

Random Selection Instructions

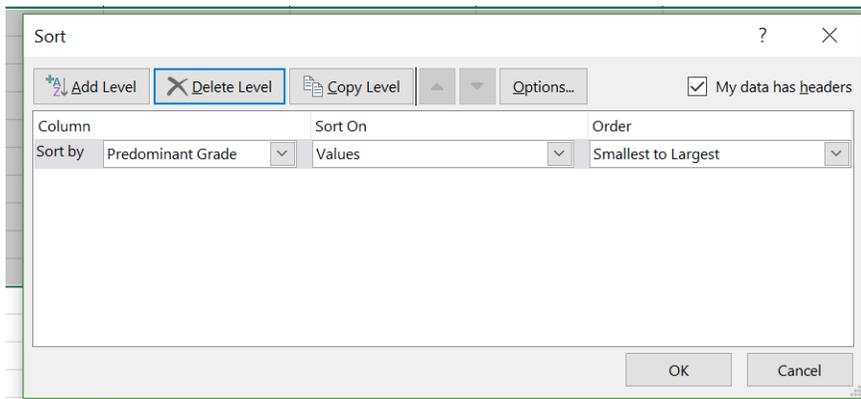


Getting Ready

1. You'll need a spreadsheet to start! Download [this template](#) or create your own spreadsheet with the following headers: Teacher Name, Subject, Period, Enrollment, Predominant Grade, Random.
2. Choose a subject (e.g., English, Math) **or** period (e.g., 3rd, 5th) in which all students are enrolled this fall to administer the survey.
3. Sum enrollment of students. *If your high school has less than 400 students (grades 9-12) or if your middle school has less than 150 students (grades 6-8) please survey all students in the school and do not move forward with classroom selection.*
4. List **all** classes occurring in your chosen subject **or** period in spreadsheet. Fill in columns for Teacher Name; Subject (e.g., Math) or Period (e.g., 3rd); Enrollment; and Predominant Grade.

Step 1

Sort by the Predominant Grade column, smallest to largest.



Step 2

For easier selection, separate out grades into different worksheets or tabs. Name the worksheets "9th", "10th", "11th", or "12th" for high schools or "6th", "7th", and "8th" for middle schools. Copy each grade's class information into separate worksheets in the file.

	A	B	C	D	E	F
1	Teacher Name	Subject	Period	Predom	Enrollm	Random
2	Tucker	Math	1	6	30	
3	Keil	English	1	6	25	
4	Roberts	Science	1	6	26	
5	Gary	Social Science	1	6	31	
6	Stephens	Math	1	6	18	
7	Smith	Math	1	6	19	
8	Gretchen	English	1	6	21	
9	Cady	Social Science	1	6	25	
10	Karen	Science	1	6	26	
11						
12						
13						

At the bottom of the spreadsheet, the worksheet tabs are visible: 6th, 7th, 8th, 9th, 10th, 11th, and a plus sign for more tabs. A red arrow points to the '6th' tab.

Step 3

For each grade worksheet, calculate the average classroom enrollment. You can do this by highlighting the Enrollment column and looking at the bottom ribbon (see image) or using the AVERAGE formula. Based on the average, determine the number of classes needed to reach 100 students per grade (high school) or 50 students per grade for middle school.

Teacher	Subject	Period	Predom	Enrollment	Random
Gill	English	1	9	25	
Gill	English	5	9	30	
Lorenzo	English	1	9	15	
Lorenzo	English	7	9	28	
Lorenzo	English	8	9	29	
Persephor	English	1	9	30	
Diedra	English	1	9	32	
Diedra	English	2	9	31	
Diedra	English	6	9	28	

The screenshot shows the Excel ribbon with the status bar at the bottom. The status bar displays 'Average: 27.5555555' which is circled in red. Other status bar information includes 'Count: 10' and 'Sum: 248'.

Example: if the average enrollment for 9th grade classes = 27.6, you should choose 4 classes to reach 100 students ($100 \div 27.6 = 3.6$ which rounds to 4).

Step 4

Within each grade worksheet, use the last column “Random” to generate random numbers from 0 to 1. Type the formula =RAND() and hit “Enter”. After entering the formula, copy and paste the values (right click → paste as values) into the same column so they don’t change. Then sort the classes by the random numbers from smallest to largest.

Select the number of classes you deemed appropriate in Step 3, starting with the first row. For example, if you are supposed to select 4 classrooms you will select the top 4 classes, regardless of enrollment.

Highlight the classes you’ve selected.

	A	B	C	D	E	F
1	Teacher	Subject	Period	Predom	Enrollment	Random
2	Lorenzo	English	1	9	15	0.00649575
3	Diedra	English	6	9	28	0.02514534
4	Diedra	English	1	9	32	0.185051
5	Persephor	English	1	9	30	0.21877626
6	Gill	English	5	9	30	0.28907811
7	Diedra	English	2	9	31	0.43330586
8	Lorenzo	English	7	9	28	0.57769556
9	Gill	English	1	9	25	0.72047509
10	Lorenzo	English	8	9	29	0.77563729

Repeat Steps 3 and 4 for all remaining grade levels.

Step 5

Create a new spreadsheet with only the selected classrooms in all grade levels (highlighted from Step 3). This will allow for easier classroom tracking and survey administration.

And you’re done with selection! If you need additional support, email us at CSPHSurveyTeam@cuanschutz.edu.