

Working with SAT Student Data File

Download the most recent SAT student data file from the Secure Site.

A [video](#) and [directions](#) to download the SAT student data file are provided.

You must have a MEIS login in order to access the Secure Site. For instructions on how to obtain a MEIS login, go to [Secure Site Training](http://www.michigan.gov/mde/0,4615,7-140-22709_57003---,00.html) (www.michigan.gov/mde/0,4615,7-140-22709_57003---,00.html) and click "How do I get access to the Secure Site?"

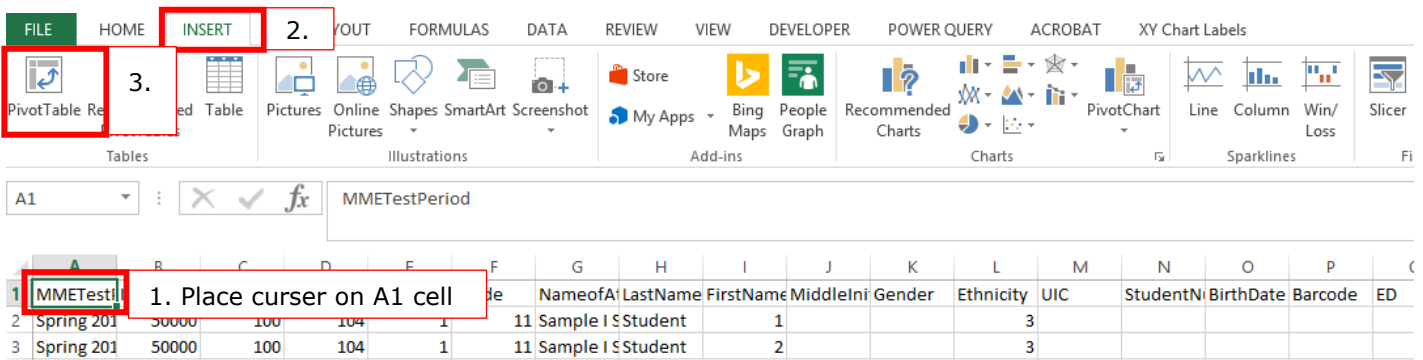
Performance Level Question

What percent of students are meeting Career and College Benchmarks in the district/building at grade 11 for ERW and Math?

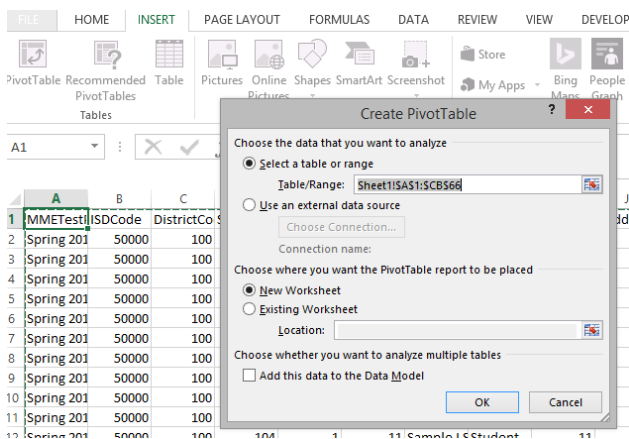
Please note: SAT CCR Benchmarks for 11th grade are 480 for ERW and 530 for Math. Other benchmarks can be found at <https://collegereadiness.collegeboard.org/about/scores/benchmarks>.

Follow the steps below to answer the question.

1. Place cursor in A1 cell and select PivotTable under the Insert tab at the top.



2. Make sure the entire table range was added and select OK.



- 3. A pivot table will be created on a new tab at the bottom of the worksheet. Take a moment to rename the tabs. I.E. StudentData, ERW_Benchmark_PVT (Evidence-based Reading and Writing Benchmark Pivot Table)

This is the location of where the pivot table will be once created

The column headers from the student data file become the pivot table fields

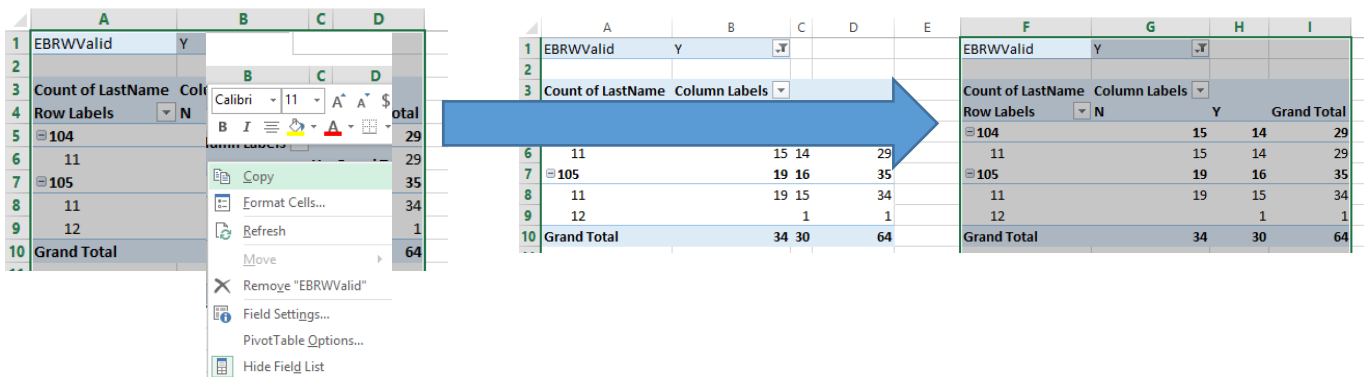
1. Rename the tabs at the bottom

- Drag "EvidenceBasedReadingandWritingCCRBenchmarkIndicator" to Columns, EBRWValid to Filters, LastName to Σ Values (it will become Count of Lastname). For Rows, drag SchoolCode and Grade in that order.

