
| 17 | MINIMUM        | 123.5      |         | 31.0    | 18.2            | 10    |          |
| 10 |                |            |         |         | 1               | 1.1   |          |

## What if?

What if you needed to add another person to your list? The first thing we would need to do would be to add another row.

o Click in the row header for row 10 with the right click of the mouse.

| 4         | A  | 8                       | C        |              | D                     | Ε     | F             | 0 |
|-----------|--|-------------------------|----------|--------------|-----------------------|-------|---------------|---|
|           | Measurements                                 |                         | Group N  | ame          |                       | Name: | Your own name |   |
|           |  |                         |          |              |                       |       |               |   |
|           | Name   | Height(cm)              | Weight() | kg)          | Foot length(cm)       |       |               |   |
| Ĺ         | Bob Harrison                                 | 131.5                   |          | 32.5         | 19.0                  |       |               |   |
| 1         | Hussen Pettit                                | 126.0                   |          | 31.0         | 18.2                  |       |               |   |
|           | Sophie Cornish                               | 136.0                   |          | 37.9         | 18.8                  |       |               |   |
| G         | ibri - 11 - A                                | A 1 1 1                 | • 100    | 32.7         | 21.0                  |       |               |   |
|           | I = 0 - A                                    |                         | 2 4      | 40.0         | 18.3                  |       |               |   |
|           |  | 101 - 100 -             |          | 31.0         | 21.0                  |       |               | _ |
| No 10 and | сору   | 777.4<br>129.6<br>136.0 |          | 34.2<br>40.0 | 116.3<br>19.4<br>21.0 |       |               |   |
|           | josert<br>Delete<br>Clear Cogtents           | 123.5                   |          | 31.0         | 18.2                  |       |               |   |
| 2         | Eormat Cells<br>Bow Height<br>Hide<br>Unbide |                         |          |              |                       |       |               |   |

- o In the menu that appears select insert. This will create a new row.
- o In this new row add these details David Rice for the name and 122 for the height.

You will notice that the max, min and average formula now has a green corner. This is because these formulas only include the cells B4 to B9 and does not include B10.

| 1  | A  | В          |      |
|----|--|------------|------|
| 1  | Measurements   |            | Grou |
| 2  |  |            |      |
| 3  | Name   | Height(cm) | Weig |
| 4  | Bob Harrison   | 131.5      |      |
| 5  | Hussen Pettit  | 126.0      |      |
| 6  | Sophie Cornish   | 136.0      |      |
| 7  | Joe Girard   | 123.5      |      |
| 8  | Kerry Reeves   | 132.9      |      |
| 9  | Steve Jobs   | 127.5      |      |
| 10 | David Rice   | 122.0      |      |
| 11 |  |            |      |
| 12 | TOTAL  | 899.4      |      |
| 13 |  |            |      |
| 14 | AVERAGE  | 129.6      |      |
| 15 |  |            |      |
| 16 | MAXIMUM  | 136.0      |      |
| 17 | Contraction of the local division of the loc |            |      |
| 18 | MINIMUM  | 123.5      |      |
| 19 | 1.1.1.1  |            |      |
| 20 |  |            |      |
| 21 |  |            |      |

Excel is asking if you need to change the formula and the data has changed, which we do.

o Alter the formula in the formula bar to include cell B14 for average.

| 14 | A              | 8           | d AVER/    | AGE(number1, [ |
|----|----------------|-------------|------------|----------------|
| 1  | Measurements   |             | Group Name |                |
| 2  |                |             |            |                |
| 3  | Name           | Height(cm)  | Weight(kg) | Foot length(c  |
| 4  | Bob Harrison   | 131.5       | 32.5       | 1              |
| 5  | Hussen Pettit  | 126.0       | 31.0       | 1              |
| 6  | Sophie Cornish | 136.0       | 37.9       | 1              |
| 7  | Joe Girard     | 123.5       | 32.7       |                |
| 8  | Kerry Reeves   | 132.9       | 40.0       | 1              |
| 9  | Steve Jobs     | 127.5       | 31.0       | 2              |
| 10 | David Rice     | 122.0       |            |                |
| 11 |                |             | 5.07       |                |
| 12 | TOTAL          | 899.4       | 205.1      | 11             |
| 13 |                |             |            |                |
| 14 | AVERAGE        | AGE(B4:B10) | 34.2       | 1              |
| 15 |                |             | 23 <b></b> |                |
| 16 | MAXIMUM        | 136.0       | 40.0       | 2              |
| 17 |                | 100.000     |            |                |
| 18 | MINIMUM        | 123.5       | 31.0       | 1              |
| 19 |                |             |            |                |
| 20 |                |             |            |                |

- o Alter the formula in the formula bar to include cell C14 and D14 for weight and foot length.
- o Now add 60 for his weight and 24cm for his foot length.
- o You will need to change the formulas to include row 10.
- o Your spreadsheet should not look like this.

|    | A              | В          | C          | D               | E     | F             | G |
|----|----------------|------------|------------|-----------------|-------|---------------|---|
| 1  | Measurements   |            | Group Name |                 | Name: | Your own name |   |
| 2  |                |            |            |                 |       |               |   |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |       |               |   |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            |       |               |   |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |       |               |   |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            |       |               |   |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |       |               |   |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |       |               |   |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |       |               |   |
| 10 | David Rice     | 122.0      | 60.0       | 24.0            |       |               |   |
| 11 |                |            |            |                 |       |               |   |
| 12 | TOTAL          | 899.4      | 265.1      | 140.3           |       |               |   |
| 13 |                |            |            |                 |       |               |   |
| 14 | AVERAGE        | 128.5      | 37.9       | 20.0            |       |               |   |
| 15 |                |            |            |                 |       |               |   |
| 16 | MAXIMUM        | 136.0      | 60.0       | 24.0            |       |               |   |
| 17 | 21122          |            |            |                 |       |               |   |
| 18 | MINIMUM        | 122.0      | 31.0       | 18.2            |       |               |   |
| 19 |                |            |            |                 |       |               |   |

### o Please check your formulas in the formula bar, they should look like this.

|    | A              | В                | C                | D                |
|----|----------------|------------------|------------------|------------------|
| 1  | Measurements   |                  | Group Name       |                  |
| 2  |                |                  |                  |                  |
| 3  | Name           | Height(cm)       | Weight(kg)       | Foot length(cm)  |
| 4  | Bob Harrison   | 131.5            | 32.5             | 19               |
| 5  | Hussen Pettit  | 126              | 31               | 18.2             |
| 6  | Sophie Cornish | 136              | 37.9             | 18.8             |
| 7  | Joe Girard     | 123.5            | 32.7             | 21               |
| 8  | Kerry Reeves   | 132.9            | 40               | 18.3             |
| 9  | Steve Jobs     | 127.5            | 31               | 21               |
| 10 | David Rice     | 122              | 60               | 24               |
| 11 |                |                  |                  |                  |
| 12 | TOTAL          | =SUM(B4:B11)     | =SUM(C4:C11)     | =SUM(D4:D10)     |
| 13 |                |                  |                  |                  |
| 14 | AVERAGE        | =AVERAGE(B4:B10) | =AVERAGE(C4:C10) | =AVERAGE(D4:D10) |
| 15 |                |                  |                  |                  |
| 16 | MAXIMUM        | =MAX(B4:B10)     | =MAX(C4:C10)     | =MAX(D4:D10)     |
| 17 |                |                  |                  |                  |
| 18 | MINIMUM        | =MIN(B4:B10)     | =MIN(C4:C10)     | =MIN(D4:D10)     |
| 19 |                |                  |                  |                  |
| 20 |                |                  |                  |                  |

### o Save your spreadsheet

# **Chapter 5**

### **Bar chart**

Charts are a really good way to present data so that it is easy to understand what it means immediately.

- o Open a new spreadsheet workbook.
- o Type the headings and months.

| 1  | A            | B         | C    | D |
|----|--------------|-----------|------|---|
| 1  | Decline in s | ong birds |      |   |
| 2  | Number in    | millions  |      |   |
| 3  |              |           |      |   |
| 4  |              | 1998      | 2012 |   |
| 5  | Skylark      |           |      |   |
| 6  | Willow war   | bler      |      |   |
| 7  | Linnet       |           |      |   |
| 8  | Song thrush  | 1         |      |   |
| 9  | Lapwing      |           |      |   |
| 10 | Yellow ham   | imer      |      |   |
| 11 | Blackbird    |           |      |   |
| 12 | Tree sparro  | w         |      |   |
| 13 | Corn buntin  | ng        |      |   |
| 14 |              |           |      |   |

o Position the pointer between the column A and B and drag to the right to make the text fit.

| A  | A                     | B    | C    | D |
|----|-----------------------|------|------|---|
| 1  | Decline in song birds |      |      |   |
| 2  | Number in millions    |      |      |   |
| 3  |                       |      |      |   |
| 4  |                       | 1998 | 2012 |   |
| 5  | Skylark               |      |      |   |
| 6  | Willow warbler        |      |      |   |
| 7  | Linnet                |      |      |   |
| 8  | Song thrush           |      |      |   |
| 9  | Lapwing               |      |      |   |
| 10 | Yellow hammer         |      |      |   |
| 11 | Blackbird             |      |      |   |
| 12 | Tree sparrow          |      |      |   |
| 13 | Corn bunting          |      |      |   |
| 14 |                       |      |      |   |
| 15 |                       |      |      |   |

- o Click in the row header 1, click B on the home tab to make it Bold.
- o Enter the following data.

| 1  | A                     | В    | С    |
|----|-----------------------|------|------|
| 1  | Decline in song birds |      |      |
| 2  | Number in millions    |      |      |
| 3  |                       |      |      |
| 4  |                       | 1998 | 2012 |
| 5  | Skylark               | 7.72 | 3.09 |
| 6  | Willow warbler        | 6.09 | 4.67 |
| 7  | Linnet                | 1.6  | 0.92 |
| 8  | Song thrush           | 3.65 | 1.54 |
| 9  | Lapwing               | 1.6  | 0.45 |
| 10 | Yellow hammer         | 4.5  | 1.76 |
| 11 | Blackbird             | 13   | 8.54 |
| 12 | Tree sparrow          | 0.65 | 0.09 |
| 13 | Corn bunting          | 0.14 | 0.03 |
| 14 |                       |      |      |

o Save your workbook and call it **Song Birds**.

We are going to make a bar chart to show the data.

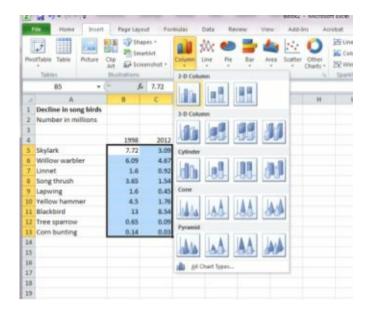
o Click in cell A4 and drag into column C and down to C13.

|    | B5 🔹 🤄                | f <sub>×</sub> | 7.72 |   |   |  |
|----|-----------------------|----------------|------|---|---|--|
|    | A                     | В              | С    | D | E |  |
| 1  | Decline in song birds |                |      |   |   |  |
| 2  | Number in millions    |                |      |   |   |  |
| 3  |                       |                |      |   |   |  |
| 4  |                       | 1998           | 2012 |   |   |  |
| 5  | Skylark               | 7.72           | 3.09 |   |   |  |
| 6  | Willow warbler        | 6.09           | 4.67 |   |   |  |
| 7  | Linnet                | 1.6            | 0.92 |   |   |  |
| 8  | Song thrush           | 3.65           | 1.54 |   |   |  |
| 9  | Lapwing               | 1.6            | 0.45 |   |   |  |
| 10 | Yellow hammer         | 4.5            | 1.76 |   |   |  |
| 11 | Blackbird             | 13             | 8.54 |   |   |  |
| 12 | Tree sparrow          | 0.65           | 0.09 |   |   |  |
| 13 | Corn bunting          | 0.14           | 0.03 |   |   |  |
| 14 | 101111118 ST          |                | _    |   |   |  |
| 15 |                       |                |      |   |   |  |
| 16 |                       |                |      |   |   |  |
| 17 |                       |                |      |   |   |  |

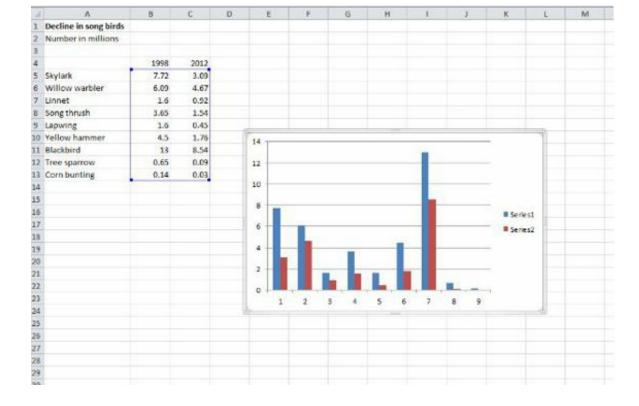
#### o Click on the Insert tab.

| File.     | Home  | buer   | 1    | Page Layout          | Formulai | Outa      | Rev          | 10      | Vev       | Add-1   | HI ÁI             | rotest                          |        |              |                  |                    |           |
|-----------|-------|--------|------|----------------------|----------|-----------|--------------|---------|-----------|---------|-------------------|---------------------------------|--------|--------------|------------------|--------------------|-----------|
| Protiatie | Table | Polare | C AL | Stapes -<br>Enartist | Caluma   | 1000 Line | <b>e</b> z · | -       | 440 A.110 | Scatter | Other<br>Charts * | 図 time<br>編 Column<br>段 Western | jiner  | <b>Q</b><br> | A<br>Test<br>Box | Header<br>A Footer | WordArt + |
| Table     |       |        | 244  | diations             |          |           |              | Charle. |           |         | 14                | Sparktimes                      | Filter | Links.       |                  |                    | Sect      |

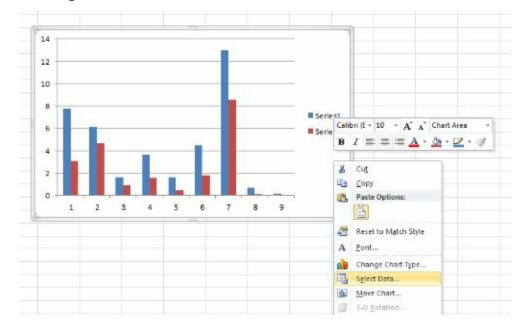
### o Click on the column button.



o Select the first type of column chart. The chart will appear on your worksheet.



