Excel Data Management

Workshop Objectives

1. Sorting Data
2. Custom Sort
3. Filtering
4. Text to Columns

5. Formulas to use with Text
   a. Trim
   b. Concatenate
   c. Count If
   d. Proper

In Excel a **List** is a collection of similar data stored in a structured manner, rows and columns. Managing lists of data, such as student records, can be time consuming and difficult. Using an Excel worksheet to manage the data or list makes the task easier. One of the great features of Excel is the ability to sort records in various ways and by multiple fields. The fields you use to order your data are called **sort fields** or **sort keys** (Last Name is an example of a sort field). The quickest way to sort data in Excel is to use the **Sort A to Z** or **Sort Z to A** buttons found in the **Editing** group on the **Home tab**. You can also use **Custom Sort** feature to sort your data on more than one field.

Exercise 1: Sorting Data using a *Single* Sort Field

1. Using the **Band Members 2013** worksheet
2. Click any cell in the **Last Name column**. You do not need to select the entire list. Excel automatically determines the range of the list when you click any cell inside the list.
3. Click the **Sort & Filter button** on the Home tab and then click "**Sort A to Z**" on the sub-menu. The list is sorted in order by last name.
4. If you selected the wrong column before sorting the list click the **Undo** button to undo the sort.
5. **Note** – remove blank columns and rows before sorting your data

Exercise 2: Sorting Data using Custom Sort

1. Click any cell in the **Band Members 2013**
2. Click on the **Sort & Filter button** on the Home tab and then click **Custom Sort** on the sub-menu. The **Sort** dialog box is displayed.
3. Make sure the **My data has headers** check box is checked
4. Under **Column**, in the **Sort by** box, select the first column (*Instrument*) that you want to sort by.
5. Under **Sort On**, select the type of sort. Do one of the following:
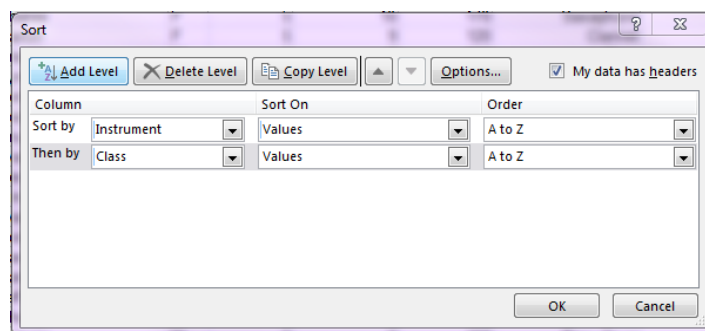
- To sort by text, number, or date and time, select **Values**.
- To sort by format, select **Cell Color**, **Font Color**, or **Cell Icon**.

6. Under **Order**, select how you want to sort. Do one of the following:

- For text values, select **A to Z** or **Z to A**.
- For number values, select **Smallest to Largest** or **Largest to Smallest**.
- For date or time values, select **Oldest to Newest** or **Newest to Oldest**.
- To sort based on a custom list, select **Custom List**.

7. To add another column to sort by, click **Add Level**, and then repeat steps three through five.
8. Choose *Class* for the second **Sort by** field
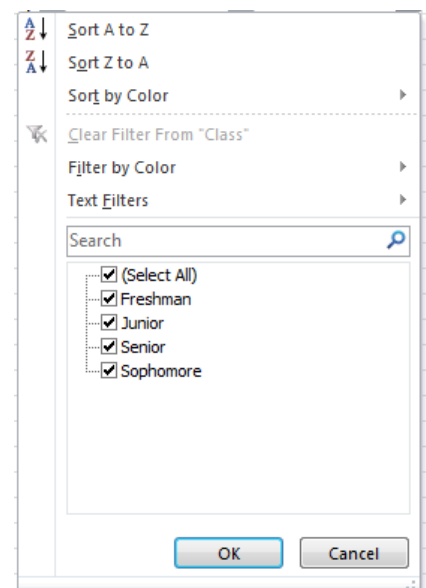9. Click OK to sort

Exercise 3: Filtering Data using AutoFilters

We learned how to sort the data, but what if we want to view data that meets certain criteria, such as Students in the New York State or band members who are seniors? Using the feature allows you to filter your data so you view only the records you want.
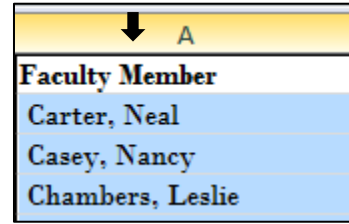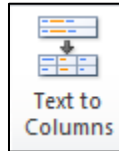
1. Using the **Band Members 2013** worksheet
2. Click any cell in the **list** to make it active
3. Click on the **Sort & Filter button** on the Home tab and then click **Filter** on the sub-menu.

