

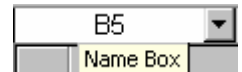
## **Microsoft Excel 2003**

Microsoft Excel is an electronic spreadsheet program. Electronic spreadsheet applications allow you to type, edit, and print spreadsheets. Excel can be used for financial, statistical, or list information.

## **Customizing**

### **Name Box**

The name box displays the cell address of the active cell in the worksheet (the cell that has the black outline which surrounds the cell that you can move using the mouse or keyboard). You can also use the name box to name a cell or range of cells so that you can quickly go to them or refer to them in a formula.



### **To Create a Name**

- Select the cell or range of cells to be named.
- Click within the **Name Box** to the left of the **Formula Bar**.
- Type a name and press **Enter**. The name cannot have any spaces, however you may use the **Underscore** key (Shift + hyphen). For Example: electronic\_services

**OR**

- Open the **Insert** menu and from the **Name** submenu select **Define...**

- In the **Names in Workbook** text box type the name that you want for the cell or range of cells.
- Press **Enter** or click **OK**.

## Using Names

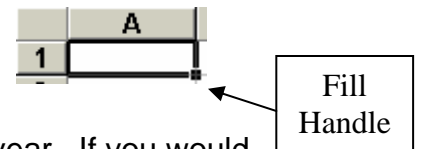
Later, when you are in another area of the workbook you can click the down arrow next to the **Name Box** and click on a name to select it. Excel will then take you to that area of the worksheet. Using the **Go To** option (Edit-Go To) you can select a named area. Also when you are using formulas you can type the name you created in the **Name Box** to refer to the cell or range of cells.

## To Erase a Name

- Open the **Insert** menu and from the **Name** submenu select **Define...**
- Select the **Name** that you want to delete and click the **Delete** button.
- Press **Enter** or click **OK**.

## Lists

If you are creating a list or a pattern of numbers, Excel can help you to quickly finish the list. You need to type at least the first three items in the list, and then select them. There is a little black box (fill handle) in the corner of the outline of the selected area. Click, hold, & drag this box. Continue dragging until the list is complete (filled in).



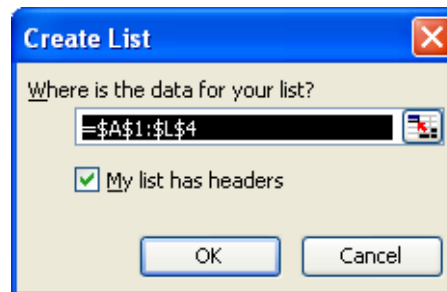
The Custom Lists are the days of the week and the months of the year. If you would like to create additional custom lists:

- Open the **Tools** menu
- Select **Options**
- Choose the **Custom List tab**.
- Select **New List**, type the entries, and then click **Add** and **OK**. Now you can use the Fill handle to quickly create your own lists.

## Generate a List Automatically

You can convert data into a list automatically. Data must be arranged in columns with descriptive column headings for this method to work.

- Click and drag to select the worksheet data including the column headings.
- Click **Data** on the menu bar.
- Click **List**.
- Click **Create List** and confirm that the cells listed match the cells in your worksheet.



- Click checkbox to confirm that the list has headers.
- Click **OK**. You may see a warning about query tables in the worksheet. Click **Yes**.
- Each column head now has an arrow indicating a drop-down column filter.

A	B	C
January ▾	February ▾	March ▾
\$ 76,868.00	\$ 5,468.00	\$ 465.00
\$ 7.00	\$ 98.00	\$ 97.00
\$ 9.00	\$ 9.00	\$ 49.00
*		

## Enter List Data Using a Form

- Type a column head name for the first column.
- Repeat step 1 to the adjacent cells until you have entered desired number of column heads.

	A	B	C	D
1	First Name	Last Name	Gender	Age
2				
3				
4				

- Click the cell in which you want to begin entering data. (In this case A1)
- Click **Data**.
- Click **Form**. A data form appears for you to enter your data.

- Type requested data in the fields pressing **Tab** to move to the next field.
- After completing the first set of fields, click **New** to enter data and start a new record. The data fills the worksheet, and the form clears for the new record.
- Repeat steps 6 – 8 to enter each new record.
- Click **Close** when you are done entering data.

### Import a Microsoft Word List

- In a **Word** table, click and drag to select the cells you want to copy.
- Click the **Copy** button.
- In **Excel**, click a cell in the upper-left of the worksheet, making sure there are enough cells below to the right to accommodate the **Word** table.
- Click the **Paste** button to insert the **Word** table into **Excel** worksheet.
- To add more records, click the first cell of a new row.
- Click **Data** then **Form**.
- In the form, click **New** to start a new record.