• You need to add labels to the chart to make it clear.



o Right click on the chart and click on Select Data Source

| 1998 |      |                                       |                   |
|------|------|---------------------------------------|-------------------|
|      | 2012 |                                       |                   |
| 7.72 | 3.09 |                                       |                   |
| 6.09 | 4.67 |                                       |                   |
| 1.6  | 0.92 |                                       |                   |
| 3.65 | 1.54 |                                       |                   |
| 1.6  | 0.45 |                                       |                   |
| 4.5  | 1.76 | 14                                    |                   |
| 13   | 8.54 |                                       |                   |
| 0.65 | 0.09 | 11                                    |                   |
| 0.14 | 0.01 | ect Data Source                       | -0                |
|      |      | Sight Ran/Calam                       | 2                 |
|      |      | · · · · · · · · · · · · · · · · · · · | geri) Avis Labels |

- o Select series1.
- o Click on Edit, you can either click on cell B4 or type 1998.
- o Press Enter
- o Do the same for series 2.
- o Now click on Edit for the horizontal axis.

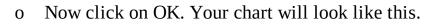
| Chart gata range: -Sheet1!\$8\$4:\$C\$13 |   |
|--|---|
| egend Entries (Series)                   | ch Row/Column Horizontal (Category) Axis Labels |
| Add ZEdit Kernove A                      | Edt 1   |
| 2012                                     | 2 3   |
|  | 4<br>5  |

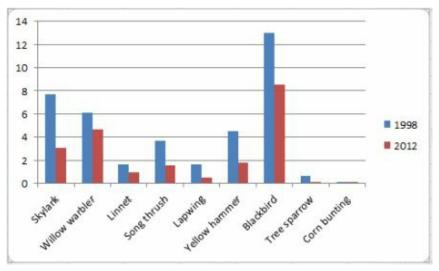
o Select the bird name labels

| -        |                     |      |      |        |   | -             |     |        |          |            |     |
|----------|---------------------|------|------|--------|---|---------------|-----|--------|----------|------------|-----|
| 1 De     | cline in song birds |      |      |        |   |               |     |        |          |            |     |
| 2 Nu     | mber in millions    |      |      |        |   |               |     |        |          |            |     |
| 3        |                     |      |      |        |   |               |     |        |          |            |     |
| 4        |                     | 1998 | 2012 |        |   |               |     |        |          |            |     |
| 3 Sk     | ylark               | 7.72 | 3.09 |        |   |               |     |        |          |            |     |
| 6 W      | Illow warbier       | 6.09 | 4.67 |        |   |               |     |        |          |            |     |
| 7 Lin    | net                 | 1.6  | 0.92 |        |   |               |     |        |          |            |     |
| # So     | ng thrush           | 3.65 | 1.54 |        |   |               |     |        |          |            |     |
| 9 1.0    | pwing               | 1.6  | 0.45 |        |   |               |     |        |          |            |     |
| 10 Ye    | llow hammer         | 4.5  | 1.76 | 14     |   |               |     |        |          |            |     |
| 11 81    | ckbird              | 13   | 8.54 | 1.0    |   |               |     |        |          |            | - 1 |
| 12 Tr    | ee sparrow          | 0.65 | 0.09 | 32     |   |               |     |        |          |            |     |
| 11 00    | on bunting          | 0.14 | 0.03 | 10     |   |               |     |        | _        |            |     |
| 14       |                     | -    |      |        |   |               |     |        |          |            |     |
| 15       |                     |      |      |        |   |               |     |        |          |            | - 1 |
| 16       |                     |      |      | 6      |   |               |     |        |          | <b>1</b> 9 | 98  |
| 17<br>18 |                     |      |      | 4      |   | -             | -   |        | _        |            |     |
| 18       |                     |      |      | 2      |   | _             | _   | _      | 0.1.00   | = 20       |     |
| 19       |                     |      |      |        | Asis Label  | 5             | 1.1 |        | 8        |            |     |
| 20       |                     |      |      | 0      | Axis label  | range:        |     |        |          | 1          | - 1 |
| 21       |                     |      |      | getate | and the second se | \$485:\$4\$13 |     | · Sh/a | rk, Wilo |            | - 1 |
| 22       |                     |      |      |        |   |               |     |        | Cancel   |            | - 1 |
| 23       |                     |      |      | -24/00 |   |               |     |        | Carce    |            | - 1 |
| 24       |                     |      |      | 1.00   |   | _             | _   | _      | _        |            |     |
| 424      |                     |      |      |        |   |               |     |        |          |            |     |

#### o Press Enter.

| Chart data ra  | ange: =Shee | t1/\$A\$4:\$C\$13 |                 |   |
|----------------|-------------|-------------------|-----------------|---|
| Legend Entries | V           |                   | gtch Row/Column | 5 |
| Add            | Edit        | X Remove          | ▼ ZEdt          |   |
| 1998           |             |                   | Skylark         |   |
| 2012           |             |                   | Wilow warbier   |   |
|                |             |                   | Linnet          |   |
|                |             |                   | Song thruzh     |   |
|                |             |                   |                 |   |





o Click on the chart, you will see the tabs for chart appear on the top ribbon.

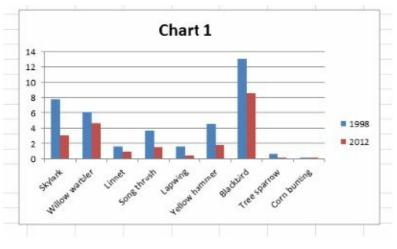
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|----------------------|----------------|-------|---------|--------|-----------|---------|--------|-------|-----------|-------|--------|----------|--------|-------------|--------|-------------|----------|---------------|
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### o Select Chart Title

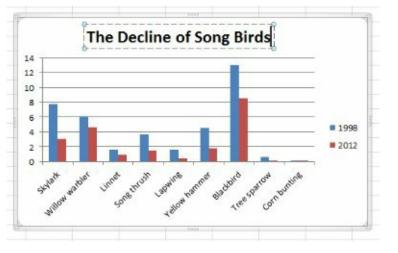
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| 3  | Format Selection      | Picture Sha |        | Chart | Anis Sepend Data                                | Data                        | -   | Gridines | ite.   | 1000   | 1000    | 10    | Inntine | Lines Up |
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|    | Chart 2 -             | (a          | fa .   | 117   | Do not display a chart                          | 18te                        |     |          |        |        |         |       |         |          |
| 4  | A                     | 8           | c      | -     | Centered Overlay Title                          |                             | 6   | H        | 1      |        | 3       | κ     | 1       | M        |
| 1  | Decline in song birds |             |        | Б     | Overlay centered 385e<br>chart without resizing |                             |     |          |        |        |         |       |         |          |
| 2  | Number in millions    |             |        | -     | Above Chart                                     | -                           |     |          |        |        |         |       |         |          |
| 3  |                       |             |        | 100   | Display Title at top of                         | churt                       |     |          |        |        |         |       |         |          |
| 4  |                       | 199         | £ 2012 |       | area and reside chart                           |                             |     |          |        |        |         |       |         |          |
| 5  | 5kylark               | 7.7.        | 3.09   | 1 14  | yore Title Options                              |                             |     |          |        |        |         |       |         |          |
| 6  | Willow warbler        | 6.0         | 4.67   |       |   |                             |     |          |        |        |         |       |         |          |
| 7  | Linnet                | 1.4         | 5 0.92 |       |   |                             |     |          |        |        |         |       |         |          |
| -  | Free Provide          | 2.0         |        |       |   |                             |     |          |        |        |         |       |         |          |

o Select above Chart to put the title above the chart.

o The Chart title is entered by default, click on the text and rename it "The Decline of Song Birds".

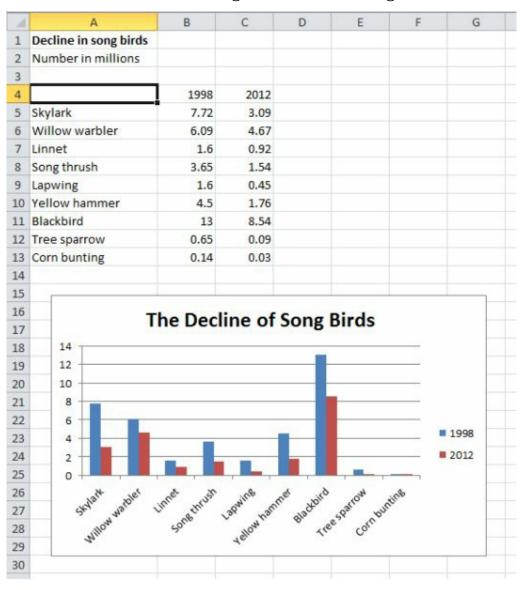


o It should now look this.



o You can move the chart so that it does not overlap the data. If you move around the chart and click you will be able to identify the parts of the chart.

o Click on the background area and drag the chart to below the data.



You may want to print out your chart

o Click on the File tab and then on Print.

| Copyen: 1        P. Came Lawrence (273330 service FCL)        Define: Dream in fragment in the service in th  | in tere     | Print  |   |  |
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| The Destine of Song Birds  | _           | Settings   |   |  |
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| And Chevelation •<br>4   | 1.          | Colored  |   |  |
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|  |             | final John   |   |  |

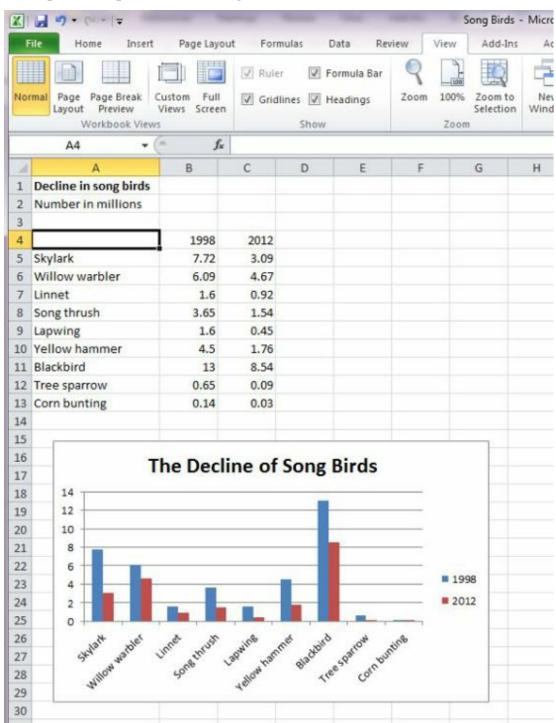
You can see how your page will print out.

o Click on the home tab to return to your spreadsheet.

