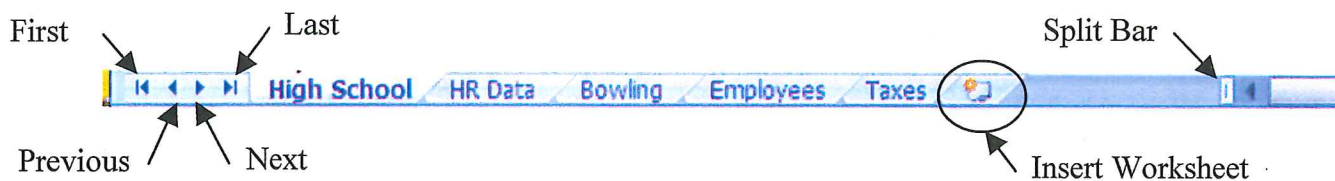

Excel 2010 Intermediate

TIES Learning and
Technology Division

1667 Snelling Ave. N.
St. Paul, MN 55108

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Excel Worksheets Skills



Name Worksheets

1. Double click on the worksheet tab.
2. Type a new name for the sheet and press Enter key.

Add a Worksheet

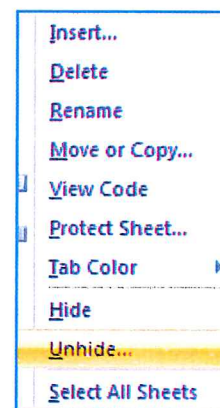
Click on the Insert Worksheet Button



Right-Click on a Sheet Tab

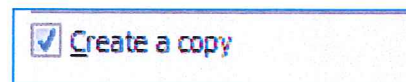


Insert, Delete, Tab Color, Hide & Unhide Sheets, Select all Sheets



Copy Worksheets

1. Right-Click on the sheet tab and select Move or Copy.
2. In the lower left corner of the dialog box click on Create a copy



OR ...

Place the mouse pointer on the Tab

Hold down on the **Ctrl** key and drag the sheet to a new location.

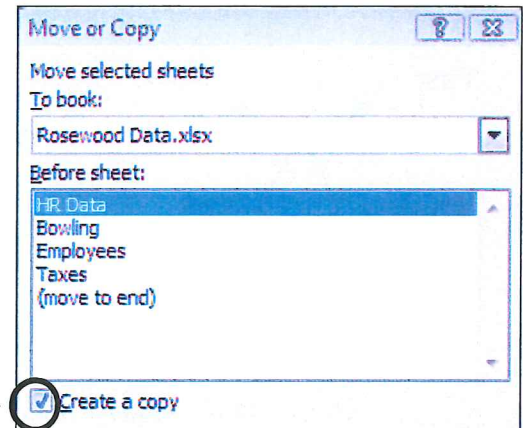
Moving and Copying Sheets to Another Excel Book

1. Have both Excel Books open (have the two Excel files open).
2. Select the worksheet that you want to move or copy.
3. On the Home tab, in the Cells group, click Format, and then under Organize Sheets, click Move or Copy Sheet.

(Or Right-Click on a sheet tab, then choose **Move or Copy**)

4. Fill in the dialog box indicating where you want the sheet moved or copied.

Check the box if you want to
copy the worksheet



Grouping Sheets

When sheets are grouped, you can quickly enter, edit, and copy data for multiple sheets. Changes you make on the active sheet are also made on all the other grouped sheets.

1. Click on the first sheet tab to include in the group.
2. Shift + click on the last sheet tab to include in the group.

(Ctrl + click on individual sheets to include or exclude).

Ungrouping Sheets

Right-click on a sheet tab and select Ungroup from the shortcut menu.

Viewing Options for Large Worksheets



Freezing Panes

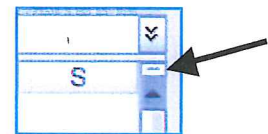
Use this option to prevent headings from scrolling off the page when you scroll down or across.

