

# Excel Skills- Customizing and Generating Excel Data

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# Introduction

The purpose of this workshop is to walk through a series of features from Excel and show you possible ways on gathering and organizing information. The examples used in the presentation is fictional data, but it shows how we have implemented these tools during this **past year**.



# Disclaimers

- Resources
- Multiple ways to use
- [Previous Workshops](#)
  - Excel Beginner
  - Excel Intermediate





# Organizing Data (Filter)

1. Select the row to be filtered

2. Click on the Data Tab

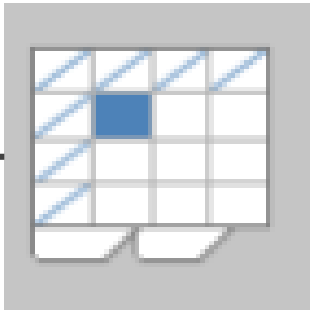
3. Click on Filter to activate

The screenshot shows the Microsoft Excel interface. The ribbon is set to the 'Data' tab. The 'Filter' button in the 'Sort & Filter' group is highlighted with a red arrow. Below the ribbon, the spreadsheet shows a formula bar with the formula `=COUNTIF(A:A,"*")-2`. The spreadsheet grid has columns A through F and rows 1 and 2. Row 1 is highlighted with a green border, indicating it is selected. The data in row 1 is: A: Google Accounts, B: (empty), C: (empty), D: (empty), E: Number of Accounts Created, F: 369. Row 2 contains headers: A: Last Name, B: MI, C: First Name, D: Program, E: Email, F: Password.

	A	B	C	D	E	F
1	Google Accounts				Number of Accounts Created	369
2	Last Name	MI	First Name	Program	Email	Password

# Organizing Data (Freeze Panes)

- Click on the cell that you would like to begin scrolling
- Go to the view tab
- Select Freeze Panes
- Click on Freeze Panes



**Freeze Panes**  
Keep rows and columns visible while the rest of the worksheet scrolls (based on current selection).

**Freeze Top Row**  
Keep the top row visible while scrolling through the rest of the worksheet.

**Freeze First Column**  
Keep the first column visible while scrolling through the rest of the worksheet.





# Master Lists

You can have a “master list” as one of your tabs in Excel where you would reference the data throughout the workbook. Any updates on the master list will be applied on the tabs that use that same data.

An example of this would be the change of a phone number or the addition of a new student.

A master list can include:

- Student Name
- Phone Number
- Email Address
- In-Person/Online Student
- *LACES ID*



## Master Lists (cont.)

We breakdown our lists in the following way:

- Google Accounts
  - CDP Enrollments
    - Class Rosters
  - GED/ESL Enrollments
    - Class Rosters

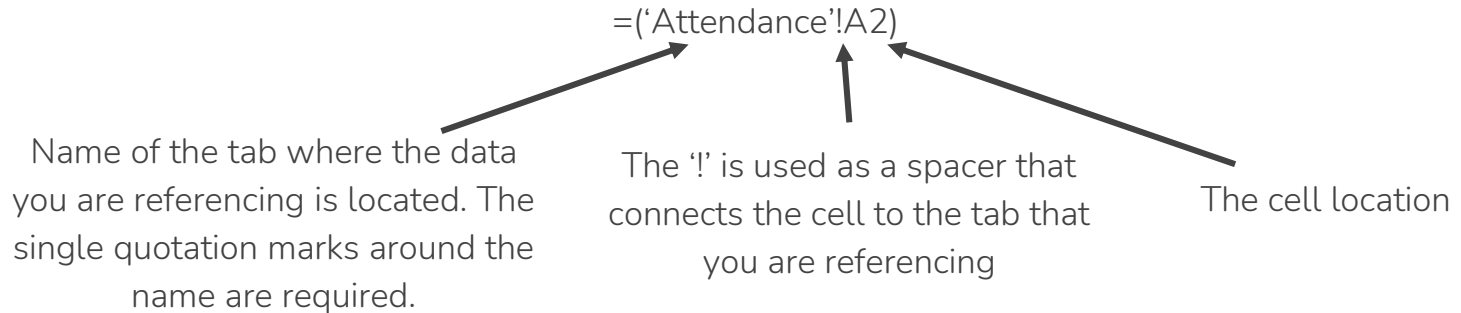
Each name above it's is own Workbook/Spreadsheet.







