GETTING STARTED WITH GOOGLE SHEETS

TABLE OF CONTENTS

Contents

CREATING FILES ON GOOGLE DRIVE

Google Drive doesn't just store your files; it also allows you to **create**, **share**, and **manage** documents with its own **productivity apps**. If you've ever used a suite like Microsoft Office, some things about Google Drive's apps might seem familiar. For instance, the types of files you can work with are similar to files that can be created with various Microsoft Office programs.

Below are the types of files you can create and share on Google Drive:

- **Documents:** For composing letters, flyers, essays, and other text-based files (similar to Microsoft Word documents)
- **Spreadsheets:** For storing and organizing information (similar to Microsoft Excel workbooks)
- **Presentations:** For creating slideshows (similar to Microsoft PowerPoint presentations)
- **Forms:** For collecting and organizing data
- **Drawings:** For creating simple vector graphics or diagrams

ALL ABOUT GOOGLE SHEETS

Google Sheets is a **web-based spreadsheet application** that allows you to store and organize different types of information, much like **Microsoft Excel**. While Google Sheets does not offer all of Excel's advanced features, it's easy to **create** and **edit** spreadsheets ranging from the simple to the complex.

While you might think spreadsheets are only used by certain people to process complicated numbers and data, they can actually be used for a variety of **everyday tasks**. Whether you're starting a budget, planning a garden, or creating an invoice or just about anything else you can think of, spreadsheets are a great way to **organize** information.

Review the slides below to learn some of the other ways you might use spreadsheets.

-

You can use spreadsheets to...

Classroom Budget: Fall 2012

Item	Price	Type	To be reimbursed?	Description
New boombox	$69.99	Other	No	
Rolling plastic bins	$42.78	Storage	Yes	Will use for storing flat items-- sketchbooks, canvas
Pastels	$71.80	Art Supply	Yes	
Tissues	$31.23	Classroom Supply	No	
Clothespins	$15.10	Classroom Supply	No	To use for hanging art to dry/display
Clothesline	$21.14	Classroom Supply	No	To use for hanging art to dry/display
Water Colors	$67.00	Art Supply	Yes	
Total	$319.04			

Budget for Fall	$300.00		New Stools	
Budget for Spring	$350.00		Price per unit	$14.99
Total for 2012-13			# of Students	18
			Total	

Plan a budget

You can use spreadsheets to...

	A	B	C	D	E	F	G	H
1		**Exercise Log**						
2	**Date:**		**Day:**					
3		**EXERCISES**	**SET 1**		**SET 2**		**SET 3**	
4	**Upper Body**		**REPS**	**WEIGHT**	**REPS**	**WEIGHT**	**REPS**	**WEIGHT**
5	1.	**Bench Press**	14	65	12	75	10	80
6	2.	**Bench Press (Decline)**	10	60	8	70	6	80
7	3.	**Cable Cross**	12	50	10	55	8	60
8	4.	**Seated Row**	20	50	15	60	10	80
9	5.	**Upright Row**	14	65	12	75	10	80
10	6.	**Shoulder Press**						
11	7.	**Hammer Curls**						
12	8.	**Triceps Extension**						
13	9.	**Triceps Lift**						
14								
15								
16								
17								

Calculate exercise statistics

•

You can use spreadsheets to...

|	A	B	C	D	E
1	Valkarian Digital: IT Department Invoice Order Form				
2					
3	ITEM #	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
5	8413	Eforcity 100ft Cat5 Cat5e RJ45 Patch Ethe	30	5.00	150.00
6	2165	V082 VPN Router- 8-port switch	1	230.00	230.00
7	8759	HP ProLiant - ML350 G6 Special Server - 4	2	1,282.00	2,564.00
8	2189	Corsair XMS2 4 GB : 2 x 2 GB Memory - D	8	57.00	456.00
9	5681	Lenovo H420 - 7752 - 4 GB RAM - 2.7 GHz	12	330.00	3,960.00
10	8970	Razer Naga Molten Special Edition - 17-bt	6	42.00	252.00
11					
12					
13					
14					
15					
16					
17					
18	Total				7,612.00
19					
20	Sales Tax: 7.5%				