# **Chapter 6**

## **Pie Charts**

You are going to draw a pie chart showing the number of different kinds of song birds in just 1996.



o Open the spreadsheet Song Birds.

o Click in cell A5 and drag down to A13.

| A  | А                     | В    | С    |
|----|-----------------------|------|------|
| 1  | Decline in song birds |      |      |
| 2  | Number in millions    |      |      |
| 3  |                       |      |      |
| 4  |                       | 1998 | 2012 |
| 5  | Skylark               | 7.72 | 3.09 |
| 6  | Willow warbler        | 6.09 | 4.67 |
| 7  | Linnet                | 1.6  | 0.92 |
| 8  | Song thrush           | 3.65 | 1.54 |
| 9  | Lapwing               | 1.6  | 0.45 |
| 10 | Yellow hammer         | 4.5  | 1.76 |
| 11 | Blackbird             | 13   | 8.54 |
| 12 | Tree sparrow          | 0.65 | 0.09 |
| 13 | Corn bunting          | 0.14 | 0.03 |
| 14 |                       |      |      |

- o Hold down the Ctrl button.
- o Click on cell C5 and drag down to C13.

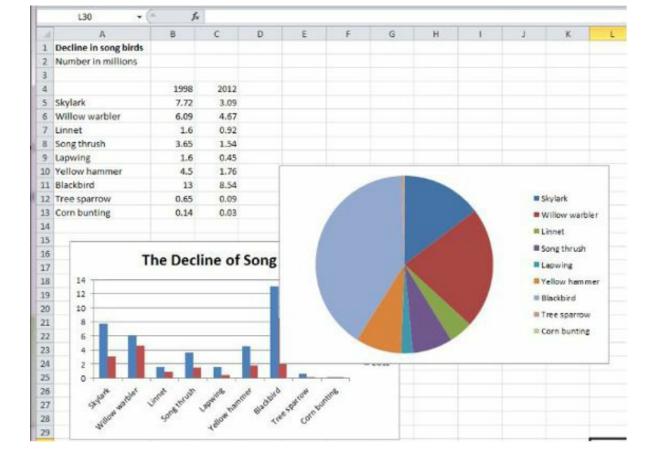
|    | А                     | В    | С    |
|----|-----------------------|------|------|
| 1  | Decline in song birds |      |      |
| 2  | Number in millions    |      |      |
| 3  |                       |      |      |
| 4  |                       | 1998 | 2012 |
| 5  | Skylark               | 7.72 | 3.09 |
| 6  | Willow warbler        | 6.09 | 4.67 |
| 7  | Linnet                | 1.6  | 0.92 |
| 8  | Song thrush           | 3.65 | 1.54 |
| 9  | Lapwing               | 1.6  | 0.45 |
| 10 | Yellow hammer         | 4.5  | 1.76 |
| 11 | Blackbird             | 13   | 8.54 |
| 12 | Tree sparrow          | 0.65 | 0.09 |
| 13 | Corn bunting          | 0.14 | 0.03 |
| 14 |                       |      |      |

- o Click on the Insert tab.
- o Click on the Chart button.

| F  | ile Home      | Insert    | Page Layor   | ut For | mulas  | Data | Revie          | ew       | View  | Add-I   | ins  |
|----|---------------|-----------|--|--------|--------|------|----------------|----------|-------|---------|------|
|    | Tables        | Picture C | Smar<br>Smar<br>Smar<br>Smar<br>Scree<br>Instrations | rtArt  | Column | Line | Pie<br>2-D Pie | Bar      | Area  | Scatter | Othe |
|    | C5            | • (*      | fx   | 3.09   |        |      |                | 10       |       | and     |      |
| A  | A             |           | в  | С      | D      |      |                |          |       | 00      | ŀ    |
| 1  | Decline in so | ng birds  |  |        |        |      |                |          |       |         |      |
| 2  | Number in m   | illions   |  |        |        |      | OF             |          |       |         |      |
| 3  |               |           |  |        |        |      | -              | <u> </u> |       |         |      |
| 4  |               |           | 1998   | 2012   |        |      | 3-D Pie        |          |       |         |      |
| 5  | Skylark       |           | 7.72   | 3.09   |        |      |                |          |       |         |      |
| 6  | Willow warb   | ler       | 6.09   | 4.67   |        |      |                |          | 0     |         |      |
| 7  | Linnet        |           | 1.6  | 0.92   |        |      |                |          |       |         |      |
| 8  | Song thrush   |           | 3.65   | 1.54   |        |      | all A          | II Chart | Types |         |      |
| 9  | Lapwing       |           | 1.6  | 0.45   |        |      | -              |          |       |         | -    |
| 10 | Yellow hamn   | ser       | 4.5  | 1.76   |        |      |                |          |       |         |      |
| 11 | Blackbird     |           | 13   | 8.54   |        |      |                |          |       |         |      |
| 12 | Tree sparrow  |           | 0.65   | 0.09   |        |      |                |          |       |         |      |
| 13 | Corn bunting  |           | 0.14   | 0.03   |        |      |                |          |       |         |      |
| 14 |               |           |  |        |        |      |                |          |       |         |      |

o Select the first type of pie chart. You can you can experiment with other types of chart later.

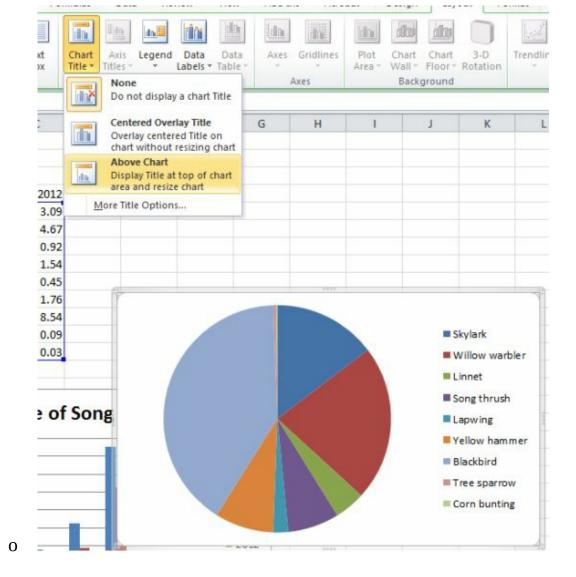
Excel will create your pie chart. We are going to edit it to make is clearer what the chart shows.



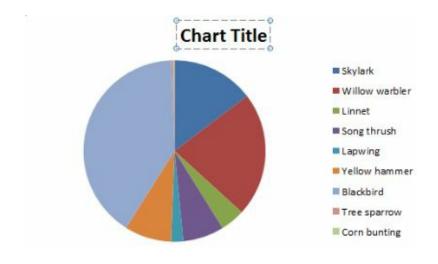
- o This first thing we are going to do is give the chart a title. Select the pie chart.
- o You will now see the chart tabs appear at the top ribbon. Select the layout tab.

| F    | Home Inser   | t Page Layo              | ut Fe            | ormulas          | Data              | Review               | View | Add-b | ns Acro          | bat          | Design | Layo           | ut Fe           | ormat    |
|------|--|--------------------------|------------------|------------------|-------------------|----------------------|------|-------|------------------|--------------|--------|----------------|-----------------|----------|
| 3    | ert Area * Format Selection Reset to Match Style Current Selection | Picture Shapes<br>Insert | A<br>Text<br>Box | Chart<br>Title * | Asts 1<br>Déles - | Legend Dat<br>Labels | -    |       | Gridines<br>Aves | Plot<br>Area |        | Chart<br>Floor | 3-0<br>Rotation | Trendlin |
|      | Chart 4 🔫  | (- fe                    |                  |                  |                   |                      |      |       |                  |              |        |                |                 |          |
| - 11 | A  | 8                        | С                | D                |                   | E                    | F    | G     | н                | 1            |        | 3              | к               | L        |
| 1    | Decline in song birds  |                          |                  |                  |                   |                      |      |       |                  |              |        |                |                 |          |
|      |  |                          |                  |                  |                   |                      |      |       |                  |              |        |                |                 |          |

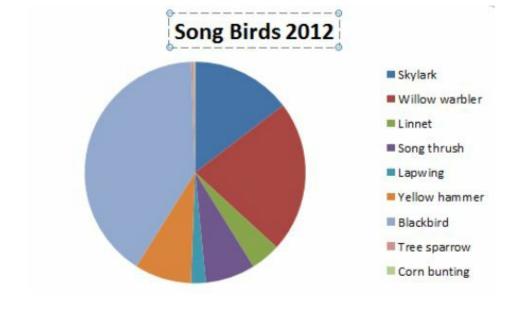
o Click on Chart title. Select Above Chart, as that is where we want the chart title to appear.



o Select the text box.



o Type Song birds 2012

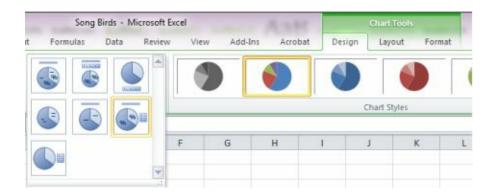


At the moment there are no data labels

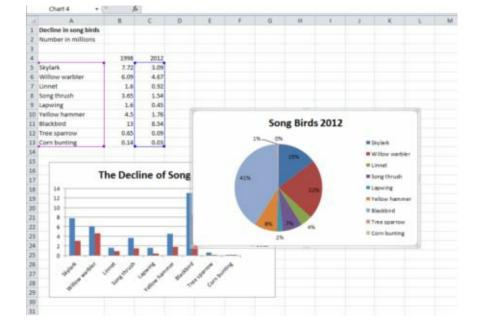
o Click on the Design Tab on the ribbon at the top.



o Select the layout with the % sign on the pie chart and the labels to the right of the pie chart.



You will see that the Chart now has a title and labels to make it very clear. However the work sheet looks messy with the two charts on it.



o Select the chart background area to make the chart tabs appear.

| - a all 122                                  |            | A Turn | nder 0   | ata ita | 84 TA | ne 488 | De Ace   | ter Den | P 18 | and Par                                | nat . |      |   | -      | 0 - | 1 |
|--|------------|--------|----------|---------|-------|--------|----------|---------|------|--|-------|------|---|--------|-----|---|
| Dange Case As Sed<br>art Type Template RoseC | in Select  | ۲      | 1        |         | (     | 2      | ۲        |         |      | ٩                                      | 6     |      | ٩ | - Mara |     |   |
| Tape   | Defa       |        | Chellins | 10      |       |        | _        |         | Out  | Partner .                              |       |      |   | bacatt |     |   |
| Chart 4 +                                    | - 1        |        |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| A  | 8          | 5      | Ð        | . 8     | · F.  | - 6    | π.       |         | 1    | E.                                     |       | - 58 | N | 0      | - p |   |
| Decline in song birds                        |            |        |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Number in millions                           |            |        |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
|  |            | -      |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Skylark                                      | 1998       | 2012   |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Willow warbler                               | 6.09       | 4.67   |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Linnet                                       | 1.6        | 0.92   |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Song thrush                                  | 3.45       | 1.54   |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Lapwing                                      | 1.6        | 0.45   |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Yellow hammer                                | 4.5        | 1.76   |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
| Blackbird                                    | 13         | 8.54   |          |         |       | Sor    | ng Birds | \$ 2012 |      |  |       |      |   |        |     |   |
| Tree sparrow                                 | 0.65       | 0.09   |          |         |       | 19. DR | 20000    |         |      |  |       |      |   |        |     |   |
| Corn bunting                                 | 0.34       | 0.07   |          |         |       |        |          |         | -    | Skylank                                |       |      |   |        |     |   |
|  |            |        |          |         | 1     |        | 100      |         | -    | Willow werb                            | w     |      |   |        |     |   |
|  | No. of the | 115    | 5.       |         | 1     |        |          | 4       |      | Linief.                                |       |      |   |        |     |   |
|  |            | no of  | Sone     |         | 425   |        |          | A       | -    | long thrush                            |       |      |   |        |     |   |
| 1  | The Decli  | ILC OF |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
|  | The Dech   | ine or |          |         |       |        |          |         |      | amente                                 |       |      |   |        |     |   |
| 14   | The Decli  | ine or |          |         |       |        |          |         |      |  |       |      |   |        |     |   |
|  | The Decli  |        |          |         |       |        |          | 7       | -    | reliou hann                            | -     |      |   |        |     |   |
| 14   | The Decli  | ine or |          |         |       |        | 1        | 7       | :    | fellow hand                            |       |      |   |        |     |   |
| 14<br>12<br>10                               | The Decli  |        |          |         |       |        |          |         | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
| 14<br>12<br>10<br>8                          | The Decli  |        |          |         |       |        |          |         | -    | fellow hand                            |       |      |   |        |     |   |
| 14<br>12<br>10<br>6                          | The Decli  |        |          |         |       |        |          |         | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
| 14<br>12<br>10<br>6                          | The Decli  |        |          |         |       |        |          | 1       | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
| 14<br>12<br>10<br>8                          | The Decli  | L      |          | -       |       |        |          | 1       | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
|  |            |        |          |         |       |        |          | ,       | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
|  |            |        |          |         |       |        |          | ,       | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
|  |            | •      |          |         |       |        |          | ,       | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
|  |            |        |          |         |       |        |          |         | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |
| 14<br>12<br>10<br>8                          | <b>;</b>   |        |          |         |       |        |          |         | -    | fellow hann<br>Blackbird<br>Two sparso |       |      |   |        |     |   |

o Click on Move Chart, a new window will appear.