H	I	J
Instrume ▾	Class ▾	Scholarship Amo ▾
Trumpet	Freshman	$4,450
French Horn	Freshman	$4,460

4. **Filter** arrows appear next to each column label in the list. Click an arrow next to a column to see a list of filtering criteria for that column.
5. Click the **Class** list arrow to see the criteria. Click the (Select all) check box to unselect all the classes and check the **Seniors** to view the chosen data subset.
6. Click the **Sex** column list arrow and select **M** to see all the males in the band
7. Click the **Scholarship Amount** column list arrow **Largest to Smallest**
8. Try various combinations
9. To turn off the Filter. Click on the **Sort & Filter button** on the Home tab and then click **Filter** on the sub-menu.

Sort A to Z
Sort Z to A
Sort by Color ▸
Clear Filter From "Class"
Filter by Color ▸
Text Filters ▸
Search 🔍
☑ (Select All)
☑ Freshman
☑ Junior
☑ Senior
☑ Sophomore

OK   Cancel

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Exercise 4: Text to Columns feature

1. Click on the **Faculty** worksheet
2. Click in cell **B1** and **Insert 3 columns**
3. Click on "**A**" in the **Header Row** to select the entire column
4. Click on the **Data tab** and **Text to Columns**
5. The Text to Columns wizard opens up - on the first screen make sure **Delimited** is selected and click **Next**
6. Check the box next to **Comma** (look at the preview pane and notice how the text is separated) and click **Next**
7. On the last screen you can choose a format for your columns if you wish – Click **Finish**

You now have the first and last names in separate columns – this is a great tool if you import data and it doesn't import in columns.

Exercise 5: Formulas to use with Text – Trim

1. Using the **Faculty** worksheet click in the column that contains the last name and **sort alphabetically**

Notice that we are missing the names that start with "B" and they are still at the bottom of the list. This happens because some of the names have spaces before them. We can use the formula TRIM to get rid on the extra spaces.
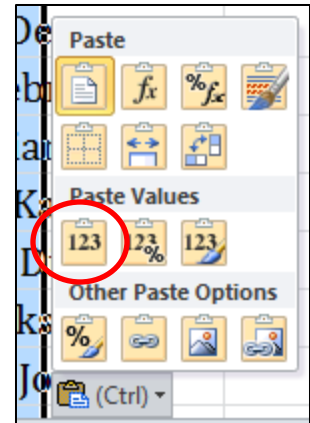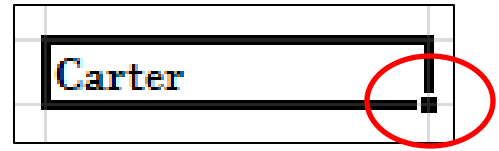
2. Click in cell **C2**
3. Click on the **Formulas Tab**
4. Click on the **Text** drop down and scroll down and click on **TRIM**
5. Click in cell **A2** and then click **OK**

*Notice the example that shows what your text looks like and what it will look like
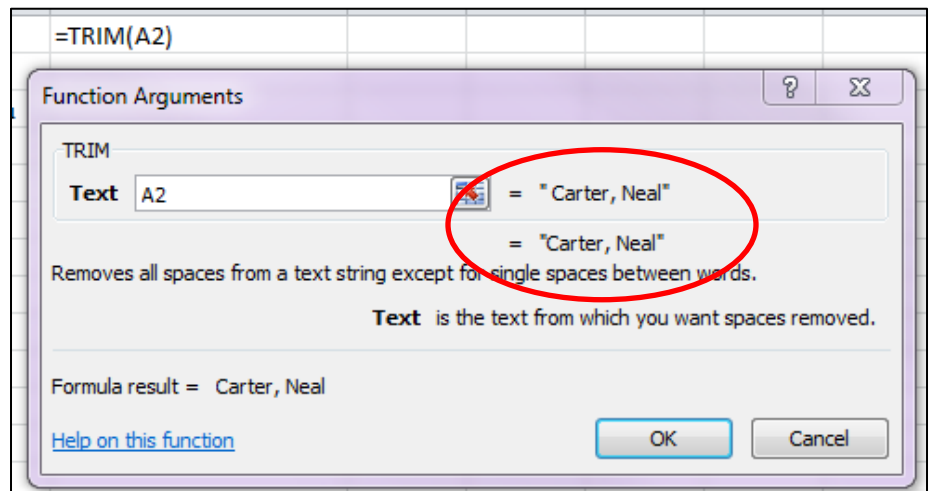
Let's Copy the formula