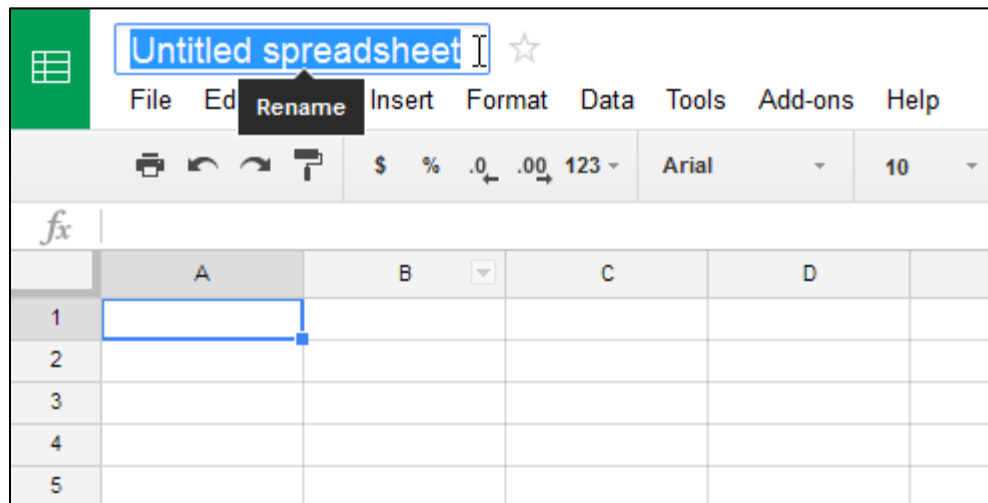## Create an invoice

TO CREATE A NEW GOOGLE SPREADSHEET

1. While viewing your Google Drive, click **New** and select **Google Sheets** from the drop-down menu.
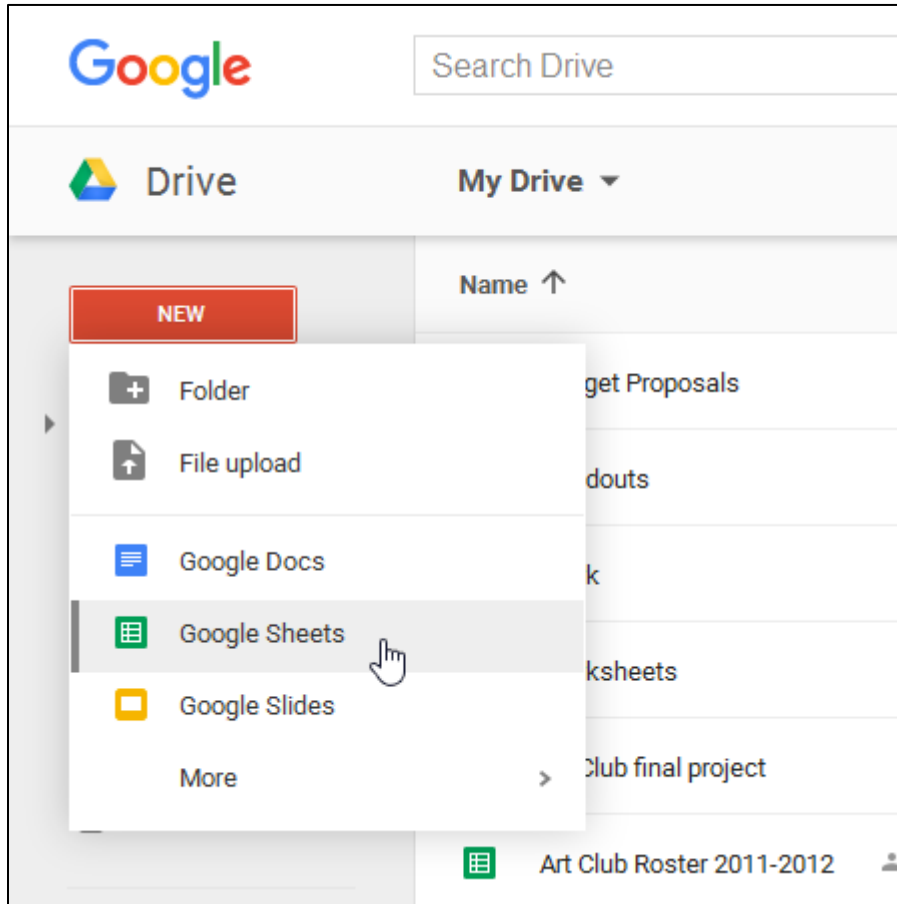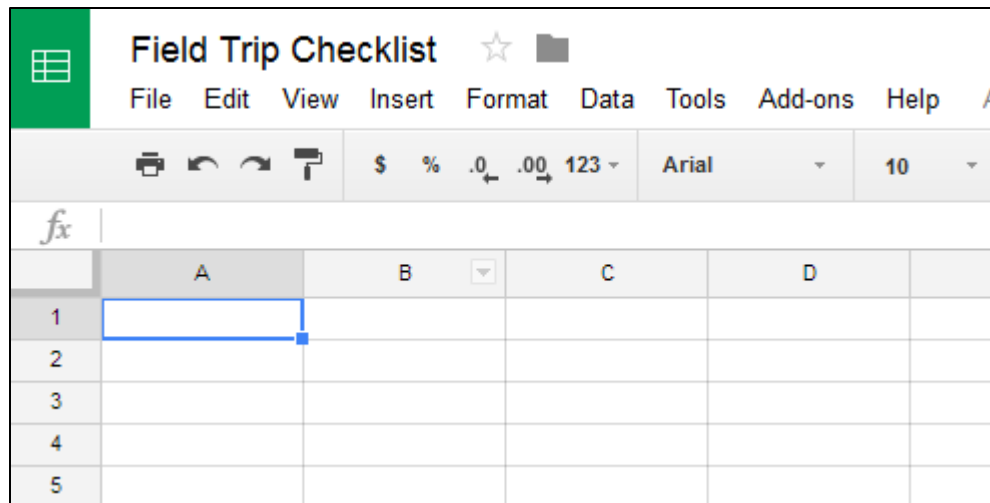