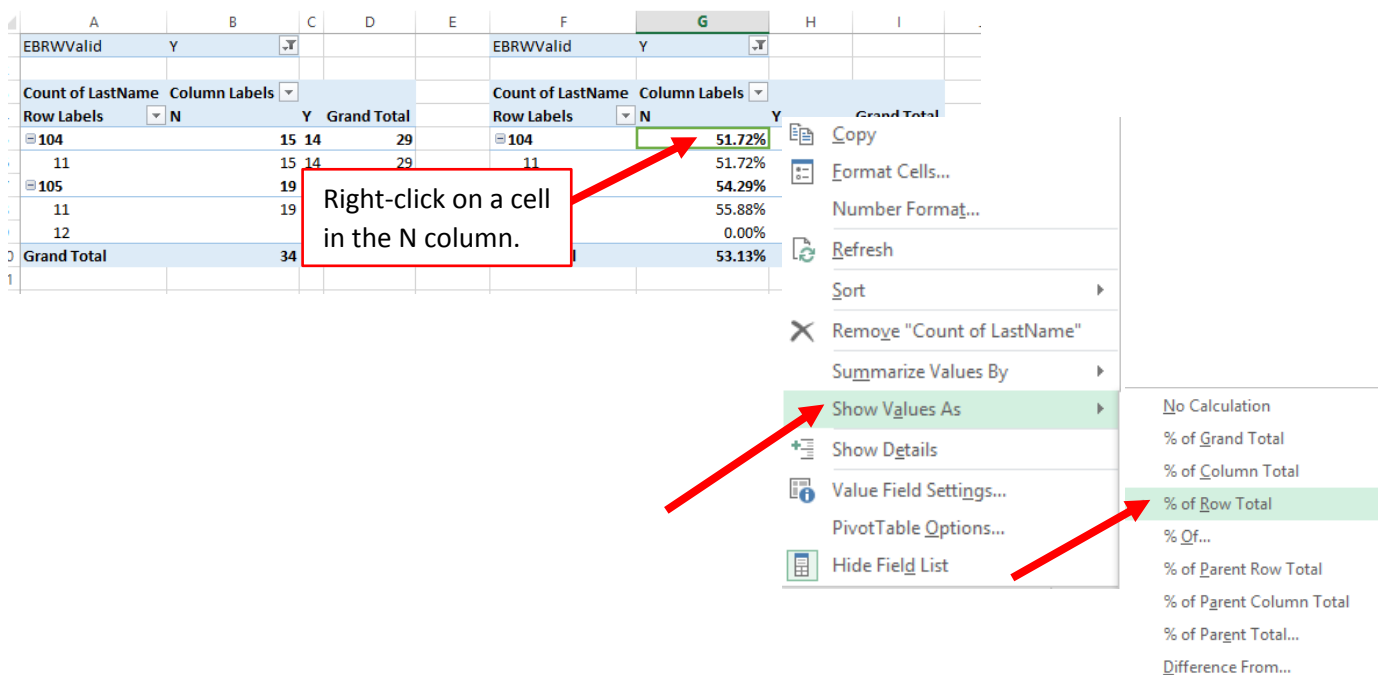
Row Labels	Y	Grand Total
104	16	30
11	16	30
105	19	35
11	19	34
12	1	1
Grand Total	35	65

- Change EBRWValid from (All) to Y on the pivot table.

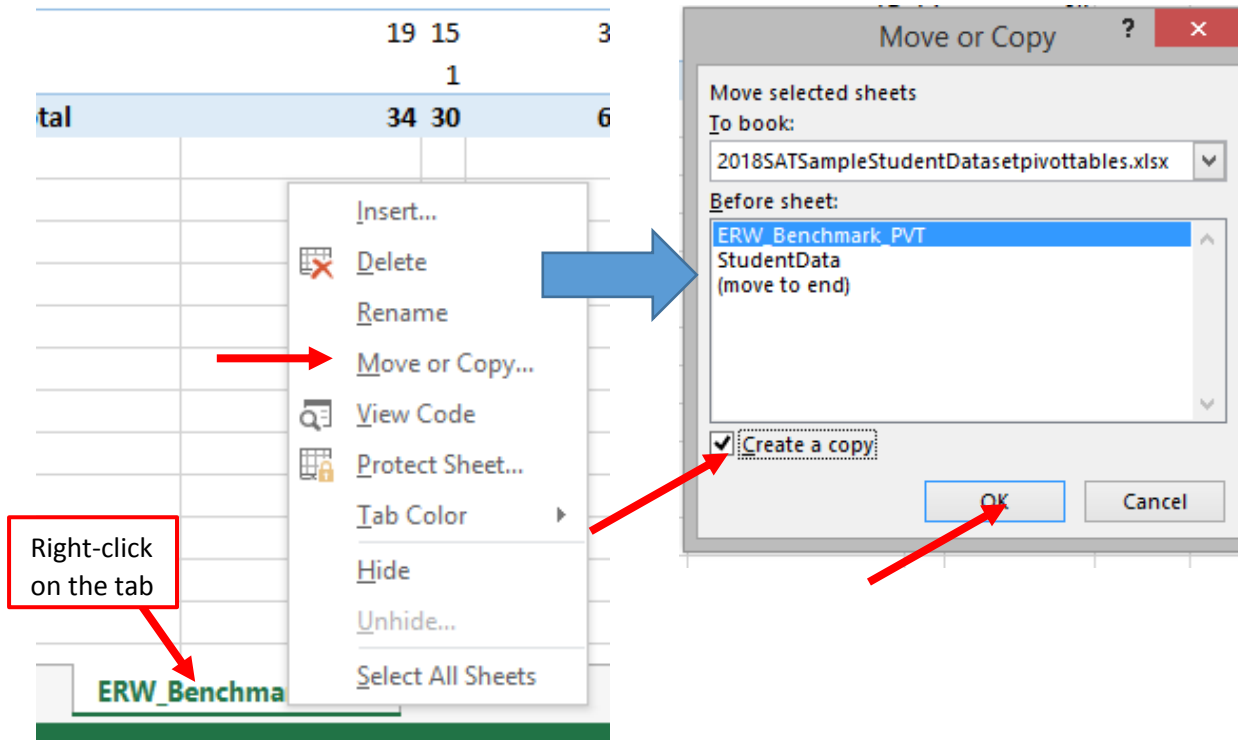
- Highlight and copy (right-click) the pivot table then paste (right-click) next to original with at least one blank column in between the tables.



