



Spreadsheet Methods 5N1977

3. Common Spreadsheet Usability Features

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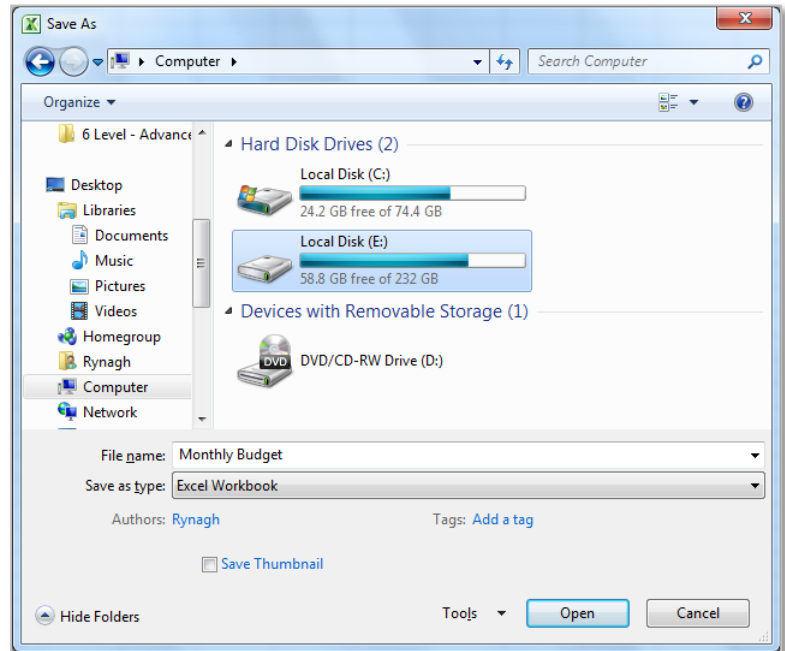


1. SAVE THE SPREADSHEET, LOAD AN EXISTING SPREADSHEET AND EXIT FROM THE APPLICATION

Save a Spreadsheet

To save spreadsheets go to **File** → **Save** or **Save As**. If it the first time the spreadsheet is being saved the **Save As** window will open. Here 3 options should be decided - the file **location** the document will be saved, the **File Name** and the **Save as type**.

1. The location the document is saved to should be selected from the left pane and the centre panel. To save to a USB scroll the bar down to computer and click on the USB. If a new folder is required for the spreadsheet click on **New Folder** then name the folder and double click on it to open it.
2. Ensure that a relevant **File Name** is chosen for the spreadsheet - Book1 is NOT a good file name! In this example the spreadsheet is named *Monthly Budget*.
3. Chose the **Save as type** this is usually always the default **Excel Workbook** however in LO5 we will be using the **Excel Macro-Enabled Workbook**. Other commonly used file types are **Excel 97-2003 Workbook** (used to ensure the spreadsheet is backward compatible with older software), **Excel Template**, **Text** (tab delimited), **PDF** and **Web Page**.



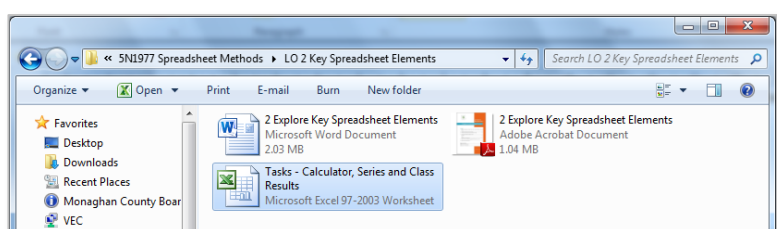
When all three options have been decided click on **Save**.

If a document has been previously saved the **Save** button can be used to save onto the same file location, name and file type, the **Save As** window is only needed on the first save. The keyboard shortcut for saving is **Ctrl + S**, learn this shortcut and use it regularly when working on a document.

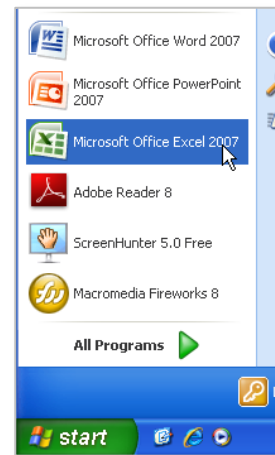
Load or Open an Existing Spreadsheet

To open a spreadsheet file which has already been created two methods can be used:

1. Open the file from the folder it is saved in, browse to the folder in **Documents** and double click on the icon for the spreadsheet.



2. Open the Excel Software package from the start menu. This will open a blank spreadsheet, go to **File** → **Open** and browse to the location of the spreadsheet from the **Open** window. From here double click on the file and it will open in the Excel program in the software.



Exit from the Excel Application

Always ensure the spreadsheet is saved before closing Excel. Use **Save As** or **Ctrl + S** as previously explained. Then exit the excel application.



There are two ways to do this go to **File** → **Exit**.

Or alternatively use the Close button at the top right of the screen.

2. EDIT FUNCTIONS ON A TOOLBAR

Display or Hide the Ribbon

The ribbon toolbar can be hidden or shown using the **Minimize/Expand the ribbon** button in the top right of the ribbon.

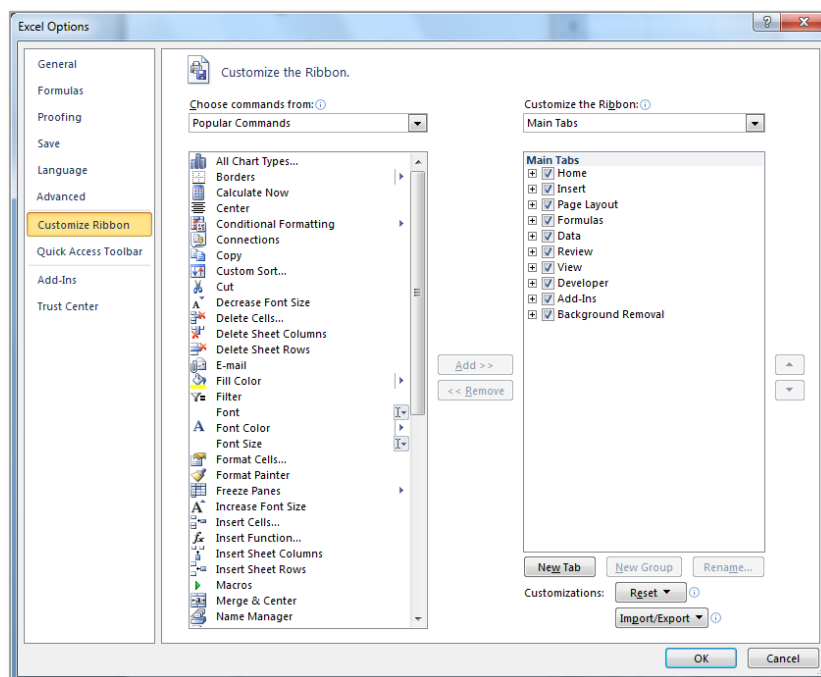
TASK 1 Experiment with the display and hide ribbon button.