## Tools to Facilitate Creating and Managing Data Lists

### **AutoComplete**

When you type duplicate data in the same column, Excel will **AutoComplete** the information for you. For instance if you are typing a list that repeats a person's name, you will just have to type the first letter or letters of the name that distinguishes it from the other names and Excel will complete the rest for you. You just need to press **Enter** for the data to be accepted. If you do not want to accept what Excel has completed, then just continue typing or press the spacebar, whatever is appropriate. AutoComplete only looks at the data organized in columns.

**To turn off this feature:** open the **Tools** menu, select **Options**, and choose the **Edit** tab. Remove the check in the check box to the left of **Enable AutoComplete for cell values**.

### **Sort**

Sorting organizes data in ascending or descending order alphabetically or numerically.

To sort by one or more columns:

- Click anywhere within the area you would like to sort.
- Open the **Data** menu.
- Select **Sort...**
- Click the down arrow and select which column to Sort by.
- Click the radio button (circle) to select **Ascending** or **Descending**.

- For multiple sorts, click the down arrow and select which column to sort second and third (Then by). Also selecting Ascending or Descending.

Multiple Sort Example:

- In the **My list has** area of the dialog box, click the radio button to select if you have a **Header**

Before:		After:			
	A	B		A	B
1	<b>Last Name</b>	<b>First Name</b>	1	<b>Last Name</b>	<b>First Name</b>
2	Brown	Spencer	2	Brown	Jacob
3	Smith	Cody	3	Brown	Spencer
4	Brown	Jacob	4	Smith	Adam
5	Smith	Adam	5	Smith	Brian
6	Smith	Brian	6	Smith	Cody





**row** (labels at the top of the columns) or **No header row**. (If the correct selection is not already marked.)

- When finished click the **OK** button.

**Note:** If you are sorting rows, then click **Options** and change the **Orientation** to **Sort left to right**. Just remember to change it back when you resume sorting columns.

OR

**To sort by one column:**

- Click within the column.
- Click one of the  sort buttons on the Standard toolbar.
- The list will be  sorted or organized in either Ascending  or Descending  order depending on which button you selected.

**Note:** It is important to just click within the column that you want to sort by. Do **NOT** select any of the worksheet or the information may get separated from the appropriate row.

## AutoFilters

If you have a lot of information you may want to filter out a smaller list to view or print for a particular purposes. To do this you will use AutoFilter.

To **start** AutoFilter:

- Create a list and include labels (a header row).
- Click anywhere within the list.
- Open the **Data** menu.
- Select **Filter**.

In the **Filter** submenu, select **AutoFilter**.

To **use** AutoFilter:

- When AutoFilter is on, down arrows will appear next to each heading. Clicking the arrows will open a drop-down list.
- Click on what you would like to filter out of the list. This can be done for each heading. Notice that the arrow changes color after you select a filter. This will help you identify which columns have been filtered.

To **unfilter** the lists:

- Click the down arrow and select **(All)**. This would need to be done for each heading that you filtered.

**OR**



- Open the **Data** menu and from the **Filter** submenu select **Show All**.

To turn **off** AutoFilter:

- **Open** the Data menu, select **Filter**, and click **AutoFilter** once again. The check will be removed in the menu and so will the arrows next to the headings within the header row of the worksheet.

	A	B	C	D	E	F	G
1	Last Name	First Name	Street Number	Street	City	State	Zip
2	(All)	Ben	39	W 4TH ST	New York	NY	10048
3	(Top 10...)	Regis	1040	Tallmadge Rd	Centerville	OH	44311
4	(Custom...)	George	11	Ventura Dr	Malibu	CA	93140
5	Bloom	Jennifer	3007	White Oak Dr	Green	OH	44232
6	Greathouse	John	4335	Red Dr	Clinton	OH	44216
7	Henderson	Jan	321	6th St	Barberton	OH	44203
8	Lyle						
9	Peters						
10	Smith						

**Note:** When inputting data into a worksheet, it is best to divide the information into the smallest parts. For example instead of a column entitled Name, the data is broken down into Last Name and First name. Also instead of a column labeled Address, the address is broken down into separate columns for Street Number, Street, City, State, and Zip. This allows the worksheet to be easily filtered and sorted.

**Shortcut:** If you use AutoFilter often, then you may want to add the AutoFilter shortcut button to the Standard toolbar.  This can be done by clicking the Toolbar Options button at the end of the Standard toolbar and then selecting Add or Remove Buttons.  Then you would need to choose Standard and lastly the AutoFilter button.

