

L♥VES DATA




# Google Sheets Tips

*Tips for using Google Sheets by Benjamin Mangold*

<b>1. Send emails when you comment</b>	<b>2</b>
<b>2. Add heatmaps using conditional formatting</b>	<b>3</b>
<b>3. Apply filters</b>	<b>5</b>
<b>4. Clean up values with CLEAN and TRIM</b>	<b>6</b>
<b>5. Protect data in cells</b>	<b>6</b>
<b>6. Validate data in cells</b>	<b>7</b>
<b>7. Integrate with Google Forms</b>	<b>8</b>
<b>8. Insert a chart from Google Sheets into a Google Doc</b>	<b>9</b>
<b>9. Import data from a website or RSS feed</b>	<b>10</b>
<b>10. Change capitalization in cells</b>	<b>11</b>
<b>11. Translate text</b>	<b>11</b>
<b>12. Split names and other data</b>	<b>12</b>
<b>13. Check for valid email addresses</b>	<b>12</b>
<b>14. Quickly summarize data</b>	<b>13</b>
<b>15. Import data from other sheets</b>	<b>14</b>
<b>16. Visualize data with a sparkline</b>	<b>14</b>
<b>17. Create QR codes</b>	<b>15</b>
<b>18. Quick data visualization</b>	<b>16</b>
<b>19. Extend Google Sheets with add-ons</b>	<b>17</b>
<b>20. Quickly learn formulas</b>	<b>18</b>
<b>21. Keyboard shortcuts</b>	<b>19</b>

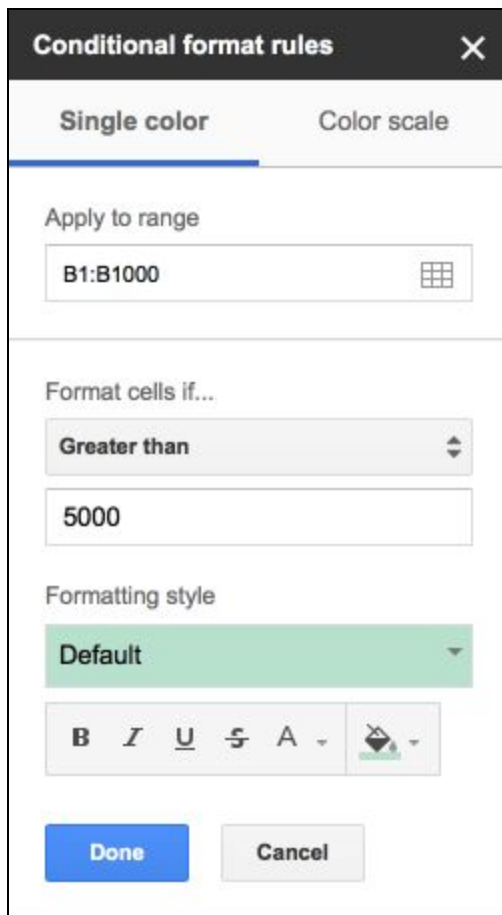
# 1. Send emails when you comment

Google Sheets is great for collaborating with others – everything is updated in real time, but what if you need to let someone know there is something you need them to check? You can actually send an email to let them know when you’re adding a comment to Google Sheets. Just add a plus sign (+) and then type their email address (or name) and then when you add your comment they’ll receive an email with your message automatically.

D	E	F	G	H	I	J
New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Ecommerce Conversion Rate	Transactions	Revenue
25,667	49.20%	3.95	0:02:35	1.07%	352	\$33,640.35
10,787	47.69%	4.28	0:02:59	3.24%	467	\$85,281.82
8,466	70.35%	1.82	0:00:45	0.00%	0	\$0.00
2,465	14.33%	 Benjamin Mangold		11.15%	643	\$107,488.18
1,049	52.38%			0.00%	0	\$0.00
1,074	57.06%	Hey +jessica.jones@lovesdata.com, does this bounce rate look right to you? Maybe there is a tracking issue?		0.00%	0	\$0.00
720	29.99%			2.75%	37	\$6,469.25
402	7.10%	<input checked="" type="checkbox"/> Assign to jessica.jones@love... The assigned person will be notified and responsible for marking as done.		33.49%	354	\$80,433.99
397	15.94%			20.75%	177	\$40,514.94
685	60.66%	<input type="button" value="Assign"/> <input type="button" value="Cancel"/>		0.00%	0	\$0.00