Display or Hide a Tab

There are 8 tabs shown on the ribbon these are **Home**, **Insert**, **Page Layout**, **Formulas**, **Data**, **Review**, **View** and additional menus which will appear when required, for example, an additional tab called **Drawing Tools Format** is shown when a shape is selected.

To hide or display any of these tabs or to show the additional **Developer** tab go to **File** → **Options** → **Customize Ribbon**.



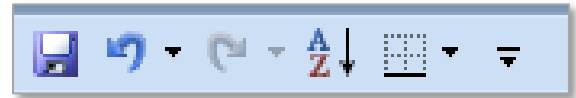
This will open the **Excel Options** window as shown. From here it is possible to turn off a tab or group or turn on a tab by selecting the correct tick box.

TASK 2 Experiment by turning on and off the Home tab.

Quick Access Toolbar

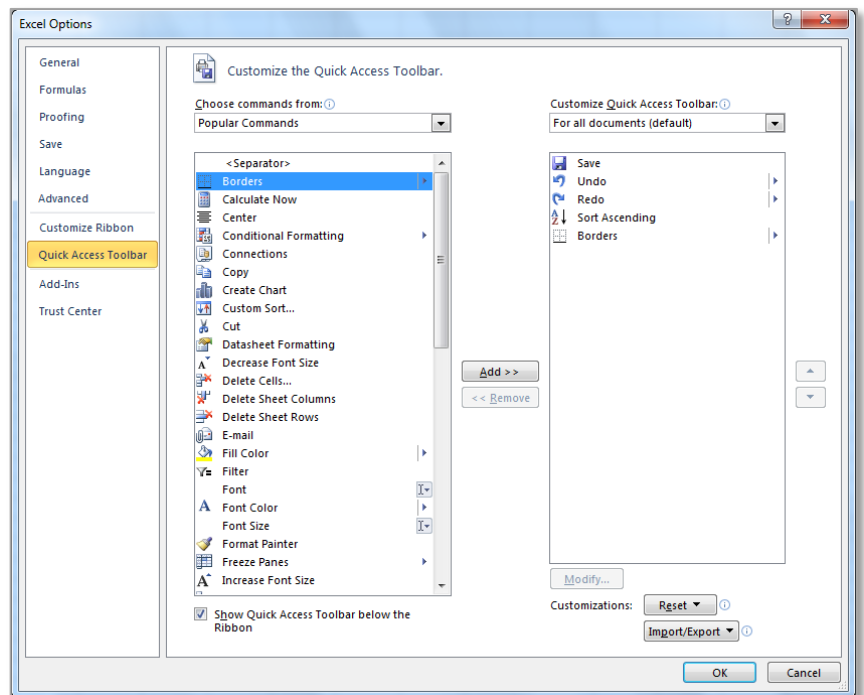
The Quick Access Toolbar is a shortcut toolbar which is visible above or below the ribbon (move it by selecting show above/below ribbon from its drop down list). Popular commands can be added and removed from this toolbar to suit the individual user.

To add commands to this toolbar, click on the drop down arrow at the end of the toolbar and select the command needed to turn it on.



Additional commands can be added by opening the More Commands option.

This will open the Excel Options facility. Through this window any of the commands available in Excel can be added to the Quick Access Toolbar. To add these options to the Quick Access Toolbar click on the function needed and click on the Add button. In this example the Sort Ascending and Borders commands have been added to the quick access toolbar.



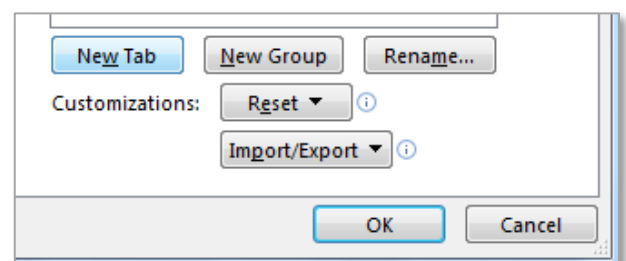
Commands are organised by tab, selecting the tab which contains the command needed from the **Choose commands from** dropdown as shown in the diagram.

TASK 3 Add the commands Sort Ascending, Borders and Format Painter to your quick access toolbar.

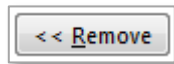
Display and Customise Toolbars

As previously shown in **Display or Hide a Tab** the Developer toolbar can be turned on from **Excel Options** to allow access to Macros, Controls and XML. In addition to this the user can create new tabs and groups on the ribbon. Go to **File → Options → Customize Ribbon** and in the bottom right corner of the window there are the following buttons.

TASK 4 Create a new tab and rename it as your name. Add a new group to the tab created and add five commands that you commonly use to this group.



Tabs and groups can be removed after they have been created by clicking on the relevant tick box and using the **remove** button.



