

Intermediate Excel 2003

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_inter_doc.html .

Toolbars

Choosing Toolbars

- On the **Menu Bar**, click on **View → Toolbars**.
- Click on the desired toolbar.
- **Note** - Toolbars already showing have a checkmark in a box in front of them.

Moving Toolbars

- Place the cursor over the left end of the toolbar. (The cursor changes to a four-headed arrow.)
- **Note** – If the toolbar is in the middle of the spreadsheet, click on the title bar of the toolbar.
- Click and drag the toolbar to the desired location. (Toolbars dock on any edge.)

Removing a Button from the Toolbar

- Hold down the **Alt** key, then click on the button and drag it off the toolbar.

Changing the Order of the Buttons on the Toolbar

- Hold down the **Alt** key.
- Click on the button and drag it to the desired location on the toolbar.

Adding Buttons to a Toolbar

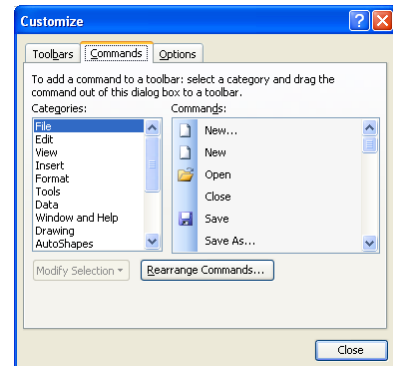
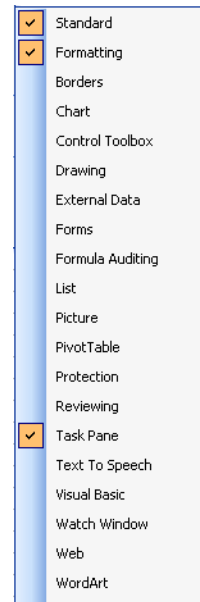
- On the **Menu Bar**, click on **Tools → Customize...**
- Click on the **Commands** tab.
- Choose a category in the **Categories** window.
- Find the desired command in the **Commands** window.
- Click and drag the command to the desired toolbar. (The I bar indicates the position on the toolbar.)
- **Note** – Commands can be added to any toolbar.

Restoring a Toolbar to Original Settings

- On the **Menu Bar**, click on **Tools → Customize...**
- Click on the **Toolbars** tab.
- Click on the toolbar to be restored.
- Click on the **Reset** button.

Customizing Excel

- On the **Menu Bar**, click on **Tools → Options**.
- **View Tab** – Choices affect the appearance of the screen, including scroll bars and gridlines.
- **Edit Tab** – Choices affect the way editing is done in the spreadsheet.
- **General Tab** – Choices affect the number of sheets in a new workbook, the standard font and font size, the default file location, and the number of files displayed in the recently used files list.
- **Custom Lists** – Choices affect existing lists and creating new lists for the Fill function.
- **Save Tab** – Choices affect **AutoRecover**.
- Click on **OK**.



Moving Through the Spreadsheet

Keyboard Method

- Press the **Scroll Lock** key on the keyboard (top right side).
- The arrow keys on the keyboard now move the spreadsheet instead of moving from cell to cell.
- Press on the **Scroll Lock** key again to turn off this feature.

Scrolling Mouse

- Press the wheel on the scrolling mouse.
- Move the mouse (no clicking) and the spreadsheet moves.
- The farther from the marker, the faster the spreadsheet moves.
- To turn off this feature, left click or press on the wheel again.

Up and Down Arrow Keys

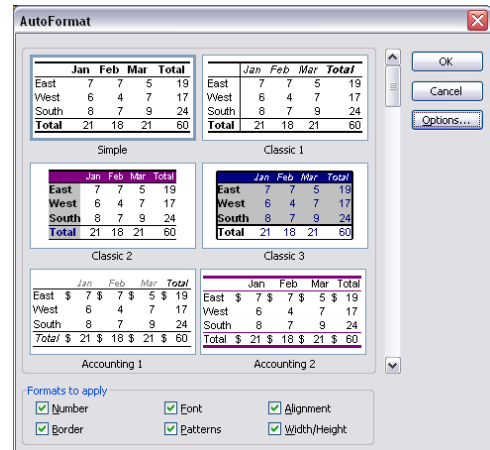
- **Arrow keys** - move one cell in the direction of the arrow.
- **Control →** or **Control ←** - moves to the next cell with information or to the far edge of the worksheet.

Page Up and Page Down Keys

- **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.

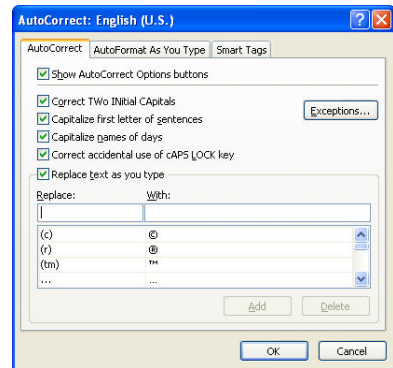
Standard Design with AutoFormat

- Take advantage of **AutoFormat** in designing the spreadsheet. **AutoFormat** allows the spreadsheet to be formatted quickly from a list of possible formats.
- Click in the section of the spreadsheet to be formatted.
- On the **Menu Bar**, click on **Format → AutoFormat...**
- Choose the best design for your spreadsheet.
- Click on the **Options** button and make specific changes as desired. (i.e. remove the checkmark from **Number** so the money format of the selected design will not change the number format in the data.)
- Click on **OK**.