1. Position the cell pointer. (In our example cell D2).
2. On the View tab, in the Window group, click the Freeze Panes button and choose Freeze Panes
3. To unfreeze the panes: On the View tab, in the Window group, click the Freeze Panes button and choose Unfreeze Panes

	A	B	C	D	E
1	School	Last Name	First Name	Emp#	Gender
2	Como Elem	Doyle	Larry	1932	M
3	Dist Office	Young	Fran	1011	F
4	Como Elem	Cooper	Linda	1290	F
5	Dist Office	Bankler	Rowena	1906	F

Split Pane / Workbook Screen

1. Place the mouse pointer on Point the split box at the top of the vertical scroll bar or at the right end of the horizontal scroll bar.
2. When the pointer changes to a split pointer  or , drag the split box down or to the left to the position that you want.
3. To remove the split, double-click any part of the split bar that divides the worksheet.



Note: You cannot freeze panes and use split at the same time.

Conditional Formatting

Use this feature to change the formatting appearance of the data based on a condition.

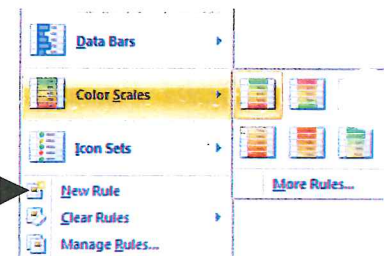
1. Select a range of cells containing numeric values you want to place a conditional format.
2. On the Home tab, in the Styles group, click on the Conditional Formatting button
3. Float the mouse pointer down to Color Scales or Data Bars and then float across (don't click) to the various choices and notice how the appearance of your data changes.



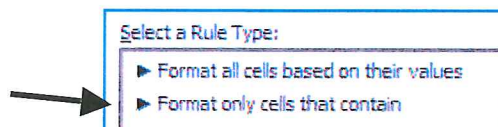
Format cells that match specific criteria.

For example, display test scores greater than 90 in a different color.

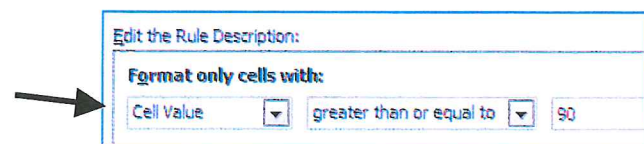
1. Select a range of cells – then click on the Home tab
2. Click on the Conditional Formatting button and click New Rule



3. Choose "Format only cells that contain"



4. Enter in the Rule / Criteria



5. Click on the Format Button

Excel 2010 Table Features

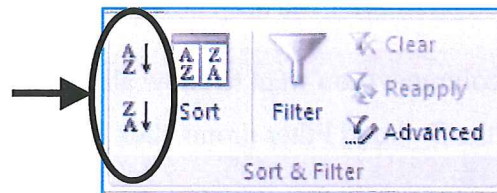
An Excel 2010 Table (previously known as list or a database) is a continuous set of rows and columns. It has no blank rows or no blank columns..

The rows & columns must be continuous--**you cannot have a blank row or column.**

To use any of the Excel Database feature you need to first **single-click** in the Database

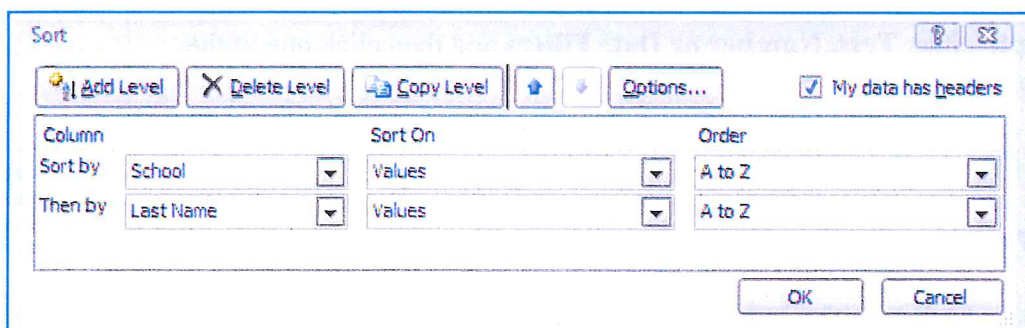
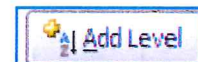
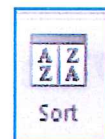
Quick Sorting (one level)