- In the copied table, right-click on a cell in the N (No) column and select Show Values As, then % of Row Total.



- Right-click on the ERW_Benchmark_PVT tab at the bottom and select Move or Copy... Check the box next to Create a Copy and click OK.



- Right-click on copied tab and select rename. Rename tab to Math_Benchmark_PVT (Math Benchmark Pivot Table). Rename is located above the Move or Copy... option (see the picture in step 8).

10. In the Math_Benchmark_PVT tab, change **both** pivot tables so that under filters is MathValid and under Columns is "MathCCRBenchmarkIndicator".

The screenshot shows two pivot tables side-by-side. The left pivot table has 'MathValid' as a filter and 'MathCCRBenchmarkIndicator' as a column label. The right pivot table also has 'MathValid' as a filter and 'MathCCRBenchmarkIndicator' as a column label. The PivotTable Fields task pane on the right shows 'MathValid' in the FILTERS area and 'MathCCRBenchmarkIndicator' in the COLUMNS area. A red box with arrows points to these fields with the text 'Make sure to change both fields for both tables.'

Count of LastName	Column Labels		
Row Labels	N	Y	Grand Total
104	20	9	29
11	20	9	29
105	27	8	35
11	26	8	34
12	1	1	1
Grand Total	47	17	64

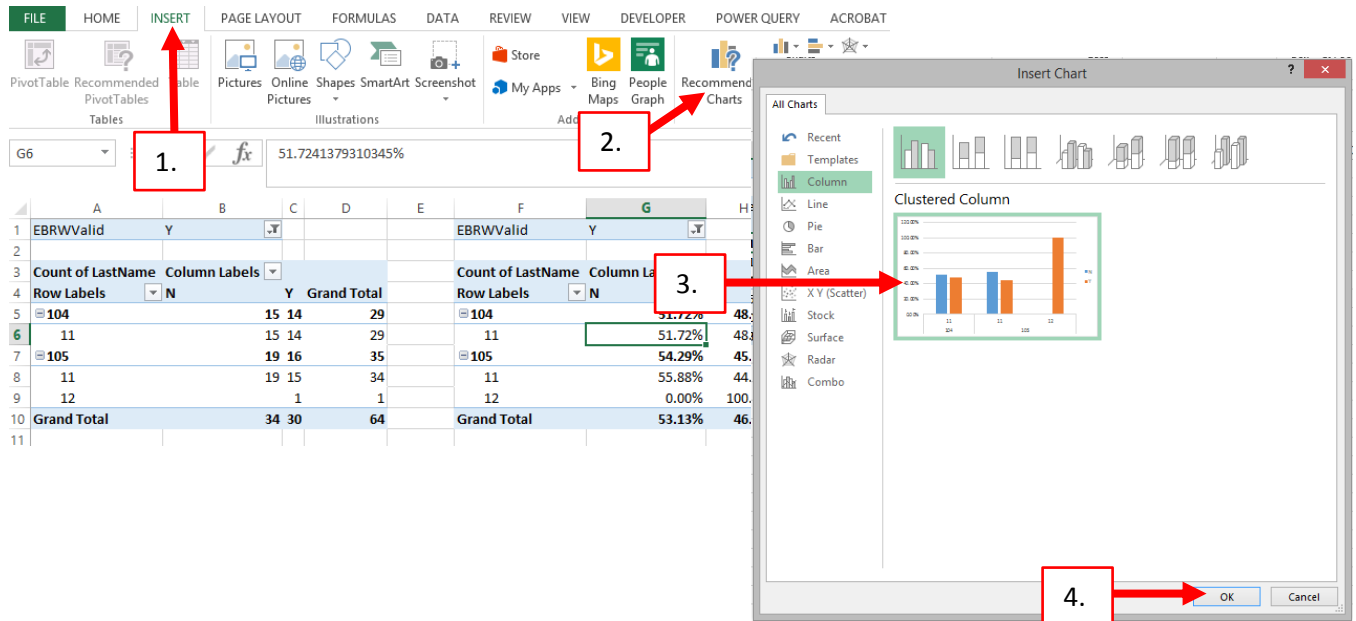
Count of LastName	Column Labels		
Row Labels	N	Y	Grand Total
104	68.97%	31.03%	100.00%
11	68.97%	31.03%	100.00%
105	77.14%	22.86%	100.00%
11	76.47%	23.53%	100.00%
12	100.00%	0.00%	100.00%
Grand Total	73.44%	26.56%	100.00%

11. Change MathValid from (All) to Y on **both** pivot tables.

The screenshot shows the 'MathValid' filter dropdown menu. The 'Y' option is selected, indicated by a red arrow. The 'OK' button is also highlighted with a red arrow.

Y	Grand Total
9	30
9	30
8	35
8	34
17	65

12. If you need a quick graph of any of the pivot tables:
 - a. Make sure the cursor is within the pivot table.
 - b. Select the Recommended Charts from the Insert tab at the top.
 - c. If you like the preview chart click OK.



13. Make adjustments to the chart as needed using the Design and Format tabs at the top under the PivotChart tools.

Demographic Question

What percent of students are meeting Career and College Benchmarks by demographic at grade 11 for ERW and Math?

The directions above must be completed before following the steps below to answer the question.

- Make sure the cursor is in one of the pivot tables in the ERW_Benchmark_PVT tab. Click on the Analyze tab at the top under the Pivottable Tools and select Insert Slicer. Within the "Insert Slicers" box, select the desired demographics and click OK.

The screenshot shows the Excel interface with the PivotTable Tools ribbon active. The 'ANALYZE' tab is selected, and the 'Insert Slicers' dialog box is open. The dialog box lists various demographic fields, with 'Ethnicity', 'ED', 'SE', and 'EL' checked. The PivotTable below shows data for 'Count of LastName' by 'Grade' (11 and 12) and 'Y' (Yes/No).

Annotations:

- 1.** Place cursor in the Pivot Table (points to cell F8).
- 2.** Click on the ANALYZE tab in the PivotTable Tools ribbon.
- 3.** Click on the Insert Slicer button in the ribbon.
- 4.** Select the desired demographics from the available fields (points to the checked items in the dialog box).

Count of LastName	Column Labels	Y	Grand Total
104	N	15	14
11		15	14
105		18	16
11		1	1
12		1	1
Grand Total		64	64

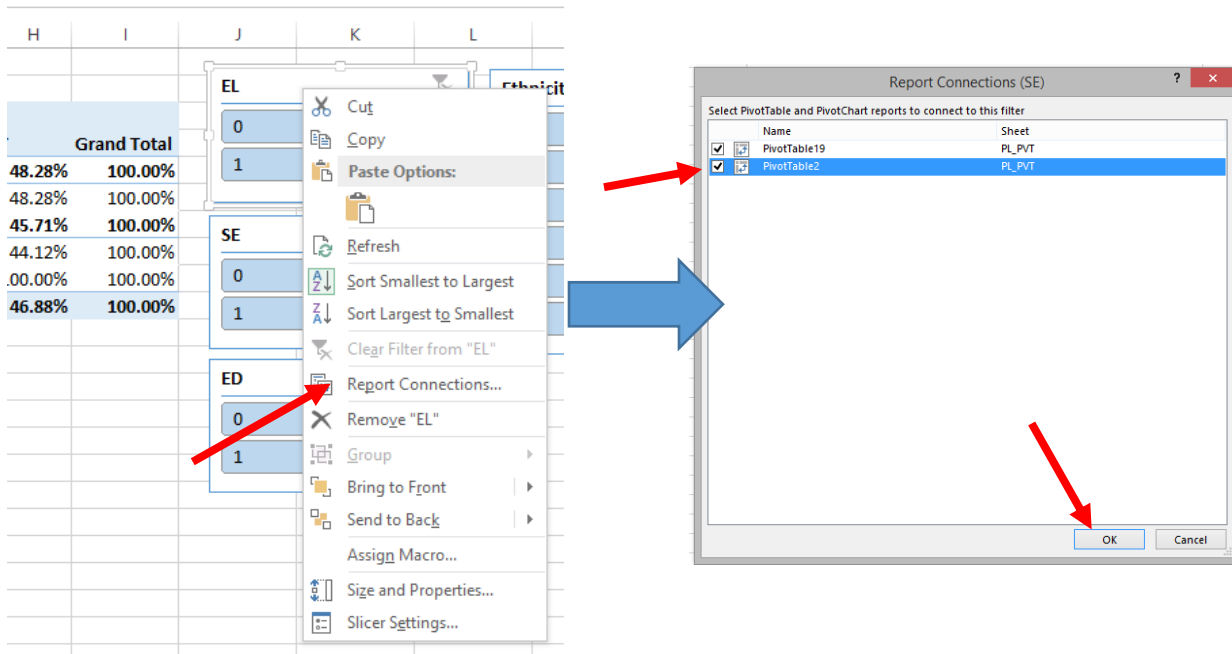
15. Move and adjust the slicers so that there is no overlap. I.E. Picture below

Count of LastName	Column Labels	Y	Grand Total	
104	N	51.72%	48.28%	100.00%
11	Y	51.72%	48.28%	100.00%
105	N	54.29%	45.71%	100.00%
11	Y	55.88%	44.12%	100.00%
12	N	0.00%	100.00%	100.00%
Grand Total		53.13%	46.88%	100.00%

- a. For most of the demographics values, it will be blank, 0 (No), or 1 (Yes). Ethnicity will have more values. An example is below, but please refer to the most recent student data file layout document available for accurate values.


Ethnicity	Student's ethnic code
	0 = Native Hawaiian or Other Pacific Islander
	1 = American Indian or Alaska Native
	3 = Black or African American
	4 = Hispanic or Latino
	5 = White
	6 = Two or more Races
	9 = Asian

17. Right-click on one of the slicers and select Reporting Connections... Make sure both pivot tables are selected in the dialogue box and click OK.



18. Repeat step 17 for all slicers to ensure each slicer is connected to each pivot table within the ERW_Benchmark_PVT tab.

To use the slicers:

Select the option desired from one of the slicers, i.e. to see only the special education students select the 1 under the SE slicer. The tables will adjust to reflect only the special education students. To deselect the slicer option, click on  which is located in the upper-right hand corner of the slicer box. The 0 will be selected again as well as the 1. The tables will now reflect all students once again.

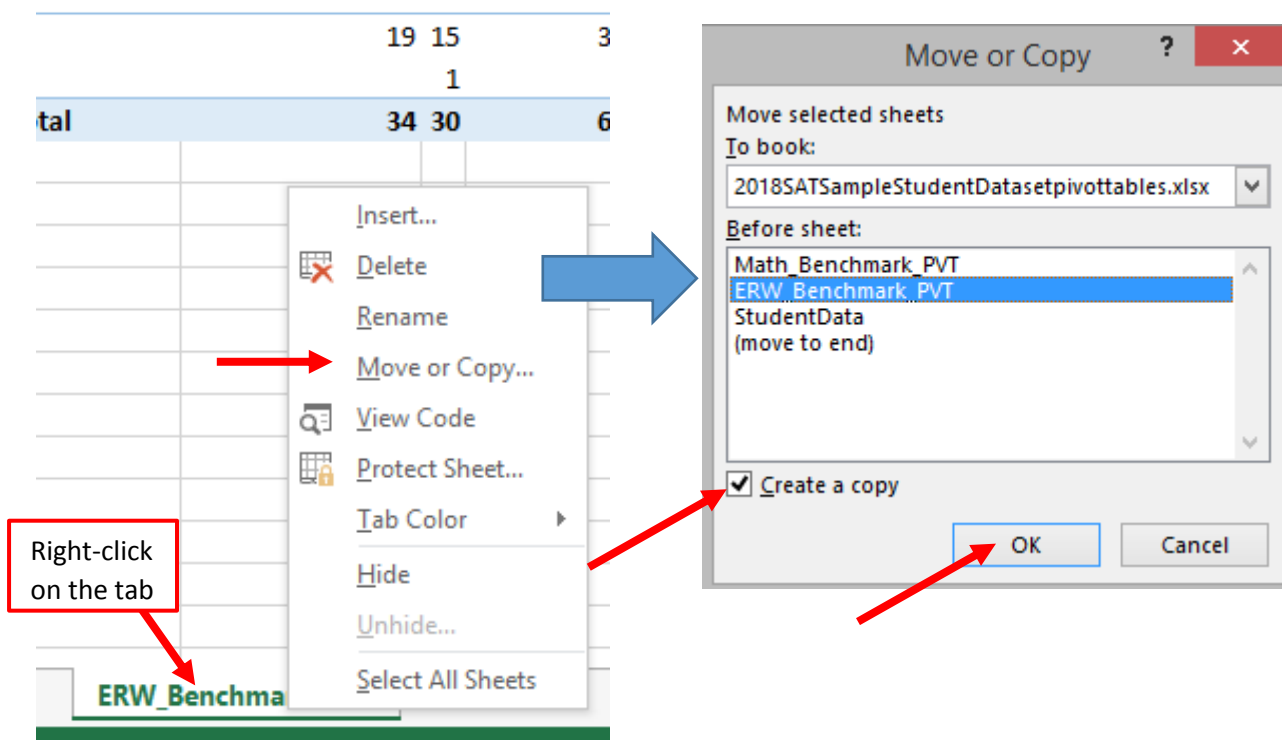
19. Repeat Steps 14 – 18 for the Math_Benchmark_PVT tab.

Performance Gaps/Comparisons

What student groups are performing similarly to “all students” and which groups have the largest gaps? Some to consider are male vs. female, ethnicity, ED, SWD, and EL.

The directions above must be completed before following the steps below to answer the question.

20. Right-click on the ERW_Benchmark_PVT tab at the bottom and select Move or Copy... Check the box next to Create a Copy and click OK.



21. Right-click on copied tab and select rename. Rename tab to ERW_Benchmark_Demo_PVT (Evidence-based Reading and Writing Benchmark by Demographic Pivot Table). Rename is located above the Move or Copy... option (see the picture in step 20).

Please note: when a tab with slicers is copied, the report connections only stay for those tables within each tab, meaning the slicer boxes in ERW_Benchmark_PVT controls the pivot tables within that tab and not the pivot tables within the new ERW_Benchmark_Demo_PVT tab. Use the Report Connections again (see step 17) if you want to connect all pivot tables to all of the slicers available within both tabs.

- 22. Pick a demographic for comparison, I.E. EL, ED, Ethnicity, etc.
- 23. Under ERW_Benchmark_Demo_PVT tab, move SchoolCode to Filters and add the demographic field to Rows, i.e. Ethnicity, under Grade for **both** Pivot Tables.

The screenshot shows two PivotTables side-by-side. The left PivotTable has 'Count of LastName' as the value field, 'Grade' as the row label, and 'Ethnicity' as the column label. The right PivotTable has the same value field and row label, but 'SchoolCode' is in the filters and 'Ethnicity' is in the rows. The 'PivotTable Fields' task pane on the right shows 'SchoolCode' in the Filters area and 'Ethnicity' in the Rows area. Red boxes and arrows highlight these configurations.

Row Labels	N	Y	Grand Total
11	34	29	63
3	13	5	18
4	5	2	7
5	13	16	29
6	3	2	5
9	4	4	8
12	1	1	2
1	1	1	2
Grand Total	34	30	64

- 24. Repeat steps 20-23 for the Math_Benchmark_PVT tab and rename the new tab Math_Benchmark_Demo_PVT (Math Benchmark by Demographic Pivot Table).

The "all students" group is already represented in the pivot tables. If a SchoolCode is selected then the bold rows will represent "all students" for each category for the selected school.

Count of LastName	Column Labels	Y	N	Grand Total
11		15	14	29
3		5	2	7
4	Ethnicity Codes	4	2	6
5		5	9	14
6		1	1	2
Grand Total		15	14	29

A school is selected.

This line represents "all students" who met or exceed (Y) or were below (N) benchmark in ERW in grade 11 for the selected school.

Ethnicity Codes

This line represents "all students" who met or exceed (Y) or were below (N) benchmark in ERW in all grades for the selected school.

If the district SAT student data file was downloaded from the secure site and the (All) is selected for the "SchoolCode" then the bold rows will represent "all students" for each category for the district.

Count of LastName	Column Labels	Y	N	Grand Total
11		34	29	63
3		13	5	18
4		5	2	7
5		13	16	29
6		3	2	5
9		4	4	8
12		1	1	2
1		1	1	2
Grand Total		34	30	64

(All) will represent the district if the district SAT student file was downloaded from the secure site.

This line represents "all students" who met or exceed (Y) or were below (N) benchmark in ERW in grade 11 for the district.

This line represents "all students" who met or exceed (Y) or were below (N) benchmark in ERW in grade 12 for the district.

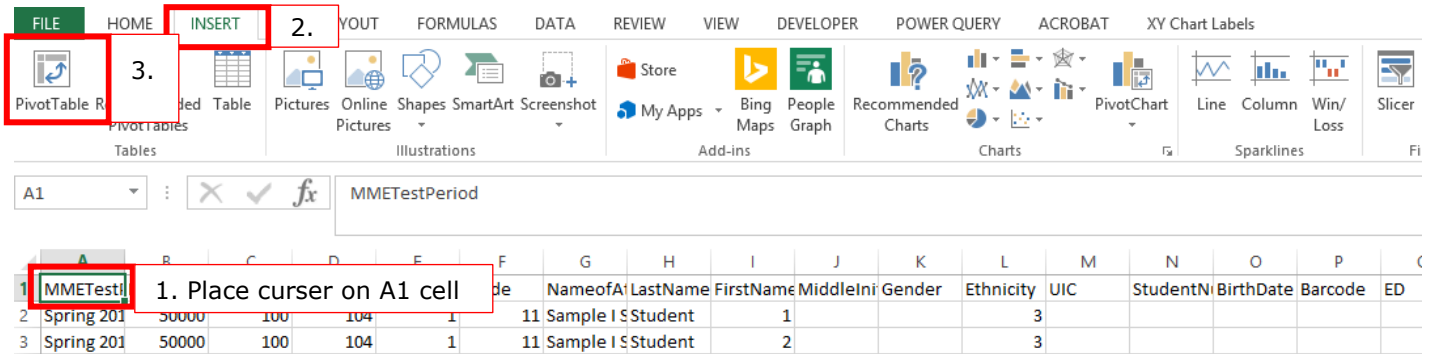
This line represents "all students" who met or exceed (Y) or were below (N) benchmark in ERW in all grades for the district.

Average Student Growth Percentile (SGP)

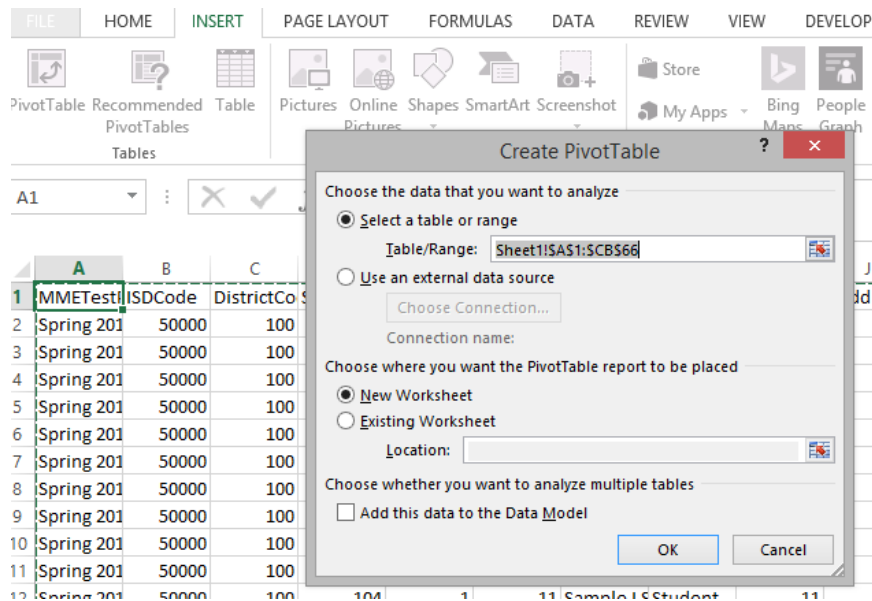
What is the average SGP by District/Building or Grade Level?

Follow the steps below to answer the question.

1. Place cursor in A1 cell on the "StudentData" tab and select PivotTable under the Insert tab at the top.



2. Make sure the entire table range was added and "New Worksheet" is selected. Click OK.



- A pivot table will be created on a new tab at the bottom of the worksheet. Take a moment to rename this tab. I.E. SGP_PVT (Student Growth Percentile Pivot Table)

To build a report, choose fields from the PivotTable Field List

This is the location of where the pivot table will be once created

The column headers from the student data file become the pivot table fields

1. Rename the new tab at the bottom

PivotTable Fields

Choose fields to add to report:

- MMEstPeriod
- ISDCode
- DistrictCode
- SchoolCode
- AttendingInstitutionCode
- Grade
- NameofAttendingInstitution
- LastName
- FirstName

Drag fields between areas below:

FILTERS COLUMNS

ROWS Σ VALUES

Defer Layout Update UPDATE

Math_Benchmark_PVT RW_Benchmark_PVT **SGP_PVT** StudentData

- Drag SchoolCode and Grade, in that order, to rows. Then drag EBRWValid to Filters and Evidence-basedReadingandWritingSGP (ERW Student Growth Percentile) to Σ Values. It will become Count of EBRWSGP.

Row Labels	Count of EvidenceBasedReadingandWritingSGP
104	25
11	25
105	21
11	21
12	21
Grand Total	46

PivotTable Fields

Choose fields to add to report:

- MathCCRBenchmarkIndicator
- EvidenceBasedReadingandWritin...
- MathSGP
- OutOfLevel
- OverallValid
- EBRWValid
- MathValid
- CreatedDate

Drag fields between areas below:

FILTERS COLUMNS

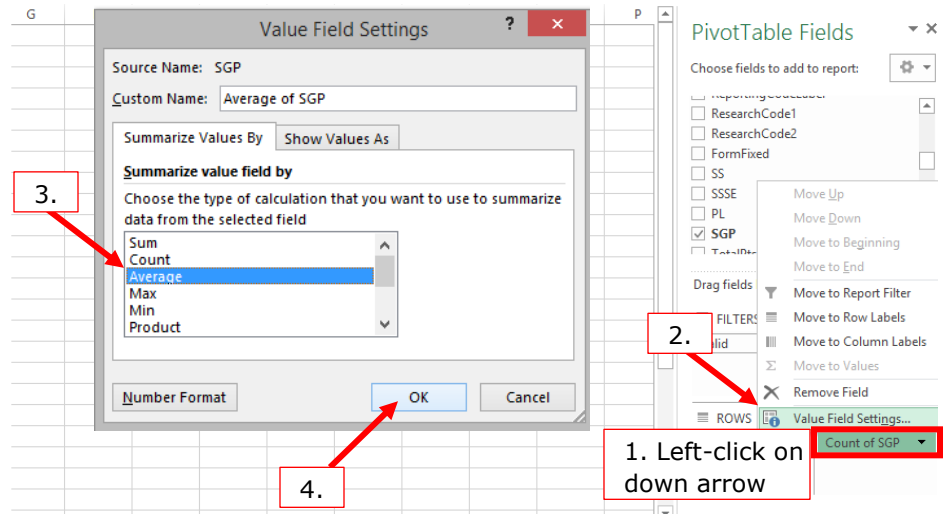
EBRWValid

ROWS Σ VALUES

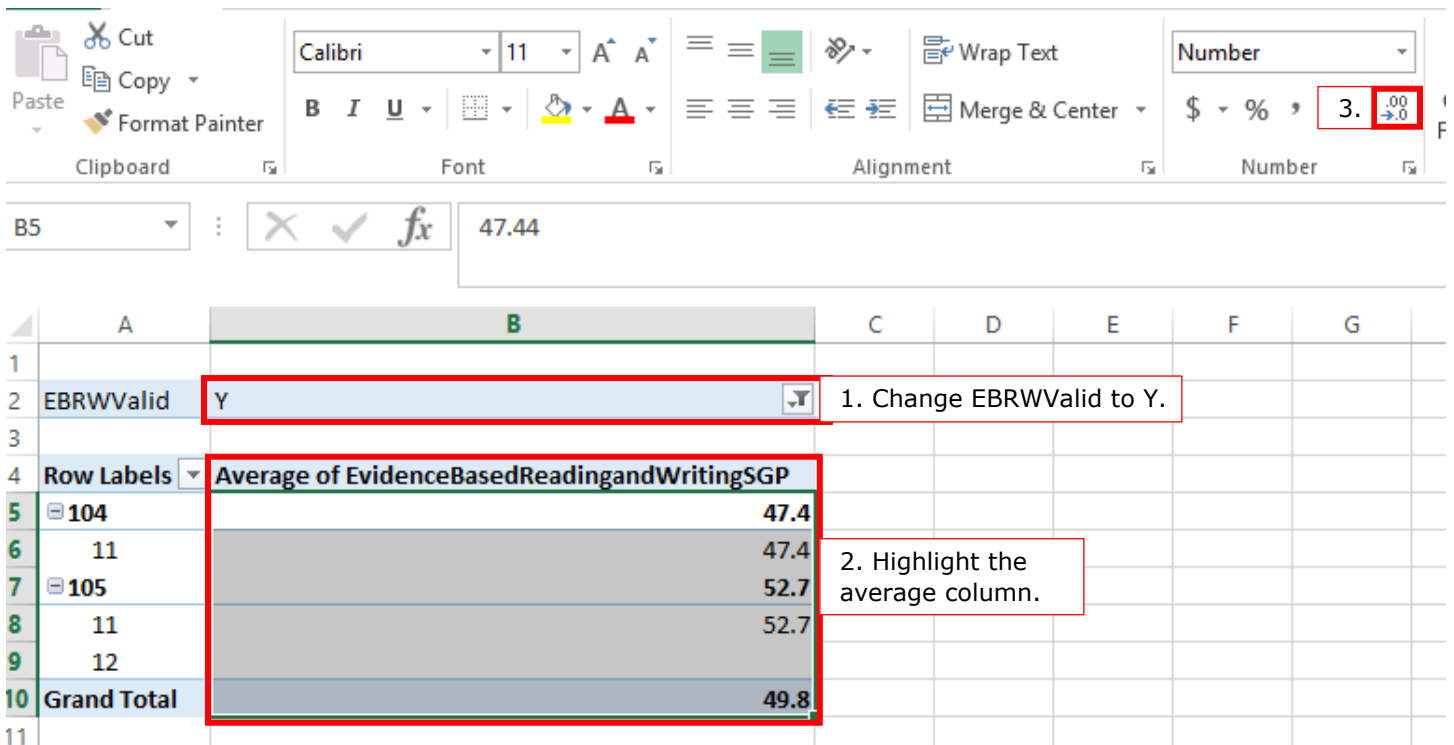
SchoolCode Count of Evid...
Grade

Drag fields from the list above to the correct areas

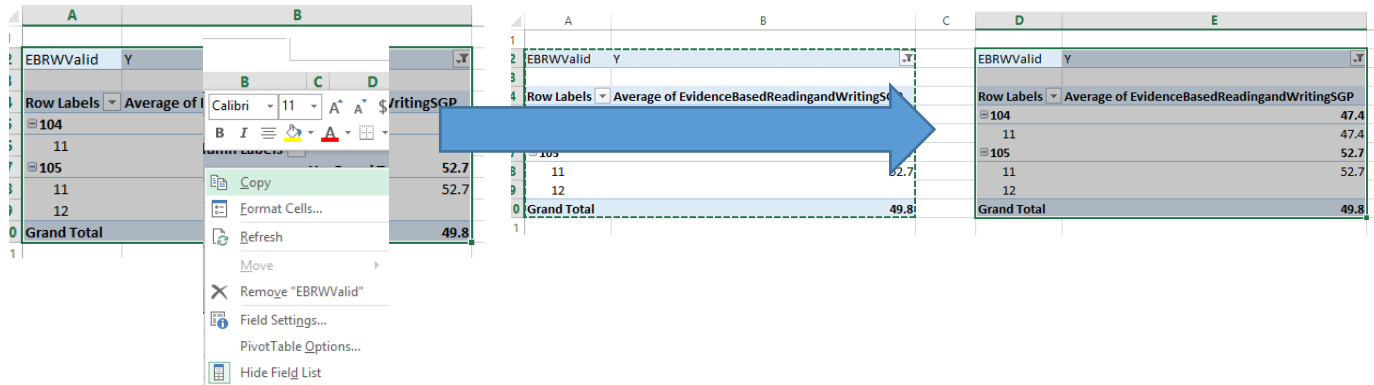
- To change Count to Average, under the Σ Values left-click on the down arrow next to "Count of EBRWSGP" and select "Value Field Settings..." In the value field settings, select Average from the list and then click OK.