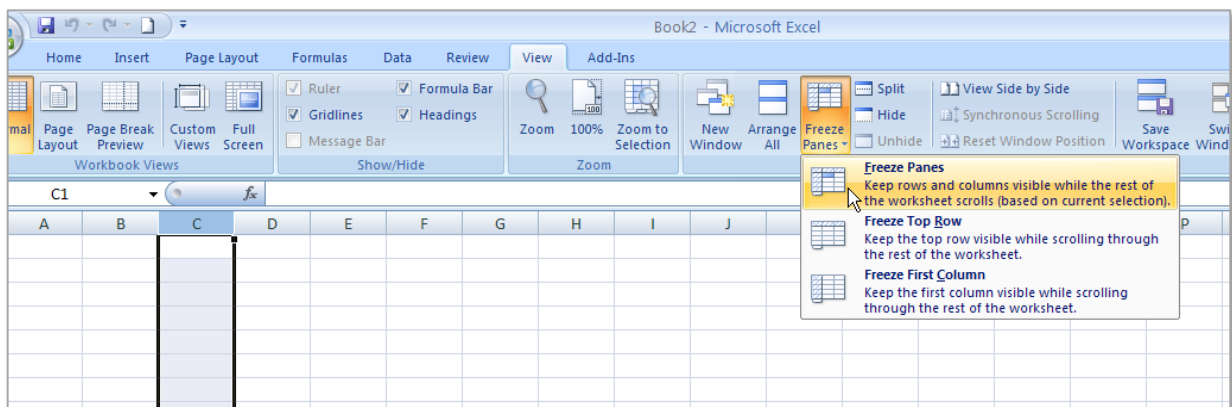
TASK 5 Remove the tab after you have created it.

3. EMPLOY WINDOW MANAGEMENT TECHNIQUES

Freezing Panes

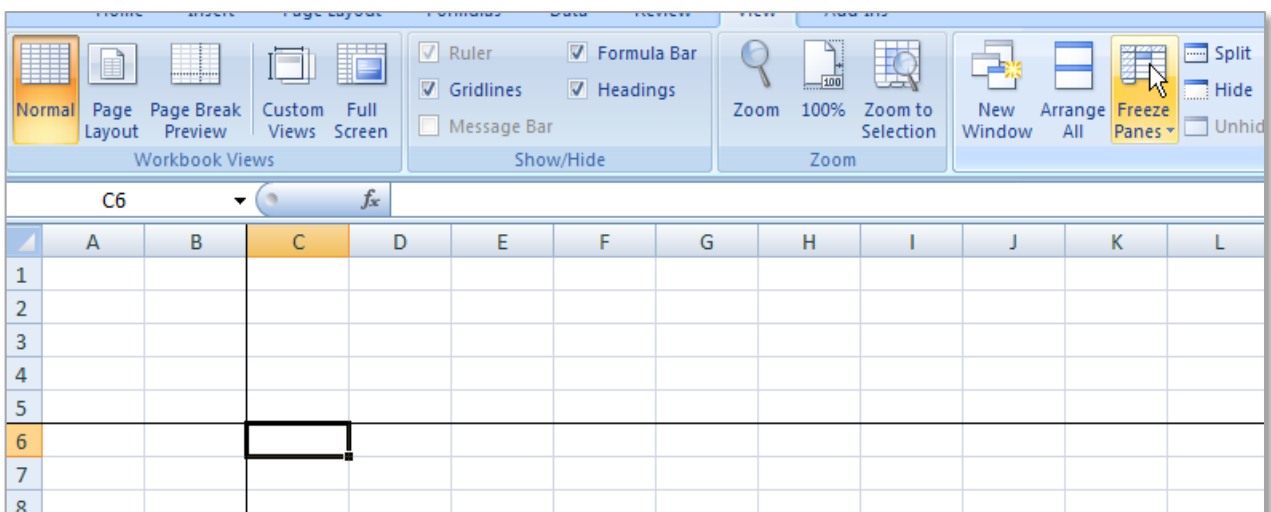
The **Freeze Panes** command allows a row or column to be frozen in place. This can also be applied to a group of rows or a group of columns.

To freeze from a **column** from moving across the page, highlight the column and go to **View** tab to the **Window** group click on the **Freeze Panes** button on the **View** menu/ribbon as shown in this image.



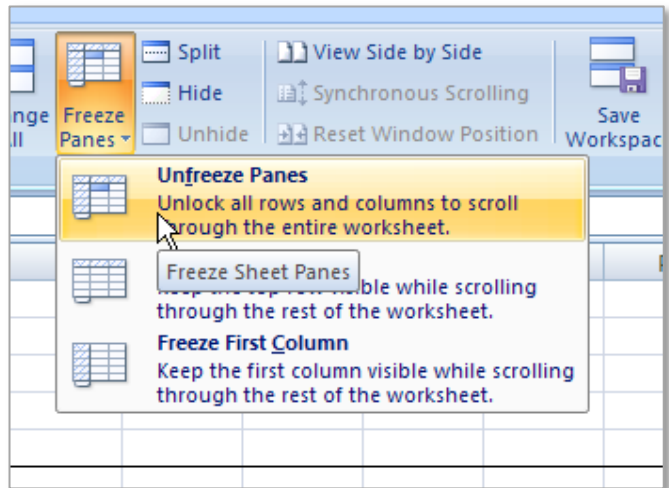
In the same way it is possible to freeze from a **row** down the page, highlight the row and click on the Freeze Panes button.

Finally to freeze both the **top group of rows and side columns** click into the cell under the cross point of the two sections and the rows and columns to the top and left become frozen.



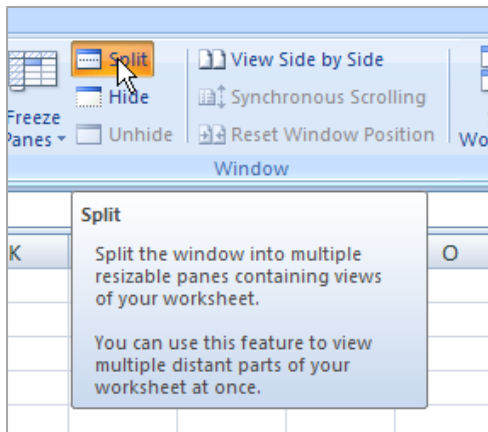
This is very useful when a spreadsheet has become bigger than the page size it is being viewed on. To turn off a frozen section of cell click on the **Unfreeze Panes** button as shown.

TASK 6 Freeze a worksheet by a column, row and a group of columns and rows. Then turn the freeze option off.



