

Excel 2003

Beginning

Educational Technology Center

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Resources for this class can be found at http://www.davis.k12.ut.us/district/etc/documents/excel_beg_doc.html .

The Office Assistant

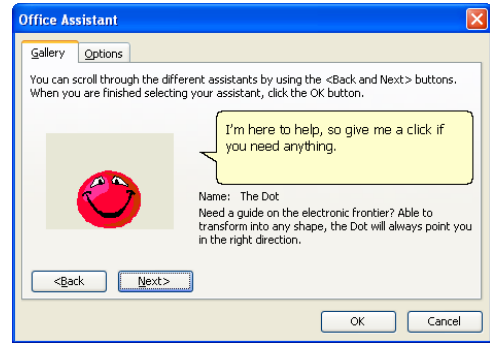


Who is the Character?

- Here is the **Office Assistant**.
- If the **Office Assistant** is not showing, on the **Menu Bar**, click on **Help** → **Show Office Assistant...**

Changing the Office Assistant

- Right click on the **Office Assistant**.
- Select **Choose Assistant ...**
- Click on the **Next** button to find the desired **Assistant**.
- Click on **OK**.

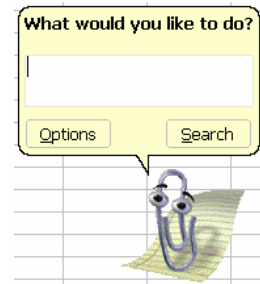


Changing the Options

- Right click on the **Office Assistant**.
- Select **Options...**
- Choose the desired options by placing a check mark in front of the option.

Using the Office Assistant

- Click on the **Office Assistant**.
- Enter a question. (This can be a single word or an entire sentence.)
- Press the **Enter** key or click on the **Search** button.
- Choose the most appropriate choice in the list.
- A window opens on the right side with the instructions.
- Follow the instructions in the main document window while they are showing on the right.



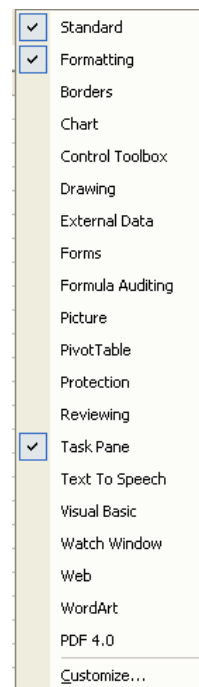
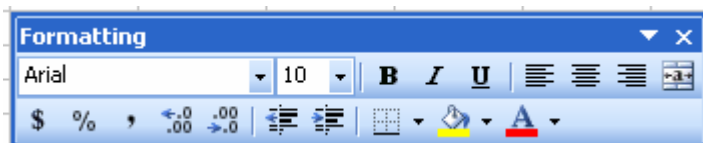
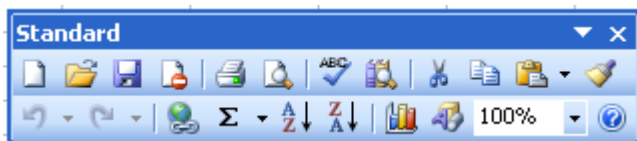
Closing the Help Window

- Click on the **X** in the top right corner of the window.

Toolbars

Choosing Toolbars

- On the **Menu Bar** click on **View** → **Toolbars**.
- Click in the box to select the desired toolbar.
- Notice that **Toolbars** which are showing have a checkmark in front of them.

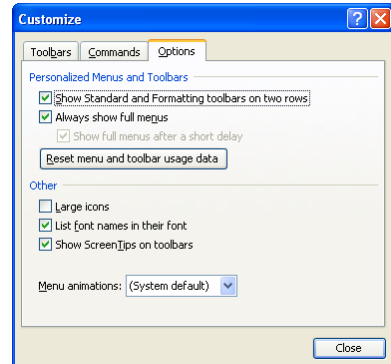


Menu Bar



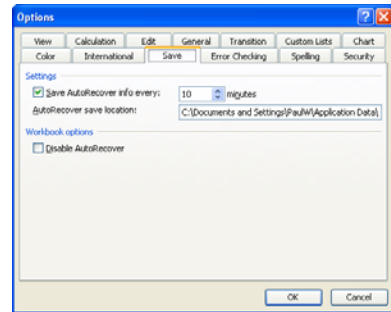
Show Full Menus

- On the **Menu Bar**, click on **Tools → Customize**.
- Choose the **Options** tab.
- Click to place a check mark in front of **Always show full menus** and **Show Standard and Formatting toolbars on two rows**.
- Click on the **Close** button.