2. The spreadsheet will appear in a **new browser tab**.
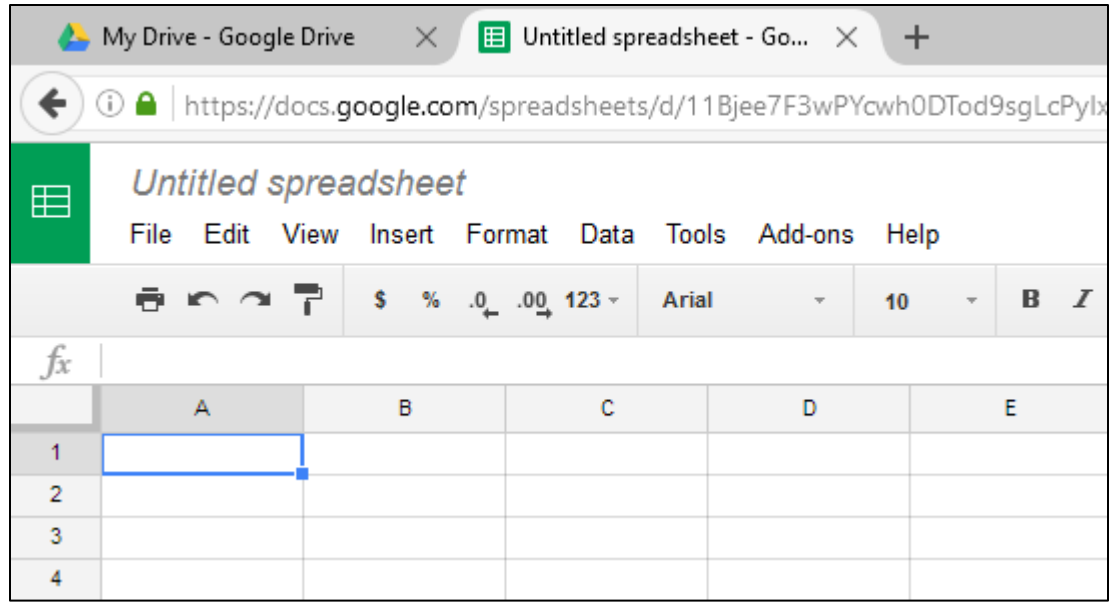
3. To name your spreadsheet, locate and select **Untitled spreadsheet** at the top of the page. Type a **name** for your spreadsheet, then press **Enter** on your keyboard.
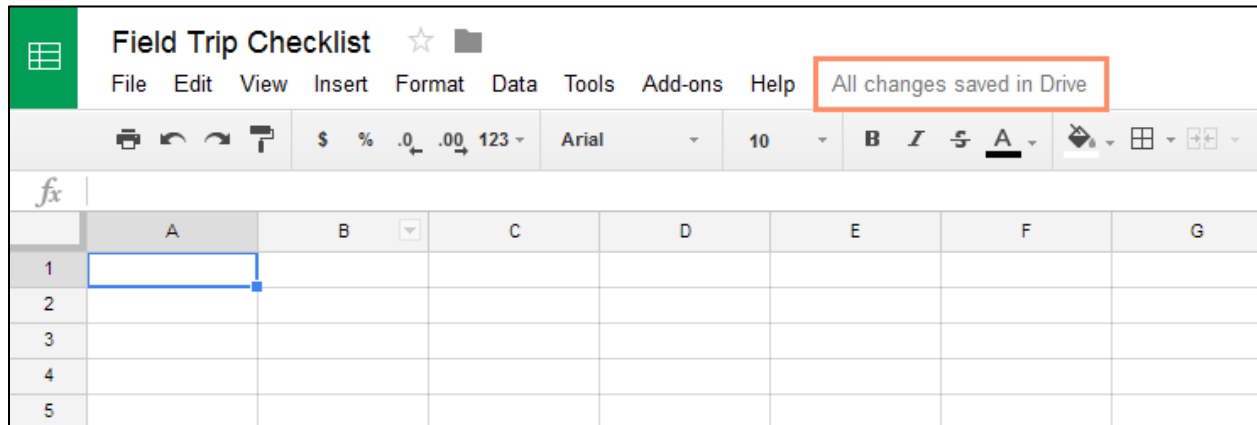

4. Your spreadsheet will be **renamed**.

5. Whenever you need to view or edit your spreadsheet, you can access it again from your Google Drive, where it will be **saved** automatically.
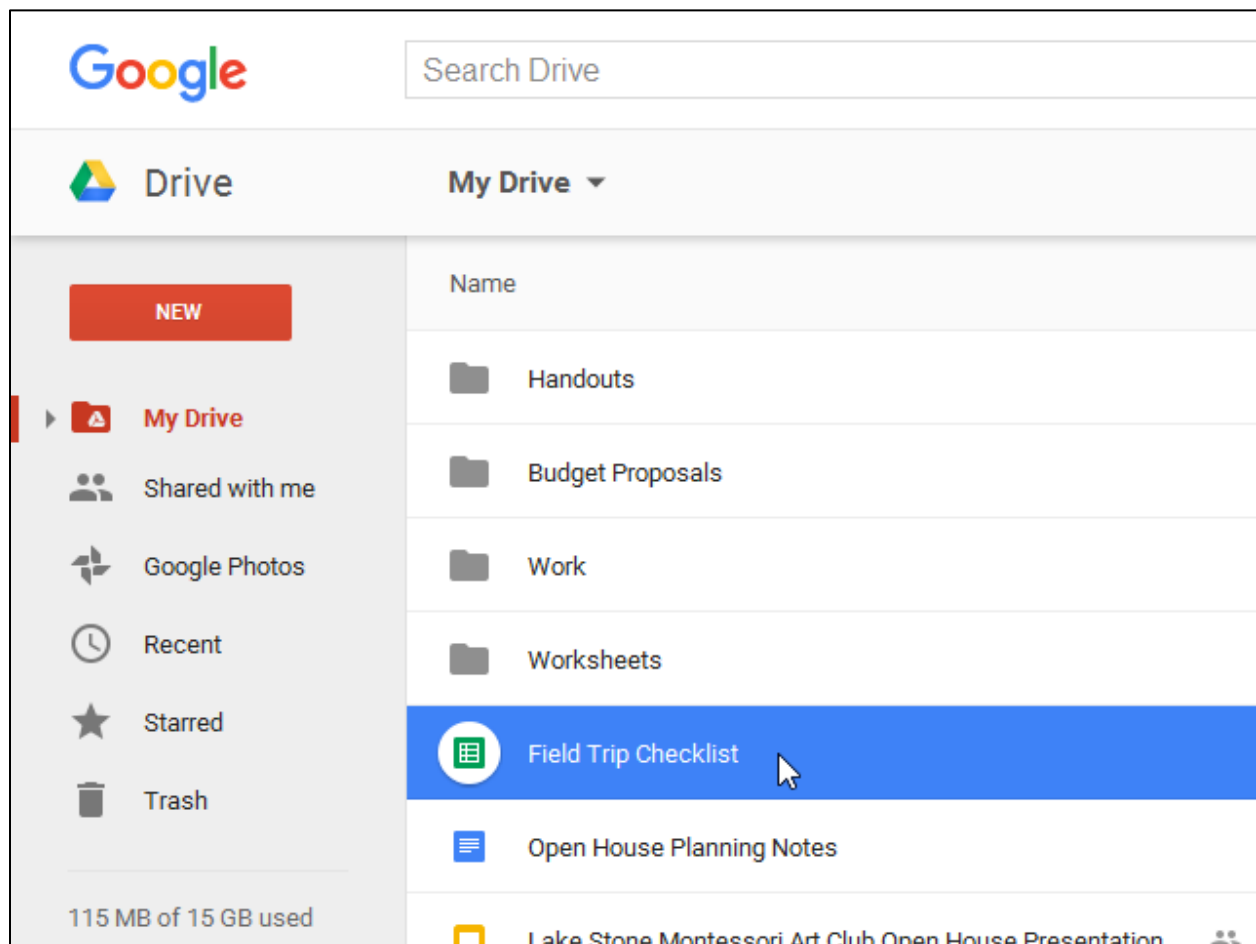
You may notice that there is no save button. This is because Google Drive uses **autosave**, which automatically and immediately saves your files as you edit them.