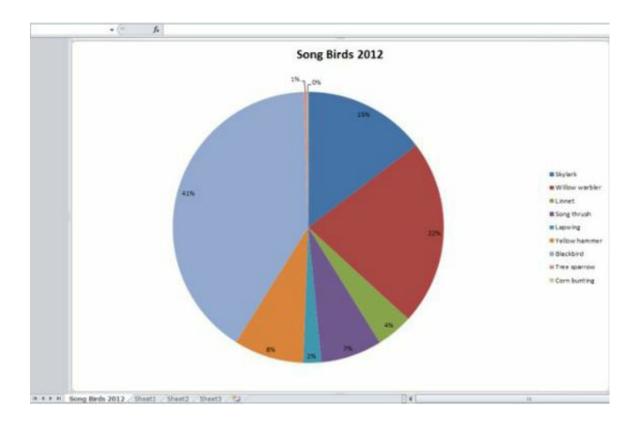


o Select New Sheet, and type in "Song Birds 2012" to give the sheet a title.

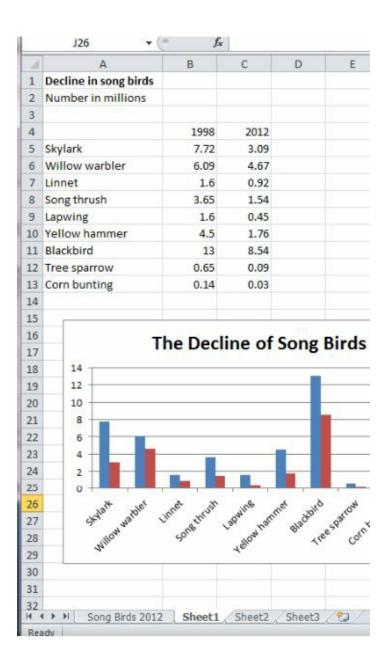
| Move Chart   |                   |                  |    | 8 X    |
|--------------|-------------------|------------------|----|--------|
| Choose where | you want the char | rt to be placed: |    |        |
|              | New sheet:        | Song Birds 2012  |    |        |
|              | O Object in:      | Sheet1           |    | -      |
|              |                   | 0                | ок | Cancel |

o Click on OK. You will now see a tab at the bottom of your spreadsheet has been created for the pie chart.

If you want to move it back to be an object in the spreadsheet just do the reverse. This view may be the best to use if you want to print it out.



o Click on the tab Sheet 1. This will let you go back to Sheet 1 to see the data and first chart.



o Save your spreadsheet.

# **Chapter 7**

# **Creating a Form**

In this chapter you are going to create a form to use to collect data about many different fruits and vegetables are eaten by people in a group.

o Open the Spreadsheet called Measurements created in Chapter 3 and 4.

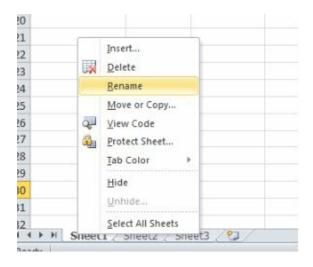
| _  | H30                      | • (*       | f <sub>x</sub> |                 |       |               |
|----|--------------------------|------------|----------------|-----------------|-------|---------------|
| 1  | A                        | В          | С              | D               | E     | F             |
| 1  | Measurements             |            | Group Name     |                 | Name: | Your own name |
| 2  |                          |            |                |                 |       |               |
| 3  | Name                     | Height(cm) | Weight(kg)     | Foot length(cm) |       |               |
| 4  | Bob Harrison             | 131.5      | 32.5           | 19.0            |       |               |
| 5  | Hussen Pettit            | 126.0      | 31.0           | 18.2            |       |               |
| 6  | Sophie Cornish           | 136.0      | 37.9           | 18.8            |       |               |
| 7  | Joe Girard               | 123.5      | 32.7           | 21.0            |       |               |
| 8  | Kerry Reeves             | 132.9      | 40.0           | 18.3            |       |               |
| 9  | Steve Jobs               | 127.5      | 31.0           | 21.0            |       |               |
| 10 | David Rice               | 122.0      | 60.0           | 24.0            |       |               |
| 11 |                          |            |                |                 |       |               |
| 12 | TOTAL                    | 899.4      | 265.1          | 140.3           |       |               |
| 13 |                          |            |                |                 |       |               |
| 14 | AVERAGE                  | 128.5      | 37.9           | 20.0            |       |               |
| 15 |                          |            |                |                 |       |               |
| 16 | MAXIMUM                  | 136.0      | 60.0           | 24.0            |       |               |
| 17 |                          |            |                |                 |       |               |
| 18 | MINIMUM                  | 122.0      | 31.0           | 18.2            |       |               |
| 19 | - Second March 19 (Selar |            |                |                 |       |               |
| 20 | -                        |            |                |                 |       |               |

# Naming the worksheets;

We are going to rename the sheets. By default Excel will create Sheet 1 Sheet 2 and Sheet 3. You can see the tabs at the bottom of your screen or workbook.

| 20       |       |        |             |          |  |
|----------|-------|--------|-------------|----------|--|
| 27       |       |        |             |          |  |
| 28<br>29 |       |        |             |          |  |
| 29       |       |        |             |          |  |
| 30       | 1     |        |             |          |  |
| 31       |       |        |             |          |  |
| 32       | 4 • • | Sheet1 | Sheet2 / Sh | eet3 🦯 🞾 |  |
| Rea      | ady   |        |             |          |  |

o Right click on the Sheet 1 tab, you will now see a menu appear.



o Select Rename form the menu, Excel will highlight Sheet 1.

| 32           |        |                     |     |  |
|--------------|--------|---------------------|-----|--|
| IAAPH        | Sheet1 | Sheet2 / Sheet3 / 💱 | / - |  |
| Ready        |        |                     |     |  |
| CONTRACTOR I |        |                     |     |  |

o Type the new name of Measurements.

| 31        |                            |  |
|-----------|----------------------------|--|
| 32        |                            |  |
| 14 4 P PI | Measurements Sheet2 Sheet3 |  |
| Ready     |                            |  |

- o Press Enter
- o Now rename Sheet2, call it Fruit and Veg.



o Press Enter once you have type the new name in.

## **Copy data between sheets**

o Create a new Title for this sheet in cell A1.

|    | E2         | •          | 0 | fx |                                       |   |   |   |   |   |
|----|------------|------------|---|----|---------------------------------------|---|---|---|---|---|
| A  | А          | В          | С | D  | E                                     | F | G | Н | 1 | J |
| 1  | Healthy Ea | ting Surve | y |    |                                       |   |   |   |   |   |
| 2  |            |            |   |    |                                       |   |   |   |   |   |
| 3  |            |            |   |    | i i i i i i i i i i i i i i i i i i i |   |   |   |   |   |
| 4  |            |            |   |    |                                       |   |   |   |   |   |
| 5  |            |            |   |    |                                       |   |   |   |   |   |
| 6  |            |            |   |    |                                       |   |   |   |   |   |
| 7  |            |            |   |    |                                       |   |   |   |   |   |
| 8  |            |            |   |    |                                       |   |   |   |   |   |
| 9  |            |            |   |    |                                       |   |   |   |   |   |
| 10 |            |            |   |    |                                       |   |   |   |   |   |
| 11 |            |            |   |    |                                       |   |   |   |   |   |
| 12 |            |            |   |    |                                       |   |   |   |   |   |
| 13 |            |            |   |    |                                       |   |   |   |   |   |
| 14 |            |            |   |    |                                       |   |   |   |   |   |
| 15 |            |            |   |    |                                       |   |   |   |   |   |

- o Click on the Bold button.
- o Make Column A width enough for the title.

|   | B1 🔹 (*               | f <sub>x</sub> |   |   |   |
|---|-----------------------|----------------|---|---|---|
| 4 | A                     | В              | С | D | E |
| 1 | Healthy Eating Survey | <u> </u>       |   |   |   |
| 2 | 0.00 100 10 10        |                |   |   |   |
| 3 |                       |                |   |   |   |
| 4 |                       |                |   |   |   |
| 5 |                       |                |   |   |   |
| 6 |                       |                |   |   |   |

- o Click on the Measurements tab to return to the first sheet.
- o Select Cells C1 to F1.

|   | C1           | ▼ (?)      | fx Group   | Name            |       |               |
|---|--------------|------------|------------|-----------------|-------|---------------|
| 1 | A            | В          | С          | D               | E     | F             |
| 1 | Measurements |            | Group Name |                 | Name: | Your own name |
| 2 |              |            |            |                 |       |               |
| 3 | Name         | Height(cm) | Weight(kg) | Foot length(cm) |       |               |
| 4 | Bob Harrison | 131.5      | 32.5       | 19.0            |       |               |

## o Click on the copy button on the home tab

|   | Calibri       |       | 11 *           | A A          | = = = | 18/     | = w | ap Text         | General      |
|---|---------------|-------|----------------|--------------|-------|---------|-----|-----------------|--------------|
|   | ste Copy as P | cture | - 3            | • <u>A</u> • | E H H | Alignme |     | erge & Center • | 99 - %<br>Nt |
|   | C1            | + (*  | f <sub>x</sub> | Group        | Name  |         |     |                 |              |
| 4 | A             | В     |                | С            | D     |         | Е   | F               |              |
| 1 | Measurements  |       | Grou           | p Name       |       | Na      | me: | Your own na     | me           |
| 2 | 111           |       |                |              |       |         |     |                 |              |

- o Click on the Fruit and Veg sheet tab to go to the second sheet.
- o Click in cell D1 to make it an active cell

|   | D1 - (*               | fx |   |   |   |   |   |
|---|-----------------------|----|---|---|---|---|---|
| À | A                     | В  | С | D | E | F | G |
| 1 | Healthy Eating Survey |    | [ |   |   |   |   |
| 2 |                       |    |   |   |   |   |   |
| 3 |                       |    |   |   |   |   |   |
| 4 |                       |    |   |   |   |   |   |
| 5 |                       |    |   |   |   |   |   |
| 6 |                       |    |   |   |   |   |   |

o Click on the paste button

|                | ome                       | Inse     | rt   | Pa | ge Layo | out | Fo    | rmula | s:  | Dat  | a Rev        | view | View      | Add-     | ins         | Acro | bat     |   |
|----------------|---------------------------|----------|------|----|---------|-----|-------|-------|-----|------|--------------|------|-----------|----------|-------------|------|---------|---|
| A A            | Calibri                   | (        |      | *  | 11 -    | A   | Å     | =     | -   | =    | 2-           | 1    | Wrap Text |          | General     |      |         |   |
| Paste          | -                         |          | BIU- |    | - 3     | ••• | A -   | ₩.    | EE  |      | 律律<br>Alignm |      | Merge &   | Center + | <del></del> | %    | •       | 1 |
| Paste (Ctrl+V) | 6                         |          |      |    | f.      | 0   | Group | Nan   | ne  |      | ringinin     |      |           |          |             | 1154 | i v c i | _ |
|                | Paste the contents of the | of the B |      |    | C       | C   |       | D     |     | F    | F            | G    |           | н        |             |      |         |   |
| Clipboard.     |                           |          | -    | _  |         |     |       |       | Gro | up N | ame          | N    | lame:     | Your     | wn na       | me   |         |   |
| 2              |                           |          |      |    |         |     |       |       |     |      | et pi        |      |           |          |             |      |         |   |

o Copy cells A3 to A18 from the Measurements sheet to the same cells on the Fruit and Veg sheet in the same way.