Automatic Timed Backup

- On the **Menu Bar**, click on **Tools → Options**.
- Click on the **Save** tab.
- Click to place a checkmark in front of **Save AutoRecover info every**.
- Set the number of minutes for **AutoRecover**.
- Click on **OK**.



The Task Pane

- The **Task Pane** is at the right side of the screen.
- The **Task Pane** offers help with the document and with selecting other documents or templates.

Opening the Task Pane

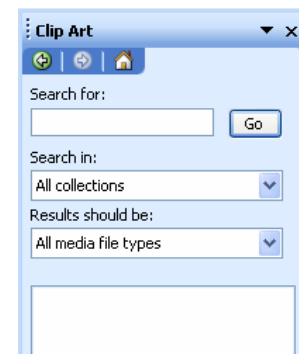
- On the **Menu Bar**, click on **View → Task Pane**.

Closing the Task Pane

- Click on the **X** in the top corner of the **Task Pane**.

Choosing a Task Pane

- Click on the down arrow on the top right side of the **Task Pane**.
- The pop-down **Menu** shows **Task Panes** for **New Workbook**, **Clipboard**, **Search**, and **Insert Clip Art**.
 - **Getting Started** – Search and opening recent documents.
 - **Help** – Locate instructions on accomplishing tasks.
 - **Clip Art** - Helps find and insert clipart that is on the computer.
 - **Clipboard** - Shows the files on the clipboard (up to 24)
 - **New Workbook** - Blank Document, General Templates, recently used documents.



Spreadsheet Anatomy

Parts of a spreadsheet


- **Cell** - The box where the numbers, the labels, or the formulas are entered.
- **Column** - The collection of cells in a line from top to bottom.
- **Row** - The collection of cells in a line from side to side.
- **Worksheet** - The single page of rows and columns that is on the screen.
- **Workbook** - The collection of pages (worksheets) that make up one file.
- **Range** - A group of cells that are next to each other.
- **Mouse pointer** - The arrow or other marker that indicates where the mouse is pointing.
- **Formula** - A mathematical expression that gives instructions to the computer about what to do with the contents of specified cells.

Size of the Spreadsheet

- Each sheet has 256 columns and 65,536 rows.
- Each workbook can have 256 sheets.

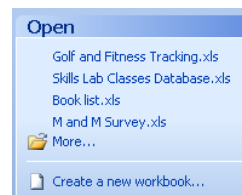
Opening an Existing Spreadsheet

Using the Menu Bar

- On the **Menu Bar**, click on **File → Open**.
 - **OR** click on the **Open File** Button. 
- Navigate to the location of the workbook.
- Click on the workbook and then click on the **Open** button.

Using the Task Pane

- In the **Task Pane**, click on the down arrow at the top and choose **Getting Started**.
- In the **Open** section, click on **More...**
- Navigate to the location of the workbook.
- Click on the workbook and then click on the **Open** button.



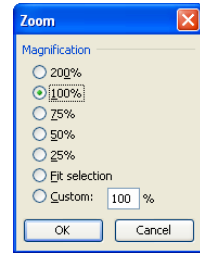
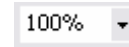
Navigating in the Worksheet Window

- **Enter key** - Moves down one cell.
- **Tab key** - Moves across one cell to the right.
- **Shift Enter** - Moves up one cell. (Reverse gear)
- **Shift Tab** - Moves across one cell to the left. (Reverse gear)
- **Arrow keys** - Move one cell in the direction of the arrow.
- **Control → or Control ←** - Moves to the next cell with information or to the far edge of the worksheet.
- **Page Up** and **Page Down** - Move one full screen at a time up or down through the worksheet.
- **Control Page Up** and **Control Page Down** - Moves from worksheet to worksheet.
- **Scroll Bars**
 - The **Scroll Bar** on the right side moves the screen up or down.
 - The **Scroll Bar** on the bottom right moves the screen to the right or left.
- **Home key** - Sends the cursor to the first column (A).
- **Control Home** - Sends the cursor to cell A1.
- **Control End** - Sends the cursor to the bottom right of the spreadsheet.