## Master Lists (cont.)



It's important to note that once you create the Master List, you should not do a copy paste of an entire new list, unless you are creating a "new" workbook (i.e. a trimester 3 class list). Instead, you can add new names on the bottom of the master list.

You do not need to filter the master list, but rather the tabs where you are using the data.





# Creating Passwords and Accounts

You can use Excel to create and monitor your student usernames and passwords for different accounts. For this to work, you need to have all student accounts from the agency's programs being used listed on Excel.



# UPPER, LOWER and PROPER Functions

These functions format the text found in a cell.

Upper - All cell text is in uppercase font

Lower - All cell text is in lowercase font

Proper - All cell text has the first letter of each word in upper case



## UPPER, LOWER and PROPER Functions (cont.)

**=LOWER("AE."&A27&B27&"@nbaestudent.org")**

Start with the  
"=" sign, the  
function name,  
and open  
parenthesis

Text inside quotation  
marks will be applied  
with the rule of the  
function.

The "&" symbol will  
combine strings of  
text, cells or a  
combination of both.



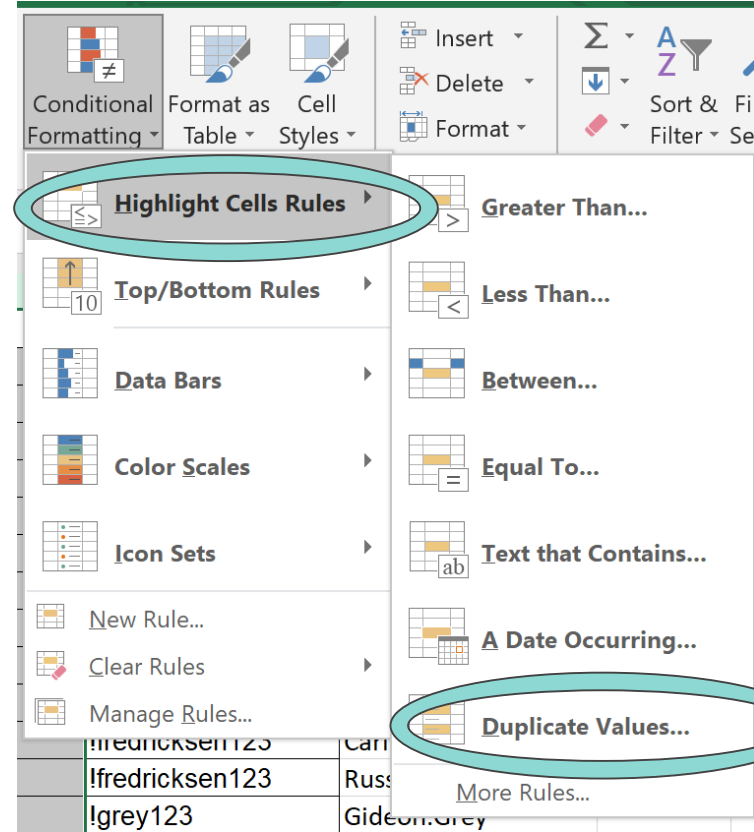
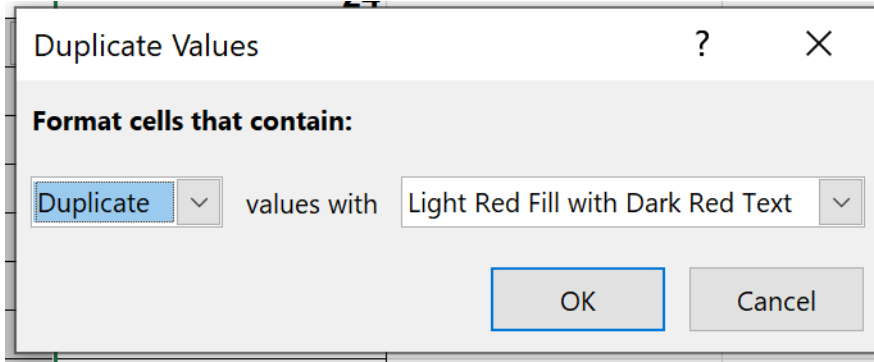
# Conditional Formatting