1. Put your cursor over the small black box in the lower right-hand corner of the cell

2. When your cursor changes to the crosshairs, click on the square and drag down to fill in the formula

3. **Better yet, double-click on the little square to fill in the formula**

4. Copy the column with the formula

5. Paste it in the Next column to the right

6. After you paste the names you should see a small clipboard appear at the bottom of the list

7. Click on it and Click on the Values only icon

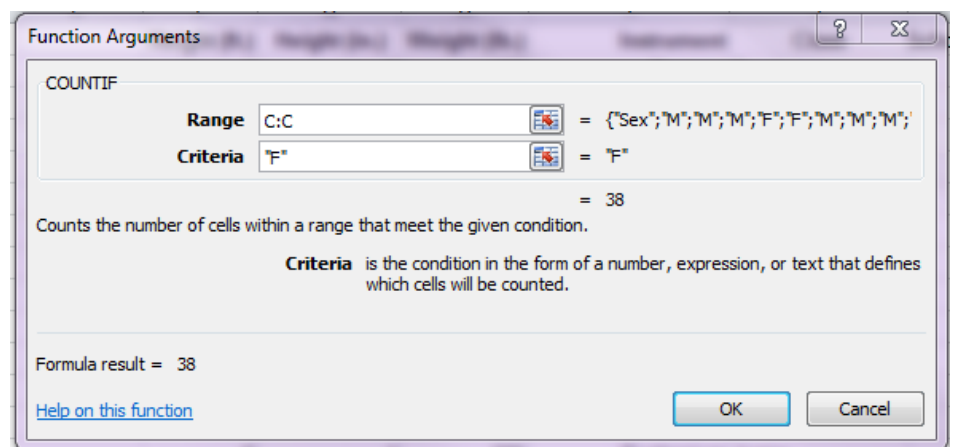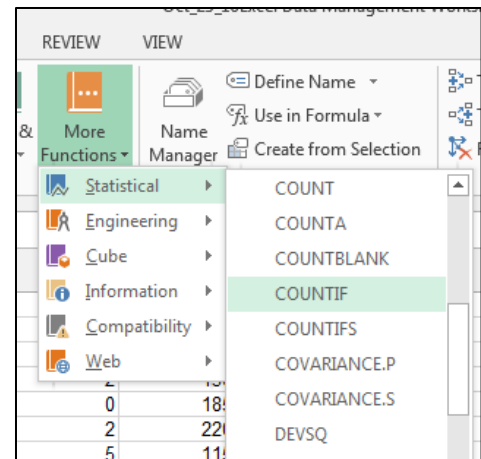## Exercise 6: Formulas to use with Text - Concatenate