1. Click anywhere in a column you want sorted
2. On the Data tab under the Sort and Filter group click on the AZ or ZA buttons



Multiple Level Sorting

1. Click anywhere in a column you want sorted
2. On the Data tab under the Sort and Filter group click on the Sort button
3. Click on the Add level button to select another sort level



Filtering

1. Single-click anywhere in the Table
2. On the Data tab under the Sort and Filter group click on the Filter button to activate the drop down filtering buttons
3. Choose a value to filter



	A	B	C	D	E	F
1	School	Last Nam	First Nam	Em	Gender	Departme
2	Dist Office	McGuire	Ellen	1932	F	Business
3	Dist Office	Gorton	Hazel	1011	F	Business
4	Como Elem	Cooper	Linda	1290	F	Admin.

Drop down Filtering buttons

Note : When a field has been filtered, the drop down arrow changes to a filter icon



To remove all filters from all columns: (you want to show all records)

On the Data tab under the Sort and Filter group click on the Clear button



To remove the Filter feature (remove the drop down arrows)

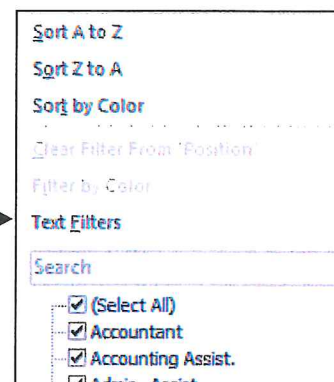
On the Data tab under the Sort and Filter group click on the Filter button



Text, Number or Date Filters

You can precisely target values for Numbers, Text or Dates in a column

1. Click on the drop down filter arrow for a column
2. Point to either **Text, Number or Date Filters** and then click one of the commands (.



Enter criteria in the Search box

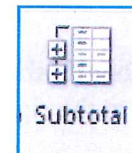
A Search box displays in the AutoFilter menu. You can type characters on which you want to filter in this box for specific values.

Data Subtotals

1	2	3	A	G	H	I	J
	1		School	Fee	Paid	Balance	Salary
	42		Como Elem Total	\$5,746.00	\$1,228.85	\$4,517.15	\$1,678,238
	62		Dist Office Total	\$2,538.38	\$439.63	\$2,098.75	\$866,065
	116		Kennedy Total	\$7,756.43	\$1,617.93	\$6,138.50	\$2,027,220
	161		Lincoln HS Total	\$5,782.35	\$1,470.88	\$4,311.48	\$3,685,189
	162		Grand Total	\$21,823.15	\$4,757.28	\$17,065.88	\$8,256,712
	163						

In our example, each time the value for the **School** changes we want to Sum (add) the values for the fields: Fee, Paid, Balance and Salary

1. Click in the Excel Table.
2. **Sort** the Table by the **field** you want to subtotal.
(In our example we first need to sort the list by school)
3. On the Data tab in the Outline group click on the Subtotal button.
4. Complete the window as illustrated below:



Subtotal

At each change in:
School

Use function:
Sum

Add subtotal to:

- ☐ Department
- ☒ Fee
- ☒ Paid
- ☒ Balance
- ☒ Salary
- ☐ Position

☒ Replace current subtotals

☐ Page break between groups

☒ Summary below data

Remove All OK Cancel

Hide/show detail buttons
 1 = Only Grand Total
 2 = Only Sub Summaries
 3 = All detail

1	2	3
		1
		2

Remove the Subtotals

1. Single-Click in the Excel Table
2. On the Data tab in the Outline group click on the Subtotal button
3. Click on the Remove All button.