| I  | File H     | ome In     | sert P        | age Layou | t Form         | ulas Data | Revie    | w View    | Add-I    | ns Acrobat        |  |
|----|------------|------------|---------------|-----------|----------------|-----------|----------|-----------|----------|-------------------|--|
| 1  | ×          | Calibri    | -             | 11 *      | A A Ŧ          | = =       | \$/-     | Wrap Text | e        | General           |  |
|    | ste<br>• Ø | BI         | Ŭ →  <br>Font | - 🔕       | • <u>A</u> • I | F # #     | Alignmer |           | Center + | 🥶 - % ,<br>Number |  |
|    | A3         |            | <b>+</b> (m)  | fx        | Name           |           |          |           |          |                   |  |
|    |            | А          | -             | В         | C              | D         | E        | F         | G        | н                 |  |
| 1  | Healthy B  | Eating Sur | vey           |           |                | Group Na  | me       | Name:     | Your o   | wn name           |  |
| 2  |            |            |               |           |                |           |          |           |          |                   |  |
| 3  | Name       |            | _             |           |                |           |          |           |          |                   |  |
| 4  | Bob Harr   |            |               |           |                |           |          | _         |          |                   |  |
| 5  | Hussen P   |            |               |           |                |           |          | _         |          |                   |  |
| 6  | Sophie C   |            |               |           |                |           |          | _         |          |                   |  |
| 7  | Joe Giran  | Secon      | _             |           |                |           |          |           |          | _                 |  |
| 8  | Kerry Ree  |            | -             |           | -              |           |          | 1         |          |                   |  |
| 10 | David Ric  |            |               |           |                |           |          |           |          |                   |  |
| 11 | David Kit  | .e         |               |           |                |           |          |           |          |                   |  |
| 12 | TOTAL      |            |               |           |                |           |          |           |          |                   |  |
| 13 |            |            |               |           |                |           |          |           |          |                   |  |
| 14 | AVERAGE    | E          |               |           |                |           |          |           |          |                   |  |
| 15 |            |            |               |           |                |           |          |           |          |                   |  |
| 16 | MAXIMU     | M          |               |           |                |           |          |           |          |                   |  |
| 17 |            |            |               |           |                |           |          |           |          |                   |  |
|    | MINIMU     | M          |               |           |                |           |          |           |          |                   |  |
| 19 |            |            |               | (Ctrl)    | •              |           |          |           |          |                   |  |
| 20 | _          |            |               |           |                |           |          |           |          |                   |  |
| 21 |            |            |               |           |                |           |          |           |          |                   |  |

## o In cell B3 type Monday

o Click in the row header for row 3

|   | A                     | В      | С | D         | E  | F     | G        | н    |
|---|-----------------------|--------|---|-----------|----|-------|----------|------|
| 1 | Healthy Eating Survey |        |   | Group Nan | ne | Name: | Your own | name |
| 2 |                       |        |   |           |    |       |          |      |
| 3 | Name                  | Monday |   |           |    |       |          |      |
| 4 | Bob Harrison          |        |   | _         |    |       |          |      |

## o Click on Bold

| À | A                     | В      | С | D        | E  | F     | G        | н    | 1 |
|---|-----------------------|--------|---|----------|----|-------|----------|------|---|
| 1 | Healthy Eating Survey |        |   | Group Na | me | Name: | Your own | name |   |
| 2 |                       |        |   |          |    |       |          |      |   |
| 3 | Name                  | Monday |   |          |    |       |          |      |   |
| 4 | Bob Harrison          |        |   |          |    |       |          | 1    |   |
| 5 | Hussen Pettit         |        |   |          |    |       |          |      |   |

## **Filling a series**

o Click in cell B3.

| 1 | А                     | В      | С | D        | E  |     |
|---|-----------------------|--------|---|----------|----|-----|
| 1 | Healthy Eating Survey |        |   | Group Na | me | Nam |
| 2 |                       |        |   |          |    |     |
| 3 | Name                  | Monday |   |          |    |     |
| 4 | Bob Harrison          |        |   |          |    |     |
| 5 | Hussen Pettit         |        |   |          |    |     |
| 6 | Sophie Cornish        |        |   |          |    |     |
| 7 | Joe Girard            |        |   |          |    |     |

o Click on a drag the little black square in the bottom right hand corner of the cell.



o Drag it to cell F3. This is called the **Fill handle**.

|   | A                            | В      | С | D           | E    | F     | G        | Н    |
|---|------------------------------|--------|---|-------------|------|-------|----------|------|
| 1 | <b>Healthy Eating Survey</b> |        |   | Group Na    | ame  | Name: | Your own | name |
| 2 |                              |        |   |             |      |       |          |      |
| 3 | Name                         | Monday |   | dia seconda |      |       |          |      |
| 4 | Bob Harrison                 |        |   |             | Fri  | iday  |          |      |
| 5 | Hussen Pettit                |        |   |             | 6.55 |       |          |      |
| 6 | Sophie Cornish               |        |   |             |      |       |          |      |

Excel will predict what you want in those cells.

| 1 | A                     | В      | С       | D         | E        | F      | G                 |
|---|-----------------------|--------|---------|-----------|----------|--------|-------------------|
| 1 | Healthy Eating Survey |        |         | Group Nar | ne       | Name:  | Your own          |
| 2 |                       |        |         |           |          |        | 1 1 1 1 1 1 1 1 1 |
| 3 | Name                  | Monday | Tuesday | Wednesd   | Thursday | Friday |                   |
| 4 | Bob Harrison          |        |         |           |          |        |                   |

o Double click between the column headers D and E to widen the column D

| 4 | A                     | В      | C       | D          | E        | F      | G        | н      |
|---|-----------------------|--------|---------|------------|----------|--------|----------|--------|
| 1 | Healthy Eating Survey |        |         | Group Name |          | Name:  | Your own | n name |
| 2 |                       |        |         |            |          |        |          |        |
| 3 | Name                  | Monday | Tuesday | Wednesday  | Thursday | Friday |          |        |
| 4 | Bob Harrison          | 10     |         |            |          |        |          |        |
| 5 | Hussen Pettit         |        |         |            |          |        |          |        |

o Your Spreadsheet should look like this.

# **Increasing the row height**

o Click the row header for row 4.

| 4  | A                     | B                         | C       | D                 | E        | F      | G        | н    | 1 | 1 | ĸ | L |
|----|-----------------------|---------------------------|---------|-------------------|----------|--------|----------|------|---|---|---|---|
| 1  | Healthy Eating Survey |                           |         | Group Name        |          | Name:  | Your own | name |   |   |   |   |
| 2  |                       |                           |         |                   |          |        |          |      |   |   |   |   |
| 3  | Name                  | Monday                    | Tuesday | Wednesday         | Thursday | Friday |          |      |   |   |   |   |
| 4  | Bob Harrison          | Contractor and Contractor |         | - Indense tresses |          |        |          |      |   |   |   |   |
| S  | Hussen Pettit         |                           |         |                   |          |        |          |      | 1 |   |   |   |
| 6  | Sophie Cornish        |                           |         |                   |          |        |          |      |   |   |   |   |
| 7  | Joe Girard            |                           |         |                   |          |        |          |      |   |   |   |   |
| 16 | Harry Passes          |                           |         |                   |          |        |          |      |   |   |   |   |

#### o Drag down to row 10 to select all these rows

|    | A  | B      | c       | D          | E        | E.     | G        | н      | 1.1 | - a | К | L | M | N |
|----|--|--------|---------|------------|----------|--------|----------|--------|-----|-----|---|---|---|---|
| 1  | <b>Healthy Eating Survey</b>             |        |         | Group Name |          | Name:  | Your own | n name |     |     |   |   |   |   |
| 2  |  |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 3  | Name                                     | Monday | Tuesday | Wednesday  | Thursday | Friday |          |        |     |     |   |   |   |   |
|    | Bob Harrison                             |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 5  | Hussen Pettit<br>Sophie Cornish          |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 5  | Sophie Cornish                           |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 7. | Joe Girard                               |        |         |            |          |        |          |        |     |     |   |   |   |   |
| B  | Joe Girard<br>Kerry Reeves<br>Steve Jobs |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 9  | Steve Jobs                               |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 10 | David Rice                               |        |         |            |          |        |          |        |     |     |   |   |   | - |
| 11 |  |        |         | -          |          |        |          |        |     |     |   |   |   |   |
|    | TOTAL                                    |        |         |            |          |        |          |        |     |     |   |   |   |   |
| 12 | Country of the                           |        |         |            |          |        |          |        |     |     |   |   |   |   |

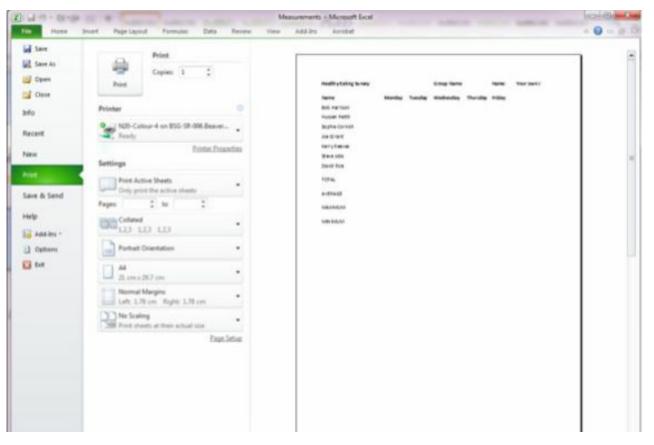
o Position the pointer anywhere between one of the selected rows.

| 4  | A                         | 8      | С       | D          | E        | F      | G        | н      | 1 |
|----|---------------------------|--------|---------|------------|----------|--------|----------|--------|---|
| 1  | Healthy Eating Survey     |        |         | Group Name |          | Name:  | Your own | n name |   |
| 2  |                           |        |         |            |          |        |          |        |   |
| 3  | Name                      | Monday | Tuesday | Wednesday  | Thursday | Friday |          |        |   |
| 4  | Height: 21.00 (28 pixels) |        |         |            |          |        |          |        |   |
| 5  | Hussen Pettit             |        |         |            |          |        |          |        |   |
| 6  | Sophle Cornish            |        |         |            |          |        |          |        |   |
| 7  | Joe Girard                |        |         |            |          |        |          |        |   |
| 8  | Kerry Reeves              |        |         |            |          |        |          |        |   |
| 9  | Steve Jobs                |        |         |            |          |        |          |        |   |
| 10 | David Rice                | _      |         |            |          |        | -        |        | _ |
| 11 |                           |        |         |            |          |        |          |        |   |
| 12 | TOTAL                     |        |         |            |          |        |          |        |   |
| -  |                           |        |         |            |          |        |          |        |   |

- o Drag the line down to make the height about 28 or 29 pixels high.
- o Save your spreadsheet.

# **Adding cell borders**

o Click on the file Tab and select Print.

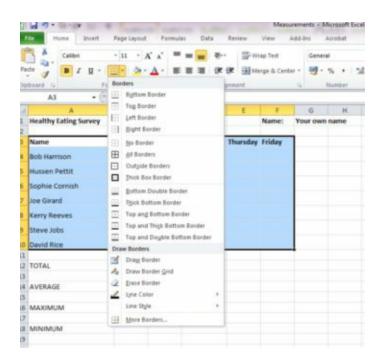


At the moment the form is not really suitable for filling in by hand. It needs some borders around each cell so that you can see which column and row you are in.

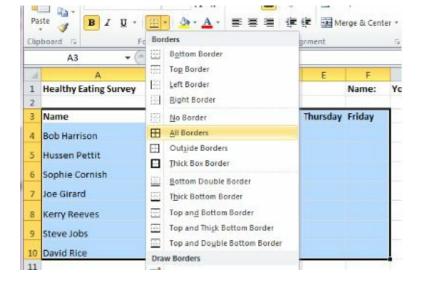
- o Click on the Home tab.
- o Select cells A3 to F10

| 4  | A                     | В      | С       | D          | E        | F         | G        | н    | 1 |
|----|-----------------------|--------|---------|------------|----------|-----------|----------|------|---|
| 1  | Healthy Eating Survey |        |         | Group Name | 8        | Name:     | Your own | name |   |
| 2  |                       |        |         |            |          | a materia |          |      |   |
| 3  | Name                  | Monday | Tuesday | Wednesday  | Thursday | Friday    |          |      |   |
| 4  | Bob Harrison          |        |         |            |          |           |          |      |   |
| 5  | Hussen Pettit         |        |         |            |          |           |          |      |   |
| б  | Sophie Cornish        |        |         |            |          |           |          |      |   |
| 7  | Joe Girard            |        |         |            |          |           |          |      |   |
| 8  | Kerry Reeves          |        |         |            |          |           |          |      |   |
| 9  | Steve Jobs            |        |         |            |          |           |          |      |   |
| 10 | David Rice            |        |         |            |          |           |          |      |   |
| 11 |                       |        |         |            |          |           |          |      |   |
| 12 | TOTAL                 |        |         |            |          |           |          |      |   |
| 13 |                       |        |         |            |          |           |          |      |   |
| 14 | AVERAGE               |        |         |            |          |           |          |      |   |
| 15 |                       |        |         |            |          |           |          |      |   |
| 16 | MAXIMUM               |        |         |            |          |           |          |      |   |
| 17 |                       |        |         |            |          |           |          |      |   |
| 18 | MINIMUM               |        |         |            |          |           |          |      |   |
| 19 |                       |        |         |            |          |           |          |      |   |

o Click on the down arrow next to the Borders button, a menu will appear.



o Select the border option to add all borders.