Views

Zoom Box

- On the **Menu Bar**, click on **View → Zoom**, choose a percentage, and click **OK**
- OR click on the **Zoom** box.
- Choose a percentage or **Selection**
- OR click in the **Zoom** box, type the desired percentage, and press the **Enter** key.



Working with Cells

Seeing what is in a cell

- Click in the cell.
- Look at the **Input Line**.
- **Note** - A formula will have an = sign followed by numbers, cell names, etc.

Changing Information in a Cell

- Click in the cell to be changed.
- Type in the new information.
- **Note** – The new information replaces the old information.
- To make a change without losing the original information, click on the **Input Line** below the toolbars.
- Press the **Enter** key.

Text or Numbers?

- The contents of each cell are identified as either a label or a value.
- **Label** - The cell contains letters and/or numbers.
- **Value** - The cell contains only numbers and mathematical signs.

Undo

- Click on the **Menu Bar**, on **Edit → Undo**.
 - **OR** click on the **Undo** button.

Saving the Spreadsheet

- On the **Menu Bar**, click on **File → Save As...**
- Give the spreadsheet a name.
- Click on the **Save** button.

Saving the Worksheet to a Previous Version

- On the **Menu Bar**, click on **File → Save As**.
- Give the spreadsheet a name.
- Click on the down arrow at the end of the **Save as type:** box.
- Choose the version of Excel to be used.
- Click on the **Save** button.

Moving Between Open Spreadsheets

- On the **Menu Bar**, click on **Window** and choose from the list.
 - **OR** click on the button on the **Taskbar** with the name of the spreadsheet.

Filling in a Form

- Open the desired form.
- Find the appropriate cell and enter the information.

Forecasting with a Spreadsheet

Steps to Follow

- Enter the information to indicate a possible situation.
- Print a copy and/or save the file.
- Enter the information for another possible situation.
- Print a copy and/or save the file.
- Continue this process until several possibilities have been entered.
- Enter new numbers for other possibilities.

Working with Lists

Structure of a List

- The first row should be the labels for the fields of information.
- Don't have a blank row after the labels.
- Don't have a blank row separating information in the list.
- Don't have a blank column separating information in the list.

Information in a List

- The first row should be the **field names**.
- Each column contains information for a **field**.
- Each row contains the information for a **record**.

Sorting the List

- Click in the list. (Don't highlight an area!)
- On the **Menu Bar**, click on **Data → Sort**.
- The names of the fields are in the list in the **Sort By** box.
- If the field names are not in the **Sort By** box, click in the **My list has** section and choose **Header row**.
- Click on the down arrow and choose the field to sort by.
- Under **Then By**, click on the down arrow and choose the field to sort by.
- Click on **OK**.



AutoFilter

Using AutoFilter

- Use **AutoFilter** to show only selected information in the list.
- On the **Menu Bar**, click on **Data → Filter → AutoFilter**.
- Notice the down arrow at the top of each column.
- Click on the down arrow and choose the desired information.

Showing All of the Information

- After applying the filter, only the matching information will be displayed.
- On the **Menu Bar**, click on **Data → Filter → Show All**.

Turning Off AutoFilter

- On the **Menu Bar**, click on **Data → Filter → AutoFilter**.

Creating a new spreadsheet

Plan

- What should the spreadsheet accomplish?
- What should be on this spreadsheet?
- What should the spreadsheet do with the information?
- What information must be on the spreadsheet to get the desired results?
- Sketch out a picture of the spreadsheet. Where will things be?