THE GOOGLE SHEETS INTERFACE

In order to use and edit spreadsheets, you will need to become familiar with the Google Sheets **interface**.

Click the buttons in the interactive below to learn more about the Google Sheets interface.
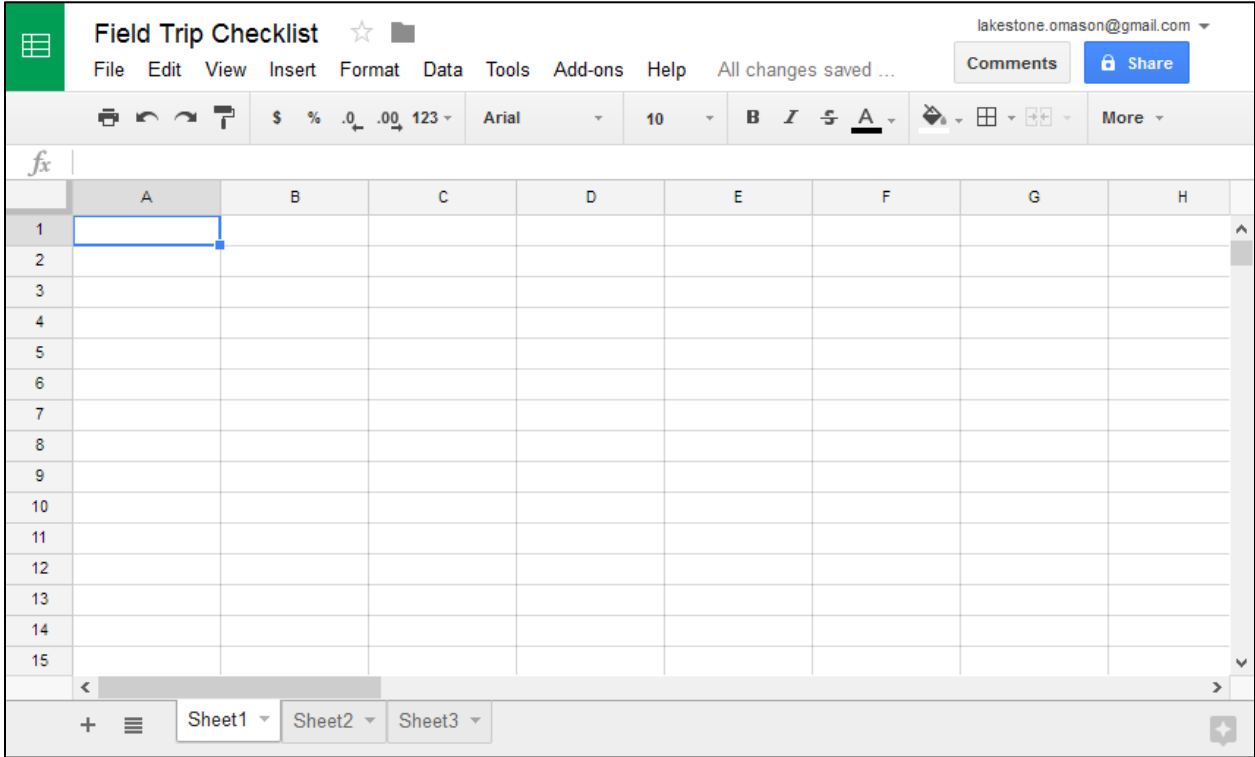
CELL BASICS

Every spreadsheet is made up of thousands of rectangles, which are called **cells**. A cell is the **intersection** of a **row** and a **column**. Columns are identified by **letters (A, B, C)**, while rows are identified by **numbers (1, 2, 3)**.

Each cell has its own **name**—or **cell address**—based on its column and row. In this example, the selected cell intersects **column C** and **row 10**, so the cell address is **C10**. Note that a cell's column and row **headings** become **darker** when the cell is selected.

You can also select multiple cells at the same time. A group of cells is known as a **cell range**. Rather than a single cell address, you'll refer to a cell range using the cell address of the **first** and **last** cells in the cell range, separated by a **colon**. For example, a cell range that included cells A1, A2, A3, A4, and A5 would be written as **A1:A5**.