## o Your spreadsheet should now look like this

|    | A                        | В      | C       | D          | E        | F      | G        | H    |
|----|--------------------------|--------|---------|------------|----------|--------|----------|------|
| 1  | Healthy Eating Survey    |        |         | Group Name |          | Name:  | Your own | name |
| 2  | Call State Street Street |        |         |            |          |        | 100      | 111  |
| 3  | Name                     | Monday | Tuesday | Wednesday  | Thursday | Friday |          | -    |
| 4  | Bob Harrison             |        |         |            |          |        |          |      |
| 5  | Hussen Pettit            |        |         |            |          |        |          |      |
| б  | Sophie Cornish           | _      |         |            |          |        |          |      |
| 7  | Joe Girard               |        |         |            |          |        |          |      |
| 8  | Kerry Reeves             |        |         |            |          |        |          |      |
| 9  | Steve Jobs               | _      |         |            |          |        |          |      |
| 10 | David Rice               |        |         |            |          |        |          |      |
| 11 |                          |        |         |            |          |        | T        |      |
| 12 | TOTAL                    |        |         |            |          |        |          |      |
| 13 |                          |        |         |            |          |        |          |      |
| 14 | AVERAGE                  |        |         |            |          |        |          |      |

## o Save your spreadsheet.

# Merging and centering cells

You are going to add a heading which we are going to centre across the top row.

o Select row headers 1 and 2

| 1 | A                     | B      | C       | D          | E        | F      | G      | H      | 1 | 1 | K |
|---|-----------------------|--------|---------|------------|----------|--------|--------|--------|---|---|---|
| 1 | Healthy Eating Survey |        |         | Group Name |          | Name:  | Yourow | n name |   |   |   |
| 2 |                       |        |         |            |          |        |        |        |   |   |   |
| 3 | Name                  | Monday | Tuesday | Wednesday  | Thursday | Friday |        |        |   |   |   |
| 4 | Bob Harrison          |        |         |            |          |        |        |        |   |   |   |
| 5 | Hussen Pettit         |        |         |            |          |        |        |        |   |   |   |
| 6 | Sophie Cornish        |        |         |            |          |        |        |        |   |   |   |
| 7 | Joe Girard            |        |         |            |          |        |        |        |   |   |   |
| 8 | Kerry Reeves          |        |         |            |          |        |        |        |   |   |   |

o Right click on the mouse and select insert.

| 1  | A                     | 8      |    | - | 1 <b>a</b> M. <b>T</b>     | CE2 · .00 | *.0 V  | G        | н    | - 1 |
|----|-----------------------|--------|----|---|----------------------------|-----------|--------|----------|------|-----|
| 1  | Healthy Eating Survey |        |    | X | Group Mamo                 |           | Name:  | Your own | name |     |
| 3  | Name                  | Monday | Tu |   | <u>С</u> ору               | Thursday  | Friday |          |      |     |
| 4  | Bob Harrison          |        |    | - | Paste Options:             |           |        |          |      |     |
| 5  | Hussen Pettit         |        |    |   | Paste Special              |           |        |          |      |     |
| 6  | Sophie Cornish        |        |    |   | Insert                     |           |        |          |      |     |
| 7  | Joe Girard            | -      |    |   | Delete                     | 1         |        |          |      |     |
| 8  | Kerry Reeves          |        | L  |   | Clear Contents             | L         |        |          |      |     |
| 9  | Steve Jobs            | -      | 1  | đ | Eormat Cells<br>Bow Height |           |        |          |      |     |
| 10 | David Rice            | _      | L  |   | Hide                       | L         |        |          |      |     |
| 11 |                       |        |    |   | Unhida                     | _         |        |          |      |     |
|    |                       |        |    | - | <u>U</u> nhide             |           |        |          |      |     |
| 13 |                       |        |    |   |                            |           |        |          |      |     |
| 14 |                       |        |    |   |                            |           |        |          |      |     |
| 15 | CONTRACTOR DOLLAR     |        |    |   |                            |           |        |          |      |     |
|    | MAXIMUM               |        |    |   |                            |           |        |          |      |     |
| 17 |                       |        |    |   |                            |           |        |          |      |     |

This will add 2 new rows, as we had highlighted 2 rows.

|   | А                    | В      | С       | D          | E        | F      | G        |
|---|----------------------|--------|---------|------------|----------|--------|----------|
| 1 |                      |        |         |            |          |        |          |
| 2 |                      |        |         |            |          |        |          |
| 3 | Salthy Eating Survey |        |         | Group Name |          | Name:  | Your own |
| 4 |                      |        |         |            |          |        |          |
| 5 | Name                 | Monday | Tuesday | Wednesday  | Thursday | Friday |          |
| 6 | Bob Harrison         |        |         |            |          |        |          |
| 7 | Hussen Pettit        |        |         |            |          |        |          |
| 8 | Sophie Cornish       |        |         |            |          |        |          |

### o Type Data Entry Form in cell A1 and press enter

|   | A2 🔻 (*               | fx     |         |            |         |
|---|-----------------------|--------|---------|------------|---------|
| 1 | А                     | В      | С       | D          | E       |
| 1 | Data Entry Form       |        |         |            |         |
| 2 |                       |        |         |            |         |
| 3 | Healthy Eating Survey |        |         | Group Name |         |
| 4 |                       |        |         |            |         |
| 5 | Name                  | Monday | Tuesday | Wednesday  | Thursda |
| 6 | Bob Harrison          |        |         |            |         |

### o Select cells A1 to F1

| 1 | A1 • (*                      | f <sub>x</sub> | Data Entr | y Form     |          |        |      |
|---|------------------------------|----------------|-----------|------------|----------|--------|------|
|   | А                            | В              | С         | D          | E        | F      | G    |
| 1 | Data Entry Form              |                |           |            |          |        |      |
| 2 |                              |                |           |            |          |        | 1    |
| 3 | <b>Healthy Eating Survey</b> |                |           | Group Name |          | Name:  | Your |
| 4 |                              |                |           |            |          |        |      |
| 5 | Name                         | Monday         | Tuesday   | Wednesday  | Thursday | Friday |      |
| 6 | Bob Harrison                 |                |           |            |          |        |      |
| 7 | Hussen Pettit                |                |           |            |          |        |      |

o Click on the Merge and centre button on the Home tab.

|             | lome In | sert Pa      | age Layou        | t Fo         | rmulas    | Data       | Revi   | ew           | View Add-         | Ins        |
|-------------|---------|--------------|------------------|--------------|-----------|------------|--------|--------------|-------------------|------------|
| <b>*</b>    | Calibri |              | 11 *             | A A          | = =       | - *        | ~      | <b>a</b> v v | Vrap Text         | Gene       |
| Paste       | BI      | <u>u</u> - 🖽 | - 3              | · <u>A</u> - |           | <b>a</b> i | e eje  | -<br>-<br>   | /lerge & Center 🔹 | <b>9</b> . |
| Clipboard 5 |         | Font         |                  | 15           |           | A          | lignme |              | Merge & Center    |            |
| A1          |         | • (**        | $f_{\mathbf{x}}$ | Data E       | ntry Form | n          |        |              | Merge Across      |            |
| 4           | А       |              | В                | C            |           | D          |        | 1            | Merge Cells       |            |
| 1 Data Ent  | ry Form |              |                  | 1            |           |            |        | 朣            | Unmerge Cells     |            |
| 2           |         |              |                  |              |           |            |        |              |                   |            |

o This will make the heading look like this.

| 1 | A                     | В    | С          | D          | E | F     | (    |
|---|-----------------------|------|------------|------------|---|-------|------|
| 1 |                       | Data | a Entry Fo | orm        |   |       |      |
| 2 |                       |      |            |            |   |       |      |
| 3 | Healthy Eating Survey |      |            | Group Name |   | Name: | Your |
| 4 |                       |      |            |            |   |       |      |

o Make the heading in cell A1 Bold font size 18 point.

| F    | Home Insert           | Pa | ige l    | ayo | ut Form        | ulas   | Data    | Review   | View       | Add-In: |
|------|-----------------------|----|----------|-----|----------------|--------|---------|----------|------------|---------|
| ľ    | Catibri               | +  | 18       | -   | A' A'          | = =    | - *     | - w      | rap Text   |         |
| Pa   | ste 🧃 🖪 I 🛛 - E       | Ð  | 8        | -   | · <u>A</u> · I |        | ≡ 津     | ER HA    | erge & Cen | ter -   |
| Clip | board G Ferr          | t  | 10       |     | 6              |        | AB      | gnment   |            | 14      |
|      | A1 • (*               |    | 11       |     | Data Ent       | ry For | m       |          |            |         |
|      | A                     |    | 14       |     | C              |        | D       | E        | F          |         |
| 1    |                       |    | 36       |     | Entry          | For    | m       |          |            |         |
| 2    | -                     |    | 20       |     |                |        |         |          |            | 1       |
| 3    | Healthy Eating Survey |    | 22       |     |                | Gro    | up Name | -        | Name:      | You     |
| 4    | Name                  | h  | -        |     | Tuesday        | We     | dnesday | Thursday | Friday     | 1       |
| 6    | Bob Harrison          | ſ  | 28<br>36 |     |                | -      |         |          |            |         |
| 7    | Hussen Pettit         | T  | 48       |     |                |        |         |          |            |         |
| 8    | Sophie Cornish        |    | -        |     |                |        |         |          |            |         |
| 9    | Joe Girard            |    |          |     |                |        |         |          |            |         |
| 10   | Kerry Reeves          | L  |          |     |                |        |         |          |            |         |
| 11   | Steve Jobs            |    |          |     |                |        |         |          |            |         |
| 12   | David Rice            |    |          |     |                |        |         |          |            |         |
| 13   |                       |    |          |     |                |        |         |          |            |         |
| 14   | TOTAL                 |    |          |     |                |        |         |          |            |         |

Check that the row height has increased; you may need to do this yourself.

# **Aligning text and number**

We are going to move the headings for Monday Tuesday etc. right aligned, that means it will line up on the right side of the cell.

o Highlight cells B5 to F5

| 4 | А  | В      | С       | D          | E        | F      | G      |
|---|--|--------|---------|------------|----------|--------|--------|
| 1 | and the second sec | Data   | Entry   | Form       |          |        |        |
| 2 |  |        |         |            |          |        |        |
| 3 | Healthy Eating Survey  |        |         | Group Name |          | Name:  | Your o |
| 4 |  |        |         |            |          |        |        |
| 5 | Name   | Monday | Tuesday | Wednesday  | Thursday | Friday | ]      |
| 6 | Bob Harrison   |        |         |            |          |        |        |
| 7 | Hussen Pettit  |        |         |            |          |        |        |
|   | Sophie Cornish   |        |         |            |          |        |        |

o Click on the Align right button



# Setting the print area

You may need to change the orientation of the page from portrait to landscape. To do this click on the page layout tab.

- Home Data Insert Page Layout Formulas Review View Add-Ins Acrobat Width: Automatic -Gridlines Colors \* Aa View A Fonts \* 41 Height: Automatic \* Print Breaks Background Themes Margins Orientation Size Print Effects \* Scale: 100% : Print + + sea + + Titles Themes Page Setup Scale to Fit Sheet O 15 **B**5 • (? Page Orientation F G A E H Switch the pages between portrait and landscape layouts. 1 Press F1 for more help. ര 2 3 **Healthy Eating Survey Group Name** Your own name Name: 4 Tuesday Wednesday Thursday Friday 5 Name Monday 6 **Bob Harrison** 7 Hussen Pettit Sophie Cornish 8 Joe Girard 9 10 Kerry Reeves 11 Steve Jobs 12 David Rice 13
- o Click on orientation.

o Select landscape from the menu that appears.

|    | Page Layo   | ut      | Forr      |
|----|-------------|---------|-----------|
|    |             | I       |           |
| 15 | Orientation | Size    | Pr<br>Are |
| C  | Po          | ortrait | Se<br>a   |
|    | La          | ndscape | .,        |
|    |             |         |           |

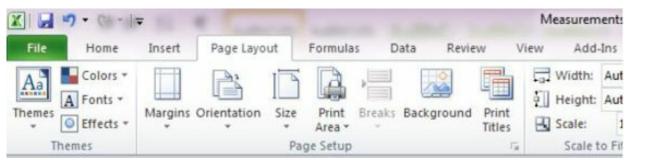
o Click on the File tab and select the Print option to view the page in Print Preview.

| Save  | Print                        |  |  |
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- o Click on the home tab
- o Select cells A1 to H12

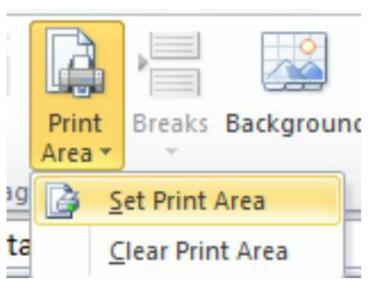
| 1  | A                     | В      | С       | D          | E        | F      | G        | н    | 1 | J |
|----|-----------------------|--------|---------|------------|----------|--------|----------|------|---|---|
| 1  | -                     | Data B | Entry F | orm        |          |        |          |      |   |   |
| 2  |                       |        |         |            |          |        |          |      |   |   |
| 3  | Healthy Eating Survey |        |         | Group Name |          | Name:  | Your own | name |   |   |
| 4  |                       |        |         |            |          |        |          |      |   |   |
| 5  | Name                  | Monday | Tuesday | Wednesday  | Thursday | Friday |          |      |   |   |
| б  | Bob Harrison          |        |         |            |          |        |          |      |   |   |
| 7  | Hussen Pettit         |        |         |            |          |        |          |      |   |   |
| 8  | Sophie Cornish        |        |         |            |          |        |          |      |   |   |
| 9  | Joe Girard            |        |         |            |          |        |          |      |   |   |
| 10 | Kerry Reeves          |        |         |            |          |        |          |      |   |   |
| 11 | Steve Jobs            |        |         |            |          |        |          |      |   |   |
| 12 | David Rice            |        |         |            |          |        |          |      |   |   |
| 13 |                       |        |         |            |          |        |          |      | T |   |
| 14 | TOTAL                 |        |         |            |          |        |          |      |   |   |
| 15 |                       |        |         |            |          |        |          |      |   |   |

o Click on the Page Layout tab.



o Click on the Print Area button and select Set Print Area.

