

# More Excel as a Tool to Troubleshoot SIS Data for EMIS Reporting

# Overview

- Basic Excel techniques can be used to analyze EMIS data
  - From Student Information Systems (SISs)
  - From the Data Collector
  - On ODE EMIS reports
- This presentation will review Excel tools
  - Help with the analysis of source data
  - How source data relates to EMIS data reporting
  - Reinforce and enhance Excel skills

# Outline

- Excel Tabs and the Quick Access Toolbar
- Creating a Source Data File
- V-Lookup, Conditional Formatting, and Pivot Tables
- Additional EMIS Tips, Tricks, and Shortcuts

# Excel Tabs and the Quick Access Toolbar


# Excel Tab Review

- FILE
- HOME
- INSERT
- PAGE LAYOUT
- FORMULAS
- DATA
- REVIEW
- VIEW

# Excel Tab Review

**FILE**

- Info
- New
- Open
- Save
- Save As
- Print



The screenshot shows the FILE tab ribbon. On the left is a vertical menu with options: Info, New, Open, Save, Save As, Print, Share, Export, Close, Account, and Options. The 'Info' section is expanded, showing four icons: Protect Workbook (Control what types of changes people can make), Inspect Workbook (Before publishing this file, be aware that: Document properties, printer path, path; Content that people with disabilities can't see), Versions (There are no previous versions of this document), and Browser View Options (Pick what users can see when this workbook is viewed).

## Frequently Used Tools for EMIS

### HOME

- Fill color
- Text Color
- Wrap Text
- Conditional Formatting
- Sort & Filter

### DATA

- Sort
- Filter
- Text to Columns

### VIEW

- Page Break Preview
- Zoom
- Arrange all
- Freeze Panes

### INSERT

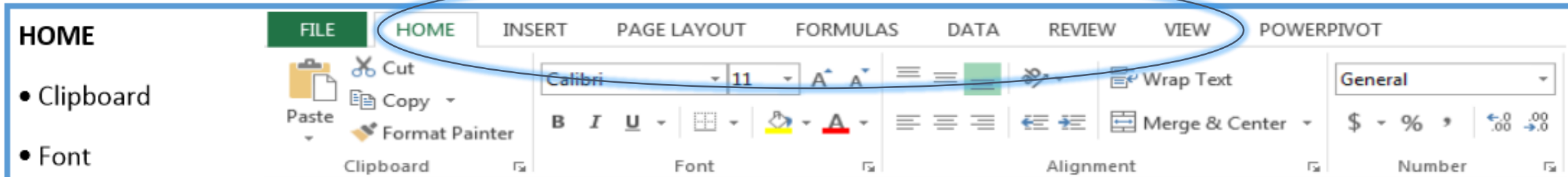
- Pivot Table
- Text Box

### FORMULAS

- Insert Function
- AutoSum

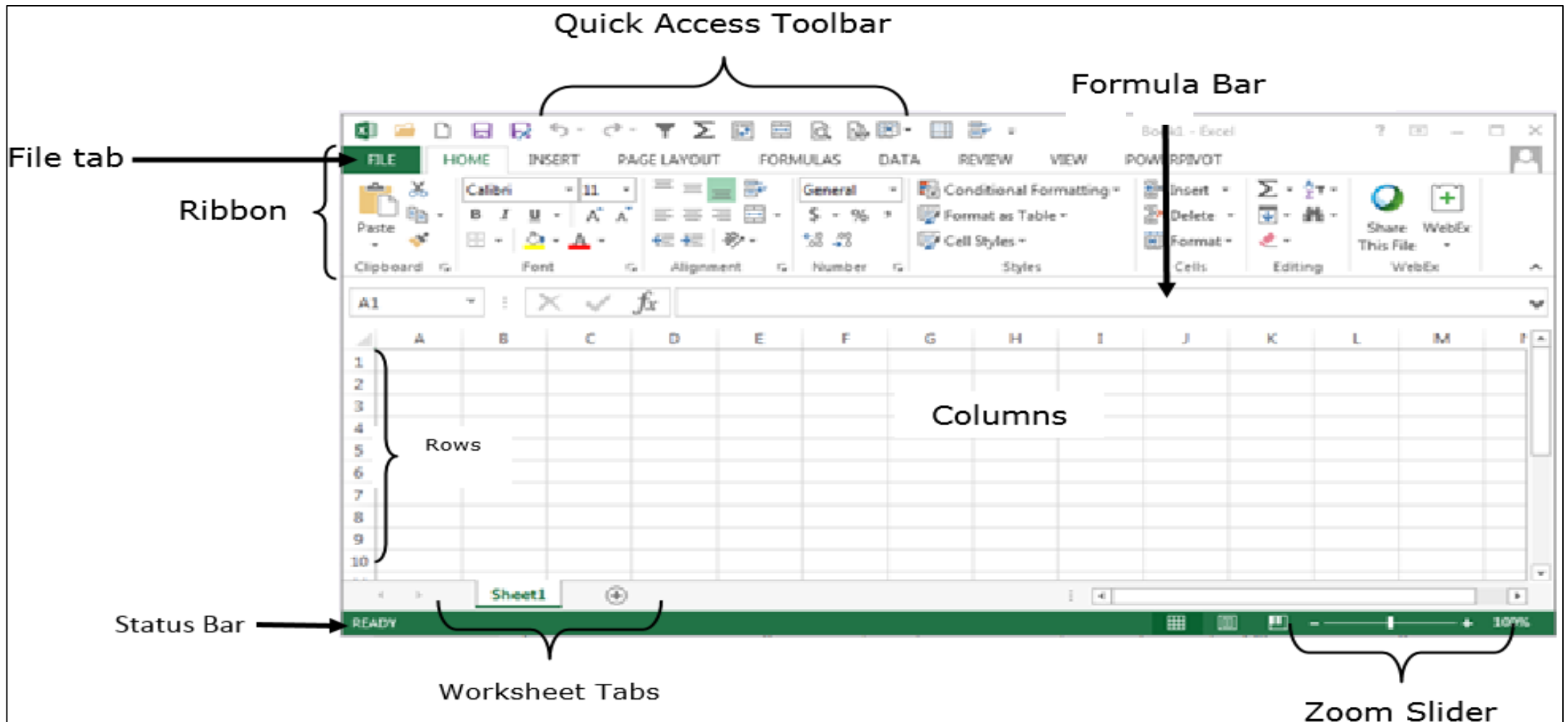
### PAGE LAYOUT

- Themes
- Orientation



The screenshot shows the Excel ribbon with the HOME tab selected and circled in blue. The ribbon includes tabs for FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, and POWERPIVOT. The HOME tab is active, showing the Clipboard group (Paste, Cut, Copy, Format Painter) and the Font group (Calibri font, size 11, Bold, Italic, Underline, Color, Background Color).