<i>M & M Survey</i>								
First Name	Last Name	Yellow	Red	Orange	Blue	Green	Brown	Total
James	Adams	2	2	3	4	4	9	24
Ann	Brady	2	5	1	3	1	12	24
Paul	Murphy	2	3	6	3	3	6	23
	Totals	6	10	10	10	8	27	71
		Yellow	Red	Orange	Blue	Green	Brown	Total
	Averages	2.0	3.3	3.3	3.3	2.7	9.0	23.7

Text Framework (Labels)

- Enter the title of the spreadsheet in cell A1
- Enter the subtitle of the spreadsheet in cell A2

Rows and Columns

Inserting a Row

- Click on the row number (left edge) to highlight the row.
- On the **Menu Bar**, click on **Insert → Rows**.
 - **OR** right click on the row number and choose **Insert**.

Inserting Several Rows

- Click on the row numbers (left edge) and drag to highlight the desired number of rows.
- On the **Menu Bar**, click on **Insert → Rows**.
 - **OR** right click on the row number and choose **Insert**.

Deleting a Row

- Click on the row number (left edge) to highlight the row.
- Right click on the row number (far left) and choose **Delete**.

Deleting Several Rows

- Click and drag on the row numbers (left edge) to highlight the rows.
- Right click on the row number (far left) and choose **Delete**.

Inserting a Column

- Click on the letter of the column (top edge) to highlight the column.
- On the **Menu Bar**, click on **Insert → Columns**.
 - **OR** right click and choose **Insert**.

Inserting Several Columns

- Click on the letter of the column (top edge) and drag to highlight the desired number of columns .
- On the **Menu Bar**, click on **Insert → Columns**.
 - **OR** right click and choose **Insert**.

Deleting a Column

- Click on the letter of the column (top edge) to highlight the column.
- Right click on the letter of the column (top edge) and choose **Delete**.

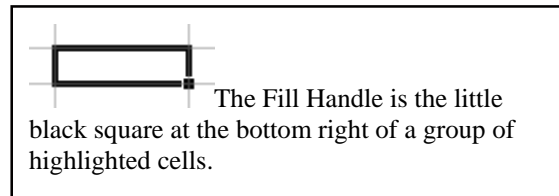
Deleting Several Columns

- Click and drag on the letters of the column (top edge) to highlight the columns.
- Right click on the letter of the column (top edge) and choose **Delete**.

Fill

Getting the Months or Days of the Week in Quickly

- Click in the first cell.
- Type in the first month or day desired.
- Place the cursor over the **Fill Handle**.
- Click and drag over the cells where the rest of the months or days of the week to be filled in.



Filling in Text

- Click in the cell with the text.
- Click on the **Fill Handle** and drag the cursor over the cells to be filled.



Filling in Formulas

- Click in the cell with the formula.
- Click on the **Fill Handle** and drag over the cells.
- The formula is copied into the cells.

Filling with a Number Pattern

- Enter the first two or three numbers in the cells. i.e. 1, 2, 3.
- Highlight the cells with the numbers.
- Click on the **Fill Handle** and drag over the cells where the pattern is to be continued.
 - Drag down or to the right to increase the number sequence.
 - Drag up or to the left to decrease the number sequence.

Formatting Numbers with the Formatting Toolbar

- Highlight the cells to be formatted.
- Click on the Toolbar button to make the desired change.
 - \$ for Currency
 - % for Percentage
 - , to add a comma separating periods (hundreds, thousands, millions, etc.)
 -  to increase the number of decimals.
 -  to decrease the number of decimals.



Merging and Centering the Title

- Click and drag to highlight the title and the cells it should cover.
- Click on the **Merge and Center** button on the **Formatting Toolbar**.



Centering the Heading of a Column

- Click in the cell.
- Click on the **Center** button on the **Formatting Toolbar**.