0



This will set the area that you have selected to be the only area that will print out.

Your Fruit and Veg worksheet should now look like this.

| 4    | A   | В      | C       | D          | E        | F      | G        | Н    | 1 |
|------|---|--------|---------|------------|----------|--------|----------|------|---|
| 1    |   | Data I | Entry F | orm        |          |        |          |      |   |
| 2    | 1   |        |         |            |          |        |          |      |   |
| 3    | Healthy Eating Survey   |        |         | Group Name |          | Name:  | Your own | name |   |
| 4    |   |        |         |            |          |        |          |      |   |
| 5    | Name  | Monday | Tuesday | Wednesday  | Thursday | Friday |          |      |   |
| 6    | Bob Harrison  |        |         |            |          |        |          |      |   |
| 7    | Hussen Pettit   |        |         |            |          |        |          |      |   |
| 8    | Sophie Cornish  |        |         |            |          |        |          |      |   |
| 9    | Joe Girard  |        |         |            |          |        |          |      |   |
| 10   | Kerry Reeves  |        |         |            |          |        |          |      |   |
| 11   | Steve Jobs  |        |         |            |          |        |          | -    |   |
| 12   | David Rice  |        |         |            |          |        |          |      |   |
| 13   |   |        |         |            |          |        |          |      |   |
|      | TOTAL   |        |         |            |          |        |          |      |   |
| 15   |   |        |         |            |          |        |          |      |   |
| 16   | AVERAGE   |        |         |            |          |        |          |      |   |
| 17   |   |        |         |            |          |        |          |      |   |
| 18   | MAXIMUM   |        |         |            |          |        |          |      |   |
| 19   | 100000000000000000000000000000000000000   |        |         |            |          |        |          |      |   |
| 20   | MINIMUM   |        |         |            |          |        |          |      |   |
| -7.4 | and the second se |        |         |            |          |        |          |      |   |

o Now click on the File tab and select the print option to view the Print Preview of your worksheet.

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o You may want to print the form out to see what it looks like on paper or just click on the

home tab.

o Save you spreadsheet

# **Chapter 8**

Now that we have collected all the data for the group on your data collection Form. You need to enter it onto your Spreadsheet to analyse.

o Open the measurements Spreadsheet and make sure your Fruit and Veg sheet is selected.

| Name     | Monday | Tuesday | Wednesday | Thursday | Friday |
|----------|--------|---------|-----------|----------|--------|
| Bob      |        |         |           |          |        |
| Harrison | 4      | 4       | 4         | 4        | 1      |
| Hussen   |        |         |           |          |        |
| Pettit   | 6      | 3       | 5         | 1        | 5      |
| Sophie   |        |         |           |          |        |
| Cornish  | 2      | 2       | 5         | 2        | 4      |
| Joe      |        |         |           |          |        |
| Girard   | 1      | 4       | 2         | 6        | 3      |
| Kerry    |        |         |           |          |        |
| Reeves   | 6      | 2       | 3         | 4        | 3      |
| Steve    |        |         |           |          |        |
| Jobs     | 5      | 1       | 5         | 3        | 2      |
| David    |        |         |           |          |        |
| Rice     | 5      | 2       | 3         | 3        | 1      |

o Enter all the data collected.

### Your spreadsheet should look like this now;

|     | нэ 👻 (*               | f <sub>x</sub> |         |            |          |        |          |      |        |
|-----|-----------------------|----------------|---------|------------|----------|--------|----------|------|--------|
|     | A                     | В              | С       | D          | E        | F      | G        | н    | - E    |
| 1   |                       | Data           | Entry F | orm        |          |        |          |      |        |
| 2   |                       |                |         |            |          |        |          |      |        |
| 3   | Healthy Eating Survey |                |         | Group Name |          | Name:  | Your own | name |        |
| 4 5 | Name                  | Monday         | Tuesday | Wednesday  | Thursday | Friday |          |      | 6<br>1 |
| 6   | Bob Harrison          | 4              | 4       | 4          | 4        | 1      |          |      |        |
| 7   | Hussen Pettit         | 6              | 3       | 5          | 1        | 5      |          |      |        |
| 8   | Sophie Cornish        | 2              | 2       | 5          | 2        | 4      |          |      |        |
| 9   | Joe Girard            | 1              | 4       | 2          | 6        | 3      |          |      |        |
| 10  | Kerry Reeves          | 6              | 2       | 3          | 4        | 3      |          |      | [      |
| 11  | Steve Jobs            | 5              | 1       | 5          | 3        | 2      |          |      |        |
| 12  | David Rice            | 5              | 2       | 3          | 3        | 1      |          |      |        |
| 13  |                       |                |         |            |          |        |          |      |        |
| 14  | TOTAL                 |                |         |            |          |        |          |      |        |
| 15  |                       |                |         |            |          |        |          |      |        |
| 16  | AVEDAGE               |                |         |            |          |        |          |      |        |

# **Copying formula from another sheet**

You have already entered Formula for the total, Average, Maximum and Minimum on your Measurements worksheet. You can copy the formula onto the Fruit and Veg worksheet.

o Click on the Measurements worksheet.

| A  | A              | В          | C          | D               | E     | F             | G |
|----|----------------|------------|------------|-----------------|-------|---------------|---|
| 1  | Measurements   |            | Group Name |                 | Name: | Your own name |   |
| 2  | 1.1.1          |            |            |                 |       |               |   |
| 3  | Name           | Height(cm) | Weight(kg) | Foot length(cm) |       |               |   |
| 4  | Bob Harrison   | 131.5      | 32.5       | 19.0            |       |               |   |
| 5  | Hussen Pettit  | 126.0      | 31.0       | 18.2            |       |               |   |
| 6  | Sophie Cornish | 136.0      | 37.9       | 18.8            |       |               |   |
| 7  | Joe Girard     | 123.5      | 32.7       | 21.0            |       |               |   |
| 8  | Kerry Reeves   | 132.9      | 40.0       | 18.3            |       |               |   |
| 9  | Steve Jobs     | 127.5      | 31.0       | 21.0            |       |               |   |
| 10 | David Rice     | 122.0      | 60,0       | 24.0            |       |               |   |
| 11 |                |            |            |                 |       |               |   |
| 12 | TOTAL          | 899.4      | 265.1      | 140.3           |       |               |   |
| 13 |                | 1          |            |                 |       |               |   |
| 14 | AVERAGE        | 128.5      | 37.9       | 20.0            |       |               |   |
| 15 |                |            |            |                 |       |               |   |
| 16 | MAXIMUM        | 136.0      | 60.0       | 24.0            |       |               |   |
| 17 |                |            |            |                 |       |               |   |
| 18 | MINIMUM        | 122.0      | 31.0       | 18.2            |       |               |   |
| 19 |                |            |            |                 |       |               |   |
| 20 |                |            |            |                 |       |               |   |
| 21 | -              |            |            |                 |       |               |   |
| 22 |                |            |            |                 |       |               |   |
| 23 |                |            |            |                 |       |               |   |

## o Select Cells B12 to B18

### o Click on the copy button

| 1    | Calibri           | - 11       | tayout For | = = = >-        | i ≣ v      | /rap Text        | Numb |
|------|-------------------|------------|------------|-----------------|------------|------------------|------|
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| City | B12               | icture     | fr =SUM(I  | 52697           | uniene     |                  | -    |
| -    |                   |            | C.         | and a disc      | -          | -                |      |
| 1    | A<br>Measurements | B          | Group Name | D               | E<br>Name: | F<br>Your own na |      |
| 2    | measurements      |            | Group Name |                 | Name.      | Tour own ha      | ne   |
| 3    | Name              | Height(cm) | Weight(kg) | Foot length(cm) |            |                  |      |
| 4    | Bob Harrison      | 131.5      |            |                 |            |                  |      |
| 5    | Hussen Pettit     | 126.0      |            |                 |            |                  |      |
|      | Sophie Cornish    | 136.0      |            |                 |            |                  |      |
| 7    | Joe Girard        | 123.5      | 32.7       | 21.0            |            |                  |      |
| 8    | Kerry Reeves      | 132.9      | 40.0       | 18.3            |            |                  |      |
| 9    | Steve Jobs        | 127.5      | 31.0       | 21.0            |            |                  |      |
| 10   | David Rice        | 122.0      | 60.0       | 24.0            |            |                  |      |
| 11   |                   |            |            |                 |            |                  |      |
| 12   | TOTAL             | 899.4      | 265.1      | 140.3           |            |                  |      |
| 13   |                   |            |            |                 |            |                  |      |
|      | AVERAGE           | 128.5      | 37.9       | 20.0            |            |                  |      |
| 15   |                   | _          |            |                 |            |                  |      |
|      | MAXIMUM           | 136.0      | 60.0       | 24.0            |            |                  |      |
| 17   | Sugar China       |            |            |                 |            |                  |      |
| _    | MINIMUM           | 122.0      | 31.0       | 18.2            |            |                  |      |
| 19   |                   |            |            |                 |            |                  |      |
| 20   |                   |            |            |                 |            | -                |      |
| 21   |                   |            |            |                 |            |                  |      |
| 22   |                   |            |            |                 |            |                  |      |

o Click on the Fruit and Veg sheet tab

#### o Click in cell B14 on the Fruit and Veg sheet.

| 4  | A                     |        | С       | D          | E        | F      | 6        | H    |   | J. | K |
|----|-----------------------|--------|---------|------------|----------|--------|----------|------|---|----|---|
| 1  |                       | Data   | Entry F | orm        |          |        |          |      |   |    |   |
| 2  |                       |        |         |            |          |        |          |      |   |    |   |
| 3  | Healthy Eating Survey |        |         | Group Name |          | Name:  | Your own | name |   |    |   |
| 4  |                       | 10     | 1 22    |            |          |        |          |      |   |    |   |
| 5  | Name                  | Monday | Tuesday | Wednesday  | Thursday | Friday |          |      | - |    |   |
| 6  | Bob Harrison          | 4      | 4       | 4          | 4        | 1      |          |      |   |    |   |
| 7  | Hussen Pettit         | 6      | 3       | 5          | 1        | 5      |          |      |   |    |   |
| 8  | Sophie Cornish        | 2      | 2       | 5          | 2        | 4      |          |      |   |    |   |
| 9  | Joe Girard            | 1      | 4       | 2          | 6        | 3      |          |      |   |    |   |
| 10 | Kerry Reeves          | 6      | 2       | 3          | 4        | 3      |          |      |   |    |   |
| 11 | Steve Jobs            | 5      | 1       | 5          | 3        | 2      |          |      |   |    |   |
| 12 | David Rice            | 5      | 2       | 3          | 3        | 1      |          |      |   |    |   |
| 13 |                       |        |         |            |          |        |          |      |   |    |   |
| 14 | TOTAL                 |        |         |            |          |        |          |      |   |    |   |
| 15 |                       |        |         |            |          |        |          |      |   |    |   |
|    | AVERAGE               |        |         |            |          |        |          |      |   |    |   |
| 17 |                       |        |         |            |          |        |          |      |   |    |   |
| 18 | MAXIMUM               |        |         |            |          |        |          |      |   |    |   |
| 19 |                       |        |         |            |          |        |          |      |   |    |   |
| 20 | MINIMUM               |        |         |            |          |        |          |      |   |    |   |
| 21 |                       |        |         |            |          |        |          |      |   |    |   |
| 33 |                       |        |         |            |          |        |          |      |   |    |   |