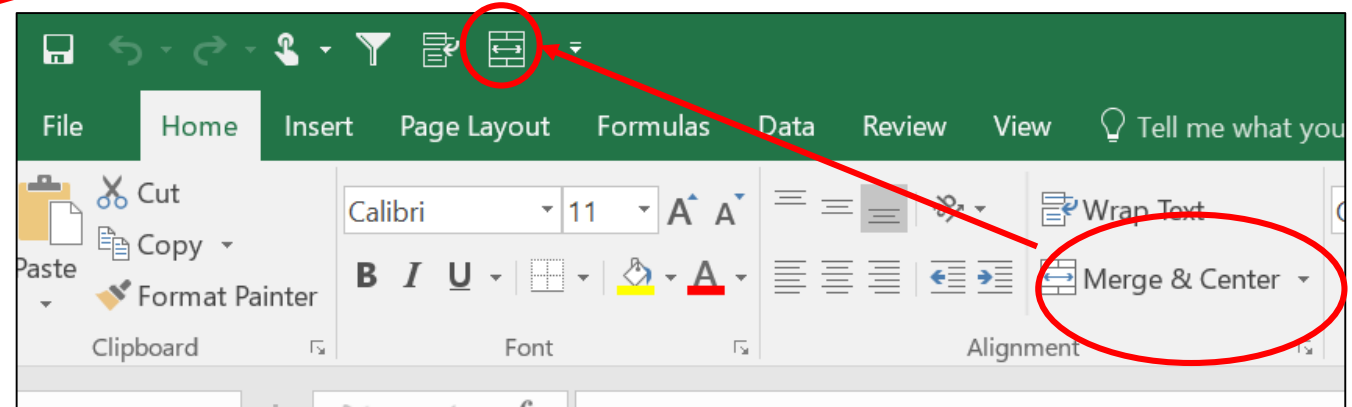
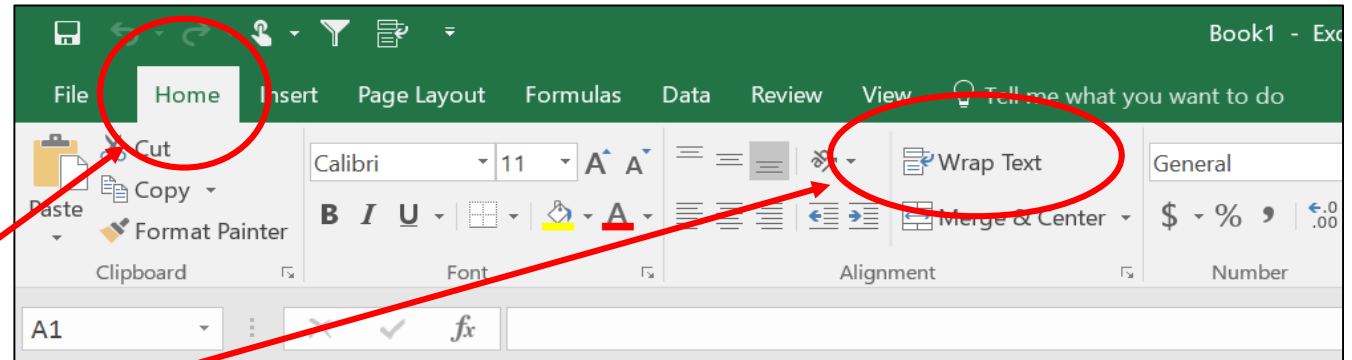
# Parts of a Worksheet Review



# Quick Access Toolbar

How to add a frequently used tool to your Quick Access Toolbar

1. Select a tab that contains the tool
2. Right click on the icon
3. In the pop-up select Add to Quick Access Toolbar
4. The tool's icon will appear in the Quick Access Toolbar





## Quick Check

Excel can be intimidating. Empower yourself by creating an Excel environment that works for you. Learn shortcuts in Excel so that you can spend more time working on your data and less time figuring out how to use Excel.

- Are you able to navigate the tabs in Excel to find the tools you need?
- Are you able to add tools to your Quick Access Toolbar for ease of use?
- Are you getting more comfortable with Excel?

# Creating a Source Data File

# Source Data File

- Creating a source data file can be a quick way to analyze your data before it makes it to the Data Collector
- Adding additional data from outside sources can enhance an all-in-one source data file
- Cross check key EMIS reporting elements by filtering various categories within your source data file

# Frequently Used Source Data Fields

Last Name	How Received	Homeless Status
First Name	Sent Reason	Disadvantgement
State Student ID	District Relationship	Limited English
EMIS ID	Percent of Time	Disability Condition
Date of Birth	District of Residence	Attendance Pattern
Gender	Withdraw Reason	MOA IRN
Building IRN	Effective Start Date	Accountability IRN
Grade Level	Effective End Date	Fiscal Year Began 9 <sup>th</sup>
Grade Next Year	Tuition Type	Diagnostic Results

# Other Data Sources

## Online Reporting System



Score Reports | Reports & Files ▾

Inbox (1) | Search Students | Add Roster | View/Edit Rosters | This page: Help | Print

### Retrieve Student Results & My Inbox

Create New Data File to Download

**Step 1: Choose What**

Report Type: Student Data ▾  
Test: Ohio State Tests ▾  
Administration: Fall2016 ▾  
Tested Grade: All Grades ▾  
Download Format: Fixed Width ▾  
Filter By: ALL ▾

**Step 2: Choose Who**

District: [Redacted] ▾  
School: All ▾

Download







### My Inbox

Your data file(s) will remain available for 30 days.