Formatting Text

- Highlight the cells to be formatted.
- On the **Menu Bar**, click on **Format → Cells**.
 - **OR** right click on the block and choose **Format Cells**.
- Choose the appropriate tab. **i.e. Number, Alignment, Font, Border, Patterns, and/or Protection.**

Rotate the Text

- Highlight the cells.
- On the **Menu Bar**, click on **Format → Cells**.
- Click on the **Alignment** tab and choose the angle of rotation in the **Orientation** section.
- **Note** - The **Text Alignment** section allows both horizontal and vertical alignment.

Column Width and Row Height

Automatically Fixing Column Width

- Place the cursor on the **Column Indicator** between the column to be adjusted and the next one to the right. (The cursor will change to a double-headed arrow.)
- Double click.

Automatically Fixing Row Height

- Place the cursor on the **Row Indicator** between the row to be adjusted and the next one down.
- Double click.

Changing Column Width or the Row Height Manually

- Place the cursor on the line between the name of the column or row.
- **Note** - The cursor will change to a double-headed arrow.
- Hold down the left mouse button while dragging it to the desired size.
- Click and drag to make the column the desired size.

Adding Borders to a Block of Cells

- Highlight the block of cells.
- On the **Menu Bar**, click on **Format → Cells...**
- Click on the **Border** tab.
- Click to choose the desired border and click on **OK**.

Adding Borders with the Formatting Toolbar

- Highlight the block of cells.
- Click on the down arrow next to the **Border** button.
- Click on the desired border.
- Click on **OK**.



Shading a Block of Cells

- Highlight the block of cells.
- On the **Menu Bar**, click on **Format → Cells...**
- Click on the **Patterns** tab.
- Choose the desired color and click on **OK**.

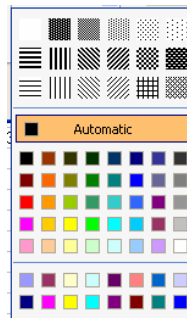
Shading a Block of Cells with the Formatting Toolbar

- Highlight the block of cells.
- Click on the down arrow next to the **Fill Color** button.
- Click to choose the desired color.



Patterns

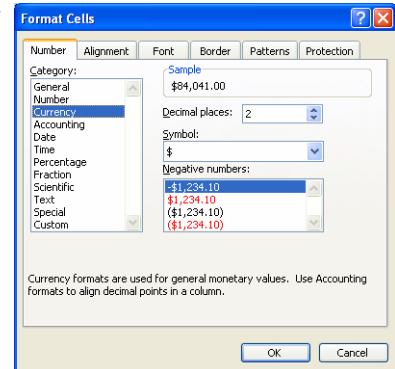
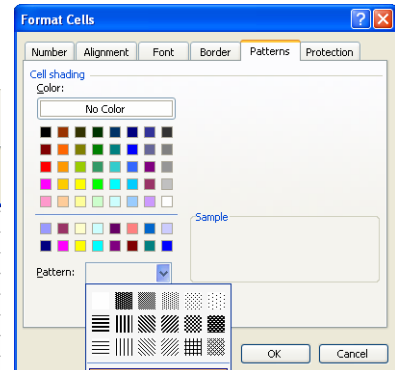
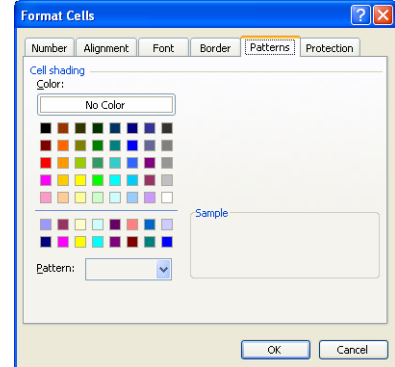
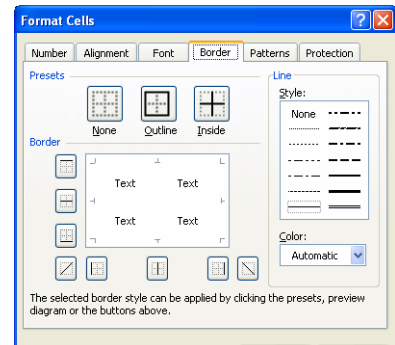
- Highlight the block of cells.
- On the **Menu Bar**, click on **Format → Cells...**
- Click on the **Patterns** tab.
- Click on down arrow at the end of the **Pattern** box.
- Choose a pattern at the top.
- Click on a color in the top group.
- Click on a color in the bottom group.
- Notice the sample and adjust as necessary.
- Click on **OK**.