#### o Click the paste button and notice the new values.

| 1  | А                     | В      | С          | D          | E        | F      | G        | Н    |
|----|-----------------------|--------|------------|------------|----------|--------|----------|------|
| 1  |                       | Data I | Entry F    | orm        |          |        |          |      |
| 2  |                       |        |            |            |          |        |          |      |
| 3  | Healthy Eating Survey |        |            | Group Name |          | Name:  | Your own | name |
| 5  | Name                  | Monday | Tuesday    | Wednesday  | Thursday | Friday |          |      |
| 6  | Bob Harrison          | 4      | 4          | 4          | 4        | 1      |          |      |
| 7  | Hussen Pettit         | 6      | 3          | 5          | 1        | 5      |          |      |
| 8  | Sophie Cornish        | 2      | 2          | 5          | 2        | 4      |          |      |
| 9  | Joe Girard            | 1      | 4          | 2          | 6        | 3      |          |      |
| 10 | Kerry Reeves          | 6      | 2          | 3          | 4        | 3      |          |      |
| 11 | Steve Jobs            | 5      | 1          | 5          | 3        | 2      |          |      |
| 12 | David Rice            | 5      | 2          | 3          | 3        | 1      |          |      |
| 13 |                       |        |            |            |          |        |          |      |
| 14 | TOTAL                 | 29.0   |            |            |          |        |          |      |
| 15 | 10.50.5               |        |            |            |          |        |          |      |
| 16 | AVERAGE               | 4.1    |            |            |          |        |          |      |
| 17 |                       |        |            |            |          |        |          |      |
| 18 | MAXIMUM               | 6.0    |            |            |          |        |          |      |
| 19 |                       |        |            |            |          |        |          |      |
| 20 | MINIMUM               | 1.0    | 1          |            |          |        |          |      |
| 21 |                       | 1      | 🛱 (Ctrl) • |            |          |        |          |      |

o Copying using the Fill handle

In the last chapter you used the Fill handle to fill in the days of the week. Excel entered the days of the week from Tuesday to Friday automatically. This fill handle can also be used to quickly copy test, numbers and formula. You can copy them into adjacent cells, instead of using the copy and paste button.

o Make sure cells B14 to B20 are selected.

| 13 |         |      |
|----|---------|------|
| 14 | TOTAL   | 29.0 |
| 15 |         |      |
| 16 | AVERAGE | 4.1  |
| 17 |         |      |
| 18 | MAXIMUM | 6.0  |
| 19 |         |      |
| 20 | MINIMUM | 1.0  |
| 21 |         |      |
| -  |         |      |

## o Drag the fill handle from the bottom right-hand corner of cell B20 across to cell F20

| 12 David Rice | 5    | 2 | 3 | 3 | 1 |
|---------------|------|---|---|---|---|
| 13            |      |   |   |   |   |
| 14 TOTAL      | 29.0 |   |   |   |   |
| 15            |      |   |   |   |   |
| 16 AVERAGE    | 4.1  |   |   |   |   |
| 17            |      |   |   |   |   |
| 18 MAXIMUM    | 6.0  |   |   |   |   |
| 19            |      |   |   |   |   |
| 20 MINIMUM    | 1.0  |   |   |   |   |
| 21            |      |   |   |   |   |
| 20            |      |   |   |   |   |

## o It should now look like this

|          | A                     | В      | С       | D          | E        | F      | G        | н    | 1 |
|----------|-----------------------|--------|---------|------------|----------|--------|----------|------|---|
| 1        |                       | Data I | intry F | orm        |          |        |          |      |   |
| 2        |                       |        |         |            |          |        |          |      | 1 |
| 3        | Healthy Eating Survey |        |         | Group Name |          | Name:  | Your own | name |   |
| 4        | N 1. R. 1             |        |         | 12         |          |        |          |      |   |
| 5        | Name                  | Monday | Tuesday | Wednesday  | Thursday | Friday | -        |      |   |
| 6        | Bob Harrison          | 4      | 4       | 4          | 4        | 1      |          |      |   |
| 7        | Hussen Pettit         | 6      | 3       | 5          | 1        | 5      |          |      |   |
| 8        | Sophie Cornish        | 2      | 2       | 5          | 2        | 4      |          |      |   |
| 9        | Joe Girard            | 1      | 4       | 2          | 6        | 3      |          |      |   |
| 10       | Kerry Reeves          | 6      | 2       | 3          | 4        | 3      |          |      |   |
| 11       | Steve Jobs            | 5      | 1       | 5          | 3        | 2      |          |      |   |
| 12       | David Rice            | 5      | 2       | 3          | 3        | 1      |          |      |   |
| 13       |                       |        |         |            |          |        |          |      |   |
|          | TOTAL                 | 29.0   | 18.0    | 27.0       | 23.0     | 19.0   |          |      |   |
| 15       |                       |        |         |            |          |        |          |      |   |
| 16       | AVERAGE               | 4.1    | 2.6     | 3.9        | 3.3      | 2.7    |          |      |   |
| 17       |                       | -      |         |            |          |        |          |      |   |
| 18       | MAXIMUM               | 6.0    | 4.0     | 5.0        | 6.0      | 5.0    |          |      |   |
| 19<br>20 | MINIMUM               | 10     |         | 20         |          |        |          |      |   |
| 20       | MINIMUM               | 1.0    | 1.0     | 2.0        | 1.0      | 1.0    |          |      |   |
| 22       |                       |        |         |            |          |        | -        |      |   |
| 23       |                       |        |         |            |          |        |          |      |   |
| 24       |                       |        |         |            |          |        |          |      |   |
| 25       |                       |        |         |            |          |        |          |      |   |

If you make a mistake and it goes wrong, use the undo button and try again. The pointer should be a cross, not an arrow when you drag the Fill handle.



# **Moving cell contents**

Now you are going to move some cells in Row 3

- o Click in cell D3
- o Drag its left hand border to cell C3

| А                     | В      | С        | D         |
|-----------------------|--------|----------|-----------|
|                       | Data I | Entry F  | orm       |
| Healthy Eating Survey |        | Group Na | ne        |
| Name                  | Monday | Tuesday  | Wednesday |
| Bob Harrison          | 4      | 4        | 4         |

o Select F3 and G3. Drag the left hand-border of F3 to cell E3 to move your name.

| A             | В      | С         | D         | E        | F        | G    |
|---------------|--------|-----------|-----------|----------|----------|------|
|               | Data   | Entry F   | orm       |          |          |      |
| Eating Survey |        | Group Nar | ne        | Name:    | Your own | name |
|               | Monday | vehaut    | Wednesday | Thursday | Friday   |      |

## Using the shortcut menu to copy and paste

As part of the data analysis it would be useful to find out the average number of fruit and vegetables eaten by each member of the group.

- o Right click cell A16.
- o Select **copy**
- o Right click cell G5

#### o Select Paste

| 4 | A                     | В      | С         | D         | E        | F          | G       | Н |
|---|-----------------------|--------|-----------|-----------|----------|------------|---------|---|
| 1 |                       | Data   | Entry F   | orm       |          |            |         |   |
| 2 |                       |        |           |           |          |            |         |   |
| 3 | Healthy Eating Survey |        | Group Nar | ne        | Name:    | Your own n | ame     |   |
| 4 |                       |        |           |           |          |            |         |   |
| 5 | Name                  | Monday | Tuesday   | Wednesday | Thursday | Friday     | AVERAGE |   |
| 6 | Bob Harrison          | 4      | 4         | 4         | 4        | 1          |         |   |
| 7 | Hussen Pettit         | 6      | 3         | 5         | 1        | 5          |         |   |
| 8 | Sophie Cornish        | 2      | 2         | 5         | 2        | 4          |         |   |
| ~ |                       | 1      | И         | 2         | 6        | 2          |         |   |

o Make the heading **AVERAGE** bold and right-align it.

You may need to widen the columns a little and put a border around the cells in column G.

o Select column headers B to G.

o Drag the boundary between the column headers D and E. Make them wide enough to hold the longest day **WEDNESDAY**.

o Use the borders tool to put borders around the cells in column G.

|       | Name:    | Your own name |         |  |  |  |
|-------|----------|---------------|---------|--|--|--|
| esday | Thursday | Friday        | AVERAGE |  |  |  |
| 4     | 4        | 1             |         |  |  |  |
| 5     | 1        | 5             |         |  |  |  |
| 5     | 2        | 4             |         |  |  |  |
| 2     | 6        | 3             |         |  |  |  |
| 3     | 4        | 3             |         |  |  |  |
| 5     | 3        | 2             |         |  |  |  |
| 3     | 3        | 1             |         |  |  |  |

# **Entering the formula for Average**

- o Click in cell G6
- o Type **=average(**
- o Drag across cells B6 to F6.
- o Type ) and press **Enter**.

o Click in cell G6 and drag the Fill handle down to cell G12 to copy the formula to the other cells.

o Copy the formula from F18 to G18 and from F20 to G20

| В      | С         | D         | E        | F          | G       |
|--------|-----------|-----------|----------|------------|---------|
| Data E | Entry F   | orm       |          |            |         |
|        | Group Nar | ne        | Name:    | Your own n | ame     |
| Monday | Tuesday   | Wednesday | Thursday | Friday     | AVERAGE |
| 4      | 4         | 4         | 4        | 1          | 3       |
| 6      | 3         | 5         | 1        | 5          | 4       |
| 2      | 2         | 5         | 2        | 4          | 3       |
| 1      | 4         | 2         | 6        | 3          | 3       |
| 6      | 2         | 3         | 4        | 3          | 4       |
| 5      | 1         | 5         | 3        | 2          | 3       |
| 5      | 2         | 3         | 3        | 1          | 3       |
| 29.0   | 18.0      | 27.0      | 23.0     | 19.0       |         |
| 4.1    | 2.6       | 3.9       | 3.3      | 2.7        |         |
| 6.0    | 4.0       | 5.0       | 6.0      | 5.0        | 4.0     |
| 1.0    | 1.0       | 2.0       | 1.0      | 1.0        | 2.8     |
|        |           |           |          |            |         |
|        |           |           |          |            |         |

o Save your spreadsheet.

# **Printing the Results.**

o Click on the File tab and select Print.

You will be able to see the Print preview. You may not be able to see all of the worksheet. If you need to change the print area, you will need to;

- o Click on the Page Layout Tab.
- o Highlight all the cells from A1 to G20.

| he       | mes O Effects - A<br>Themes | Aargins O | rientation Si | Fag 3 c   | Breaks Backgro  | Titles   | Height<br>Stale<br>Stale | 100%    |
|----------|-----------------------------|-----------|---------------|-----------|-----------------|----------|--------------------------|---------|
|          | Print_Area                  | - (*      | fx            |           | lear Print Area |          |                          |         |
| Å        | A                           |           | В             | С         | D               | E        | F                        | G       |
| 1        |                             |           | Data E        | Entry F   | orm             |          |                          |         |
| 2        |                             |           |               |           |                 |          |                          |         |
| 3        | Healthy Eating Su           | irvey     |               | Group Nar | ne              | Name:    | Your own na              | ame     |
| 5        | Name                        |           | Monday        | Tuesday   | Wednesday       | Thursday | Friday                   | AVERAGE |
| 6        | Bob Harrison                |           | 4             | 4         | 4               | 4        | 1                        | 3       |
| 7        | Hussen Pettit               |           | 6             | 3         | 5               | 1        | 5                        | 4       |
| 8        | Sophie Cornish              |           | 2             | 2         | 5               | 2        | 4                        | 3       |
| 9        | Joe Girard                  |           | 1             | 4         | 2               | 6        | 3                        | 3       |
| 10       | Kerry Reeves                |           | 6             | 2         | 3               | 4        | 3                        | 4       |
| n        | Steve Jobs                  |           | 5             | 1         | 5               | 3        | 2                        | 3       |
| 12       | David Rice                  |           | 5             | 2         | 3               | 3        | 1                        | з       |
| 13       |                             |           |               |           |                 |          |                          |         |
| 14<br>15 | TOTAL                       |           | 29.0          | 18.0      | 27.0            | 23.0     | 19.0                     |         |
| 16       | AVERAGE                     |           | 4.1           | 2.6       | 3.9             | 3.3      | 2.7                      |         |
| 17       |                             |           |               |           |                 |          |                          |         |
| 18<br>19 | MAXIMUM                     |           | 6.0           | 4.0       | 5.0             | 6.0      | 5.0                      | 4.0     |
| 20       | MINIMUM                     |           | 1.0           | 1.0       | 2.0             | 1.0      | 1.0                      | 2.8     |

- o Select the Print area button on the ribbon.
- o Select Set Print Area from the menu that will appear.
- o Now click on the file tab and select the print option to view the print preview.
- o Save and close the Spreadsheet.

Well done – you now have cracked the basics of a Microsoft Excel 2010.