Name	Data	Format	Type	Test	Administration	Grade	Date Created	Status
Greenon Local SD (046235)	Student Data	CSV	District	Ohio State Tests	Fall2016	All	3/13/2017 9:20 PM	Download

# Data Collector

SIFWorks® VRF® Data Collector

 <a href="#">Student Discipline Record (GD).csv</a>	4
 <a href="#">Student Gifted Education Record (GG).csv</a>	17
 <a href="#">Student Missing Override Record (FC).csv</a>	2
 <a href="#">Student Missing Report.csv</a>	
 <a href="#">Student Program Record (GQ).csv</a>	73
 <a href="#">Student Race Detail Record (GJ).csv</a>	23
 <a href="#">Student Special Education Graduation Requirement Record (FE).csv</a>	26



## Midyear Student Collection (FY17)

Collection required for all Traditional Districts, JVSDs, ESCs, and State Supported Schools. Source file(s) for GI, FS, FD, FB, FN, GD, GG, GE, FE, FC, FL, GJ, and GQ student record types, labeled with the S reporting period, must be uploaded in EMIS manual format through the Data Collector Data Sources tab. The DN record is also required to be reported in this collection request as well, although there are a limited set of options required. This collection request is for the data for school funding, Federal reporting, and other required ODE reporting.

**Submissions:** January 05, 2017 - April 28, 2017

**Expiration Date:** April 28, 2017 (in 46 days)

**Collection Request:** 3

**Status:** The collection was submitted March 10, 2017 at 03:53:48 PM by Myers.

**Validation Status:** [Level 1 Validation](#)

**Validation Status:** [Level 2 Validation](#)

**Submission Status:** Processing Completed (March 10, 2017 at 03:53:04 PM)

**Submission Number:** 13 (attempt 1)

**Actions:** [View Submission Results](#)

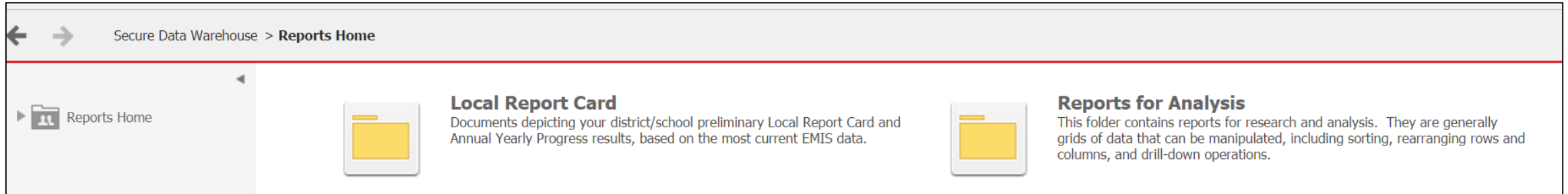
[Review](#)

[Start Collection](#)

[Add New Scheduled Collection](#)

[Set Default Collection properties](#)

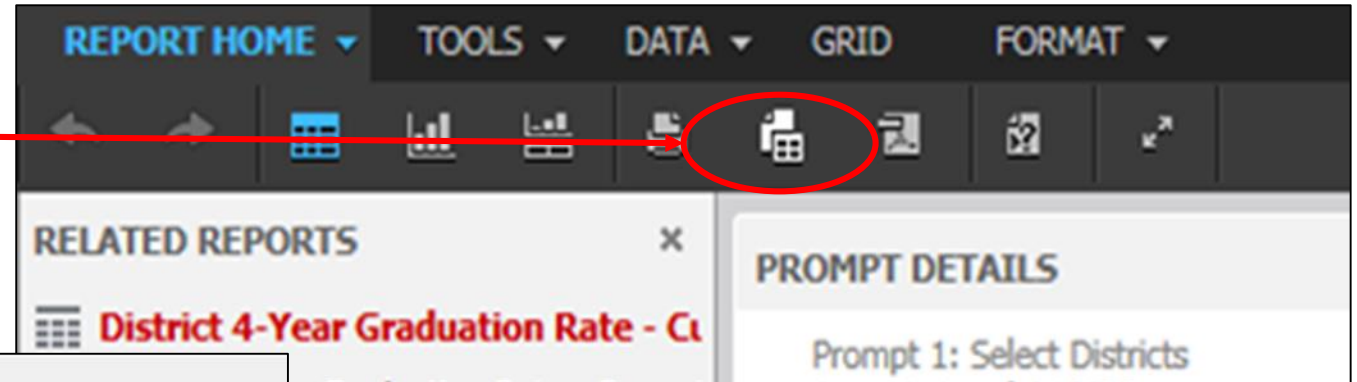
# Secure Data Center



- Achievement data
- K-3 Literacy data
- Graduation data
- Prep for Success data
- Special education data
- Gifted data

# Secure Data Center, cont'd

Use the SDC export option



**Export Options**

District 4-Year Graduation Rate - Current Data->Student Identifier

Export:

Export Header and Footer:

**Excel options:**

Excel with plain text

CSV file format

Excel with formatting

HTML

Plain text

Delimiter:

Export metric values as text

Export headers as text

**Excel with formatting options:**

Export Report Title

Export filter details

Remove extra column:

The SDC export option allows multiple export formats



# ODDEX SCR Export

Ohio Department of Education Ohio District Data Exchange (ODDEX)

Home SOES SCR History CCP Users Agencies SSID

2017

Last Name  SSID  Display Mode Conflicts

First Name  Gender  Conflict Status New with Issues

ODDEX export will generate a TXT file. From the TXT file, Select All then copy the data from the TXT file

scr\_export - Notepad

File Edit Format View Help

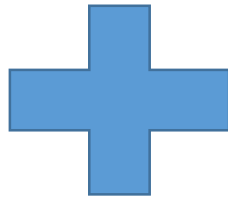
SSID	First Name	Last Name	Conflict Code	Conflict Effective Dates	Reporting LEA1 IRN
------	------------	-----------	---------------	--------------------------	--------------------

In Cell A1, paste the data from the TXT file

	A	B	C	D	E	F	G	H	I	J
	SSID	First Name	Last Name	Conflict Code	Conflict Effective Dates	Reporting LEA1 IRN	Reporting LEA1 Name	LEA1 Date Range	LEA1 Percent Of Time	LEA1 Admission Date
1	SSID	First Name	Last Name	Conflict Code	Conflict Effective Dates	Reporting LEA1 IRN	Reporting LEA1 Name	LEA1 Date Range	LEA1 Percent Of Time	LEA1 Admission Date
2	KP67			STIC	1/4/2017	123456	ABC Local	09/26/2016 - Current		9/26/2016
3	KT23			STIC	1/20/2017	123456	ABC Local	07/01/2016 - Current		8/1/2013
4	NA61			STIC	1/4/2017	123456	ABC Local	01/04/2017 - Current		1/4/2017
5	NC96			WTIC	1/4/2017	123456	ABC Local	07/01/2016 - 07/01/2016	100	8/26/2015
6	NY11			STIC	1/4/2017	123456	ABC Local	07/01/2016 - Current		12/8/2011
7	NY11			STIC	1/4/2017	123456	ABC Local	07/01/2016 - Current		8/15/2004

# Combined Source Data File Example

- Source Data File – 12<sup>th</sup> Grade Students




SSID	FIRST NAME	LAST NAME	STUDENT ID	GRADE	DISABILITY CONDITION
KQ3120909	ETHAN	THOMAS	123467	12	12
PQ9733522	OLIVIA	WILLIAMS	123458	12	*
IX6825340	LIAM	JONES	123459	12	*
IX9047510	OLIVER	WALKER	123478	12	*
IY8586474	EMMA	SMITH	12345	12	*
JT8837916	SOPHIA	BROWN	123460	12	15
JN5602659	AVA	MILLER	123462	12	*
PP7370386	WILLIAM	TAYLOR	123465	12	10
JE5216291	ABIGAIL	JACKSON	123468	12	10

- Special\_Education\_Graduation\_Requirement\_(FE) – Assessment Exemption preview/review file

DISABILITY CONDITION	OGT - R	OGT - W	C
10	Y	N	
15	Y	Y	
12	Y	Y	
10	Y	Y	

# Combined Source Data File Example cont'd

This combined Source Data File now includes Assessment requirements for 12<sup>th</sup> grade students with a disability



SSID	FIRST NAME	LAST NAME	STUDENT ID	GRAD	DISABILITY CONDITION	OGT - R	OGT - W	OGT - M	OGT - S	OGT - C
KQ3120909	ETHAN	THOMAS	123467	12	12	Y	N	N	Y	Y
JT8837916	SOPHIA	BROWN	123460	12	15	Y	N	Y	N	Y
PP7370386	WILLIAM	TAYLOR	123465	12	10	Y	N	Y	Y	Y
JE5216291	ABIGAIL	JACKSON	123468	12	10	Y	N	Y	Y	N
UT5745888	Derik	Jeter	321654	12	13	Y	N	N	Y	Y

# Cross-Check Key EMIS Reporting Elements

- Are all Open Enrolled In and Out students marked correctly
  - How Received and Sent Reason vs Student Address
- Are all students with a disability marked correctly
  - Student Disability Category vs valid ETR dates
- Are your Concentrators marked for the current year
  - Student courses vs CTE Program of Concentration Flag
- What other areas do you cross check in your source data prior to collections

## Quick Check

Having a source data file to review prior to data collection will help to ensure quality data is being collected at the time of a submission. Consider adding additional data from outside sources.

- Are you able to create your own source data File?
- What other data sources are available to compliment your source data file?
- What multi-filtering cross-checks can you do prior to collecting and submitting data?

# V-Lookup, Conditional Formatting, and Pivot Tables

# V-Lookup

- Problem: Identifiable data is on one report, but not on another
- Solution: V-Lookup between Source Data File and report
  - Student names
  - Student test scores
  - Student membership codes
- What do they have in common?
  - SSID
- What reports might come back with just an SSID?



# V-Lookup Exercise

Be sure to sort your SSID's alphabetically before beginning the Vlookup process.

A2       =VLOOKUP(A2)

	A	B	C	D	E	F	G
1	ssid	LAST NAME	FIRST NAME	LEA_IRN	BLDG_IRN	Result	Result_Description
2	IR5724489	VLOOKUP(A2)		12345		GR0000	Current graduation status
3	IW4627713			12345		GR0000	Current graduation status
4	JV2246202			12345		GR0000	Current graduation status
5	JZ7939497			12345		GR0000	Current graduation status
6	KJ2701701			12345		GR0000	Current graduation status
7	KM8440984			12345		GR0000	Current graduation status
8	KN3781864			12345		GR0000	Current graduation status
9	KO1743342			12345		GR0000	Current graduation status
10	KO3327576			12345		GR0000	Current graduation status
11	SD1685794			12345		GR0000	Current graduation status
12		NEW COLUMN					
15	<b>FILE B - ODE REPORT</b>						
16	<b>2018_GRAD_Cohort-Non-EOC</b>						

Function Arguments

VLOOKUP

Lookup\_value    A2    = "IR5724489"

Table\_array       = number

Col\_index\_num       = number

Range\_lookup       = logical

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.



# V-Lookup Exercise Steps

1. Open **Source Data File** - Sort Ascending by SSID and save (Do NOT close file)
2. Open report missing Student names **Data Collector - 2018\_GRAD\_Cohort-Non-EOC- Pts-Detail** – Sort Ascending by SSID and save (Do NOT close file)
3. Use a new tab in **Data Collector - 2018\_GRAD\_Cohort-Non-EOC-Pts-Detail** and rename Sheet 1 Source Data
4. Copy and paste the data from **Source Data File** into the Source Data worksheet tab into **Data Collector – 2018\_GRAD\_Cohort-Non-EOC-Pts-Detail**
5. Move State Student ID to column A (**Both files**)  
*Always move the SSID field to column A first in the files you will be using*
6. Insert one column for last name and one column for first name into **Data Collector - 2018\_GRAD\_Cohort-Non-EOC-Pts Detail**

# V-Lookup Exercise Steps, cont'd

7. In Cell B2 of **Data Collector - 2018\_GRAD\_Cohort-Non-EOC-Pts-Detail** (LAST NAME) click on the function icon.
  - A. The Insert Function pop-up should appear. Select VLOOKUP and OK
  - B. The Function Arguments popup should now appear.  
DO NOT HIT ENTER/OK UNTIL ALL FOUR VALUES ARE INSERTED
  - C. Lookup\_value - **Data Collector - 2018\_GRAD\_Cohort-Non-EOC-Pts-Detail**, click in Cell A2 (SSID)
  - D. Table\_array – **SOURCE DATA**, Highlight area that you want the LOOKUP to look at then press F4 to make the range absolute
  - E. Col\_index\_num - **SOURCE DATA**, 2 (column number the LAST NAME is in)
  - F. Range\_lookup - FALSE
8. Drag or copy down the VLOOKUP result to the end of column B in **Data Collector - 2018\_GRAD\_Cohort-Non-EOC-Pts-Detail**
9. Follow the same steps to come up with the First Name column

# V-Lookup Exercise Result

Function Arguments

VLOOKUP

Lookup\_value: A2 = "IR5724489"

Table\_array: 'SOURCE DATA'!A1:C11 = {"ssid","last","first";"IR5724489","BALLARD",...}

Col\_index\_num: 2 = 2

Range\_lookup: FALSE = FALSE

Formula result = BALLARD

OK Cancel

Help on this function

	A	B	C	D	E
1	ssid	LAST NAME	FIRST NAME	LEA_IRN	BLDG_IRN
2	IR5724489	BALLARD		12345	
3	IW4627713	PAYTON		12345	
4	JV2246202	TAGG		12345	
5	JZ7939497	BLAIR		12345	
6	KJ2701701	BROWN		12345	
7	KM8440984	TUCKER		12345	
8	KN3781864	PAYTON		12345	
9	KO1743342	LUCAS		12345	
10	KO3327576	MASSIE		12345	
11	SD1685794	#N/A			
12		NEW COLUMNS			
13					
14					
15	FILE B - ODE REPORT				
16	2018_GRAD_Cohort-Non-EOC-Pts-Detail				
17					
18					

In this example, your final result in the Function Argument should show the student's Last Name after the "=" sign.

You will also notice that the SD1685794 does not have a match. This means the SSID is not in your source data, so you will want to investigate who the SSID belongs to.

# Conditional Formatting

- Problem: How do I know who's missing and who is not when comparing two sets of data?
- Solution: Use Conditional Formatting between source data file and report
- What should they all have in common?
  - SSID
- Compare a list of students from your SIS who were required to take a test against the test results
- Compare a list of students in grades 12 and 23 against a list of students who are reported as withdrawn with a code of 99 and a diploma date

# Conditional Formatting Exercise



Each set of data being compared should **not** have duplicates within the main data set.

The screenshot shows the Microsoft Excel interface. The 'Home' tab is selected on the ribbon. The 'Conditional Formatting' option is highlighted with a red box. The 'Duplicate Values' dialog box is open, showing the following settings:

- Format cells that contain: Duplicate
- values with: Light Red Fill with Dark Red Text

The background spreadsheet shows the following data:

	SSID	FIRST NAME	LAST NAME	STUDENT ID	GRA
1	SSID				
2	JT8837916	SOPHIA	BROWN	123460	1
3	PP7370386	WILLIAM	TAYLOR	123465	1

# Conditional Formatting Exercise Steps

1. Open the **Source Data File – V-lookup and Conditional Formatting** file
2. Click on the **CF Source Data** tab
3. Copy and paste the list of known SSIDs (*column o*) to the bottom of Column A. These were SSIDs from the Secure Data Center
4. Select Column A (SSIDs to compare)
5. Go to *Home > Conditional Formatting > Highlight Cell Rules > Duplicate Values*
6. At the Duplicate Values prompt, it should default to “Duplicate” values with “Light Red Fill with Dark Red Text”. Select “OK”
7. All SSIDs that are in the SDC List will be highlighted in light red and have dark red text
8. Are students counting that should count? Who is missing? Who is on the list but shouldn't be?

# Conditional Formatting Exercise

	A	B	C	D	E	F
1	<b>SSID</b>	<b>FIRST NAME</b>	<b>LAST NAME</b>	<b>STUDENT ID</b>	<b>GRADE</b>	<b>EMIS SITUATION</b>
2	JT8837916	SOPHIA	BROWN	123460	12	351
3	PP7370386	WILLIAM	TAYLOR	123465	12	355
4	KQ3120909	ETHAN	THOMAS	123467	12	355
5	JE5216291	ABIGAIL	JACKSON	123468	12	382
6	KP6745575	JAMES	WHITE	123469	11	382
7	MC2155271	EMILY	HARRIS	123470	11	382
8	KO1739256	JAMES	MARTIN	123471	11	484
9						
10	JT8837916					
11	PU6370386					
12	TO3120875					
13	JE5216291					
14	KP6745575					
15	MC2158571					
16	KO1739256					
17	JS7547388					
18	KP6701486					
19	LK5757368					

## Source Data File

In this example, any SSID that is in both lists is now highlighted in light red and the font color has changed to dark red.

## Secure Data Center File - Copy and Pasted data

When looking at your own data, who isn't appearing in your SDC file that should be? Is there someone in the list that appears in both the Source Data File and SDC file that shouldn't be?



# Pivot Table

- Problem: Besides filtering, how do I create a summary analysis of data that will still allow me to view the data as a whole if needed?
- Solution: Create a Pivot Table from your source data file
- This is an interactive summary report that you create
- Think about the end result before diving in
  - View the recommended Pivot Tables to get an idea of different options
  - What data do you want to know as a summary and how do you want to see it?