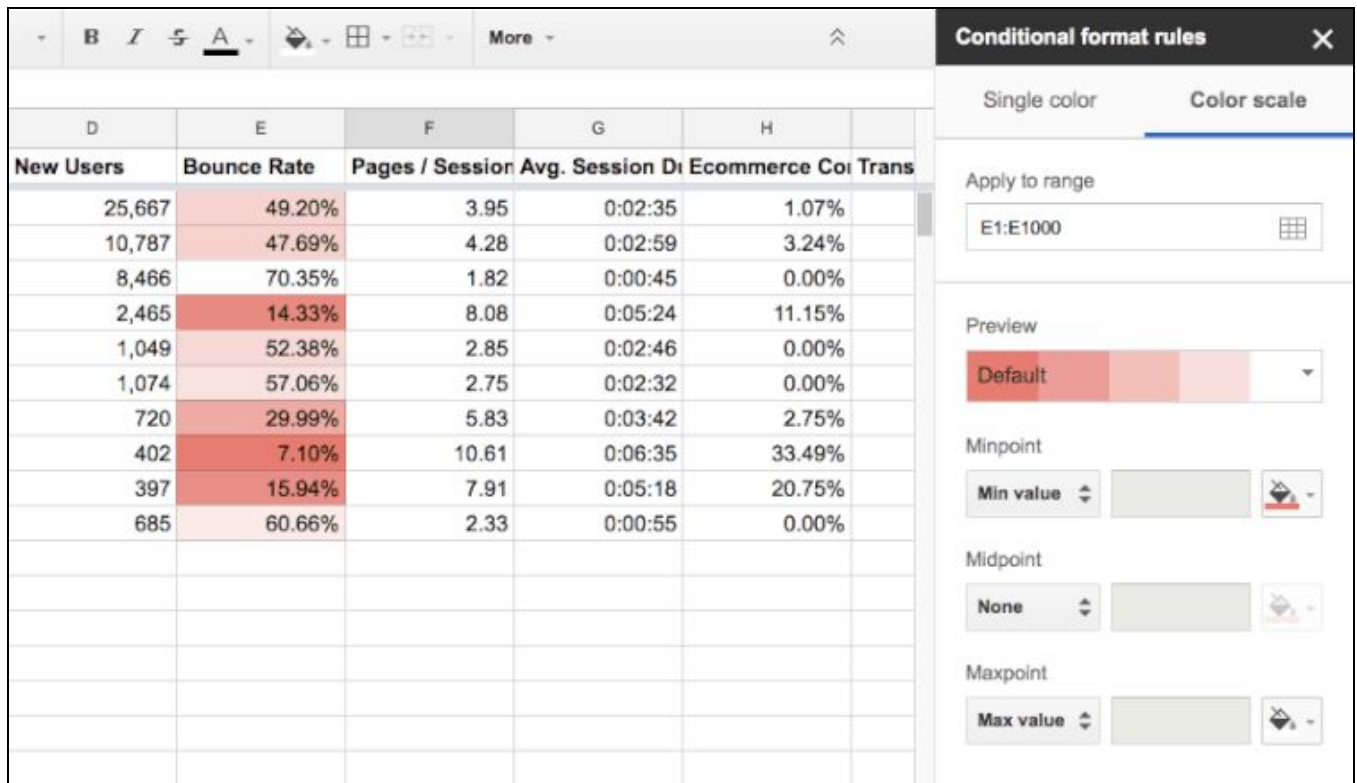
## 2. Add heatmaps using conditional formatting

Heatmaps are a great way to draw attention to important data in your sheet. You can highlight particular values, outliers or errors using conditional formatting.



The image shows the 'Conditional format rules' dialog box in Google Sheets. The dialog has a dark header with the title 'Conditional format rules' and a close button (X). Below the header are two tabs: 'Single color' (selected) and 'Color scale'. The 'Apply to range' section shows a text box containing 'B1:B1000' and a grid icon. The 'Format cells if...' section has a dropdown menu set to 'Greater than' and a text box containing '5000'. The 'Formatting style' section has a dropdown menu set to 'Default' and a toolbar with icons for Bold (B), Italic (I), Underline (U), Text color (A), and Background color (a paint bucket). At the bottom are 'Done' and 'Cancel' buttons.

Applying a color scale allows you to quickly highlight lower and higher values in your data. I find this especially useful when I've pulled in data from Google Analytics so that I can quickly identify where to focus my analysis.



D	E	F	G	H	
New Users	Bounce Rate	Pages / Session	Avg. Session Di	Ecommerce Coi	Trans
25,667	49.20%	3.95	0:02:35	1.07%	
10,787	47.69%	4.28	0:02:59	3.24%	
8,466	70.35%	1.82	0:00:45	0.00%	
2,465	14.33%	8.08	0:05:24	11.15%	
1,049	52.38%	2.85	0:02:46	0.00%	
1,074	57.06%	2.75	0:02:32	0.00%	
720	29.99%	5.83	0:03:42	2.75%	
402	7.10%	10.61	0:06:35	33.49%	
397	15.94%	7.91	0:05:18	20.75%	
685	60.66%	2.33	0:00:55	0.00%	

**Conditional format rules**

Single color **Color scale**

Apply to range

E1:E1000

Preview

Default

Minpoint

Min value

Midpoint

None

Maxpoint

Max value

Learn more about [conditional formatting](#).

### 3. Apply filters

You can use filters to only view rows of interest within the sheet. This can be really useful when you're working with a larger set of data. Just select the filter icon (or select 'Filter' under 'Data') and then you'll be able to click the filter icon in the first column row of your sheet and select the value(s) you want to be included.

1	Source / Medium	Sessions	% New Session	New Users
2	google / organic			25,667
3	(direct) / (none)			10,787
4	youtube.com / referral			8,466
5	mail.google.com / referral			2,465
6	nytimes.com / referral			1,049
7	partners / affiliate			1,074
8	google / cpc			720
9	deals.com / referral			402
10	t.co / referral			397
11	m.facebook.com / referral			685
12				
13				
14				
15				
16				

If you're using a filter on a regular basis you can save them to use again in the future. Select 'Create New Filter View' by clicking the filter icon (or under 'Data' and then 'Filter Views').

G	H		
<b>Avg. Session D</b>	<b>Ecommerce Co</b>		
0:00:45	0.00%		
0:05:24	11.15%		
0:02:46	0.00%		
0:06:35	33.49%	354	\$80,433.99
0:05:18	20.75%	177	\$40,514.94
0:00:55	0.00%	0	\$0.00

Learn more about [filters](#).