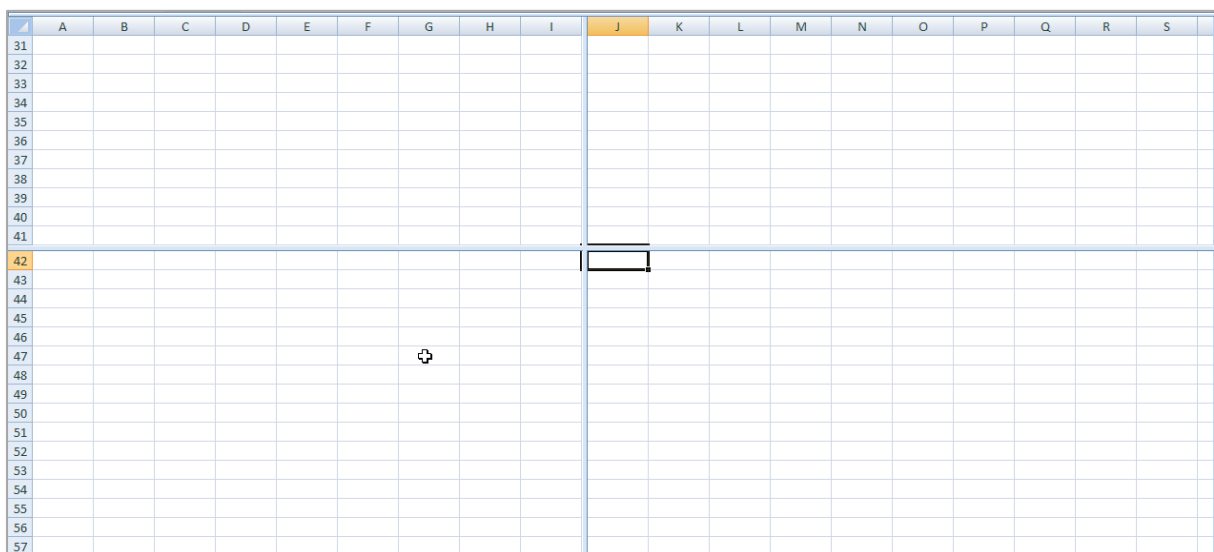
Split Screen

A split screen allows the user to look at and edit different parts of a worksheet at the same time to

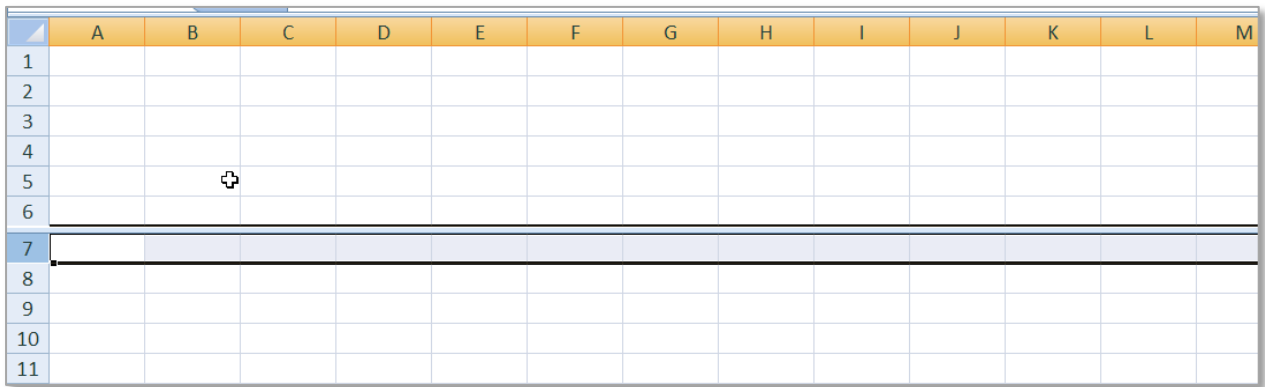


facilitate this, the split screen option splits the window being worked on into multiple resizable panes all showing the same worksheet. If any information in any one of the split screens is changed, it is automatically changed in the other windows of the screen, this is because only one copy of the spreadsheet is being worked on but it is being viewed from different sections.

To split a spreadsheet click on a cell and click on the **Split** button on the **View** ribbon in the **Window** group. This will split the spreadsheet in four different sections from that cell. To remove the split click on the split button again and the spreadsheet will return to normal.



In addition a screen can be split in two from one row or column. To do this highlight the row or column where the split will start from and click on the **Split** button.

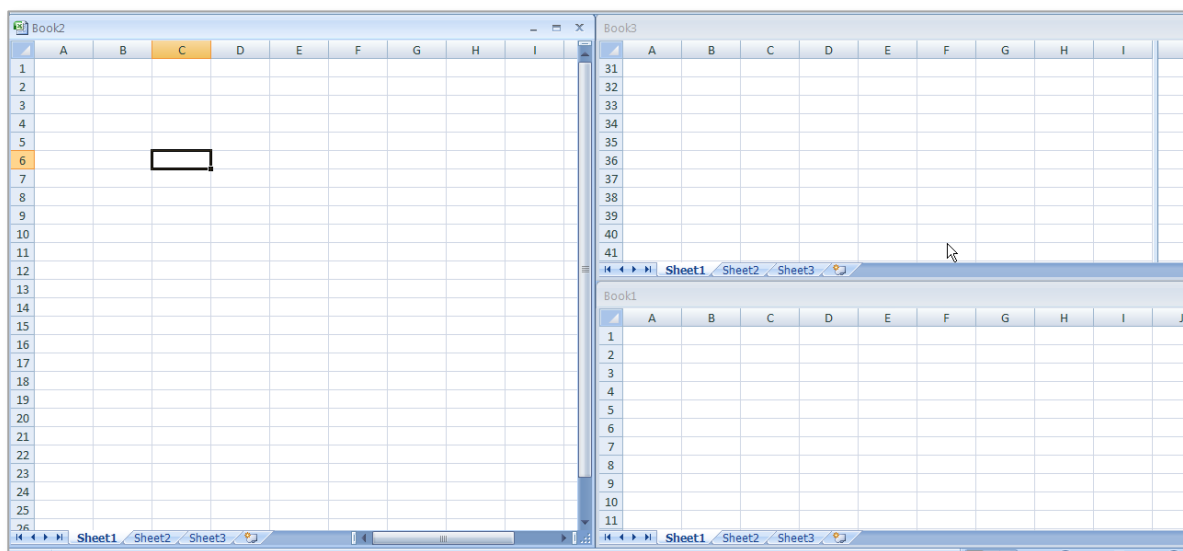
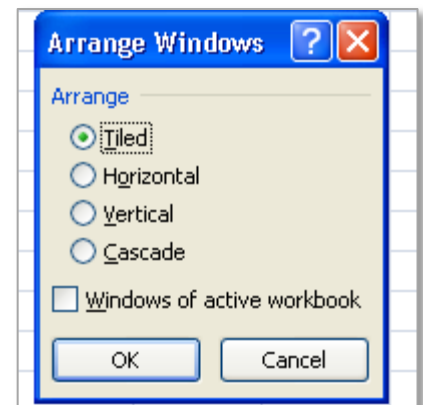


Arranging Windows

To show more than one window at the same time go to the **View** tab to the **Window** group and select the **Arrange All** button this will show all Excel windows which are currently open on the one page.