Setting up conditional formatting can help in identifying cells that meet certain conditions. A few helpful ways to identify these conditions would be:

- Duplicates
- Less than
- More than

# Conditional Formatting (cont.)

- Select the column(s) or row(s) you would like to format
- On the Home Tab, go to the Styles section and click on Conditional Formatting
- Rest the pointer above the Highlight Cells Rules
- Select the Duplicate Values section
- Select Duplicate and color
- Press OK





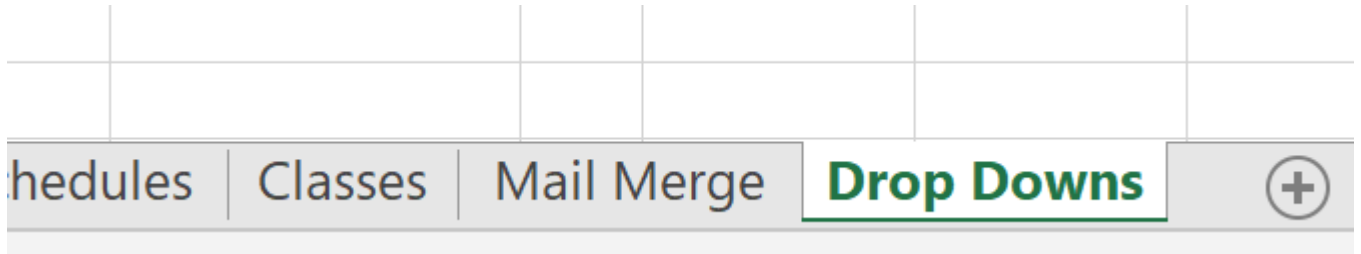




# Drops Down Lists to Control Data Input

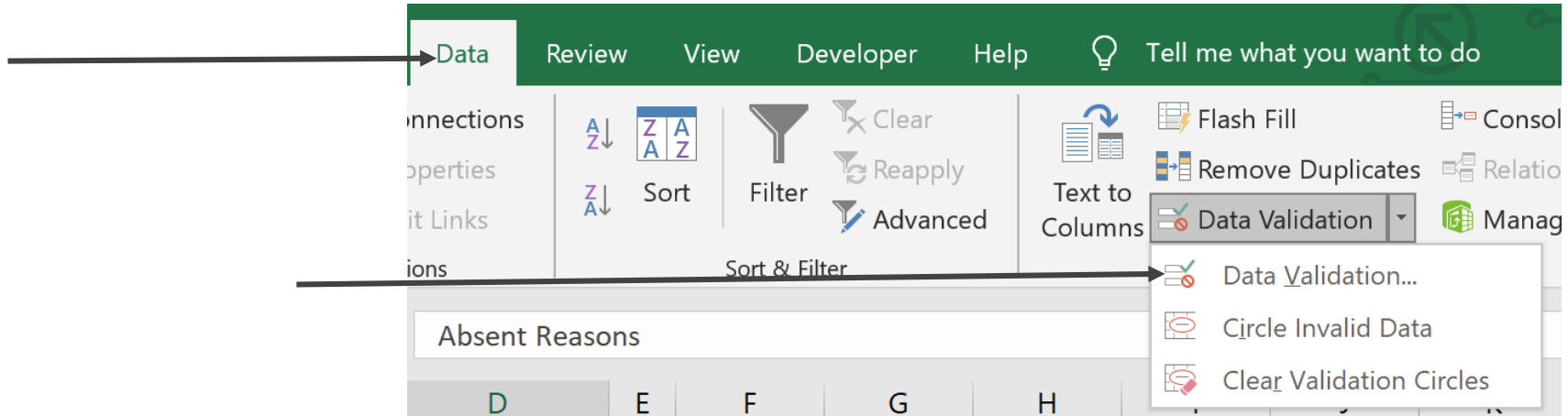
Drop Down Lists are an easy way to keep data consistent and easy to filter. You can create a tab where your drop down lists are located to make it easy to add, edit or delete a options for your cells.