## Viewing Different Parts of a Worksheet at the Same Time

### Split

Split allows you to view different sections of a worksheet at the same time. The different sections can be side by side allowing you to view needed areas and even paste data.

### To split the worksheet into multiple panes:

Move the active cell or select the row or column that is below or to the right of the area that you want split.

Open the **Window** menu and select **Split**.

## To remove the split:

Open the **Window** menu and select **Remove Split**.

	A	B	C	D	E	F
1	Last Name	First Name	Number	Address	City, State, Zip	
2	Adams	Abigail	1600	Pennsylvania Avenue NW	Washington, D.C. 20500	
3	President George W. Bush		1600	Pennsylvania Avenue NW	Washington, D.C. 20500	
4	Ben & Jerry's Homemade, Inc.		30	Community Drive	South Burlington, VT 05403-6828	
5	ABBEY	DOUGLAS	2600	PENNSYLVANIA AVE NW	Washington, D.C. 20500	
6	ABDNOR	LEANNE	1331	PENNSYLVANIA AVE NW	Washington, D.C. 20500	
7	ABURISH	RAGHEB	2715	PENNSYLVANIA AVE NW	Washington, D.C. 20500	

## Freeze

When freeze is selected, areas of the worksheet are frozen while the rest of the worksheet is able to be scrolled. For instance if you have headings at the top of columns of data, the headings can be frozen and as you type data or scroll through the worksheet the headings will still be visible.

To freeze the worksheet:

Move the active cell or select the row or column that is below or to the right of the area that you want split.

Open the **Window** menu and select **Freeze Panes**.


To remove the freeze:

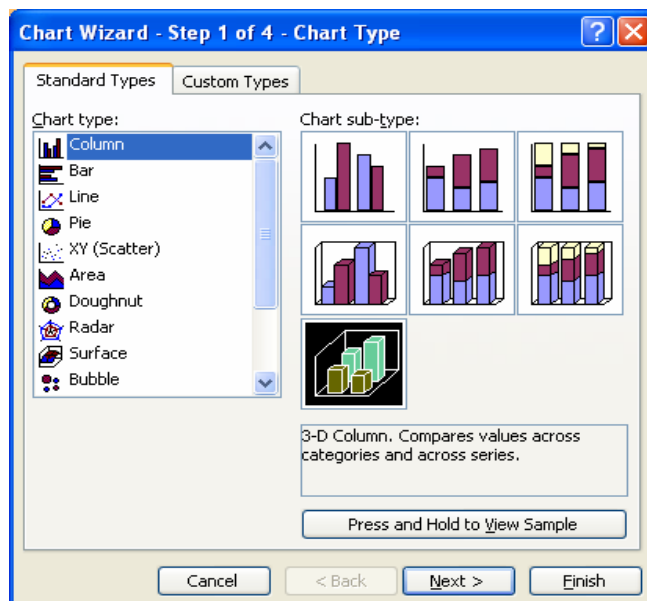
Open the **Window** menu and select **Unfreeze Panes**.

	A	B	C	D	E	F
1	Last Name	First Name	Number	Address	City, State, Zip	
2	Adams	Abigail	1600	Pennsylvania Avenue NW	Washington, D.C. 20500	
3	President George W. Bush		1600	Pennsylvania Avenue NW	Washington, D.C. 20500	
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6	ABDNOR	LEANNE	1331	PENNSYLVANIA AVE NW	Washington, D.C. 20500	
7	ABURISH	RAGHEB	2715	PENNSYLVANIA AVE NW	Washington, D.C. 20500	
8	ACEVEDO	EDWARD	2400	PENNSYLVANIA AVE NW	Washington, D.C. 20500	
9	ADAMS	ANTHONY	2001	PENNSYLVANIA AVE NW	Washington, D.C. 20500	