Choose how the multiple windows will be displayed **Tiled**, **Horizontal**, **Vertical** or **Cascade**. For example if there are three Excel spreadsheets currently open they will be displayed as follows with the **tiled** arrangement.

TASK 7 Open two workbooks and experiment with the **Arrange All** command.

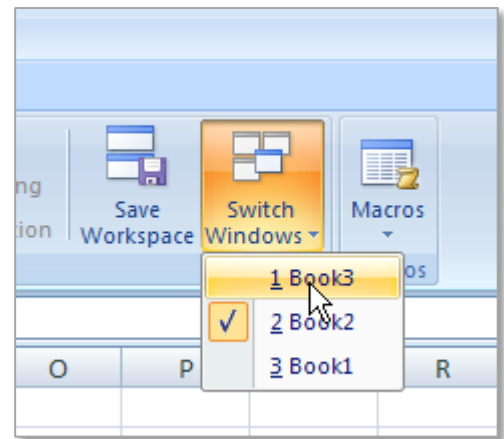


To return to showing any one spreadsheet double click on the **title bar** at the top of the spreadsheet required for viewing.

Switching Windows

To **Switch Windows** means swapping or exchanging between two different windows or two different excel spreadsheets. To use this function first open at least two different excel spreadsheets. Then go to the **View** tab to the **Window** group and select the **Switch Windows** command.

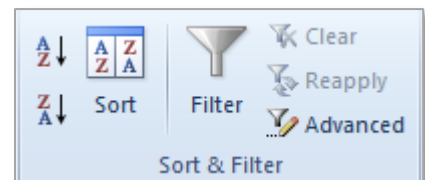
To select the spreadsheet needed click on the name of the spreadsheet from the drop down menu. This tool can be very useful if more than one spreadsheet is open and the user needs to switch between the spreadsheets regularly.





4. SORT A SPREADSHEET

On a Selected Key

Sorting can be applied to a table down a column using the label of the column. This is called sorting on a **Selected Key**. The **Sort** command can be accessed on the **Data** tab in the **Sort & Filter** group and on the **Home** tab in the **Editing** group.



To apply a sort to a column by a key, click into the table on the relevant column and click on the relevant sort button  (ascending) or  (descending). The data is instantly sorted according to the selected column.

Using a Custom Sort

To apply a custom sort to a table go to the **Data** tab to the **Sort & Filter** group, highlight all the cells in the table including the title cells of the table (or click in the table) and click on **Sort**.

	A	B	C	D	E	F	G	H
1								
2	Sports Shop Football Sales							
3								
4	Club	Shirt	Shorts	Hats				
5	Liverpool	564	226	346				
6	Manchester	451						
7	Juventus	351						
8	Aston Villa	325						
9	Leicester	313						
10	Chelsea	231						
11	Newcastle	214						
12	Blackburn	134						
13	Blackburn	134						
14								

Sort

Add Level
 Delete Level
 Copy Level
 Options...
 My data has headers

Column: Sort On: Order:

Sort by: Shirt Values Largest to Smallest

This brings up the **Sort** window to sort using the labels entered for the table ensure the **My data has headers** tick box is turned on. Then choose the column to sort and the way the information is sorted, data can be sorted by **Values, Cell Colour, Font Colour** and **Cell Icon**.

TASK 8 Type the following table into a worksheet and experiment with both **Key Sorting** and **Custom Sorting**. For the custom sort organise the data first by club, then shirts and then shorts.

	A	B	C	D	E
1					
2	Sports Shop Football Sales				
3					
4	Club	Shirt	Shorts	Hats	
5	Chelsea	231	221	98	
6	Juventus	351	361	106	
7	Blackburn	134	234	108	
8	Newcastle	214	111	115	
9	Blackburn	134	24	156	
10	Leicester	313	225	156	
11	Aston Villa	325	123	213	
12	Manchester	451	112	241	
13	Liverpool	564	226	346	
14					
15					

NOTES:

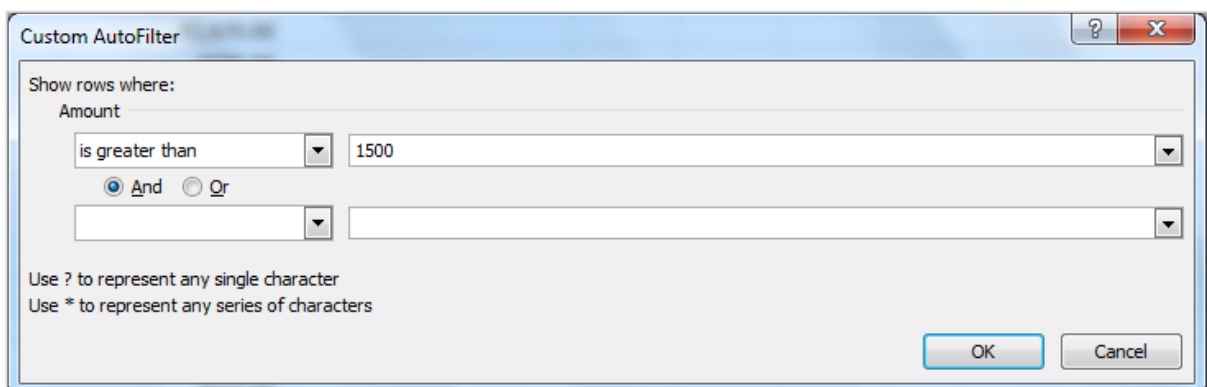
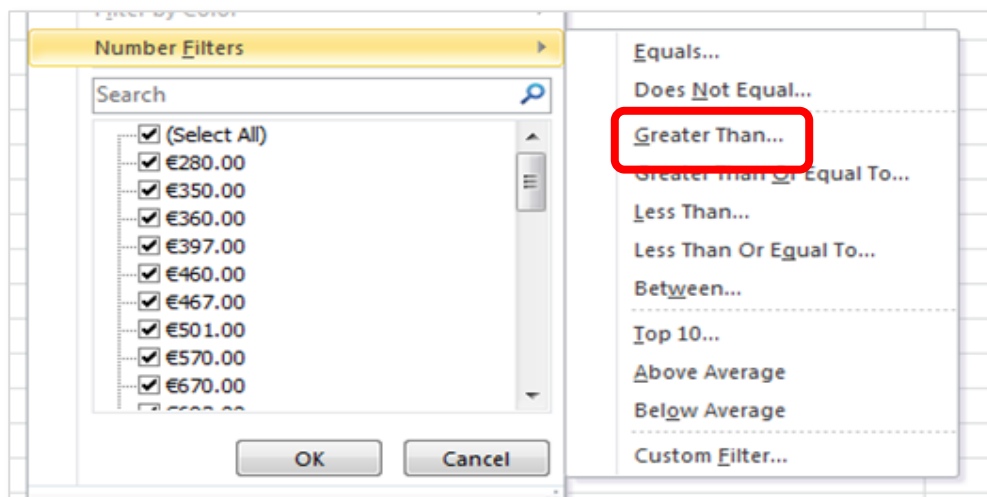
5. USE FILTERS AND THEIR RELATED OPTIONS