In the images below, two different cell ranges are selected:

- Cell range **A2:A8**

- Cell range **A2:B8**

UNDERSTANDING CELL CONTENT

Any information you enter into a spreadsheet will be stored in a cell. Each cell can contain several different types of content, including **text**, **formatting**, **formulas**, and **functions**.

- **Text**: Cells can contain **text**, such as letters, numbers, and dates.

	A	B	C
1	Date	Sales	Percentage of Total
2	5/6/2016	100	0.1479
3	5/7/2016	121	0.1790
4	5/8/2016	86	0.1272
5	5/9/2016	25	0.0370
6	5/10/2016	154	0.2278
7	5/11/2016	110	0.1627
8	5/12/2016	80	0.1183
9			

- **Formatting attributes**: Cells can contain formatting attributes that change the way letters, numbers, and dates are **displayed**. For example, percentages can appear as 0.15 or 15%. You can even change a cell's **background color**.

	A	B	C
1	Date	Sales	Percentage of Total
2	May 6	$100.00	14.79%
3	May 7	$121.00	17.90%
4	May 8	$86.00	12.72%
5	May 9	$25.00	3.70%
6	May 10	$154.00	22.78%
7	May 11	$110.00	16.27%
8	May 12	$80.00	11.83%
9			

- **Formulas and functions**: Cells can contain **formulas** and **functions** that calculate cell values. In our example, SUM(B2:B8) adds the value of each cell in cell range B2:B8 and displays the total in cell B9.

	fx	=SUM(B2:B8)		
		A	**B**	**C**
1		Date	Sales	Percentage of Total
2		May 6	$100.00	14.79%
3		May 7	$121.00	17.90%
4		May 8	$86.00	12.72%
5		May 9	$25.00	3.70%
6		May 10	$154.00	22.78%
7		May 11	$110.00	16.27%
8		May 12	$80.00	11.83%
9		Total Sales	$676.00	

TO SELECT CELLS

To input or edit cell content, you'll first need to **select** the cell.

1. Click a cell to select it.
2. A **blue box** will appear around the selected cell.

	fx	x		
		A	**B**	**C**
1		Art Museum Field Trip Checklist		
2				
3		Student	Attending	Not Attending
4		Anderson, Stewart	x	
5		Bledsoe, David	x	
6		Carter, Angela	x	
7		Flint, Tony		x
8		Jimenez, Alfonso	x	
9		Jones, Drew	x	

You can also select cells using the **arrow keys** on your keyboard.

TO SELECT A CELL RANGE

Sometimes you may want to select a larger group of cells, or **cell range**.

1. Click and drag the mouse until all of the cells you want to select are **highlighted**.

2. Release the mouse to select the desired cell range.

fx	x		
	A	B	C
1	Art Museum Field Trip Checklist		
2			
3	Student	Attending	Not Attending
4	Anderson, Stewart	x	
5	Bledsoe, David	x	
6	Carter, Angela	x	
7	Flint, Tony		x
8	Jimenez, Alfonso	x	
9	Jones, Drew	x	
10	Martin, Billy		x

TO INSERT CELL CONTENT

1. Select the desired cell.

fx			
	A	B	C
1	Art Museum Field Trip Checklist		
2			
3	Student	Attending	Not Attending
4	Anderson, Stewart	x	
5	Bledsoe, David	x	
6	Carter, Angela	x	
7	Flint, Tony		x
8	Jimenez, Alfonso	x	
9	Jones, Drew	x	
10	Martin, Billy		x
11	Quince, Tim		x
12	Polanski, Lisa		x
13	Olsen, Stephanie		
14	Stephenson, Anneke		

2. Type **content** into the selected cell, then press Enter. The content will appear in the **cell** and the **formula bar**. You

can also input content into and edit cell content in the
formula bar.

	A	B	C
fx	x		
	A	**B**	**C**
1	Art Museum Field Trip Checklist		
2			
3	Student	Attending	Not Attending
4	Anderson, Stewart	x	
5	Bledsoe, David	x	
6	Carter, Angela	x	
7	Flint, Tony		x
8	Jimenez, Alfonso	x	
9	Jones, Drew	x	
10	Martin, Billy		x
11	Quince, Tim		x
12	Polanski, Lisa		x
13	Olsen, Stephanie	x	
14	Stephenson, Anneke		

TO DELETE CELL CONTENT

1. Select the cell you want to **delete**.

2. Press the **Delete** or **Backspace** key on your keyboard.
   The cell's contents will be deleted.

	A	B	C
1	Art Museum Field Trip Checklist		
2			
3	Student	Attending	Not Attending
4	Anderson, Stewart	x	
5	Bledsoe, David	x	
6	Carter, Angela	x	
7	Flint, Tony		x
8	Jimenez, Alfonso	x	
9	Jones, Drew	x	
10	Martin, Billy		x
11	Quince, Tim		x
12	Polanski, Lisa		x
13	Olsen, Stephanie		
14	Stephenson, Anneke		

TO COPY AND PASTE CELLS

It's easy to **copy** content that is already entered into your spreadsheet and **paste** this content to other cells.

1. Select the cells you want to copy.

2. Press **Ctrl+C** (Windows) or **Command+C** (Mac) on your keyboard to **copy** the cells.

	A	B	C	D	E
	fx	x			
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy		x		
11	Quince, Tim		x		
12	Polanski, Lisa		x		
13	Olsen, Stephanie				
14	Stephenson, Anneke				
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

3. Select the cell or cells where you want to **paste** the cells.
   The copied cells will now have a box around them.

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy		x		
11	Quince, Tim		x		
12	Polanski, Lisa		x		
13	Olsen, Stephanie				
14	Stephenson, Anneke				
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

4. Press **Ctrl+V** (Windows) or **Command+V** (Mac) on your keyboard to **paste** the cells.

fx	x			
	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy		x		
11	Quince, Tim		x		
12	Polanski, Lisa		x		
13	Olsen, Stephanie	x			
14	Stephenson, Anneke	x			
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

TO CUT AND PASTE CELLS

Unlike copying and pasting—which **duplicates** cell content—cutting and pasting **moves** content between cells.