## 4. Clean up values with CLEAN and TRIM

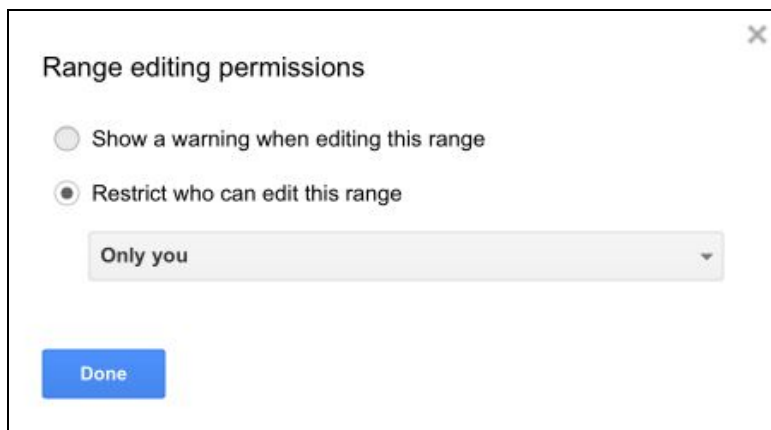
If you find unwanted characters in your cells, you can use the CLEAN function to remove any non-printable characters and the TRIM function to remove whitespace from the start and ends of cells.

fx		=TRIM(A2)	
	A	B	C
1	<b>Name</b>	<b>Cleaned Name</b>	
2	Bysshe Whitaker	Bysshe Whitaker	
3	Rozanne Harmony	Rozanne Harmony	
4	Kent Malachi	Kent Malachi	
5	Melinda Brianne	Melinda Brianne	
6			

Learn more about the [CLEAN](#) and [TRIM](#) functions.

## 5. Protect data in cells

If lots of people are working on a sheet, then you might want to lock down some of the data to prevent mistakes. You can lock sheets and even individual cells so that data isn't accidentally changed.

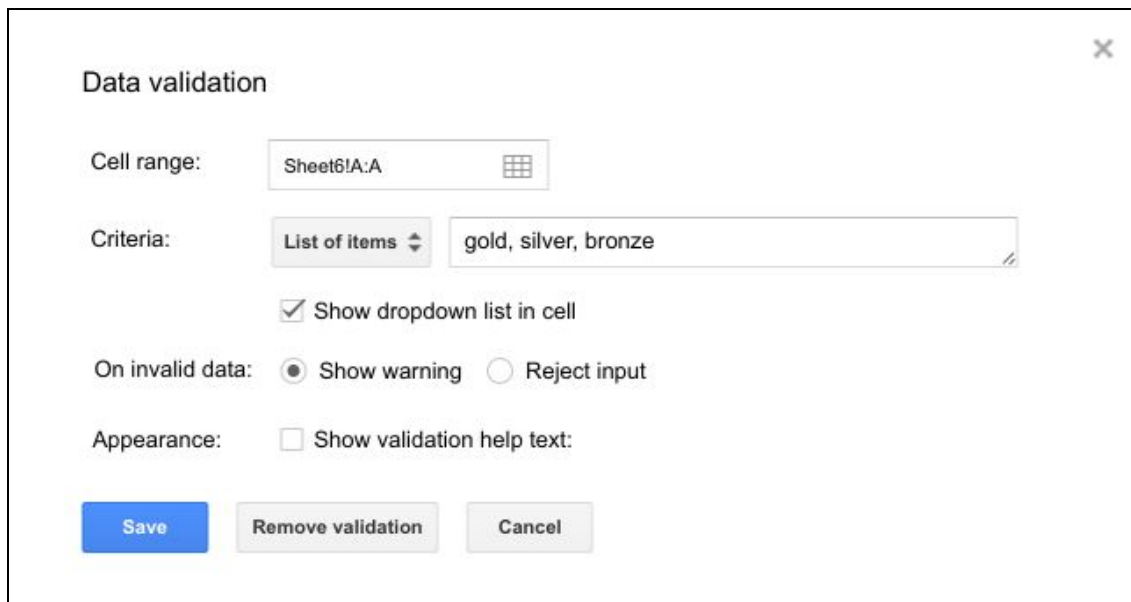


The image shows a dialog box titled "Range editing permissions" with a close button (X) in the top right corner. It contains two radio button options: "Show a warning when editing this range" (unselected) and "Restrict who can edit this range" (selected). Below the second option is a dropdown menu currently showing "Only you". At the bottom left is a blue "Done" button.

If you don't want completely lock down cells, you also have the option to show a warning before they're edited.

## 6. Validate data in cells

You can ensure that certain cells only contain selected data by applying data validation to your sheet. For example, you can set validation so that particular cells only contain numbers or even a value from a predefined list.



The screenshot shows the 'Data validation' dialog box in Google Sheets. It has a title bar with a close button (X) in the top right corner. The dialog is titled 'Data validation'. It contains the following fields and options:

- Cell range:** A text box containing 'Sheet6!A:A' with a small grid icon to its right.
- Criteria:** A dropdown menu set to 'List of items' and a text box containing 'gold, silver, bronze'.
- Show dropdown list in cell
- On invalid data:** Two radio buttons: 'Show warning' (selected) and 'Reject input'.
- Appearance:**  Show validation help text:

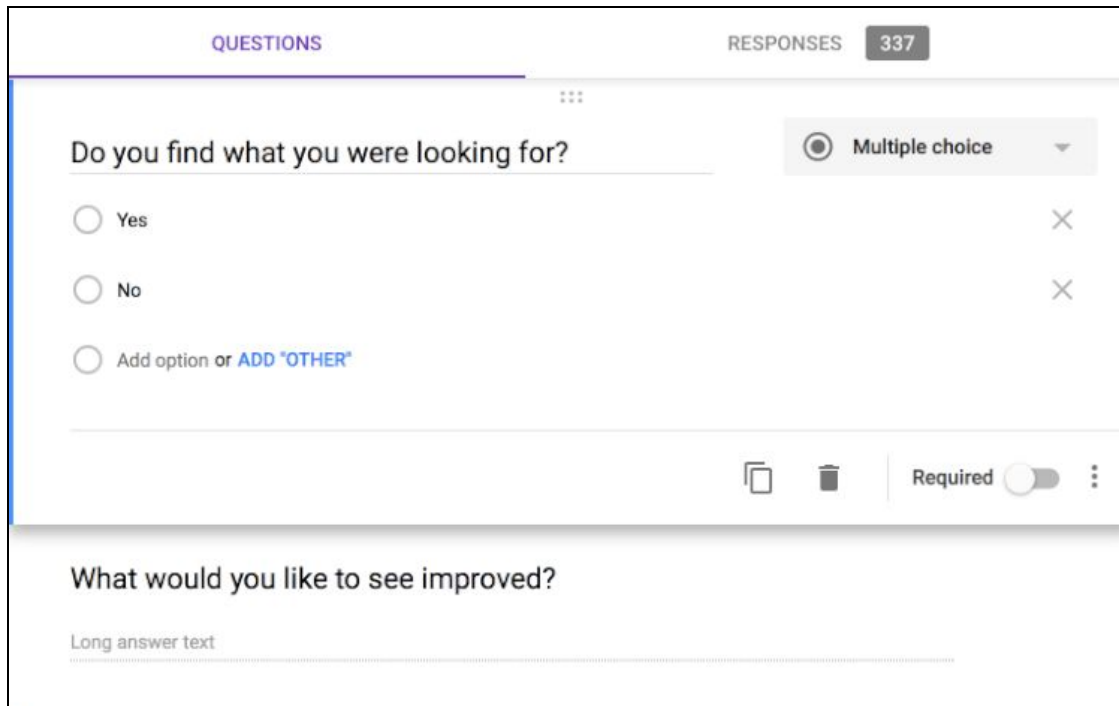
At the bottom of the dialog are three buttons: 'Save' (blue), 'Remove validation' (grey), and 'Cancel' (grey).

Setting a predefined list of values will also make a drop-down selector available within the sheet.



## 7. Integrate with Google Forms

After you've collected responses using Google Forms you can use Google Sheets to analyze and visualize your data.

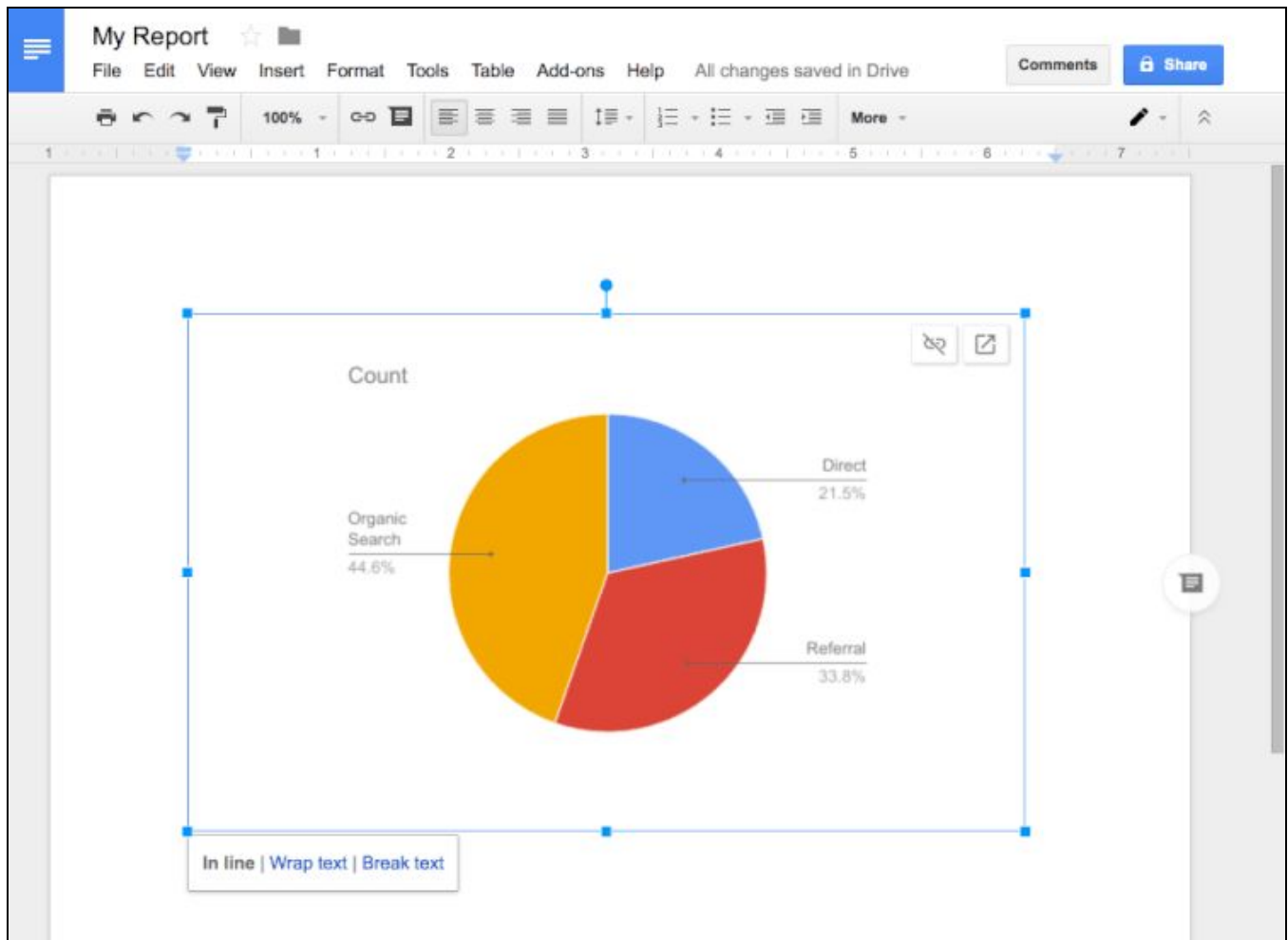


The screenshot displays the Google Forms editor interface. At the top, there are two tabs: 'QUESTIONS' (active) and 'RESPONSES' (with a count of 337). The main area shows two questions. The first is a multiple choice question: 'Do you find what you were looking for?'. It has three options: 'Yes', 'No', and 'Add option or ADD \*OTHER\*'. The 'Multiple choice' type is selected. Below the options are icons for adding, deleting, and required status. The second question is a long answer text question: 'What would you like to see improved?'. It is labeled 'Long answer text'.

To send data into a Google Sheets, select 'Responses' inside the form and then click on the Google Sheets icon to send existing (and future) responses into a sheet.

## 8. Insert a chart from Google Sheets into a Google Doc

Once you've created a chart inside Google Sheets you can insert it into a Google Doc. Inside the document, select 'Insert', then 'Chart' and then 'From Sheets'.



This can save a lot of time since you can update the chart in the document to reflect any changes you've made in Google Sheets. All you need to do is click 'Update' in the document and you're done!

## 9. Import data from a website or RSS feed

You can use different functions to import data into your sheet from websites and RSS feeds, including:

- [ImportHTML](#) for importing HTML tables and lists
- [ImportFeed](#) for importing RSS entries
- [ImportData](#) for importing a web-based CSV file
- [ImportXML](#) for importing a custom section of a webpage that you can identify with Xpath

For example, here is an import of all the SpaceX launches from Wikipedia:

*fx* =IMPORTHTML("https://en.wikipedia.org/wiki/List\_of\_Falcon\_9\_and\_Falcon\_Heavy\_launches", "table", 1)

	A	B	C	D	E	F	G	H	I	J
1	Flight №	Date and time (UTC)	Type Booster[a]	Launch site	Payload	Payload mass	Orbit	Customer	Outcome	
2									Mission	Landing
3	2010 to 2013[edit]									
4	1	June 4, 2010, 18 F9 v1.0[28]	CCAFS LC-40	Dragon Spacecraft Qualification U	LEO			SpaceX	Success	Parachutes[29] Failure[30]
5		First flight of Falcon 9 v1.0[1]								
6	2	December 8, 201 F9 v1.0[28]	CCAFS LC-40	Dragon demo flight C1, two cubes	LEO			NASA (COTS), N	Success [30]	Parachutes[34] Failure[30]
7		Maiden flight of Dragon capsule; 3 hours, testing of maneuvering thrusters and reentry[35]								
8	3	May 22, 2012, 0 F9 v1.0[28]	CCAFS LC-40	Dragon demo flight C2+[37]	LEO			NASA (COTS)	Success[38]	No attempt
9		Launch was scrubbed on first attempt,[39] second launch attempt was successful.[40]								
10	4	October 8, 2012, F9 v1.0[28]	CCAFS LC-40	SpaceX CRS-1[4	500 kg (1,100 lb)	LEO		NASA (CRS)	Success	No attempt
11					172 kg (379 lb)[44]	LEO		Orbcomm	Failure[14][45]	
12		CRS-1 successful, but the secondary payload was inserted into abnormally low orbit and lost due to Falcon 9 boost stage engine failure, ISS visiting vehicle safety rules, and the primary payload owner's contractual right to decline a second ignition of the second stage under some conditions.[13][14]								

## 10. Change capitalization in cells

You can capitalize the first letter in each word using the [PROPER](#) function. This is useful if you need to clean up values to make them consistent.

	=PROPER(A2)		
	A	B	C
1	<b>Name</b>	<b>Cleaned Name</b>	
2	bysshe whitaker	Bysshe Whitaker	
3	RozAnne harmony	Rozanne Harmony	
4	Kent MALACHI	Kent Malachi	
5	melinda brianne	Melinda Brianne	
6			

Alternatively, you can use the [LOWER](#) function to make all letters lowercase.

## 11. Translate text

If your sheet contains cells that use a different language, then you can use the [GOOGLETRANSLATE](#) function to automatically translate the values in another language.

	=GOOGLETRANSLATE(A2)		
	A	B	C
1	<b>Italian</b>	<b>English</b>	
2	dieci	ten	
3	undici	eleven	
4	dodici	twelve	
5	tredici	thirteen	
6			

Learn more about the [GOOGLETRANSLATE](#) function.

## 12. Split names and other data

If you ever find that you need to split the data contained in one cell into multiple cells, then you can use the 'split text to columns' option (which you'll find under 'Data'). This can be useful if you need to clean up data, for example, if you need to split first and last names into separate columns in your sheet.

	A	B	C
1	<b>Name</b>		
2	Bysshe	Whitaker	
3	Rozanne	Harmony	
4	Kent	Malachi	
5	Melinda	Brianne	
6		Separator: Space	
7			
8			

## 13. Check for valid email addresses

If you have a list of emails and you want to ensure that they've used a valid email address structure, then you can check them using Google Sheets. It won't check that your emails will be delivered, but it will help identify any email addresses that will bounce (like ones missing the '@' or '.com').

	A	B	C
	<i>fx</i>	=ISEMAIL(A2)	
1	<b>Email</b>	<b>Valid?</b>	
2	byshe@gmail.com	TRUE	
3	rozanne@gmail.com	FALSE	
4	@gmail.com	FALSE	
5	melinda@gmail.com	TRUE	
6			

Learn more about the [ISEMAIL](#) function.

## 14. Quickly summarize data

If you're looking for a quick way to summarize data, then SUMIFS and COUNTIFS can be a good option, as they allow you to define multiple criteria. For example, you could sum all numbers over a certain value or count the number of rows that contain a particular string or value.

	A	B	C	D	E
1	<b>Country</b>	<b>Channel</b>	<b>Sessions</b>	<b>Value</b>	
2	United States	Organic Search	12,888	\$3,036.00	
3	United States	Referral	8,581	\$6,390.00	
4	United States	Direct	7,937	\$2,676.00	
5	India	Organic Search	2,374	\$189.00	
6	United Kingdom	Organic Search	2,195	\$140.00	
7	United States	Social	1,644	\$206.00	
8	United States	Paid Search	1,203	\$380.00	
9	Canada	Organic Search	1,197	\$208.00	
10	Germany	Organic Search	1,132	\$99.00	
11	Netherlands	Organic Search	986	\$70.00	
12					
13	<b>Summary</b>				
14	United States		32,253	\$12,688.00	
15					

Learn more about [SUMIFS](#) and [COUNTIFS](#).

## 15. Import data from other sheets


Instead of maintaining data in multiple sheets, you can simply import data from one sheet into another. This also means that you only need to update data in one place (and not multiple sheets) which can be a big time saver.

	A	B	C	D	E	F	G	H	I	J
1	#									
2	# 1 Master View									
3	# New Custom Report									
4	# 20170403-20170502									
5	#									
6										
7	Country	Default Channel	Sessions	Goal Completions						
8	United States	Organic Search	12,888	3,036						
9	United States	Referral	8,581	6,390						
10	United States	Direct	7,937	2,676						

Learn more about the [IMPORTRANGE](#) function.

## 16. Visualize data with a sparkline





You can easily add sparklines to your sheets in order to quickly see trends in your data. This can be especially useful if you're comparing data (like metrics from Google Analytics) or if you want to turn your sheet into a dashboard.

	A	B	C
1	<b>Day Index</b>	<b>Sessions</b>	
24	4/25/2017	2,547	
25	4/26/2017	4,484	
26	4/27/2017	3,021	
27	4/28/2017	2,582	
28	4/29/2017	1,661	
29	4/30/2017	1,706	
30	5/1/2017	2,813	
31	5/2/2017	2,766	
32			

Learn more about the [SPARKLINE](#) function.

## 17. Create QR codes

Barcodes are a useful way to keep track of things, like checking people in at an information session, conference or event. And you can quickly create QR codes in Google Sheets.

	A	B	C	D	E	F
1	User ID	QR Code				
2	18320291					
3	32983298					
4	22839823					
5	42020929					

This example will pull in the data from the A1 cell to create a QR code:

```
=IMAGE("https://chart.googleapis.com/chart?chs=200x200&cht=qr&chl="&A1&"")
```

I've used a similar method to create coupon codes on a website that people can then use to redeem an in-store offer.