Filtering is applied to lists of data, allowing certain data to be display and unrequired data to be temporarily hidden. To turn on filtering highlight all the data and headings and go to the **Data** tab to the **Sort & Filter** group and click on the **Filter** command button. .

There are three types of filters that can be used they are **text**, **date** and **number**. Filters are applied differently depending on the data to be filtered.

Numbers

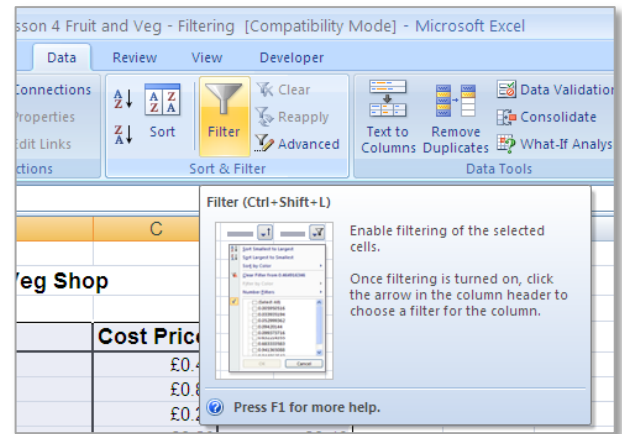
To apply a **Custom Filter** to a **NUMBER** there are a variety of options experiment with some of these options to understand how they behave. Notice that those options with the three dots after them for example **Greater than...** will open a **Custom Auto Filter** dialogue box to allow the required figures to be set (see below).



Text

Example 1

To sort data by a single value or text item, drop down the filter list as shown and select the desired option. In the example show the data is being filtered by the word apple.



Fruit and Veg Shop				
	Fruit	Variety	Cost Price	Sale Price
1				
2				
3				
4	Apple	Pink Lady	£0.49	£0.55
5	Apple	Granny Smith	£0.23	£0.43
6	Apple	Golden Delicious	£0.22	£0.41
7	Apple	Gala	£0.27	£0.54

The following is the result of the filter. Note that the lines have not all been displayed.

Fruit and Veg Shop				
	Fruit	Variety	Cost Price	Sale Price
4	Apple	Pink Lady	£0.49	£0.55
5	Apple	Granny Smith	£0.23	£0.43
6	Apple	Golden Delicious	£0.22	£0.41
7	Apple	Gala	£0.27	£0.54

Example 2

A text filter can also be used on part of a word, for example in this filter the letters *Ja* are searched and this returns two names

Order	Date	Salesperson	Amount
9	1009 29		
10	1010 01		
11	1011 01		
12	1012 02		
13	1013 02		
14	1014 02		
15	1015 04		
16	1016 04		
17	1017 04		
18	1018 05		
19	1019 05		
20	1020 06		
21	1021 06		

Order	Date	Salesperson	Amount
29	1029 21/06/2011	Mary Jane	€4,270.00
33	1033 07/01/2012	James	€460.00
35	1035 07/01/2012	Mary Jane	€1,570.00
38	1038 09/01/2012	Mary Jane	€925.00
40	1040 14/01/2012	Mary Jane	€2,074.00
42	1042 03/02/2013	James	€4,765.00
45	1045 05/02/2013	Mary Jane	€780.00

Date

Custom Filters can also be used for **DATE** filters. In this example the month of May is custom searched in the Date column. The filter list automatically shows all the available dates showing May, when applied only sales in May are shown. Clicking on the plus symbol next to the month will show all the available days in that month.

8	Order	Date	Salesperson	Amount
9	1009	29/05/2011	Tommy	€1,245.00
39	1039	10/05/2012	Tommy	€360.00
45	1045	05/05/2013	Mary Jane	€780.00
46				

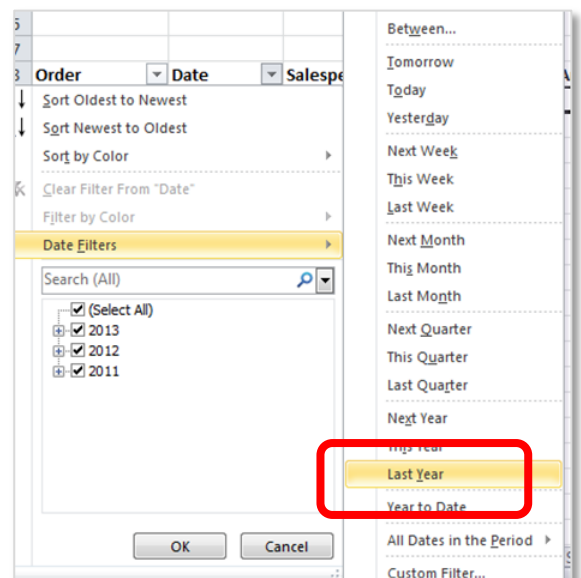
In addition using a number here will bring up all the dates with that number in them. For example typing 4 – will give any dates with 4th 14th or 24th.

The following wildcard characters can be used as comparison criteria for **number** filters.

Use	To find
*4	This will show any number containing a 4 anywhere in the number.
?4*	This will show any value starting with the number 4.
?1,*	This will show all values that start with one thousand – 1,???