AutoCorrect

- On the **Menu Bar**, click on **Tools → AutoCorrect Options...**
- Choose from the checkboxes:
 - Correct T**W**o I**N**itial C**A**pitals
 - Capitalize first letter of sentences
 - Capitalize names of days
 - Correct accidental usage of c**A**P**S** I**O**C**K** key
- Click on **OK**.

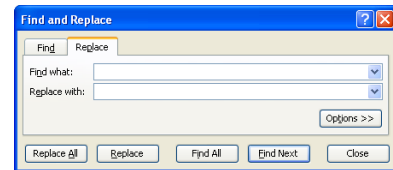


Correcting Automatically

- On the **Menu Bar**, click on **Tools → AutoCorrect Options...**
- In the box under **Replace**, type the word to be changed automatically.
- In the box under **With**, type the word or words to automatically replace the word typed in **Replace**.
- Click on **OK**.

Find and Replace

- To find text, on the **Menu Bar**, click on **Edit → Find...**
 - In the **Find what** box, enter the word or phrase to be found.
 - Click on the **Find Next** button.
- To find and replace, on the **Menu Bar**, click on **Edit → Replace...**
 - In the **Find what** box, enter the word or phrase to be found.
 - In the **Replace with** box, enter the word or phrase to replace it with.
 - The **Options** button works here as noted above.



Saving the Workbook

- On the **Menu Bar**, click on **File → Save As...**
- Enter a name for the spreadsheet.
- Click on the down arrow at the end of the **Save as type** box and choose the desired version.
- **Note** – An **Excel** spreadsheet can be saved in a variety of formats for use with other programs.
- Click on the **Save** button.

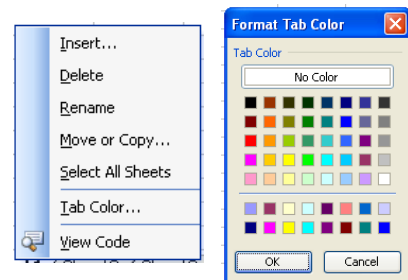
Worksheets

Renaming a Worksheet

- Double click on the worksheet tab.
- Type in the name.
- Press the **Enter** key.

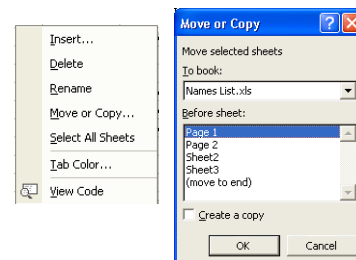
Coloring the Worksheet Tab

- 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 as a stripe at the bottom. When the tab is not selected, the entire tab shows the color.



Moving a Worksheet to another Workbook

- Be sure both workbooks are open.
- Right click on the tab of the worksheet and choose **Move or Copy...**
- Click on the down arrow below **To book** and choose the destination workbook.
- In the **Before sheet** window, choose the worksheet it should come before.

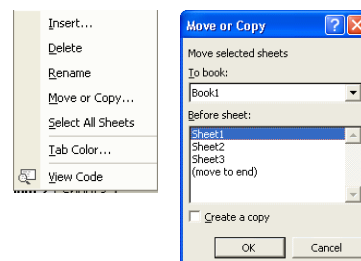


Copying a Worksheet within the Workbook

- Click on the tab of the worksheet to be copied.
- Hold down the **Control** key while clicking and dragging the worksheet to the side.
- Release the **Control** key when the worksheet is successfully copied.

Copying a Worksheet to another Workbook

- Be sure both workbooks are open unless the sheet is being moved to a new workbook.
- Right click on the tab of the worksheet and choose **Move or Copy...**
- Click to select **Create a copy** at the bottom of the window.
- Click on the **To book** down arrow and choose the destination workbook.
- In the **Before sheet** window, choose the worksheet it should come before.
- Click on **OK**.



Group Column/Row Adjustments

- **Columns** can be adjusted so that multiple columns have the same width.
- Click and drag over the letters of the columns (top edge) to highlight the desired columns.
- Move the cursor to a line between the column letters at the top (two-headed arrow).
- Click and drag to adjust the width of the column.
- When the mouse button is released, the other columns in the selected group will adjust to the same width.
- **Rows** can be adjusted so that multiple rows have the same height.
- Click and drag on the numbers of the rows (left edge) to highlight the desired rows.
- Move the cursor to a line between the row numbers at the left (two-headed arrow).
- Click and drag to adjust the height of the row.
- When the mouse button is released, the other rows in the selected group will adjust to the same height.

Paste Special

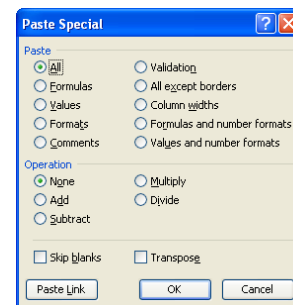
- **Paste Special** gives great control over how something is pasted.

Copying

- Copy the cells that have the information, formatting, or other information desired.
- The highlighted cells now have a “marching ant border.” As long as the “ants are marching,” those cells can be pasted with paste or paste special.
- **Note** - To turn off the marching ants (deselect the cells), press the **Escape** key.

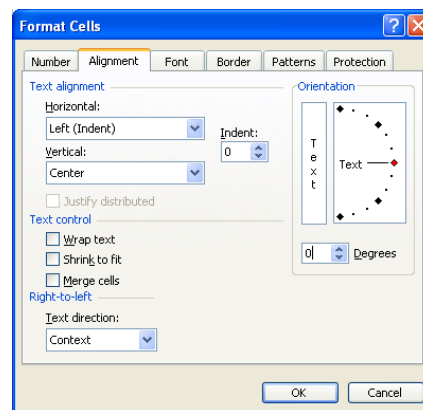
Using Paste Special

- Click in the cell the information or formatting is to be pasted.
- On the **Menu Bar**, click on **Edit → Paste Special**.
- In the **Paste** section, choose the type of paste desired:
 - **All**
 - **Formulas**
 - **Values**
 - **Formats**
 - **Comments**
 - **Validation**
 - **All except borders**
 - **Column widths**
 - **Formulas and number formats**
 - **Values and number format**
- In the **Operation** section, choose the operation to be performed with the numbers from the copied section.
 - Choose **None** if no operation is desired.
- **Transpose** causes a row to be pasted as a column or a column to be pasted as a row.
- Click on the **Paste Link** button to create a dynamic link between the copied cells and the destination cells. This closes the window and performs the paste.
- Click on **OK**.



Text Formatting

- The placement of text in a cell can be controlled precisely.
- Click and drag over the cells to select them.
- On the **Menu Bar**, click on **Format → Cells...**
- Click on the **Alignment** tab.
- To align the text:
 - Click on the **Horizontal** down arrow and choose **Left**, **Center**, or **Right**.
 - Click on the **Vertical** down arrow and choose **Top**, **Center**, or **Bottom**.
- To have multiple lines of text filling the height of the cell, click on the **Vertical** down arrow and choose **Justify**.
- To have multiple lines of text, in the **Text control** section, click to select **Wrap text**.
- To have text shrink in size to fit the width of the cell, in the **Text control** section, click to select **Shrink to fit**.
- To place text at an angle, in the **Orientation** section, click to select the desired angle or enter the number of degrees the text is to be slanted.
- Click on **OK**.



Format Painter

- Click in the cell with the desired formatting.
- Click on the **Format Painter** button on the toolbar.
- Click and drag over the cells to be formatted.



Formatting Several Selections

- Click in the cell that has the desired formatting.
- Double click on the **Format Painter** button on the toolbar.
- Click and drag over the cells to be formatted.
- Click on the **Format Painter** button to turn the tool off.



Naming a Cell or Range of Cells

- Naming a cell or a range of cells allows the name to be used in formulas.
- Naming a cell or a range of cells also gives quick access to the named cell(s).
- A name identifies a specific cell or range of cells in a workbook, not just on a worksheet.

Naming the Cell(s)

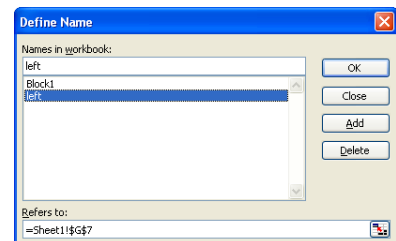
- Click and drag to highlight the desired cells (or click in the cell).
- Click in the **Name Box**, which is to the left of the **Input line**.
- Enter the name of the cell(s). The name cannot have any spaces in it.
- Press the **Enter** key.

Using the Name

- To find a named cell or range, click on the **Name Box** down arrow and choose the desired range.
- To use a named cell or range of cells in a formula, type in the name of the cell(s) rather than highlighting the cell(s).

Deleting a Name

- On the **Menu Bar**, click on **Insert** → **Name** → **Define...**
- Click on the name to be deleted.
- Click on the **Delete** button and then click on **OK**.



Dynamic Links

- Click in the cell where the information should be seen.
- Type an equal sign (=).
- Move to the location of the original information and click on that cell.
- Press the **Enter** key.
- **OR** Select the original location of the information.
- On the **Menu Bar**, click on **Edit** → **Copy** OR click on the **Edit** button.
- Move to the location where the information should also be seen.
- On the **Menu Bar**, click on **Edit** → **Paste Special**.
- Click on the **Paste Link** button.

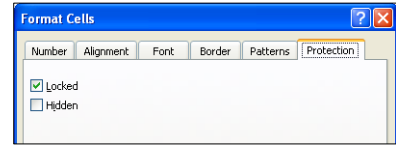
Dynamically Linking to Word

- Select the original location of the information.
- On the **Menu Bar**, click on **Edit** → **Copy** OR click on the **Edit** button.
- Bring up the Word document.
- On the **Menu Bar**, click on **Edit** → **Paste Special**.
- Click on the radio button in front of **Paste Link**.
- In the **As** window, click on **Microsoft Excel Worksheet Object**.
- Click on **OK**.
- **Note** - This link works best when both documents are open on the computer at the same time.

Protecting Cells/Worksheets

What is happening?

- Cells are protected by default.
- The protection does not take effect until the sheet is protected.
- Unprotect the cells in which information will be able to be changed.

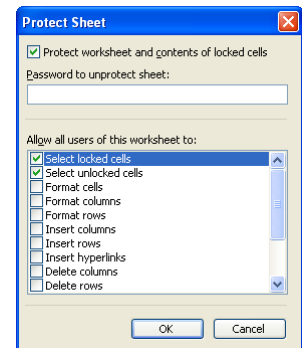


Unprotecting Cells

- Highlight the cells to be unprotected.
- On the **Menu Bar**, click on **Format → Cells...**
- Click on the **Protection** tab.
- Click to remove the check mark from **Locked**.
- Click **OK**.

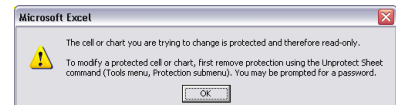
Protecting the Sheet

- On the **Menu Bar**, click on **Tools → Protection → Protect Sheet...**
- Enter a password if desired. (If a password is entered here, it must be entered to unprotect the sheet later.)
- Select the desired options.
 - Leave the checkmarks in front of **Select locked cells** and **Select unlocked cells**.
 - Choose **Formatting, Inserting, Deleting** etc. to allow the user to make changes to the selected item.
- Click on **OK**.



Working with a Protected Sheet

- Try to enter information in a cell that is protected.
- A warning comes up indicating the sheet is protected.

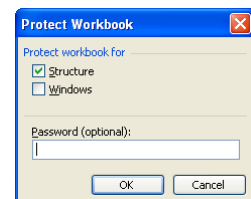


Unprotecting the Sheet

- On the **Menu Bar**, click on **Tools → Protection → Unprotect Sheet...**
- The password must be entered if one was entered when the sheet was protected.

Protecting the Workbook

- On the **Menu Bar**, click on **Tools → Protection → Protect Workbook...**
- Enter a password if desired. (If a password is entered here, it must be entered to unprotect the workbook later.)
- Select **Structure** to protect the structure of the workbook, including the cells, their contents, and the formatting.
- Click on **OK**.



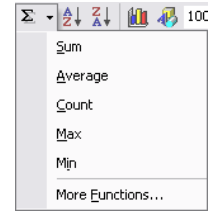
Unprotecting the Workbook

- On the **Menu Bar**, click on **Tools → Protection → Unprotect Workbook...**
- The password must be entered if one was entered when the sheet was protected.

Formulas

Entering Formulas

- Click in the cell where the formula is to be placed.
- On the **Standard Toolbar**, click on the **Sum** button down arrow.
- 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.



Order of Operations

- To be sure to get the desired results, use the proper order of operations.
- A mnemonic to remember the order is: **Please Excuse My Dear Aunt Sally**.
 1. **Please** (Parenthesis) - Things contained in parenthesis.
 2. **Excuse** (Exponents) - Exponential calculations.
 3. **My** (Multiplication) **Dear** (Division) - Multiplication or division. (A combination of these reads from left to right.)
 4. **Aunt** (Addition) **Sally** (Subtraction) - Addition or subtraction. (A combination of these reads from left to right.)

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.

3-D Reference

- **3-D Reference** means performing a function on the same cell or group of cells on several worksheets.
- For example, in a workbook where each student's information is recorded on a separate worksheet, an average of their scores can be calculated on the summary page.
- Click in the cell the formula is to appear in.
- Enter an = sign, the name of the function, and an opening parenthesis.
- Click on the tab of the first worksheet and click in the cell with the data to be used in the function. (If multiple cells are to be used, click and drag to highlight them.)
- Hold down the **Shift** key and click on the tab of the last worksheet to be included.
- Press the **Enter** key.

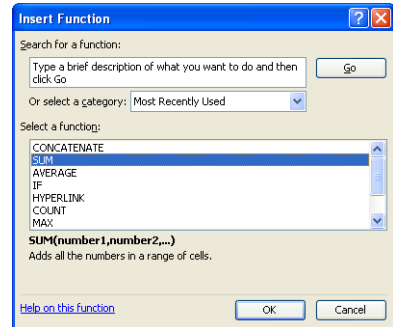
Entering More Complex Formulas

- Click in the cell the function is to be placed in.
- On the **Menu Bar**, click on **Insert → Function**
- OR click on the **Insert function** button on the **Input Line**.



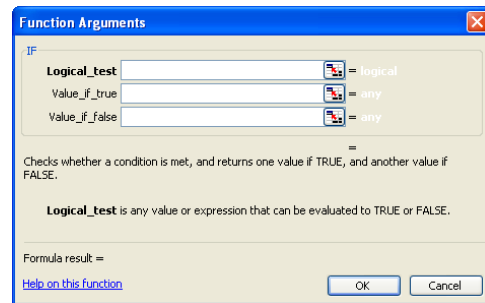
Finding the Right Function

- Enter a description of what the desired function should do in the **Search for a function** box.
- Click on the **Go** button.
- Click to select the function from the list in the **Select a function** box.
- Notice the description below the box.
- Choose a different function if the selected one is not appropriate.
- Click on **OK**.



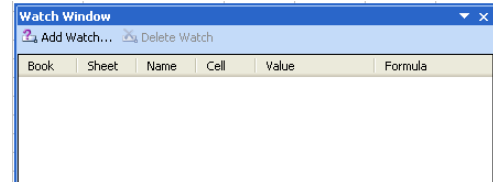
IF Formula

- Click in the cell the formula is to be in.
- On the **Menu Bar**, click on **Insert → Function...**
- OR click on the **Insert function** button on the **Input Line**.
- Click on **IF** in the **Select a function** box.
- When **IF** is not in the **Select a function** box:
 - Click on the down arrow to **Select a category**.
 - Choose **All**.
 - Scroll through the **Select a function** box and choose **IF**.
- Click on **OK**.
- **Logical Test**
 - The test is the condition that must be met. The computer measures whether it is true or false.
 - The contents of a cell(s) can be examined.
 - If the cell is empty or contains a 0, a result of false is given. If the cell contains a number other than 0, true.
 - Another example, “Is the total in cell D5 larger than 32?” would be entered as **D5>32**.
 - To choose a particular cell, click on the red dot at the end of the box, click on the desired cell, and then press the **Enter** key.
- **Value if true**
 - The content of the cell appears when the results of the logical test is true.
 - Text must be enclosed in double quotes. For example, “**Number is too large**”.
 - To have no text appear, type in double quotes. For example, “”.
 - To have the contents of another cell appear, click on the red dot at the end of the box, click on the desired cell, and then press the **Enter** key.
- **Value if false**
 - The content of the cell appears when the results of the logical test is false.
 - Text must be enclosed in double quotes. For example, “**Number is too small**”.
 - To have no text appear, type in double quotes. For example, “”.
 - To have the contents of another cell appear, click on the red dot at the end of the box, click on the desired cell, and then press the **Enter** key.
- Click on **OK**.



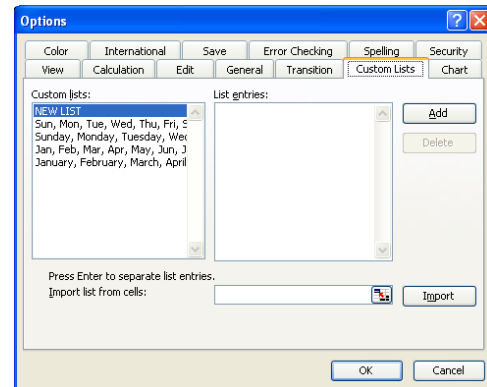
The Watch Window

- The **Watch Window** toolbar allows the contents of selected cells to be monitored.
- On the **Menu Bar**, click on **View → Toolbars → Watch Window**.
- **Adding a Watch**
 - Click in the spreadsheet on the cell to be watched.
 - Click on the **Add Watch...** button in the **Watch Window**.
- **Deleting a Watch**
 - Click on the watch to be deleted.
 - Click on the **Delete Watch** button in the **Watch Window**.
- Cells can be watched in any spreadsheet that is open.



Creating a Custom Fill

- On the **Menu Bar**, click on **Tools → Options**.
- Click on the **Custom Lists** tab.
- Click on **New List** in the **Custom lists** section.
- Type the list into the **List entries** box.
- **Note** - Each item should be on its own line.
- Click on the **Add** button and then click **OK**.

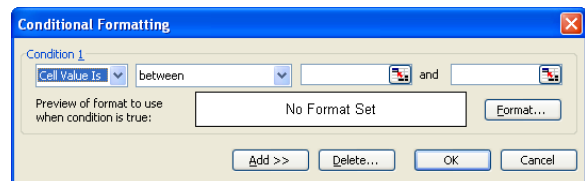


Custom Fill from a List

- On the **Menu Bar**, click on **Tools → Options**.
- Click on the **Custom Lists** tab.
- Click on **New List** in the **Custom lists** section.
- Click on the button with the red dot next to the **Import** button.
- Click and drag to highlight the desired list.
- Click on the **Import** button and then click **OK**.

Conditional Formatting

- The format of cells can be based on the contents of the cells.
- Click in the cell to be formatted.
- On the **Menu Bar**, click on **Format → Conditional Formatting**.
- In the first box, choose **Cell Value is** or **Formula is**.
- In the second box, select a condition.
- In the third box, enter a value or select a section of the spreadsheet with the red arrow button.
- If desired, use the fourth box also.
- Click on the **Format** button.
- This is the formatting that will apply if the condition(s) are met.
 - **Font tab** - Choose the Font style, the type of underlining, and the color of the font.
 - **Border tab** - Choose the border conditions, the style of the border, and the color of the border.
 - **Patterns tab** - Choose the cell shading. (This is the most dramatic type of formatting.)
- Click on **OK**.
- If another condition needs to apply also, click on the **Add** button. Up to three conditions may apply.
- Click on **OK**.



Documentation

- Prepare instructions for:
 1. Other persons who will use the spreadsheet.
 2. The creator of the spreadsheet. We all forget with the passage of time.
- Comments are a great way to include documentation.

Comments

- A comment is like a sticky note.
- Cells with comments have a red triangle in the top right corner.

Inserting Comments

- Click in the cell where the comment is to be placed.
- On the **Menu Bar**, click on **Insert → Comment** OR right click in the cell and select **Insert Comment**.
- Enter the comment. The name of the author can be erased.
- Click away from the comment box or press the **Escape** key when finished.

Seeing Comments

- Place the mouse over a cell with a comment and the comment box will appear.

Editing Comments

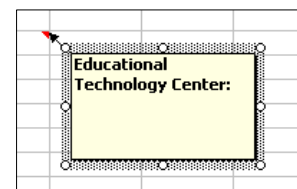
- Click in the cell with the comment.
- On the **Menu Bar**, click on **Insert → Edit Comment** OR right click in the cell and select **Edit Comment**.
- Edit the comment as needed.
- Click away from the comment box or press the **Escape** key when finished.

Resizing the Comment Box

- Click in the cell with the comment.
- On the **Menu Bar**, click on **Insert → Edit Comment** OR right click in the cell and select **Edit Comment**.
- Place the cursor over one of the handles (white boxes on the edge). (The cursor is a two-headed arrow.)
- Click and drag to the appropriate size.

Moving the Comment Box

- Click in the cell with the comment.
- On the **Menu Bar**, click on **Insert → Edit Comment** OR right click in the cell and select **Edit Comment**.
- Place the cursor over the edge of the comment box. (The cursor is a four-headed arrow.)
- Click and drag the comment box to the desired location.



Removing a Comment Box

- Click in the cell with the comment.
- On the **Menu Bar**, click on **Edit → Clear → Comments** OR right click in the cell and select **Delete Comment**.

Printing Comments on the Worksheet

- On the **Menu Bar**, click on **View → Comments**.
- **Note** - This makes the comments visible on the page.
- On the **Menu Bar**, click on **File → Page Setup** and choose the **Sheet** tab.
- In the **Print** section, click on the down arrow after **Comments**.
- Choose **As displayed on sheet**.
- Click on **OK** and then print the worksheet.

Printing Comments at the End of the Worksheet

- On the **Menu Bar**, click on **File → Page Setup** and choose the **Sheet** tab.
- In the **Print** section, click on the down arrow after **Comments**.
- Choose **At end of sheet**.
- Click on **OK** and then print the worksheet.

The Drawing Toolbar

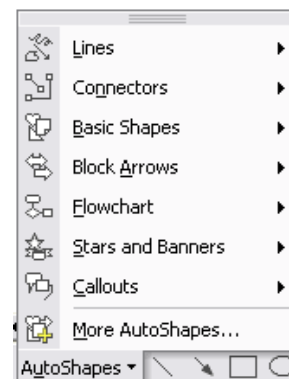
Showing the Drawing Toolbar



- The **Drawing** toolbar is usually displayed at the bottom of the window.
- On the **Menu Bar**, click on **View → Toolbars → Drawing**.

Inserting AutoShapes

- **AutoShapes** provide decorative elements and places for comments.
- On the **Drawing** toolbar, click on **AutoShapes**.
- Select the desired category and shape.
 - **Lines** - Choose from lines, arrows, curves, and squiggles.
 - **Connectors** - Choose lines or arrows to connect other shapes.
 - **Basic Shapes** - Choose boxes, shapes, or brackets.
 - **Block Arrows** - Choose from a variety of arrows, bent or straight.
 - **Flowchart** - Choose from a variety of flowchart symbols.
 - **Stars and Banners** - Choose multi-pointed starts or shaped banners.
 - **Callouts** - Choose speech or thought balloons or boxes.
 - **More AutoShapes** - Choose from clip art shapes.
- In the document, click and drag to create the shape in the desired location.
- Make adjustments to the shape as desired.
- **Note** – If the object has yellow diamonds, these are used to change the proportions of the object.



Adding Text to an Object

- If the object is a callout, click in the callout.
- For other shapes, right click on the object and select **Add Text**.
- Enter the desired text.
- Use the **Formatting** toolbar to change the font, font size, font color, etc.
- Click away from the object.

Moving an Object

- Click on the object and move the cursor to the hash-mark edge.
- Click and drag the object to the desired location.

Resizing an Object

- Click on the object.
- Move the cursor over one of the handles. (The open circles at the corners and the middle of each edge.)
- The cursor will change to a two-headed arrow.
- Click and drag to the desired size.

Connecting the Tail of the Callout

- Click on the callout and then click on the border of the callout.
- Notice the yellow diamond at the end of the tail of the callout.
- Click and drag it to the desired location.

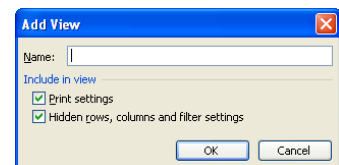
Deleting an Object

- Click on the object and then click on the border of the object.
- Press the **Delete** key on the keyboard.

Custom Views

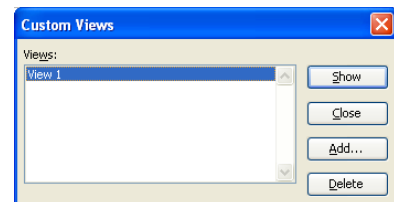
Creating a Custom View

- On the **Menu Bar**, click on **View** → **Custom Views...**
- Click on the **Add...** button.
- Enter a name for the view.
- To include printer settings, leave the checkmark in front of **Print settings**.
- To include hidden rows, columns and filter settings, leave the checkmark in front of **Hidden rows, columns and filter settings**.
- Click on **OK**.



Seeing a Custom View

- On the **Menu Bar**, click on **View** → **Custom Views...**
- Click on the desired view.
- Click on the **Show** button.



Deleting a Custom View

- On the **Menu Bar**, click on **View** → **Custom Views...**
- Click on the desired view.
- Click on the **Delete** button.
- Click on the **Yes** button to delete the selected view.
- Click on the **Close** button.

Data Validation

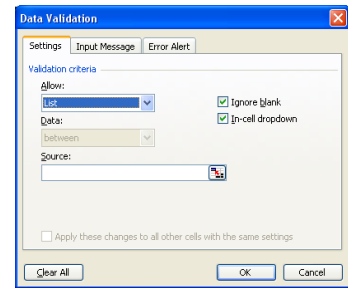
- Data validation is the process of setting limits that will be checked when data is entered.
- Data validation helps ensure the accuracy and usefulness of the data.
- For example, choosing from a list is faster and more accurate than typing in the information.

Creating the List

- In a separate area of the worksheet, create the list.
- The list should run down a column.

Setting up the Cell

- Click in the cell where the list is to be used.
- On the **Menu Bar**, click on **Data → Validation...**
- Click on the **Settings** tab.
- Click on the **Allow** box down arrow and choose **List**.
- Click on the button at the end of the **Source** box.
- Highlight the cells with the desired list.
- Press the **Enter** key.
- Click on **OK**.
- If subsequent cells need the same data validation, use the fill feature.

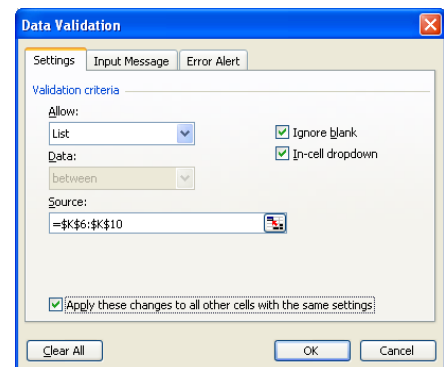


Using the List

- Click in the cell where the list is to be used.
- Click on the down arrow and choose the desired item from the list.

Editing the List

- Make corrections to the list (original list) as needed.
- Click in a cell where the list was used.
- On the **Menu Bar**, click on **Data → Validation...**
- Click on the button at the end of the **Source** box.
- Highlight the cells with the list and then press the **Enter** key.
- Click at the bottom of the window to **Apply these changes to all other cells with the same settings**.
- Click on **OK**.
- The choices are now updated.



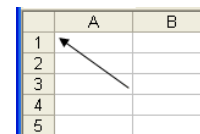
Hiding and Unhiding

Row(s)

- To hide a row, click in a cell of the row to be hidden.
 - On the **Menu Bar**, click on **Format → Row → Hide**.
 - OR Right click on the row indicator and choose **Hide**.
- **Note** - Click and drag to select several cells in a column to select several rows to be hidden.
- To unhide a row, click and drag to highlight cells above and below the hidden row(s).
 - On the **Menu Bar**, click on **Format → Row → Unhide**.

Unhiding the Row 1

- Click on the cell above the row 1 indicator. (See illustration.)
- This will select the entire worksheet.
- On the **Menu Bar**, click on **Format → Row → Unhide**.

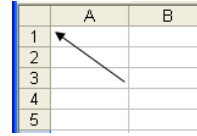


Column(s)

- To hide a column, click in a cell of the column to be hidden.
 - On the **Menu Bar**, click on **Format → Column → Hide**.
 - OR Right click on the column indicator and choose **Hide**.
- **Note** - Clicking and dragging to select several cells in a row will cause several columns to be hidden.
- To unhide a column, click and drag to highlight cells to the right and to the left of the hidden column(s).
 - On the **Menu Bar**, click on **Format → Column → Unhide**.

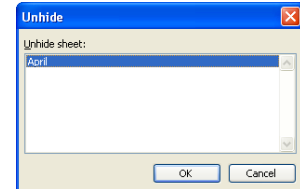
Unhiding Column A

- Click on the cell to the left of column A indicator.
- This will select the entire worksheet.
- On the **Menu Bar**, click on **Format → Column → Unhide**.



Sheet(s)

- To hide a sheet, click on the tab of the sheet to be hidden.
 - On the **Menu Bar**, click on **Format → Sheet → Hide**.
- To unhide a sheet, on the **Menu Bar**, click on **Format → Sheet → Unhide**.
 - Select the sheet to unhide.
 - Click on **OK**.

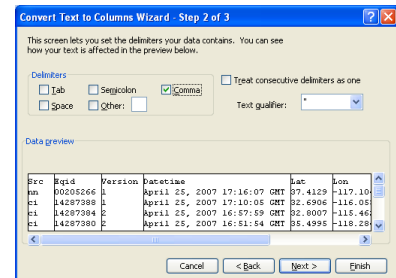


Getting Data

- Data can be obtained from a variety of sources.
- Data in a table in a **Word** document can be pasted directly into **Excel**.
- Data which is not organized as a table can be organized into columns if the information on each line is consistently organized and separated by a comma, a tab, or some other marker. Files with commas separating the data are csv files.