1. Click on the **Attendees spreadsheet**

2. Click in cell **C1**

3. Click on the **Formulas Tab**

4. Click on the small arrow under **Text**

5. Click on **Concatenate**

6. In the Function Arguments window, click in **Text1** and click in cell **A1**

7. Click in **Text2** type a **comma** and a **space**
   – notice that Excel adds the **Quotes**

8. Click in **Text3** and click in cell **B1**

9. Check the example to see if the name appears the way you want it to.

10. Click finish

11. You should have the name **Annette, Fisk**

12. Copy your formula
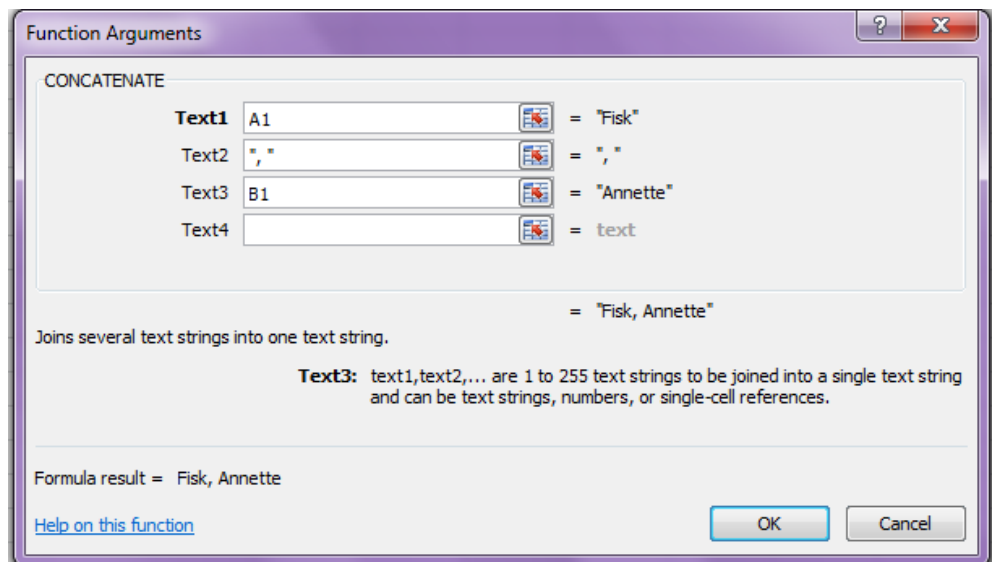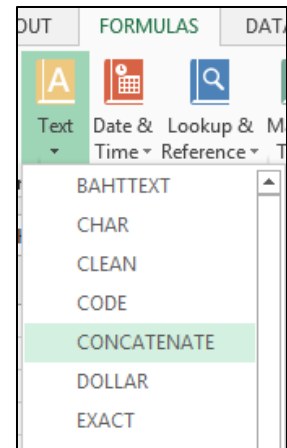
Exercise 7: Formulas to use with Text – Count If

Let's find out how many girls and boys are in our band

1. Click on the Band Members 2013 spreadsheet
2. Click in **column D** and add a couple of columns
3. Click in **cell D2**
4. Click on the **Formulas Tab**, click on **More Functions** – **Statistical**, scroll down and click on **COUNTIF**
5. Click on the column header for **column C** to define the **Range**
6. Click in the **Criteria** text box and type **"F"** and click **OK**
7. Your result should be 38 female band members
8. Repeat the steps to count the males in the band

Exercise 8: Formulas to use with Text – Proper

Some of the names in our spread sheet have lowercase letters where there should be upper case letters.
Let's use the function PROPER to fix this problem.

1. On the Band Members sheet, click in **cell B2** and add 2 columns
2. Click on the **Formulas Tab** -- **Text** – click on **PROPER**
3. Click on the column header for column A to select the entire column
4. Click OK
5. Double click on the fill handle to copy the formula to the column
6. Copy the corrected names and paste them as text to remove the formula and retain the data only
7. Repeat with the first names
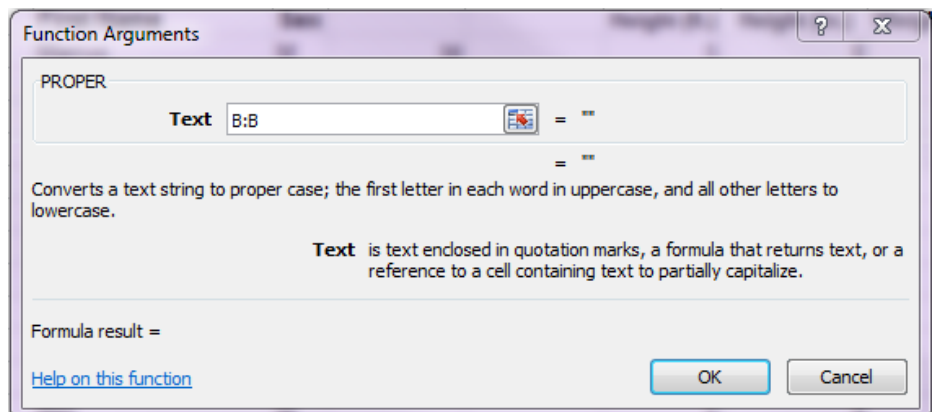
Tips:

Ctrl+Shift+down arrow will take you to the end of a column of data

Ctrl+home key will always take you to cell A1

Get rid of the Start Screen

1. Click on Blank workbook or Blank Document
2. Click on File Options
3. On the General page
4. Uncheck the "Show the Start screen when this application starts."
5. Click OK