1. Select the cells you want to **cut**.

	A	B	C	D	E
	fx	x			
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy		x		
11	Quince, Tim		x		
12	Polanski, Lisa		x		
13	Olsen, Stephanie	x			
14	Stephenson, Anneke	x			
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

2. Press **Ctrl+X** (Windows) or **Command+X** (Mac) on your keyboard to cut the cells. The cell content will remain in its original location until the cells are pasted.

3. Select the cell or cells where you want to **paste** the cells.

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy		x		
11	Quince, Tim		x		
12	Polanski, Lisa		x		
13	Olsen, Stephanie	x			
14	Stephenson, Anneke	x			
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

4. Press **Ctrl+V** (Windows) or **Command+V** (Mac) on your keyboard to **paste** the cells.

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x			
11	Quince, Tim	x			
12	Polanski, Lisa	x			
13	Olsen, Stephanie	x			
14	Stephenson, Anneke	x			
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

There may be times when you want to copy and paste only certain parts of a cell's content. In these cases, you can use the **Paste Special** option.
Click **Edit** in the toolbar menu, hover the mouse over **Paste Special**, and select your desired paste option from the drop-down menu.
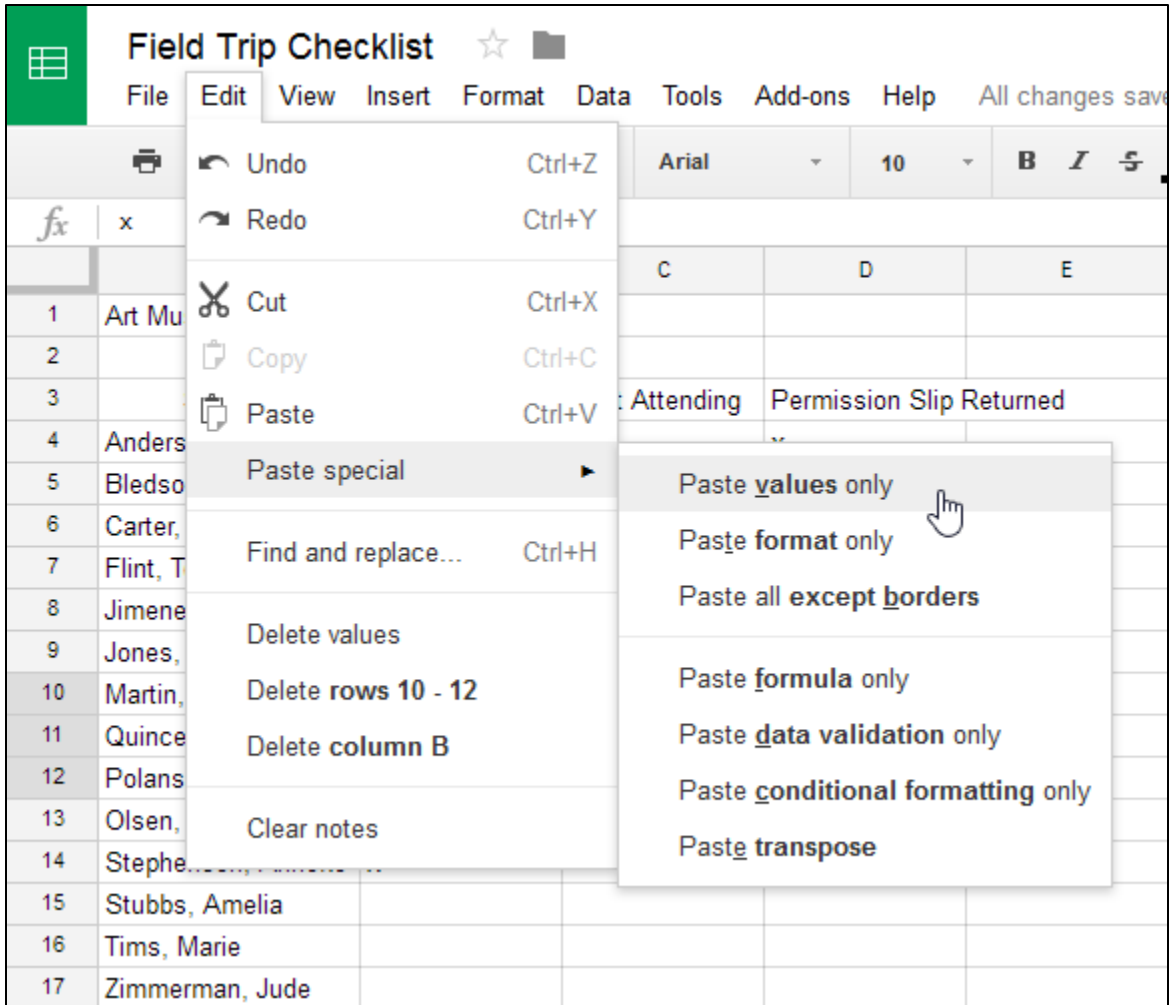
TO DRAG AND DROP CELLS

Rather than cutting and pasting, you can **drag and drop** cells to move their contents.