# Recommended Pivot Table Exercise

	FIRST	LAST	SID	ETHNICITY	GENDER	GRADE	SSID	EMIS SITUATION	DIST OF RES
1	EMMA	SMITH	123456	W	F	12	IY8586474	302	284284
2	NOAH	JOHNSON	123457	W	M	12	OS4945828	302	444888
3	OLIVIA	WILLIAMS	123458	W	F	12	PQ9733522	304	262626
4	LIAM	JONES	123459	W	M	12	IX6825340	304	262626
5	SOPHIA	BROWN	123460	W	F	11	JT8837916	351	336336
6	MASON	DAVIS	123461	W	M	10	OO2167428	351	844844
7	AVA	MILLER	123462	M	F	12	JN5602659	351	444222
8	JACOB	WILSON	123463	W	M	12	JV2048972	353	444888

	FIRST	LAST	SID	ETHNICITY	GENDER	GRADE	SSID	EMIS SITUATION	DIST OF RES
1	EMMA	SMITH	123456	W	F	12	IY8586474	302	284284
2	NOAH	JOHNSON	123457	W	M	12	OS4945828	302	444888
3	OLIVIA	WILLIAMS	123458	W	F	12	PQ9733522	304	262626
4	LIAM	JONES	123459	W	M	12	IX6825340	304	262626
5	SOPHIA	BROWN	123460	W	F	11	JT8837916	351	336336
6	MASON	DAVIS	123461	W	M	10	OO2167428	351	844844
7	AVA	MILLER	123462	M	F	12	JN5602659	351	444222
8	JACOB	WILSON	123463	W	M	12	JV2048972	353	444888
9	ISABELLA	MOORE	123464	W	F	12	OS4945828	302	444888
10	WILLIAM	TAYLOR	123465	W	M	12	PQ9733522	304	262626
11	MIA	ANDERSON	123466	W	F	12	PQ9733522	304	262626
12	ETHAN	THOMAS	123467	W	M	12	IX6825340	304	262626
13	ABIGAIL	JACKSON	123468	W	F	12	PQ9733522	304	262626
14	JAMES	WHITE	123469	W	M	12	IX6825340	304	262626
15	EMILY	HARRIS	123470	W	F	12	PQ9733522	304	262626
16	JAMES	MARTIN	123471	W	M	12	IX6825340	304	262626
17	CHARLOTTE	THOMPSON	123472	W	F	12	PQ9733522	304	262626
18	MICHAEL	GARCIA	123473	W	M	12	IX6825340	304	262626
19	HARPER	MARTINEZ	123474	W	F	12	PQ9733522	304	262626
20	BENJAMIN	CLARK	123475	W	M	12	IX6825340	304	262626
21	ASHER	LEWIS	123476	W	F	12	PQ9733522	304	262626
22	AVA	LEE	123477	W	M	12	IX6825340	304	262626
23	OLIVER	WALKER	123478	W	F	12	PQ9733522	304	262626
24	AMELIA	HALL	123479	W	M	12	IX6825340	304	262626
25	ADAM	ALLEN	123480	W	F	12	PQ9733522	304	262626
26	LEVI	YOUNG	123481	W	M	12	IX6825340	304	262626
27	WYATT	GREEN	123482	W	F	12	PQ9733522	304	262626

Row Labels	M	W	Grand Total
10		1	1
11	1	2	8
12		1	14
<b>Grand Total</b>	<b>1</b>	<b>3</b>	<b>23</b>



In order to have data populate in the Recommended PivotTable, you must have a group of data selected.

# Recommended Pivot Table Exercise Steps

1. Open your Source Data file and highlight the data that you want to include in your summary
2. Next, select Insert > Recommended Pivot Tables
3. Scroll down through the Help tool's recommendations as to what details you would like to see in the Pivot Table
4. Select the highlighted Pivot Table you want to work with and click OK
5. A new worksheet will appear next to the original worksheet
6. Rename the new worksheet

# Recommended Pivot Table Exercise Result

In this example we chose to look at Ethnicity by Grade levels

You can adjust any of the views by dragging them between the filter criteria or back up into the field selection area

New Worksheet with Excel Recommended Pivot Table

Row Labels	M	W	Grand Total	
10		1	1	
11	1	2	8	11
12		1	14	15
Grand Total	1	3	23	27

PivotTable Fields

Choose fields to add to report:

- FIRST
- LAST
- SID

Drag fields between areas below:

FILTERS

COLUMNS: ETHNICITY

ROWS: GRADE

VALUES: Count of LAST

Defer Layout Update [UPDATE]

Drag Fields in and out of your list or across to Filters, Columns, Rows or Values to create the final summary (Pivot Table) that you would like

## Quick Check

V-Lookup, Conditional Formatting, and Pivot Table tools can take your ability to review, sort, and filter your data to a whole new level.

The more you use these tools, the easier it will be when analyzing reports and sharing that data with others in the district.

- What additional data sources can I use for V-lookup to my source data?
- Will Conditional Formatting help with Secure Data Center (SDC) reports?
- What ODE reports could I duplicate with my source data by creating a Pivot Table?

# Additional EMIS Tips, Tricks & Shortcuts

# Other Tools for your EMIS Excel Toolbox

Frequently used tips from other EMIS Coordinators have been included with this presentation

- Changing uppercase names to proper case
- Calculating the number of calendar days between two dates
- Calculating a future date
- Calculating the age of a student as of a certain date
- Creating a table view of a worksheet
- Quick counts of column data
- Excel Dashboard Reference Guide
- Keyboard Shortcuts



# Proper and Days Functions

- Need to change student names from all upper case to “Proper” case?
  - Insert additional column(s) next to the names
  - In cell D2, type **=PROPER(B2)**
  - In cell E2, type **=PROPER(C2)**
  - HARRY POTTER should now be Harry Potter
- How do you calculate how many days are between two dates (includes first and last days)?
  - G2 = Beginning of the school year (8/17/16)
  - H2 = End/Withdraw Date (2/1/17)
  - In cell I2, type **=DAYS(H2,G2+1)**
  - The total number of calendar days will populate.
  - Drag the result down the column to fill in the rest of the fields.