Text to Columns

- From a source such as <http://earthquake.usgs.gov/eqcenter/catalogs/>, copy the CSV file information and paste it into an Excel spreadsheet.
- On the **Menu Bar**, click on **Data → Text to Columns...**
- Click to choose **Delimited** as the type of data and then click on **Next**.
- In the **Delimiters** section, choose the delimiter such as **Comma**.
- The **Data preview** box shows the data in columns.
- Click on the **Finish** button.



Charts

Using Charts

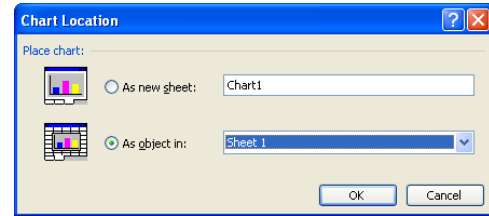
- Charts can be an effective visual presentation showing a comparison of items, changes over time, parts of a whole, trends, and correlations.
 - **Comparisons, Changes over Time, and Trends** – Use a column chart, a bar chart, a line chart, a cone chart, a pyramid chart, area chart, or surface chart.
 - **Parts of a Whole** - Use a pie chart, a doughnut chart, a stacked column chart, or a stacked bar chart.
 - **Correlations** – Use an X Y (Scatter) chart or a Bubble chart.
 - **Note** – A radar chart shows data from a central point in a circle.

Resizing a Chart

- Click on the chart.
- Place the cursor over a handle (the square boxes on the edge). The cursor changes to a two-headed arrow.
- Click and drag the chart to the desired size.
- **Note** - By using the corner, the chart can be made wider and taller at the same time.

Changing the Chart Location

- A chart can be an object resting on top of the worksheet or a worksheet by itself.
- Click on the chart.
- On the **Menu Bar**, click on **Chart → Location...**
- Make the desired change in location.
- Click on **OK**.



The Chart Toolbar

- The **Chart Toolbar** is a powerful tool for quickly formatting the chart.

The Chart Toolbar		
Name	Icon	Description
Chart Object		Click on the down arrow and choose the chart object to work with.
Format _____		Click on the chart area to be formatted and then click on the Format _____ button to format the area. The name of the object displayed in the Chart Object box is added to the name of the button.
Chart Type		Click on the Chart Type down arrow and choose the desired type of chart.
Legend		Click on the Legend button to add or remove the legend.
Data Table		Click on the Data Table button to add or remove the data table.
By Row		Click on the By Row button to chart the data by information in the rows.
By Column		Click on the By Column button to chart the data by information in the columns.
Angle Clockwise		Click on the text to be changed, such as the X axis, and then click on the Angle Clockwise button to turn the text clock wise.
Angle Counterclockwise		Click on the text to be changed, such as the X axis, and then click on the Angle Counterclockwise button to turn the text counter clock wise.

Using the Chart Toolbar

- Click on the part of the chart to work with.
- The **Chart Object** box displays the name of the object.
- Click on the **Format** _____ button. The name of the object displayed in the **Chart Object** box is added to the name of the button.
- Make the desired changes to the object.
- Click on **OK**.

Changing the Chart Type

- Click on down arrow next to the **Chart Type** button on the **Chart Toolbar** and choose the desired chart.

Showing/Hiding the Legend

- Click on the **Legend** button.
- If the legend is showing, it will be hidden. If the legend is hidden, it will be displayed.

Showing/Hiding the Data Table

- Click on the **Data Table** button.
- If the data table is showing, it will be hidden. If the data table is hidden, it will be displayed.

By Row or By Column

- Data is charted by rows or by columns. The button with the color background indicates which way the data is being charted.
- To change from charting by rows to charting by columns, click on the **By Column** button.
- To change from charting by columns to charting by rows, click on the **By Row** button.

Angling the Text

- The text on the X axis and the Y axis can be turned quickly clockwise or counterclockwise.
- Click on the axis to be angled. (The name of the axis, value (Y) or category (X) is displayed in the **Chart Object** box.)
- Click on the **Angle Clockwise** button or the **Angle Counterclockwise** button as desired.
- To remove an angle from the text:
 - Click on the axis to be changed.
 - Click on the **Format** button.
 - Click on the **Alignment** tab.
 - Enter 0 in the **Degrees** box.
 - Click on **OK**.

Printing

Printing

- **Always use Print Preview first!** Otherwise, the document will be **UGLY**.

Print Preview

- On the **Menu Bar** click on **File → Print Preview**
- Carefully check the page.

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** allows the information to be fit on a specified number of pages.
- **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 the desired information.

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**.
- **Note** – When printing a crossword puzzle with clues at the end of the page, be sure to print **Row and Column Headings**.

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 Multiple Worksheets

- Click on the tab of the first worksheet to be included.
- Hold down the **Control** key and click on each additional worksheet that is to be printed.
- On the **Menu Bar** click on **File → Print Preview**
- Check the pages to be sure they will print as desired.
- Click on the **Print** button.

Repeating Headings

- Column headings and row labels can be repeated on every page.
- If 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 right of **Rows to repeat at top**.
- Click in the row with the headers are to be repeated.
- Press the **Enter** key.
- Click on the red arrow at the end of the **Columns to repeat at left**.
- Click in the column with the headers to be repeated.
- Press the **Enter** key.
- Click on **OK**.