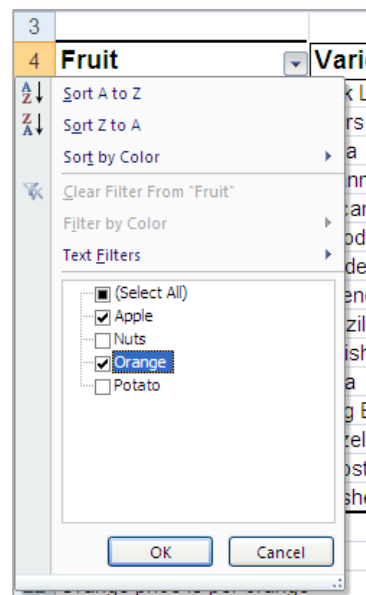
Date filters can also be applied in pre-set group categories as shown here. In this example the filter will show all orders places **Last Year**.

There are a variety of different options here for date filters. Some of these options can be filtered further, for example the **Between...** filter can be used to set two specific dates.

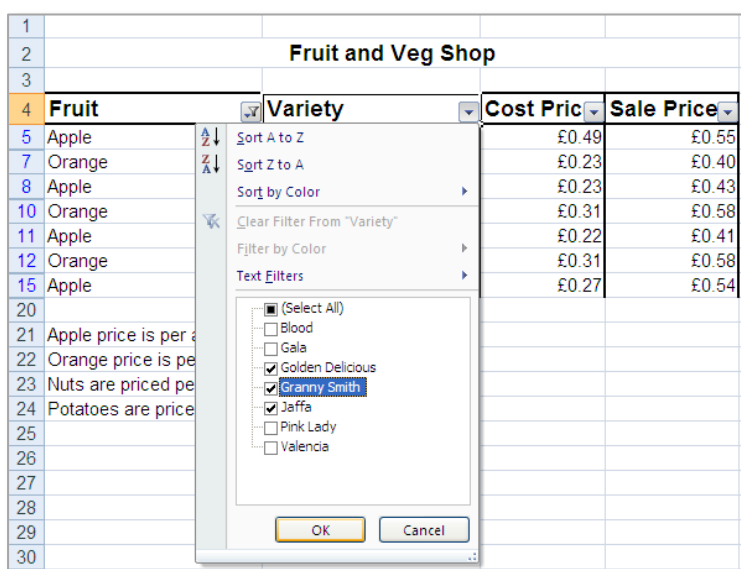


By multiple values in one column

To filter data by multiple values in one column, select more than one value and the resulting list will show all of the rows with the two selected values.



On multiple columns

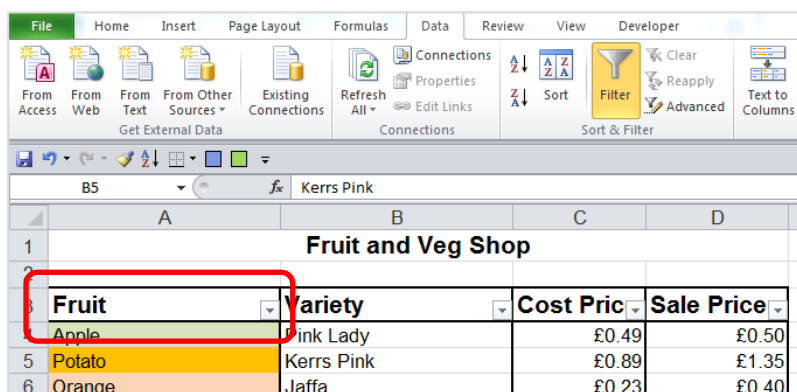


Filters can be applied on multiple columns at the same time. Choose the filter to be set and select the value it should be filtered by. It is important to note that filters are **additive**, which means that each additional filter is based on the current filter and further reduces the subset of data.

Colour

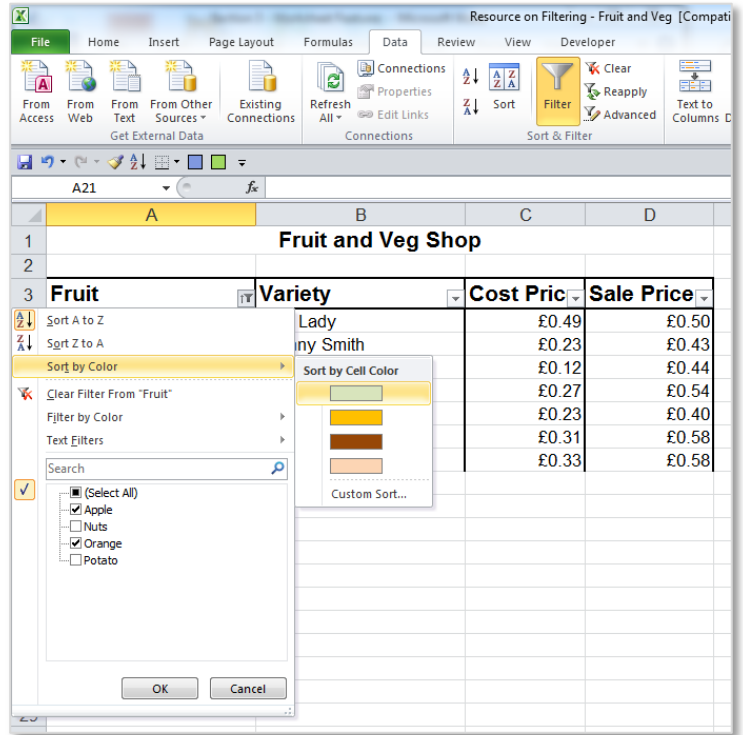
Filters can also be applied according to the colour of the cell - font or background.

Experiment with the Resource on Filtering – Fruit and Veg.