1. Select a **cell**, then hover the mouse over an **outside edge** of the blue box. The cursor will turn into a **hand icon**.

fx	x			
	A	B	C	D	E

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x			
11	Quince, Tim	x			
12	Polanski, Lisa	x			

2. Click and drag the cell to its desired location.

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony		x		
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x			
11	Quince, Tim	x			
12	Polanski, Lisa	x			

3. Release the mouse to **drop** the cell.

f_x	x				
	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony	x			
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x			
11	Quince, Tim	x			
12	Polanski, Lisa	x			

TO USE THE FILL HANDLE

There may be times when you want to copy the content of one cell to several other cells in your spreadsheet. You could **copy and paste** the content into each cell, but this method would be time consuming. Instead, you can use the **fill handle** to quickly copy and paste content from one cell to any other cells in the same row or column.

1. Select the **cell** you want to use. A small square—known as the **fill handle**—will appear in the bottom-right corner of the cell.

2. Hover the mouse over the **fill handle**. The cursor will change to a black cross.

	A	B	C	D	E
	fx	x			
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony	x			
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x			
11	Quince, Tim	x			
12	Polanski, Lisa	x			
13	Olsen, Stephanie	x			
14	Stephenson, Anneke	x			
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

3. Click and drag the **fill handle** over the cells you want to fill. A **dotted black line** will appear around the cells that will be filled.

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x			
7	Flint, Tony	x			
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x			
11	Quince, Tim	x			
12	Polanski, Lisa	x			
13	Olsen, Stephanie	x			
14	Stephenson, Anneke	x			
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

4. Release the mouse to **fill** the selected cells.

	A	B	C	D	E
1	Art Museum Field Trip Checklist				
2					
3	Student	Attending	Not Attending	Permission Slip Returned	
4	Anderson, Stewart	x		x	
5	Bledsoe, David	x		x	
6	Carter, Angela	x		x	
7	Flint, Tony	x		x	
8	Jimenez, Alfonso	x		x	
9	Jones, Drew	x		x	
10	Martin, Billy	x		x	
11	Quince, Tim	x		x	
12	Polanski, Lisa	x		x	
13	Olsen, Stephanie	x		x	
14	Stephenson, Anneke	x		x	
15	Stubbs, Amelia				
16	Tims, Marie				
17	Zimmerman, Jude				

USING THE FILL HANDLE TO CONTINUE A SERIES

The fill handle can also be used to continue a **series**. Whenever the content of a row or column follows a sequential order—like **numbers (1, 2, 3)** or **days (Monday, Tuesday, Wednesday)**—the fill handle will guess what should come next in the series. In our example below, the fill handle is used to extend a series of **dates** in a column.

	A	B
	5/6/2016	
1	May 6, 2016	
2	May 7, 2016	
3	May 8, 2016	
4	May 9, 2016	
5	May 10, 2016	
6	May 11, 2016	
7	May 12, 2016	
8	May 13, 2016	
9	May 14, 2016	
10	May 15, 2016	
11	May 16, 2016	
12	May 17, 2016	
13	May 18, 2016	
14	May 19, 2016	
15	May 20, 2016	
16	May 21, 2016	
17	May 22, 2016	
18	May 23, 2016	
19	May 24, 2016	
20	May 25, 2016	
21		
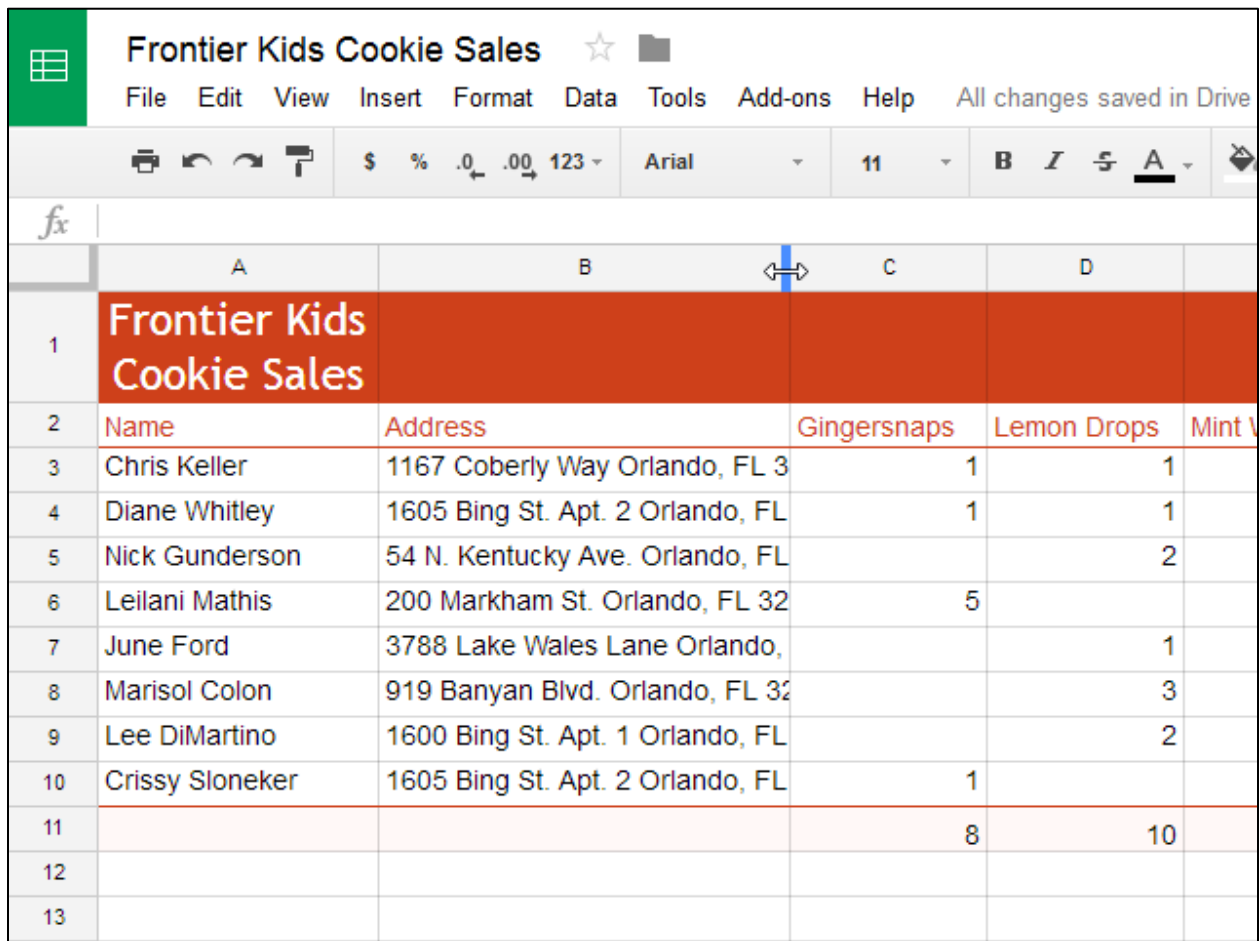
WORKING WITH COLUMNS, ROWS, AND CELLS