Copy Sub-totals in Excel 2010

Copy only the Excel subtotals to another Worksheet

1) Select the sub-totals that you want to copy

C	D	H	I	J	K
Last Name	Building	Salary	Fee	Paid	Balance
	Dist Office Total	\$873,065	\$2,538.38	\$439.63	
	Glen Elem Total	\$1,649,833	\$5,614.50	\$1,202.60	
	Kennedy Total	\$2,027,220	\$7,756.43	\$1,617.93	
	Lincoln HS Total	\$1,712,270	\$5,882.35	\$1,470.88	
	Grand Total	\$6,262,388	\$21,791.65	\$4,731.03	

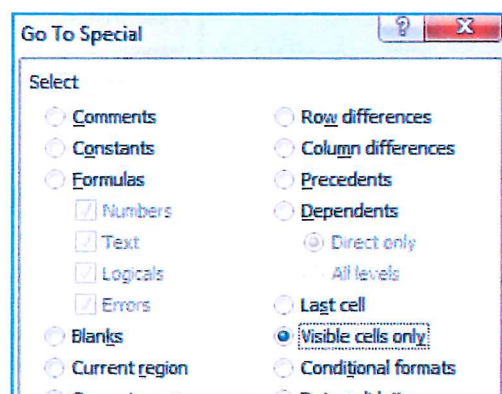
2) On the “Home” tab of the Ribbon, look for the “Editing” group – usually it is the last one, all the way over at the right hand side of the Ribbon.

3) Click on “Find & Select”



4) On the little menu that appears, click “Go To Special”

5) In the box that appears, make sure you select “Visible Cells Only” in the right hand column



6) Click OK

7) Copy using the Excel menu (or Ctrl + C) and then paste your sub-totals in your new Worksheet

Create an Excel Table

Use this command to define a block of data as an Excel 2010 Table

1. Select the range of cells that you want to include in the Table. The selection contains no blank columns or blank rows)
2. On the Insert tab, in the Tables group, click on the Table button.



3. If the selected range contains column headers, select the “My table has headers” check box.

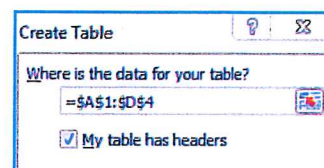
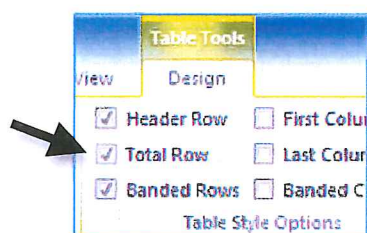


Table Tools : Design Tab & Totals Row

When using this method of defining a table a new Tab will display. The Table Tools will display adding a Design tab.

Use this to include a Total Row at the bottom of the table or to apply various Designs for the table

Check the “Total Row” box to see summary data at the end of your table



43	Zerbackie	Betty	Rosemount	12	95	F
44	Zimmer	Abby	Anoka	10	98	F
45	Total				88.3	40

Choose various Table Styles



Remove the Table Feature

1. Click anywhere in the table.
2. On the Design tab, in the Tools group, click Convert to Range.

Or Right Click in the table and choose Table – Convert to Range

Excel Database Functions

Excel provides 12 functions that you can use to analyze the information in your database. All the database functions start with the letter “D” (DAVERAGE, DMAX, DMIN, DSUM, etc.) and require three pieces of information:

- Database the range of cells that make up the database.
- Field indicates which field or column that you want to analyze.
- Criteria the range of cells that contains the criteria that you will enter.

Data Average Function (DAVERAGE)

This function will average the values of a field that match a variety of criteria.

DAVERAGE(database-range, field, criteria)

The formula for our example will be entered in cell D10
=DAVERAGE(B13:S167,J13,G10:J11)

Diagram illustrating the DAVERAGE function setup. The formula is entered in cell D10. The criteria range is highlighted in red, and the field to be averaged is also highlighted in red.