Complete the following filters:

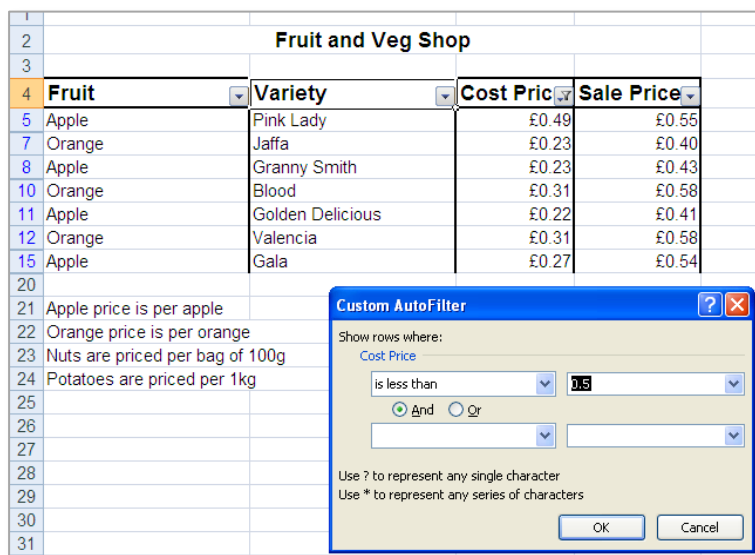
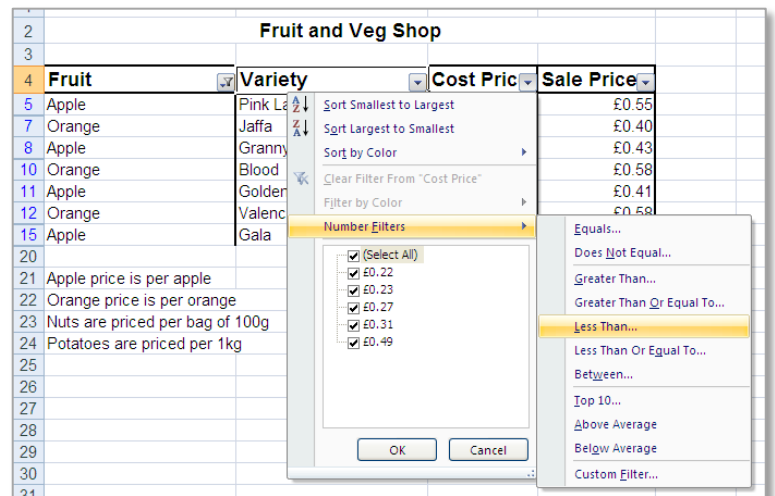
1. Filter the Fruit by Apples and Oranges as shown.
2. Sort the Fruit A to Z from the filter drop down.
3. Sort by the Colour Green, Orange, Brown as shown.



Using comparison operators Less Than, Greater Than, Equals, etc.

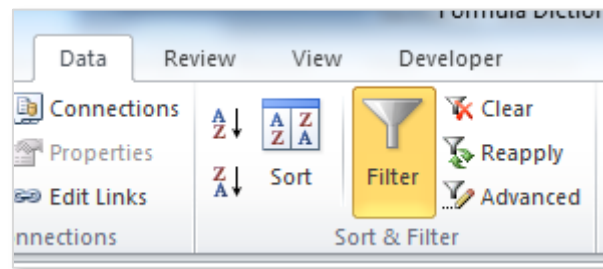
Comparison operators can be used in filtering. In the following example we will show all fruit or vegetables which have a cost price of less than €0.50.


Choose the appropriate comparison for the filter and enter the values required for comparison, in this example it is less than €0.50.

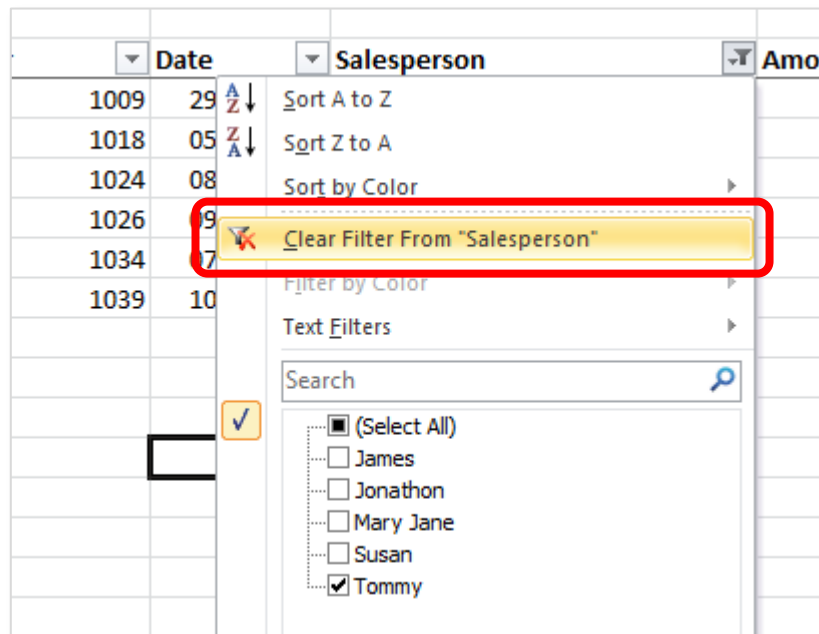


Remove a Filter

To remove any filter that has been applied first click in the table anywhere, then go to the **Data** tab to the **Sort & Filter** group and deselect the **Filter** command button.



Alternatively click on the heading which has a filter applied to it. The filter symbol will have changed to this  and from the filter list select the **Clear Filter From:** option.



NOTES:

TASK 9 Type the following table into a worksheet and experiment with filtering by numbers, by text, by multiple values and on multiple columns.

TASK 10 Edit the table to have font colour and cell colour and apply filtering by colour.

TASK 11 Use comparison operators of **Greater Than**, **Less Than** and **Equal To** to data in the table.

	A	B	C	D
1				
2	Fruit and Veg Shop			
3				
4	Fruit	Variety	Cost Price	Sale Price
5	Apple	Pink Lady	£0.49	£0.55
6	Potato	Kerrs Pink	£0.89	£1.35
7	Orange	Jaffa	£0.23	£0.40
8	Apple	Granny Smith	£0.23	£0.43
9	Nuts	Pecan	£0.78	£1.05
10	Orange	Blood	£0.31	£0.58
11	Apple	Golden Delicious	£0.22	£0.41
12	Orange	Valencia	£0.31	£0.58
13	Nuts	Brazil	£0.64	£0.95
14	Potato	British Queens	£0.65	£1.20
15	Apple	Gala	£0.27	£0.54
16	Potato	King Edward	£0.69	£1.05
17	Nuts	Hazel	£0.75	£1.00
18	Potato	Rooster	£0.82	£1.30
19	Nuts	Cashew	£0.83	£1.15
20				

NOTES: