



Google Sheets

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About Google Sheets

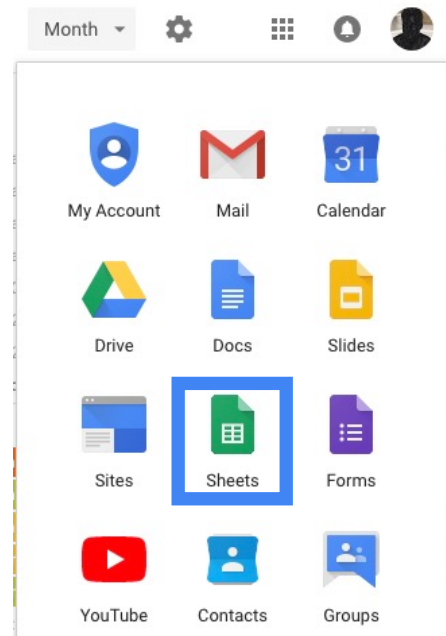
Sheets is Google's answer to Microsoft Excel. It can do complex number-crunching on rows and columns of information. While Sheets can easily sort data, it can also make an easy task of many mundane operations on data that you might have to perform.

Screen elements of Google Sheets is shown in the figure below. This tutorial will be working with Google Forms data from a previous tutorial.

Access Google Sheets

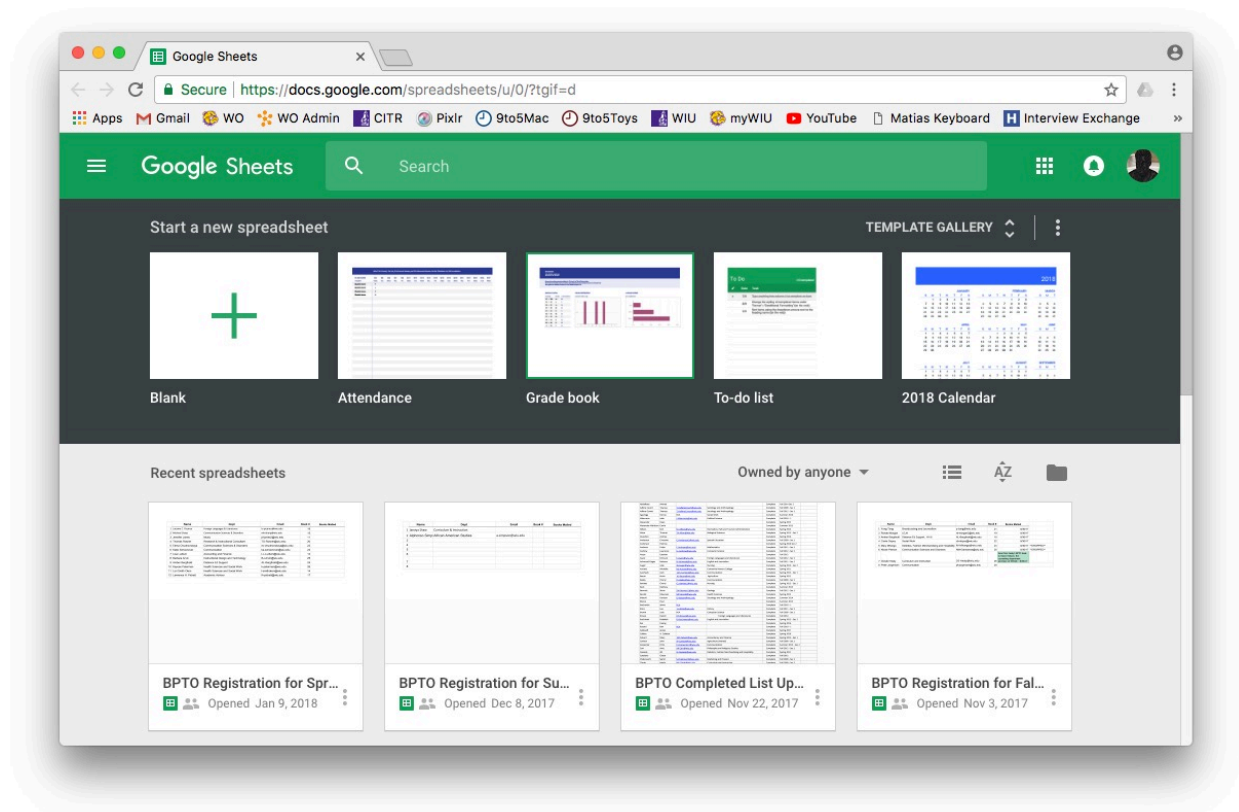
To get to Sheets from any Google page, click the app launcher at the top right and click the **Sheets** icon.

NOTE: The app launcher can be customized in terms of icon location, so the location of your Sheets icon may be in a different spot in the list.



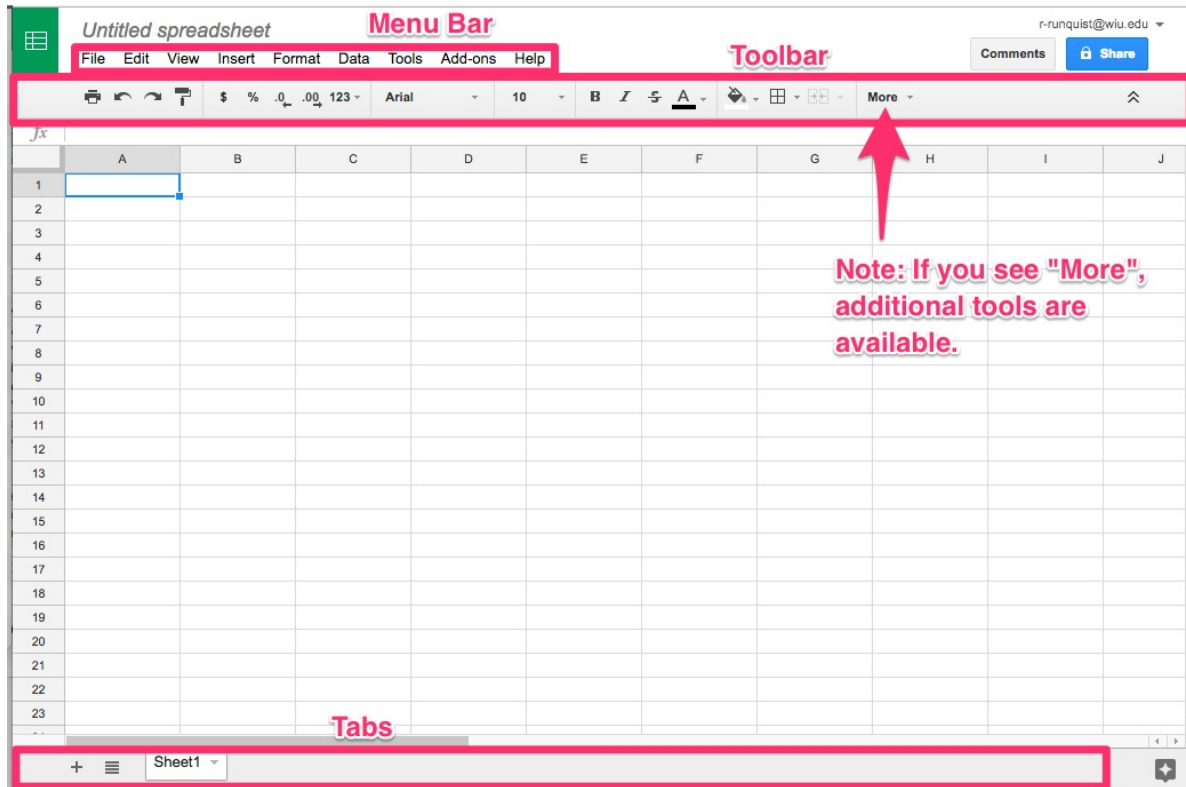
If you are using Sheets for the first time, you may need to click the More link at the bottom of the app launcher window.

Google Sheets Home Page



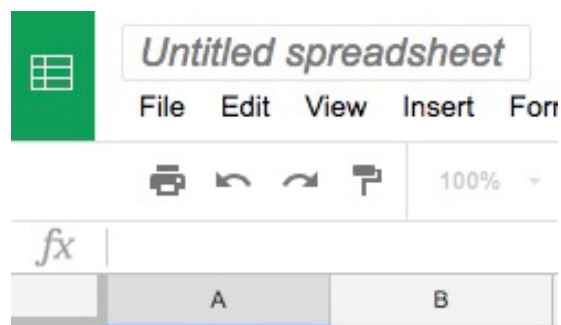
Create a New Spreadsheet

From the Sheets home page you can click once to create a blank spreadsheet, create a spreadsheet from a template, or open recent spreadsheet. To create a new spreadsheet simply click the **Blank** template icon. You will see the following.



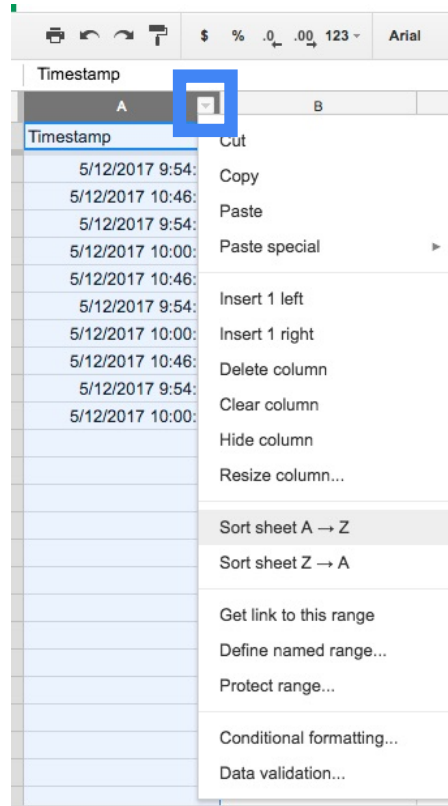
Name the Presentation

Click the area that says **Untitled presentation** on the upper left to name the presentation (or click **File** and choose **Rename**).



Sorting Data

Data can be easily sorted by hovering your mouse on the column heading for the column you wish to sort on. A dropdown menu option will appear on the right side. Select the **Sort sheet** option that best suits your needs. In the following figure, the “Timestamp” column “A” is being sorted from A to Z.



Add Another Column

Add another column to your data where you can do some computation. In the right-most column (G), add a new column by clicking the column dropdown (above) and select “Insert 1 right” option. Column (H) will appear.

Create a Formula to Find Unique Email Addresses

In the newly created column we will enter a formula for finding all of the students submitting work. Click cell H2 and enter the following formula. Just as in Excel, formulas must begin with an equal sign (=).

$$=unique(B2:B11)$$

This will find all the unique values that exist in the email address column (B) between cell 2 and cell 11. However, what happens when the data set grows? We will want to modify the formula a bit. Re-edit the formula in H2 to be the following:


$$=unique(B2:B)$$

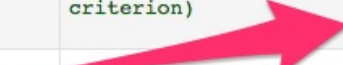
This will update the spreadsheet automatically as new items are added.

Explore Other Formulas

If you don't know the name of the given functions, such as "unique" simply select "Insert" in the Google Sheets menu bar, followed by "Function" and "More". A new page will appear. Scroll through or simply use your browsers "Search" option to find the function you are needing. Functions can also be nested if you need even more functionality.

If you were curious about how many times a student entered a posting, you might consider a "countif" function. Walk through the steps to see if you can create this formula. A typical view of Sheets' help system is below. See examples when you click to "Learn more".

Math	COUNTBLANK	<code>COUNTBLANK(range)</code>	Returns the number of empty cells in a given range. Learn more 
Math	COUNTIF	<code>COUNTIF(range, criterion)</code>	Returns a conditional count across a range. Learn more 
Math	COUNTIFS	<code>COUNTIFS(criteria_range1, criterion1, [criteria_range2, criterion2, ...])</code>	Returns the count of a range depending on multiple criteria. Learn more 
			Counts the number of

See examples 

Countif Solution

Create a new column "I" to the right of column "h" that holds the "unique" formula that was used. Build the following formula in cell I2:

```
=countif(B2:B,H2)
```