Emp#	School	Last Name	First Name	Gender	Position	Department	Birth Date	Salary	Start Date	Sick
2858	Como	Airre	Dave	M	Teacher	Engineering	10/11/1961	\$27,883	9/12/1987	15.00
2868	Como	Andersen	Tom	M	Teacher	Art	9/28/1943	\$55,822	4/5/1982	1.50
1758	Como	Brwyne	Melia	F	Nurse	Health	9/30/1961	\$36,940	9/20/1987	3.00
2758	Como	Brwyne	Tom	M	Teacher	Bus ED	6/26/1963	\$28,550	3/6/1985	3.00
1311	Como	Cane	Nate	F	Clerk	Business	5/31/1960	\$25,889	7/7/1988	0.75
1331	Como	Cash	Mary	F	Teacher	Business	6/8/1949	\$47,853	6/12/1989	1.00
1724	Como	Chu	Steven	M	Curr. Admin	Bus ED	4/14/1956	\$35,786	12/26/1984	3.75
1290	Como	Cooper	Linda	F	Admin. Assist.	Business	5/17/1964	\$41,539	2/14/1989	4.00

Concatenate Function

Concatenate joins several text items into one text item. For instance, if first name and last name are in separate columns, they can be joined together into one column.

	A	B	C	D	E
1	First	Last	Full		
2					
3	Little	Richard	Little Richard		
4	Mick	Jagger			

1. Click where you want the joined text strings (C3)
2. Click the Insert Function button and start the Concatenate function (Text category)
3. In our example, the first argument (Text 1) should be cell A3
4. The second argument (Text 2) Type a quotation mark, a space, and another quotation mark " "

Excel will place a space between the first and last names.
5. The third argument (Text 3) should be cell B3
6. Click OK.
7. Use the Fill Handle to copy the formula down the column for other names.

Function Arguments

CONCATENATE

Text1: A3 = "Little"

Text2: " " = " "

Text3: B3 = "Richard"

Text4: =

If you delete the first and last name columns, you will lose the text, as you did in the previous example when we used the Proper function. Use the Copy and Paste Values procedure to convert the full names to text values.

Edit Copy - Edit Paste Special - Values

Paste Special

Paste

☒ All ☐ Validation

☐ Formulas ☐ All except borders

☐ Values ☐ Column Widths

☐ Formats ☐ Formulas and number formats

☐ Comments ☐ Values and number formats

Operation

☒ None ☐ Multiply

☐ Add ☐ Divide

☐ Subtract

☐ Skip blanks ☐ Transpose

Paste Link Cancel OK

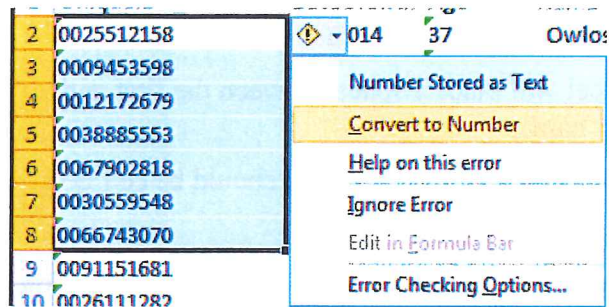
Numbers Stored as text

Excel Error Checking Options button



The whole sheet

- 1 Click on the first error symbol on the sheet to display the yellow icon
2. Ctrl +a to select the entire sheet
- 3 Click on the drop down arrow of the Excel Error Checking Options button
- 4 Choose Convert to number



One column at a time

- 1 Click in the first value of a column, the Excel Error Checking Options button displays
- 2 Ctrl-Shift press the Down Arrow key to select the whole column
- 3 Scroll back up to the top of the column
- 3 Click on the drop-down arrow of the Excel Error Checking Options button
- 4 Choose: Convert to Number



Turn off the symbol

Options - Formulas - Error Checking - Enable background error checking