D2 : X ✓ fx =PROPER(B2)

	A	B	C	D	E	F	G	H
1	SSID	FIRST	LAST	First	Last	SID	FS Start Date	End / Withdraw Date
2	CJ7229552	HARRY	POTTER	Harry	Potter	555649	8/17/2016	2/1/2017
3	CK3668609	KATIE	BELL	Katie	Bell	555231	8/17/2016	2/1/2017
4	EF3553572	AMELIA	BONES	Amelia	Bones	555899	8/17/2016	2/1/2017
5	HB7565571	LAVENDAR	BROWN	Lavendar	Brown	555748	12/1/2016	2/1/2017
6	IG8556609	ARGUS	FILCH	Argus	Filch	555694	10/9/2016	2/1/2017

I2 : X ✓ fx =DAYS(H2,G2+1)

	A	B	C	D	E	F	G	H	I
	SSID	FIRST	LAST	First	Last	SID	FS Start Date	End / Withdraw Date	Calendar Days
	CJ7229552	HARRY	POTTER	Harry	Potter	555649	8/17/2016	2/1/2017	167
	CK3668609	KATIE	BELL	Katie	Bell	555231	8/17/2016	2/1/2017	
	EF3553572	AMELIA	BONES	Amelia	Bones	555899	8/17/2016	2/1/2017	
	HB7565571	LAVENDAR	BROWN	Lavendar	Brown	555748	12/1/2016	2/1/2017	
	IG8556609	ARGUS	FILCH	Argus	Filch	555694	10/9/2016	2/1/2017	

# Date Function

- Find the end date for an IEP, it is **1 year** minus **1 day** from the Event date
  - In cell I3, type **=DATE(YEAR(F3)+1,MONTH(F3),DAY(F3)-1)**
- For an ETR, it is **3 years** minus **1 day** from the Event date
  - In cell N3, type **=DATE(YEAR(K3)+3,MONTH(K3),DAY(K3)-1)**
- TIEP and TETR have to be entered manually since the Event Date is the Adoption Date

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	SID	GRADE	First	Last	EMIS	EVENT DATE	IEP TYPE	START	END		DATE	ETR TYPE	START	END
1														
2	123456	1	Ellie	Mays	5	5/3/2016	IIEP	5/3/2016			5/3/2016	IETR	5/3/2016	
3	321654	12	Derik	Jeter	100	12/1/2016	RIEP	12/1/2016	11/30/2017		12/1/2016	RETR	12/1/2016	11/30/2019
4	789456	6	Todd	Williams	151	9/2/2016	TIEP	9/2/2016	MANUAL		9/2/2016	TETR	9/2/2016	MANUAL



# Dated If Function

- Want to get a head start on your 5 & 6 year olds for Federal Child Count? To help you determine a students age as of a certain date you will find the formula listed below as a helpful addition to your Source Data
- Known Data:
  - Date of Birth
  - Age as of 10/31/16
  - Disability = Yes
  - Grade = Kindergarten
- In cell I3, type **=DATEDIF(H3,\$I\$2,"Y")**

I3 : <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <i>fx</i> =DATEDIF(H3,I2,"Y")									
	A	B	C	D	E	F	G	H	I
1									Age as of
2	SSID	FIRST	LAST	SID	GR	EMIS	DISAB	DOB	10/31/2016
3	FJ7229552	Joseph	Walsh	998776	K	100	15	6/28/2011	5
4	SK3668609	Ty	Joseph	888775	K	5	15	2/27/2011	5
5	WF3553572	Chrissy	Hynde	112233	K	100	05	5/2/2011	5
6	PB7565571	Erik	Carmen	142536	K	100	05	4/3/2011	5
7	LG8556609	Marc	Kozelek	635241	K	5	01	3/8/2011	5
8	DX5675650	John	Stevens	748596	K	5	08	1/24/2010	6
9	JH5766445	Raquelle	Sweet	475869	K	5	12	9/5/2010	6
10	IP8140461	Nancee	Wilson	586947	K	5	05	12/1/2010	5
11	MR5062617	Kellie	Deal	142563	K	5	15	2/22/2011	5
12	CG2903942	Tracey	Chapman	595153	K	5	13	12/6/2010	5
13	XC3295124	Teddy	Lewis	753951	K	5	10	6/30/2010	6
14									
15									

# Tables

Have a large amount of data that you would like to see as a table?

- Open your worksheet and select **INSERT > TABLE**
- The range of data to be included in the table will auto-populate
- Click OK
- Your worksheet will now be in a Table format
- You can select various types by going to **TABLE TOOLS > DESIGN > TABLE STYLES.**

The screenshot shows the Microsoft Excel ribbon with the 'INSERT' tab selected. The 'Table' button is visible in the 'Tables' group. Below the ribbon, a worksheet is displayed with a table of student data. The table has columns for SSID, FIRST NAME, LAST NAME, STUDENT ID, and GRADE. The data rows are as follows:

	SSID	FIRST NAME	LAST NAME	STUDENT ID	GRADE
1	FJ7229552	Joseph	Walsh	998776	K
2	SK3668609	Ty			
3	WF355357	Ch			
4	PB756557	Eri			
5	LG8556609	Ma			
6	DX567565	Joh			
7	JH5766445	Ra			
8	IP8140461	Na			
9	MR506261	Ke			
10	CG290394	Tracey	Chapman	595153	K
11	XC329512	Teddy	Lewis	753951	K

The 'Create Table' dialog box is open, showing the range '= \$A\$1:\$L\$52' and the 'My table has headers' checkbox checked. The dialog box has 'OK' and 'Cancel' buttons.