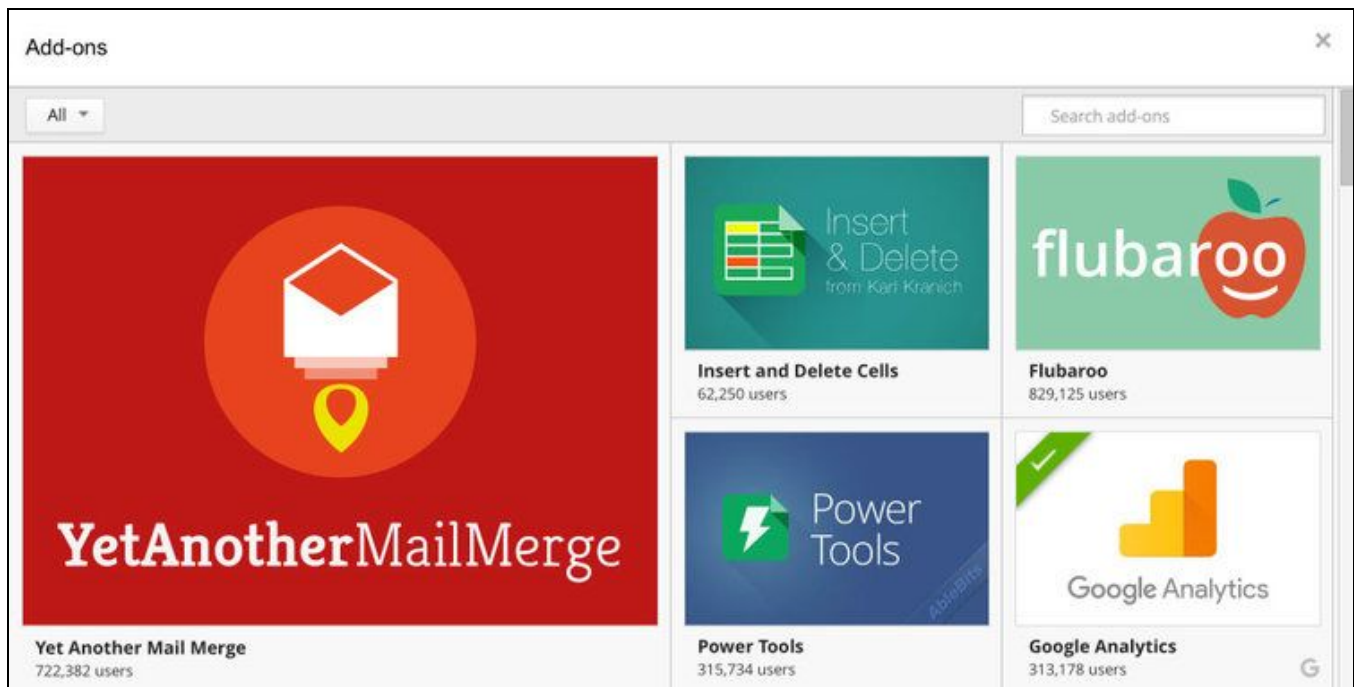
## 18. Quick data visualization

If you're ever looking for new ideas on how to visualize your data, you can use the Explore feature to see suggested ways to present your data.



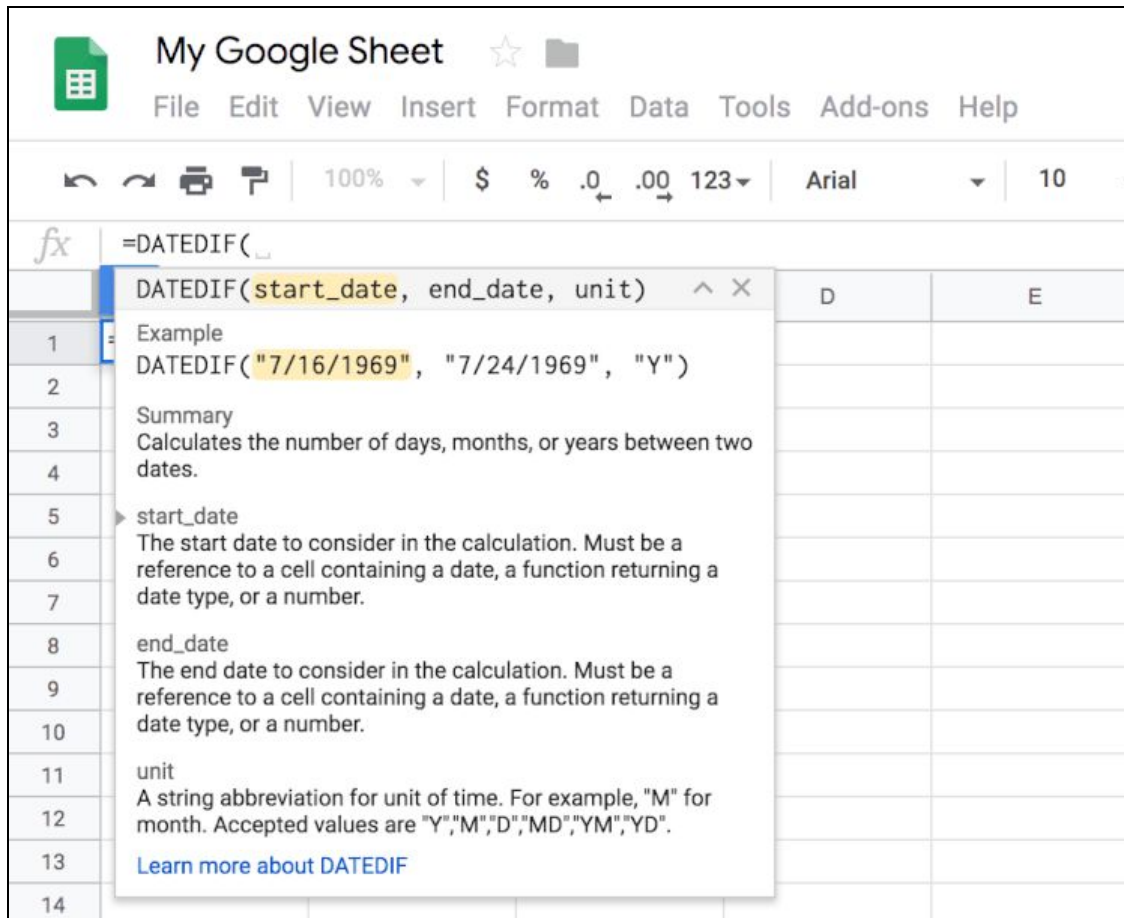
## 19. Extend Google Sheets with add-ons

There are lots and lots of add-ons you can use with Google Sheets. They can make it easier to get things done quickly. My personal favorites are the [Google Analytics](#) add-on for pulling data into sheets and [Supermetrics](#) (affiliate link) for pulling in data from platforms like Facebook, Twitter and LinkedIn.