We will be looking at Enrollments as our example.



# Drops Down Lists to Control Data Input (cont.)

- Highlight the cells that you would like to have a drop down list
- Click on the Data Tab
- Select Data Validation



# Drops Down Lists to Control Data Input (cont.)

- Select the List option under Allow



- Highlight the cells where your drop down information is located



- Click Ok

A screenshot of the 'Data Validation' dialog box in Microsoft Excel. The dialog has three tabs: 'Settings', 'Input Message', and 'Error Alert'. The 'Settings' tab is active. Under 'Validation criteria', the 'Allow' dropdown is set to 'List', and the 'Data' dropdown is set to 'between'. There are two checked checkboxes: 'Ignore blank' and 'In-cell dropdown'. The 'Source' field is empty, with an upward-pointing arrow icon on the right. At the bottom, there are three buttons: 'Clear All', 'OK', and 'Cancel'. The 'OK' button is highlighted with a blue border. A question mark icon and a close (X) icon are in the top right corner of the dialog box.

Data Validation

Settings Input Message Error Alert

Validation criteria

Allow:

List  Ignore blank

Data:

between  In-cell dropdown

Source:

Apply these changes to all other cells with the same settings

Clear All OK Cancel





# Cover Sheet to track enrollments, Class Grades and other info.

You can keep count of information using the COUNTIF function. This can help in verifying your data integrity (i.e. entering data in LACES).

**=COUNTIF(F:F,A3)**



Range of cells

Criteria (can be typed or from a cell)



# Creating Rosters

There are multiple ways to do this. The most efficient way for me has been filtering the student lists by Last Name and then by class. The lists will be alphabetical under each class.

<b>Last Name, First Name</b>	<b>Monday Class</b>
<b>Allen, Barry</b>	Basic Math 102
<b>Danvers, Kara</b>	Basic Math 102
<b>Fredricksen, Carl</b>	Basic Math 102
<b>Grey, Gideon</b>	Basic Math 102
<b>Hamada, Hiro</b>	Basic Math 102
<b>Hopps, Bonnie</b>	Basic Math 102
<b>Andersen, Riley</b>	Botany 102
<b>Beuty, Aurora</b>	Botany 102
<b>Callaghan, Robert</b>	Botany 102
<b>Fauna, Tiana</b>	Botany 102
<b>Flynn, Huey</b>	Botany 102
<b>Fredricksen, Russell</b>	Botany 102

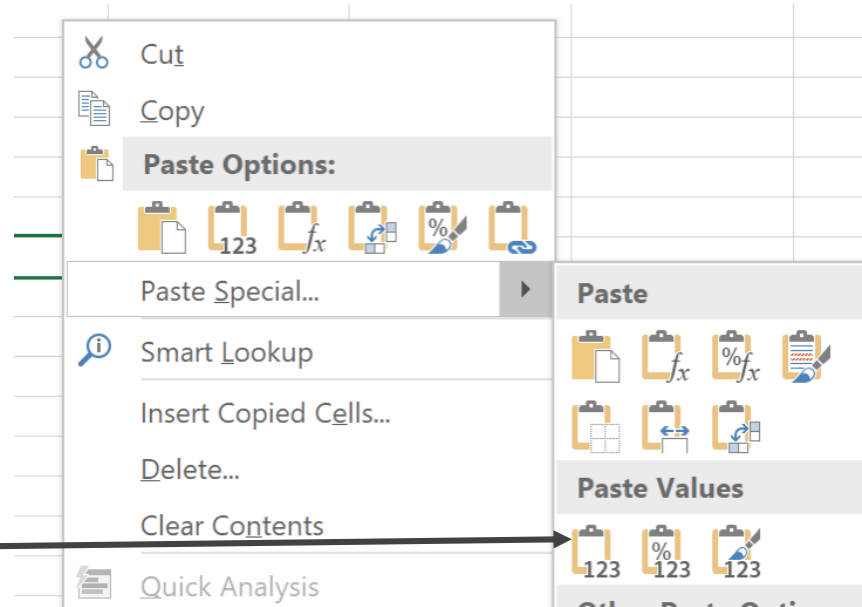


# Creating Rosters (cont.)

Once you copy the information and are ready to paste for your roster:

- Right click on the cell you would like to paste the data
- Select Paste Special...
- Paste Values

This pastes the data to the sheet without the formulas.



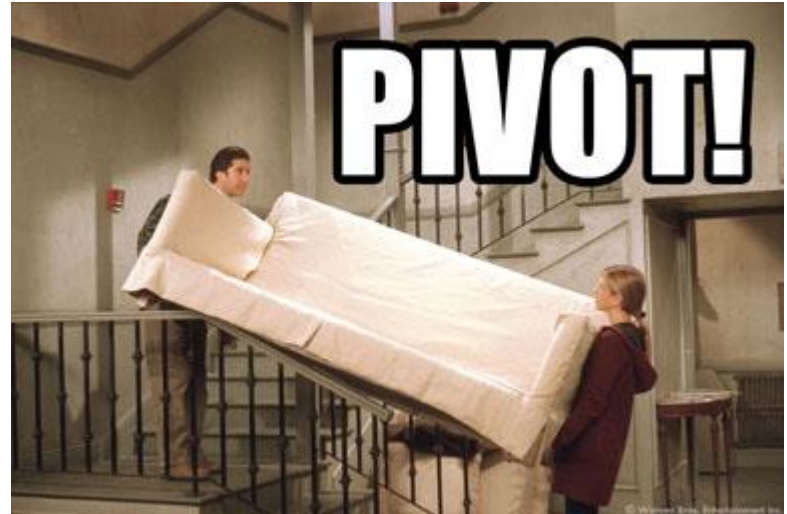






# Using Pivot Tables for Attendance

Pivot Tables are very handy to manipulate data and present it in different ways. You can even swap columns and rows. One thing to keep in mind is that the more different types of data you have, the trickier it will be to manipulate.



# Using Pivot Tables for Attendance (cont.)

Pivot Tables are divided in 4 areas:

2. Columns

3. Rows

1. Filters

4. Values

Online	TRUE		
Row Labels		Sum of 12/14/20	Sum of 12/21/20
Ager		3	3
Dow		3	3
Johnson		3	3
Pastor		3	0
Porras		0	3
Ramos Colon		3	0
Rivera		3	3
<b>Grand Total</b>		<b>18</b>	<b>15</b>

PivotTable Fields

Choose fields to add to report: [Settings]

Search [Search]

- Last Name
- First Name
- Online
- Phone Number
- Grade/Status
- Hours

Drag fields between areas below:

Filters	Columns
Online	Σ Values

Rows	Σ Values
Last Name	Sum of 12/14/20

Defer Layout Update [Update]





# How to Calculate Hours in Excel

**=HOUR(H5)+MINUTE(H5)/60**

The hour plus minutes divided by the minutes per hour. H5 would be the cell that contains the Difference from the Sign In and Sign Out time.

# How to Calculate Hours in Excel

Sign In - Time	Sign Out - Time	Difference	Time logged in # of hours
10:15 AM	12:15 PM	2:00	2.00
6:10 PM	7:50 PM	1:40	1.67
11:15 AM	1:00 PM	1:45	1.75
2:15 PM	3:15 PM	1:00	1.00

↑  
Columns 1 and 2 need to be formatted for time (that includes AM or PM)

↑  
=G5-F5

=HOUR(H5)+MINUTE(H5)/60

Please note that for this cell to calculate properly, the cell needs to be formatted for Number.



## Using the “&” to combine cells

The “&” can combine numbers and texts within cells. We will be looking at Progress Reports to explore this feature.