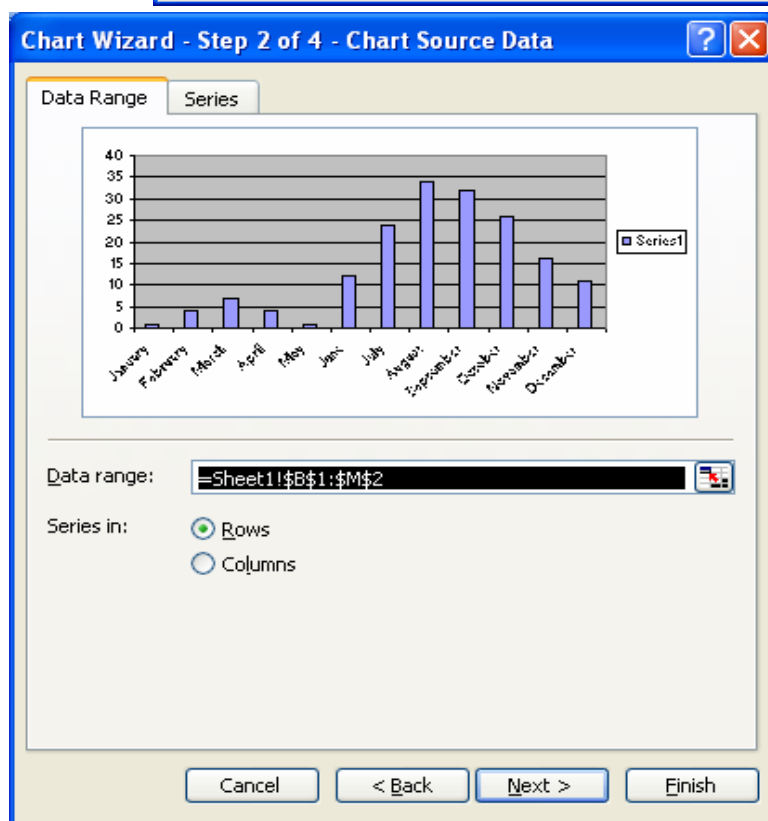
## Charts

### Creating Charts

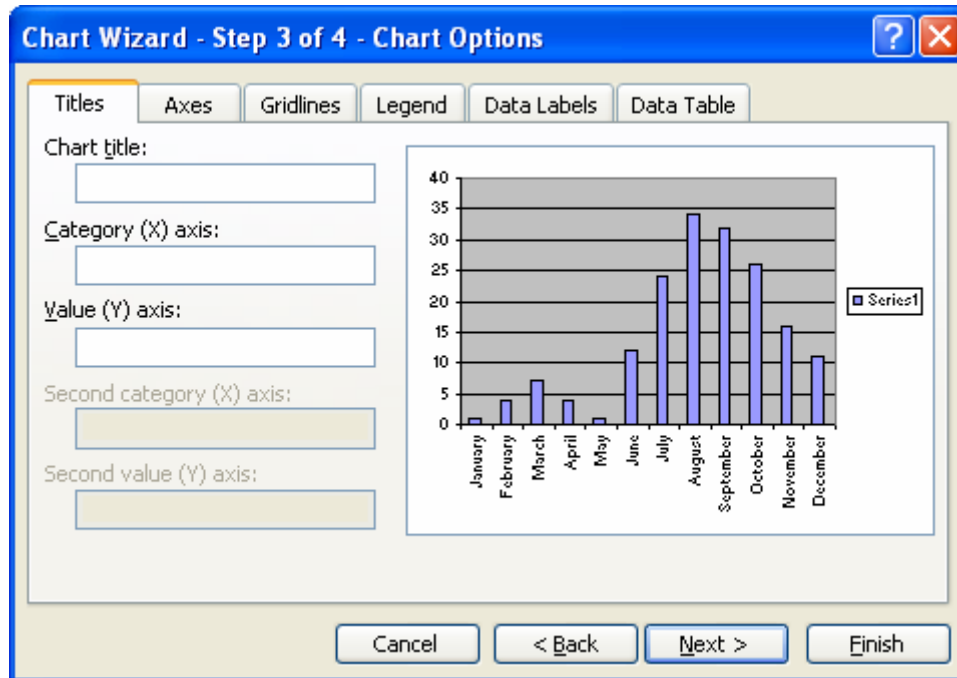
- Click and select the worksheet data you want to chart.
- Click the Chart Wizard button. 
- In the Chart Wizard Dialog Box:
- Click a chart type.
- Click a chart sub-type.
- Click **Next**.



- **The Chart Wizard Step 2 Screen Appears:**
- Confirm the selected data range of cells.
- Click to arrange data in rows or columns.
- Click **Next**.