Number Entry

Formatting Numbers

- Highlight the cells.
- On the **Menu Bar**, click on **Format → Cells**
 - **OR** Right click on the block and choose **Format Cells**.
- Choose the **Number** tab.
- Choose the desired format. (See descriptions below.)
- Set the number of decimals and/or other formatting.
- Click on **OK**.



Moving and Copying

Cut and Paste

- Highlight the cell or cells to be moved.
- On the **Menu Bar**, click on **Edit → Cut**
 - **OR** click on the **Cut** icon.
- **Notice the marching ants around the block you are cutting.**
- Click in the cell the information is to be moved to.
- On the **Menu Bar**, click on **Edit → Paste**.
 - **OR** click on the **Paste** icon.

Yellow	Red	Orange
24	8	19
14	14	18
14	11	30
15	6	26
19	9	26
15	14	21

Copy and Paste

- Highlight the cell or cells to be moved.
- On the **Menu Bar**, click on **Edit → Copy**.
 - **OR** click on the **Cut** icon.
- **Notice the marching ants around the block you are cutting.**
- Click in the cell the information is to be moved to.
- On the **Menu Bar**, click on **Edit → Paste**.
 - **OR** click on the **Paste** icon.

Clearing a block of cells

- Highlight the cells to be cleared.
- On the **Menu Bar**, click on **Edit → Clear**.
- Choose All, Formats, Contents, or Notes.

Freeze Pane

- Click in the cell just under and to the right of the information that shouldn't scroll off the screen.
- On the **Menu Bar**, click on **Window → Freeze Panes**.

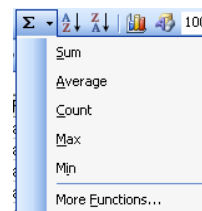
Unfreeze Panes

- On the **Menu Bar**, click on **Window → Unfreeze Panes**.

Formulas

Entering Simple Formulas

- Click in the cell where the formula is to be.
- On the **Standard Toolbar**, click on the down arrow by the **Sum** button.
- Choose the appropriate function.
 - **Sum** - Add the list of numbers.
 - **Average** - Find the mean of the list of numbers.
 - **Count** - Count the number of cells with numbers.
 - **Max** - Find the maximum (largest) number in the list.
 - **Min** - Find the minimum (smallest) number in the list.
- Click and drag to highlight the desired cells for the formula.
- Press the **Enter** key.



Writing a Formula

- Click in the cell where the formula should go.
- Type an equals sign (=).
- Select cells to be included by clicking and dragging.
- Enter the proper operations
 - Addition (+)
 - Subtraction (-)
 - Multiplication (*)
 - Division (/)
 - Exponentiation (^)
- Press the **Enter** key.

Worksheets

Naming a Worksheet

- Double click on the tab of the sheet.
- Enter a name for the sheet.
- Press the **Enter** key.

Copying a Worksheet

- Hold down the **Control** key.
- Click on the tab of the sheet and drag it to the right.
- Let go of the mouse.
- Let go of the **Control** key.
- Double click on the tab of the sheet and give it a name.

Moving a Worksheet

- Click on the tab of the sheet and drag it to the desired location.

Coloring the Worksheet Tab

- Right click on the tab of the sheet.
- Click on **Tab Color...**
- Click on the desired color.
- Click on **OK**.
- **Note** – When the tab is selected, the color shows at the bottom. When the tab is not selected, the entire tab shows the color.

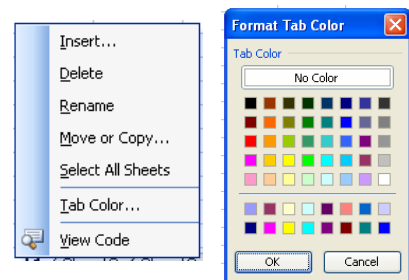


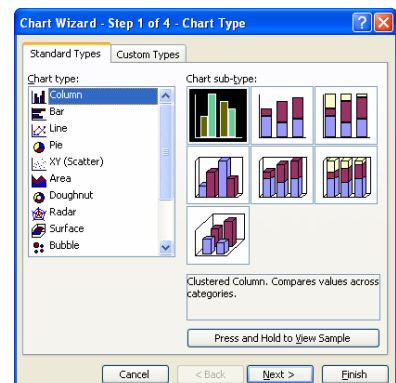
Chart Wizard

- Select the data for the chart.
- Click on the **Chart Wizard Button** on the **Toolbar**.



Step 1

- Choose the chart type and the chart subtype.
- Click and hold the mouse down on the **Press and hold to view sample** button to see what the chart looks like.
- Click on the **Next** button.
- **Note** - The Custom Types tab offers several nice options.



Types of Charts	
Name	Description
Column (vertical)	Use to compare totals over time and to show a trend.
Bar (horizontal)	Use to compare totals over time and to show a trend.
Line	Use to show change over time, emphasizing the rate of change.
Pie	Use to show relationships and portions of the whole.
Doughnut	A variation of the pie chart.
X Y (Scatter)	Use to compare trends over uneven intervals of time.
Area	Use to show change over time, emphasizing the amount of change.
Radar	Use to show data relative to a central point.
Surface	Use to show relationships of two sets of data, especially large amounts of data.

Step 2

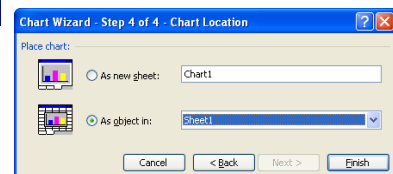
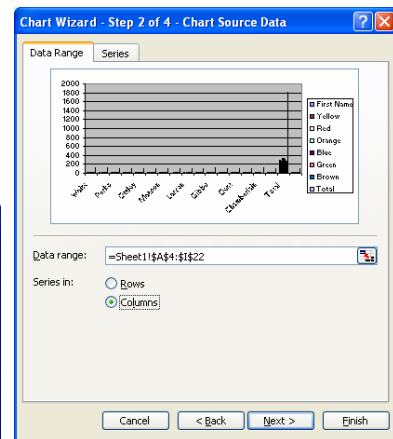
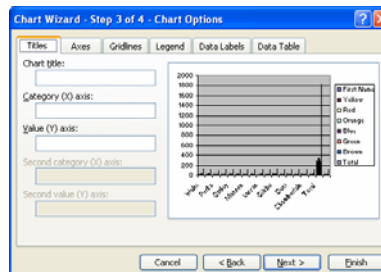
- Check to make sure that the desired data is included.
- To change the data set -**
 - Click on the arrow at the end of the Data range box.
 - Click and drag to choose the desired data.
 - Press the **Enter** key.
- Click on the **Next** button.

Step 3

- Type in a name for the chart.
- Click on the **Next** button.

Step 4

- Choose where to place the chart.
- As a new sheet:** will place the chart on a new sheet in the workbook.
- As object in:** will place the chart on the active page just like clipart.
- Click on the **Finish** button.



Using the Chart Toolbar

- Click on the chart.
- The **Chart Toolbar** is available.
- Click on the down arrow at the end of the **Chart Objects** box and choose the desired item.
- Click on the **Format Object** button.
- Change the formatting as desired. (See the chart below.)
- Click on **OK**.
- Note** – As an object in the chart is selected by clicking on it, the name of the object is displayed in the **Chart Object** box.