## 20. Quickly learn formulas

Google Sheets makes it easy to learn formulas while you're working. When you start typing a formula you'll see a handy reference that includes important details about the formula that you're adding to your sheet. Just start typing the formula, for example, start typing **=DATEDIF**( and you'll see this:

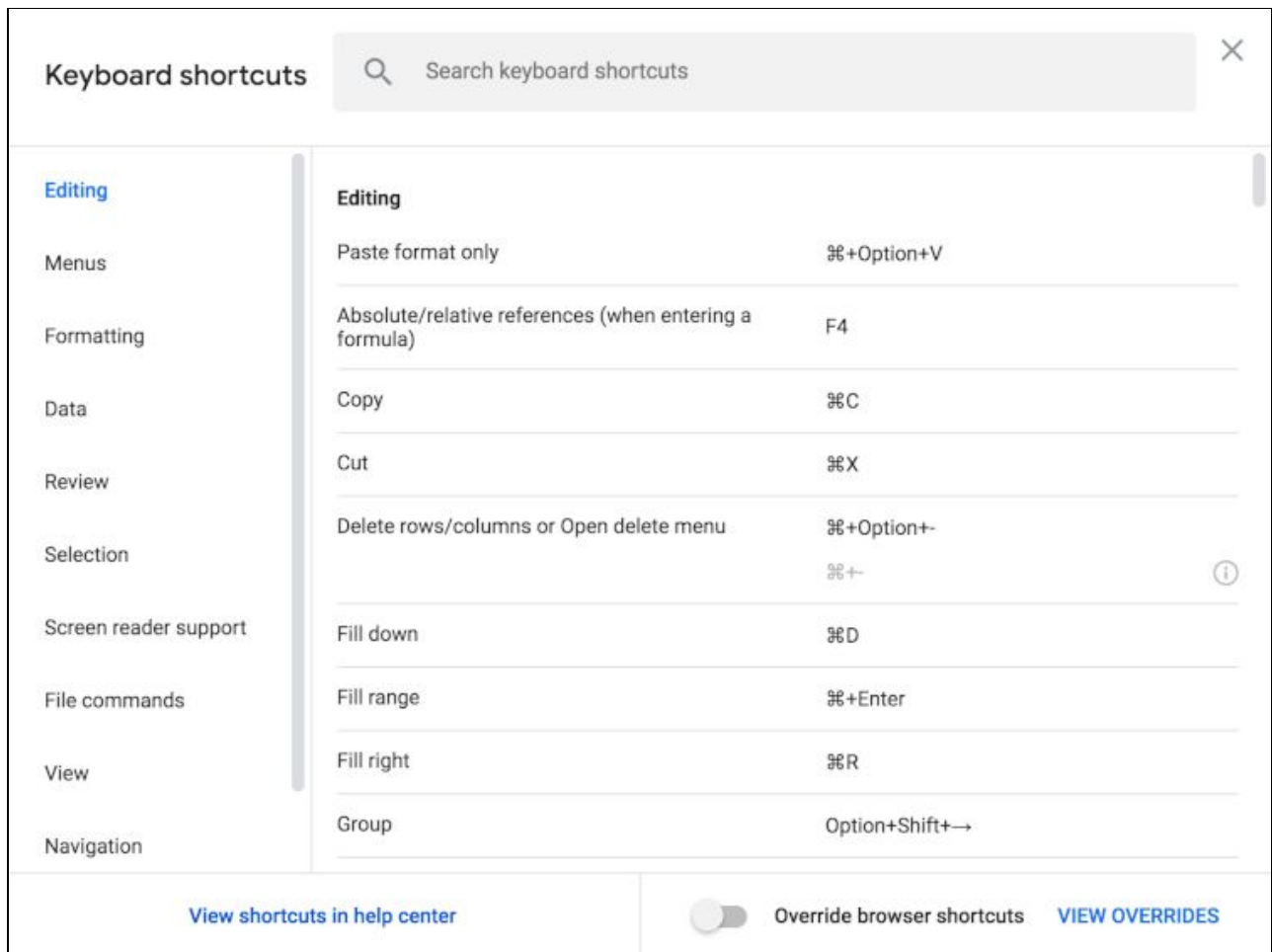


The screenshot shows the Google Sheets interface with a formula help popup for the **DATEDIF** function. The popup is titled "DATEDIF(start\_date, end\_date, unit)" and includes the following information:

- Example:** `DATEDIF("7/16/1969", "7/24/1969", "Y")`
- Summary:** Calculates the number of days, months, or years between two dates.
- start\_date:** The start date to consider in the calculation. Must be a reference to a cell containing a date, a function returning a date type, or a number.
- end\_date:** The end date to consider in the calculation. Must be a reference to a cell containing a date, a function returning a date type, or a number.
- unit:** A string abbreviation for unit of time. For example, "M" for month. Accepted values are "Y","M","D","MD","YM","YD".
- [Learn more about DATEDIF](#)

## 21. Keyboard shortcuts

You can speed things up by using keyboard shortcuts in Google Sheets. From clearing formatting inside cells, to adding comments, and hiding rows, the built-in keyboard shortcuts can help save you time. To access keyboard shortcuts (and even create your own) hit **Command** and **/** (forward slash) on Mac or **Control** and **/** (forward slash) on Windows.



The screenshot shows the 'Keyboard shortcuts' dialog box in Google Sheets. It features a search bar at the top with the text 'Search keyboard shortcuts'. On the left, there is a vertical sidebar with categories: Editing (highlighted in blue), Menus, Formatting, Data, Review, Selection, Screen reader support, File commands, View, and Navigation. The main area displays a list of shortcuts under the 'Editing' category:

Shortcut	Key
Paste format only	⌘+Option+V
Absolute/relative references (when entering a formula)	F4
Copy	⌘C
Cut	⌘X
Delete rows/columns or Open delete menu	⌘+Option+- ⌘+-
Fill down	⌘D
Fill range	⌘+Enter
Fill right	⌘R
Group	Option+Shift+→

At the bottom of the dialog, there is a link 'View shortcuts in help center', a toggle switch for 'Override browser shortcuts' (which is currently turned off), and a link 'VIEW OVERRIDES'.