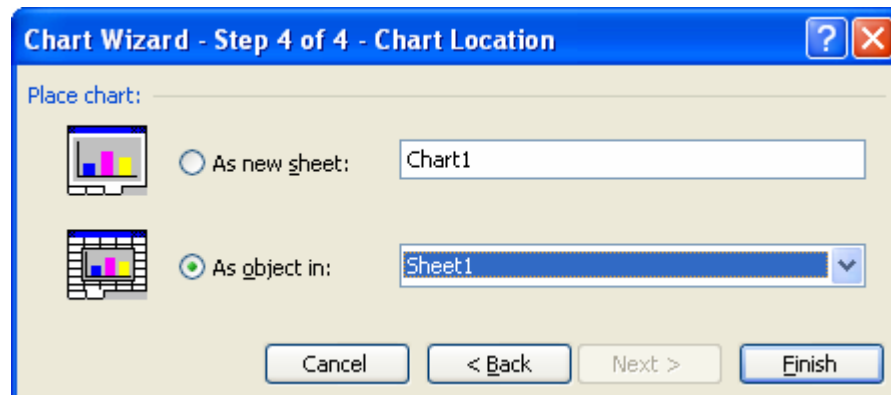


- **The Chart Wizard Step 3 Screen Appears:**



- Type a chart title.
- Type a name for the x and y axes.
- Click **Next**.

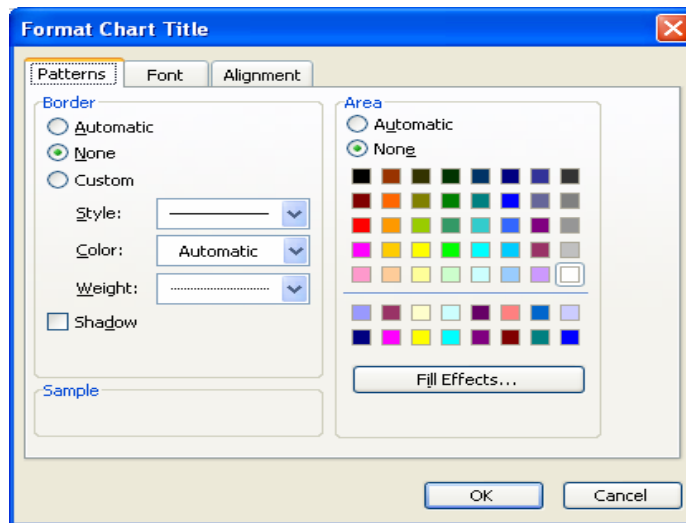
- **The Chart Wizard Step 4 Screen appears:**



- Click to indicate whether to locate your chart on a separate sheet.
- Click **Finish**.

### Modifying Chart Details

- Double-clicking on any of the chart components will bring up a formatting dialog box. You may make your changes here and click **OK**.
- Here is an example of the formatting dialog box for the chart title:



### Change Size of Charts

- Click on blank portion of chart. You should see black tabs appear on border of chart.
- Click and drag black tabs in order to resize chart.

### Change Type of Chart

- Right click on blank portion of chart. A menu will appear.
- Select **Chart Type** from the menu.
- Choose your new chart type. Press **OK**.

## Exercises

### Exercise 1

#### Creating a Name: Page 2

1. Using the [travel expense log](#) file, highlight the row for John Watkins and assign the name **Watkins** to those cells. Scroll down to the bottom of the worksheet and then use the name box to relocate to the **Watkins** cells.

### Exercise 2

#### Making a List Page 2 - 4

1. Create a new file (workbook) and type in the following column heads:
  - First Name
  - Last Name
  - City
  - State
2. Enter data into the form for yourself and 4 other people you know.

### Exercise 3

#### AutoComplete, Sort, AutoFilters Page 4 & 5

1. Using the file you just created, sort your records in descending alphabetical order by the last name.
2. Below your data select an empty cell and type "**January**". Use AutoComplete to create a row with all 12 months. Enter yourself and your friends' names next to their month of birth.

3. Using the [travel expense log](#) file, select the AutoFilter option and filter out the salespeople who's **Registration** equals **\$500**.

#### **Exercise 4**

##### Split & Freeze **Page 6 & 7**

1. Using the [travel expense log](#) file, **split** the data at the 25<sup>th</sup> salesperson. Close the file when you are done.
2. Reopen the [travel expense log](#) file and **freeze** the name column of the worksheet.

#### **Exercise 5**

##### Creating a Chart **Page 7**

1. Using the [travel expense log](#) file, filter the **Total** column into **Top 10** items. Create a chart based on the **Top 10** results.
2. Name the chart "**Top 10 Salespeople**".
3. Place the chart at the bottom of the worksheet data.

#### **Exercise 6**

##### Modifying a Chart **Page 9**

1. Change the color of the chart to **RED**.
2. Expand the size of the chart so that all column headings and salespeople are shown.
3. Change the type of chart.