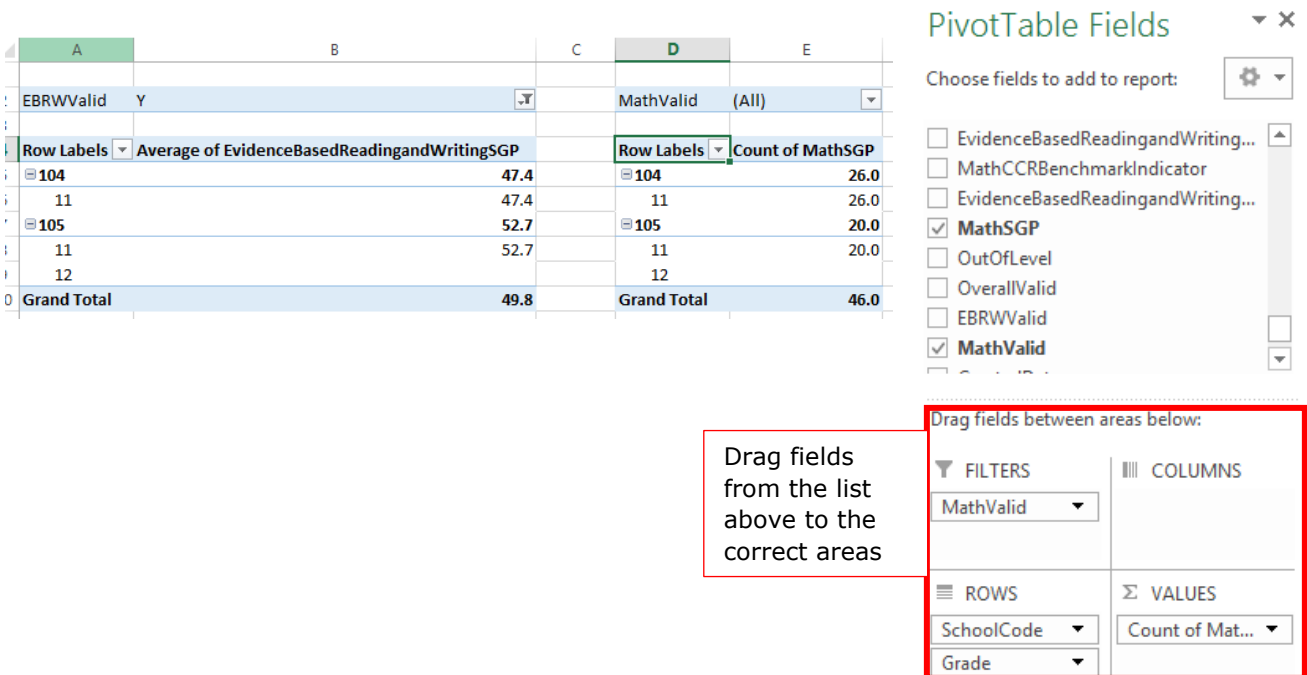
- Make sure to select Y under EBRWValid. If needed, highlight the average column and use the "Decrease Decimal" icon to reduce the number of the decimals.



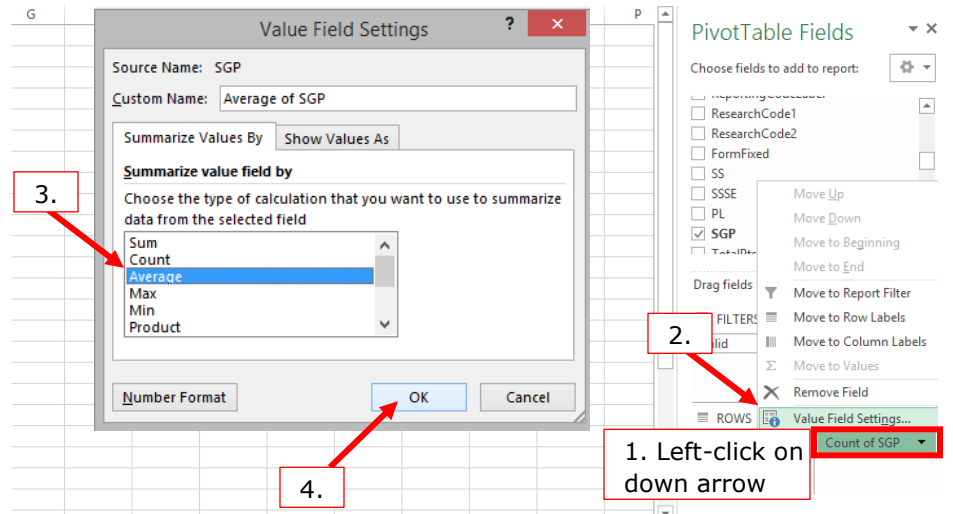
25. Highlight and copy (right-click) the pivot table then paste (right-click) next to original with at least one blank column in between the tables.



26. Change the copied table so that under filters is MathValid and under Σ Values is MathSGP (Math Student Growth Percentile). It will become Count of MathSGP.



- To change Count to Average, under the Σ Values left-click on the down arrow next to "Count of MathSGP" and select "Value Field Settings..." In the value field settings, select Average from the list and then click OK.



- Make sure to select Y under MathValid. If needed, highlight the average column and use the "Decrease Decimal" icon to reduce the number of the decimals.

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER POWER QUERY

Clipboard Font Alignment Number

E5 : 54.36

Row Labels	Average of EvidenceBasedReadingandWritingSGP	Row Labels	Average of MathSGP
104	47.4	104	54.4
11	47.4	11	54.4
105	52.7	105	49.2
11	52.7	11	49.2
12		12	
Grand Total	49.8	Grand Total	52.1

1. Change MathValid to Y.

2. Highlight the average column.