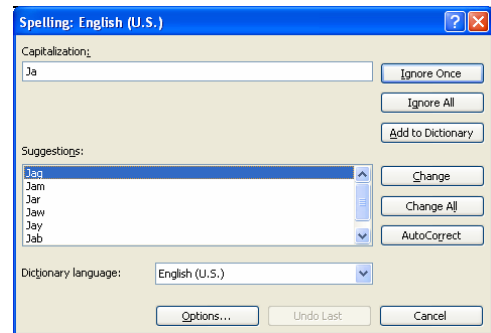


Chart Objects

Name of Object	Description	Formatting Options
Category Axis	The X axis, horizontal	Click on the desired tab and make the changes. Patterns tab – Change the borders and background. Scale tab – Change the scale of the axis. Font tab – Change the font, font style, size, and color. Number tab – Change the format of the numbers. Alignment tab – Change the text to an angle. Placement tab – Change the location of the legend. Properties tab – Change the attributes of the object.
Chart Area	The area the chart, title, and legend are on.	
Chart Title	The title of the chart.	
Legend	The key to the chart.	
Plot Area	The area behind the chart.	
Value Axis	The Y axis, vertical	
Series “ “	A set of values such as a row of information.	

Spelling

- On the **Menu Bar**, click on **Tools → Spelling**
 - **OR** press F7.
- Check each word that comes up.
- Click on **Ignore** or **Ignore All** button to make no changes.
- Click on the correct spelling and then click on the **Change** button.



Print Area

- Setting the print area tells the computer to print just the selected part of the spreadsheet.

Setting the Print Area

- Click and drag to select the area to be printed.
- On the **Menu Bar**, click on **File → Print Area → Set Print Area**.

Clearing the Print Area

- On the **Menu Bar**, click on **File → Print Area → Clear Print Area**.

Printing

- **Always look at the document in Print Preview first!**

Print Preview

- On the **Menu Bar**, click on **File → Print Preview**.
- Look carefully at the page to see what needs to be done.

Margins

- Click on the **Margins Button** and then click on the black blocks to change the margins.
- Be careful! Black blocks without dotted lines are column markers.
- It is very easy to change column widths at this point.
 - **OR** click on the **Setup** button and choose the **Margins** tab, and adjust the margins as needed.
- Click **OK**.

Setup

- Click on the **Setup** Button.
- **Page Orientation**
 - Click on the **Page** tab, and choose Portrait Orientation or Landscape Orientation.
- **Scaling**
 - Click on the **Page** tab, and adjust the scale of the printing.
 - **OR Fit to** sets the number of pages the information will be squeezed onto.
 - **Note** - Choose the # pages wide and the # pages tall.
- **Header/Footer**
 - Click on the **Header/Footer** tab, and choose from the list by clicking on the down arrow.
 - **OR** click on the **Custom** buttons and enter your own.
- **Sheet**
 - Click on the **Sheet** tab, and choose to print or not print the gridlines.
 - Choose the order that the pages will be printed.
- Click on **OK**.

Multiple Page Printouts

Column Headings Repeated on Every Page

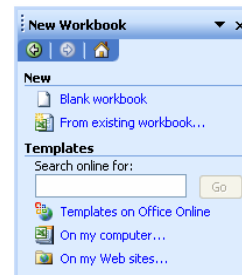
- Close **Print Preview**.
- On the **Menu Bar**, click on **File → Page Setup**.
- Click on the **Sheet** tab.
- Click on the red arrow at the right of **Rows to repeat at top**.
- Click in the row with the headers you want repeated.
- Press the **Enter** key.
- Click on **OK**.

Row Headings Repeated on Every Page

- If you are still in Print Preview, click on the **Close** button.
- On the **Menu Bar**, click on **File → Page Setup**.
- Click on the **Sheet** tab.
- Click on the red arrow at the end of the **Columns to repeat at left**.
- Click in the column with the headers you want repeated.
- Press the **Enter** key.
- Click on **OK**.

Templates

- On the **Menu Bar**, click on **File → New...**
- In the **Task Pane**, in the **Templates** section, click on **On my computer....**
- Look at the templates under each of the tabs.
- Click on the desired template.
- Click on **OK**.



Templates on the Web

- On the **Menu Bar**, click on **File → New ...**
- The **Task Pane** will open in **New Workbook**.
- In the **Templates** section, choose **Templates on Office Online**.
- Click on the map on **United States**.
- Choose a category listed under the featured templates and choose a template. (Look for templates with a green **X** which indicates Excel templates.)
- Click on the **Download Now** button and follow the steps.
- The template will open in **Excel**.