# Tables, cont'd

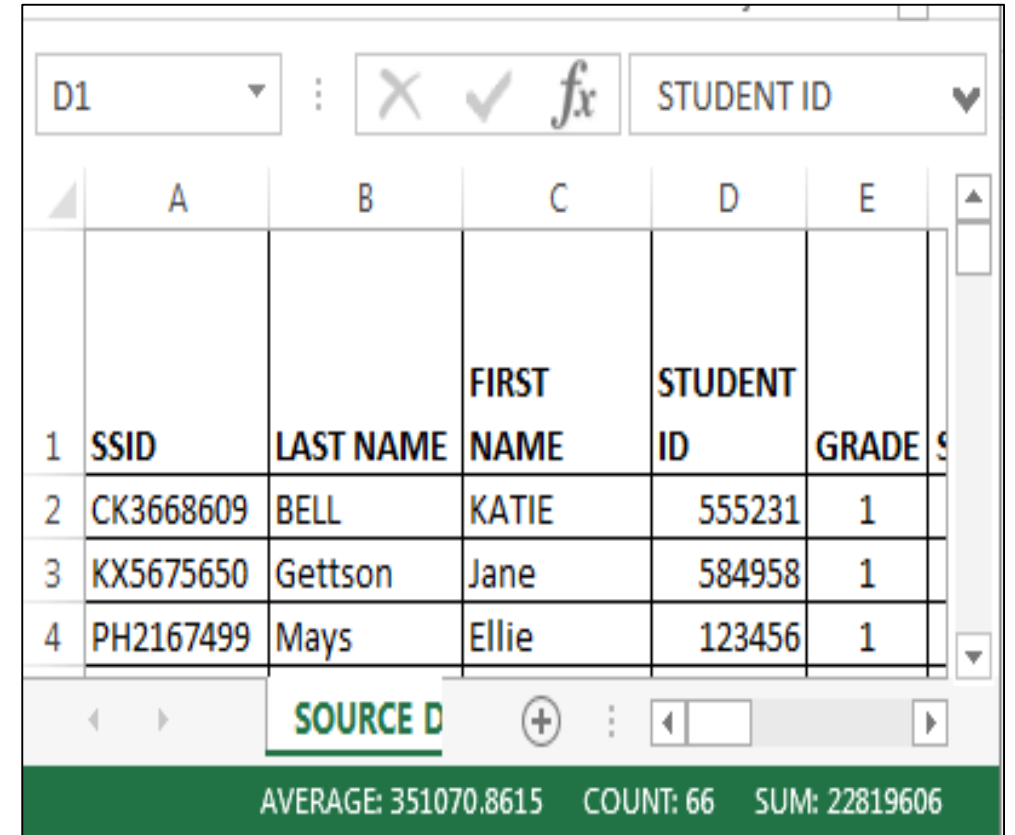
Want to change the table back to a worksheet with no filters but keep the style of the table?

- Select **TABLE TOOLS > DESIGN > Tools > Convert to Range**
- When converting back to a worksheet a pop-up will appear asking if you want to convert the table to a normal range
- Select YES
- You'll notice the filters are gone, but the table style remains.

	A	B	C	D	E
1	SSID	FIRST NAME	LAST NAME	STUDENT ID	GRADE
2	FJ7229552	Joseph	Walsh	998776	K
3	SK3668609	Ty	Joseph	888775	K
4	WF355357	Chrissy	Hynde	112233	K
5	PB756557	Erik	Carmen	142536	K
6	LG8556609	Marc	Kozelek	635241	K
7	DX567565	John	Stevens	748596	K
8	JH5766445	Raquelle	Sweet	475869	K
9	IP8140461	Nancee	Wilson	586947	K
10	MR506261	Kellie	Deal	142563	K
11	CG280284	Tracey	Chapman	595152	K

# Quick Calculations

- Want a quick AVERAGE, COUNT, or SUM of a column?
  - Highlight the column that you would like this data on
  - Look in the bottom right corner of the worksheet and the AVERAGE, COUNT, and/or SUM will appear
  - AVERAGE is the average of the selected cells
  - COUNT is the number of selected cells that contain data
  - SUM is the sum of the selected cells
- To add additional settings to the Status Bar, right click anywhere in the bar and check or un-check what you would like to see



The screenshot shows an Excel spreadsheet with a table of student data. The table has columns for SSID, LAST NAME, FIRST NAME, STUDENT ID, and GRADE. The status bar at the bottom displays summary statistics for the selected data: AVERAGE: 351070.8615, COUNT: 66, and SUM: 22819606.

	A	B	C	D	E
1	SSID	LAST NAME	FIRST NAME	STUDENT ID	GRADE
2	CK3668609	BELL	KATIE	555231	1
3	KX5675650	Gettson	Jane	584958	1
4	PH2167499	Mays	Ellie	123456	1

STATUS BAR: SOURCE D (+) AVERAGE: 351070.8615 COUNT: 66 SUM: 22819606

# Other Tools for Your EMIS – Excel Toolbox

Keyboard Shortcuts							
Open Workbook	<Ctrl>	+	< O >	To Cell A1	<Ctrl>	+	<Home>
Create New Workbook	<Ctrl>	+	< N >	To Last Cell	<Ctrl>	+	<End>
Save	<Ctrl>	+	< S >	Cut	<Ctrl>	+	< X >
Preview and Print	<Ctrl>	+	< P >	Copy	<Ctrl>	+	< C >
Close Workbook	<Ctrl>	+	< W >	Paste	<Ctrl>	+	< V >
Right One Cell	<Tab>			Undo	<Ctrl>	+	< Z >
Left One Cell	<Shift>	+	<Tab>	Redo	<Ctrl>	+	< Y >
Up One Cell	<Shift>	+	Enter	Find	<Ctrl>	+	< F >
Select All	<Ctrl>	+	< A >	Replace	<Ctrl>	+	< H >
Select Entire Row	<Shift>	+	<Space>	Bold	<Ctrl>	+	< B >
Select entire column	<Ctrl>	+	<Space>	Italics	<Ctrl>	+	< I >
Fill Right	<Ctrl>	+	< R >	Underline	<Ctrl>	+	< U >

# Summary

- Creating an all in one source data file can be invaluable when analyzing data
- Using shortcuts will decrease time spent retyping information that is already there or is easily calculated
- Using the new skills you have learned will reinforce your knowledge and will make it easier to continue learning more Excel

# Resources

- Microsoft Excel Help within Excel “?” Articles and Videos
- Google it
- Microsoft Excel Classes
- Your ITC



Questions?