Every row and column of a new spreadsheet is always set to the same **height** and **width**. As you begin to work with spreadsheets, you will find that these default sizes are not always well-suited to different types of cell content.

TO MODIFY COLUMN WIDTH

In our example below, some of the content in column B is too long to be displayed. We can make all of this content visible by changing the **width** of column B.

1. Hover the mouse over the line between two columns. The cursor will turn into a **double arrow**.

2. Click and drag the column border to the right to **increase column width**. Dragging the border to the left will **decrease column width**.

3. Release the mouse when you are satisfied with the new column width. All of the cell content is now visible.

TO AUTOSIZE A COLUMN'S WIDTH

The **autosizing** feature will allow you to set a column's width to fit its content **automatically**.

1. Hover the mouse over the line between two columns. The cursor will turn into a **double arrow**.

2. Double-click the mouse.

	A	B		C	Lemon
1	Frontier Kids Cookie Sales				
2	Name	Address		Gingersnaps	Lemon
3	Chris Keller	1167 Coberly Way Orlando, FL 32804		1	
4	Diane Whitley	1605 Bing St. Apt. 2 Orlando, FL 32803		1	
5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL 32804			
6	Leilani Mathis	200 Markham St. Orlando, FL 32804		5	
7	June Ford	3788 Lake Wales Lane Orlando, FL 32804			
8	Marisol Colon	919 Banyan Blvd. Orlando, FL 32804			
9	Lee DiMartino	1600 Bing St. Apt. 1 Orlando, FL 32803			
10	Crissy Sloneker	1605 Bing St. Apt. 2 Orlando, FL 32803		1	
11				8	
12					
13					

3. The column's width will be changed to fit the content.

TO MODIFY ROW HEIGHT

You can make cells taller by modifying the **row height**. Changing the row height will create additional space in a cell, which often makes it easier to view cell content.

1. Hover the mouse over the line between two rows. The cursor will turn into a **double arrow**.

2. Click and drag the row border down to **increase the height**. Dragging the border up will **decrease the row height**.

	A	B	C	D
1	**Frontier Kids Cookie Sales**			
2	Name	Address	Gingersnaps	Lemon Dro
3	Chris Keller	1167 Coberly Way Orlando, FL 32804	1	
4	Diane Whitley	1605 Bing St. Apt. 2 Orlando, FL 32803	1	
5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL 32804		
6	Leilani Mathis	200 Markham St. Orlando, FL 32804	5	
7	June Ford	3788 Lake Wales Lane Orlando, FL 32804		
8	Marisol Colon	919 Banyan Blvd. Orlando, FL 32804		
9	Lee DiMartino	1600 Bing St. Apt. 1 Orlando, FL 32803		
10	Crissy Sloneker	1605 Bing St. Apt. 2 Orlando, FL 32803	1	
11			8	
12				
13				

3. Release the mouse when you are satisfied with the new
    row height.

TO MODIFY ALL ROWS OR COLUMNS

Rather than resizing rows and columns individually, you can modify the height and width of every row and column in a spreadsheet at the same time using the **Select All** button. This method allows you to set a **uniform size** for the spreadsheet's rows and columns. In our example, we'll set a **uniform row height**.

1. Click the **Select All** button just below the formula bar to select every cell in the spreadsheet.

2. Hover the mouse over the line between two rows. The cursor will turn into a **double arrow**.

3. Click and drag the row border to modify the height.

	A	B	C	D
1	**Frontier Kids Cookie Sales**			
2	Name	Address	Gingersnaps	Lemon Dro
3	Chris Keller	1167 Coberly Way Orlando, FL 32804	1	
4	Diane Whitley	1605 Bing St. Apt. 2 Orlando, FL 32803	1	
5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL 32804		
6	Leilani Mathis	200 Markham St. Orlando, FL 32804	5	
7	June Ford	3788 Lake Wales Lane Orlando, FL 32804		
8	Marisol Colon	919 Banyan Blvd. Orlando, FL 32804		
9	Lee DiMartino	1600 Bing St. Apt. 1 Orlando, FL 32803		
10	Crissy Sloneker	1605 Bing St. Apt. 2 Orlando, FL 32803	1	
11			8	
12				

4. Release the mouse when you are satisfied with the new row height for the spreadsheet.

INSERTING, DELETING, AND MOVING ROWS AND COLUMNS

After you've been working with a spreadsheet for a while, you may find that you want to **add new** columns or rows, **delete** certain rows or columns, or even **move** them to a different location in the spreadsheet.

To insert a column:

1. Right-click a column heading. A **drop-down menu** will appear. There are two options to add a column. Select **Insert 1 left** to add a column **to the left** of the current column, or select **Insert 1 right** to add a column **to the right** of the current column.
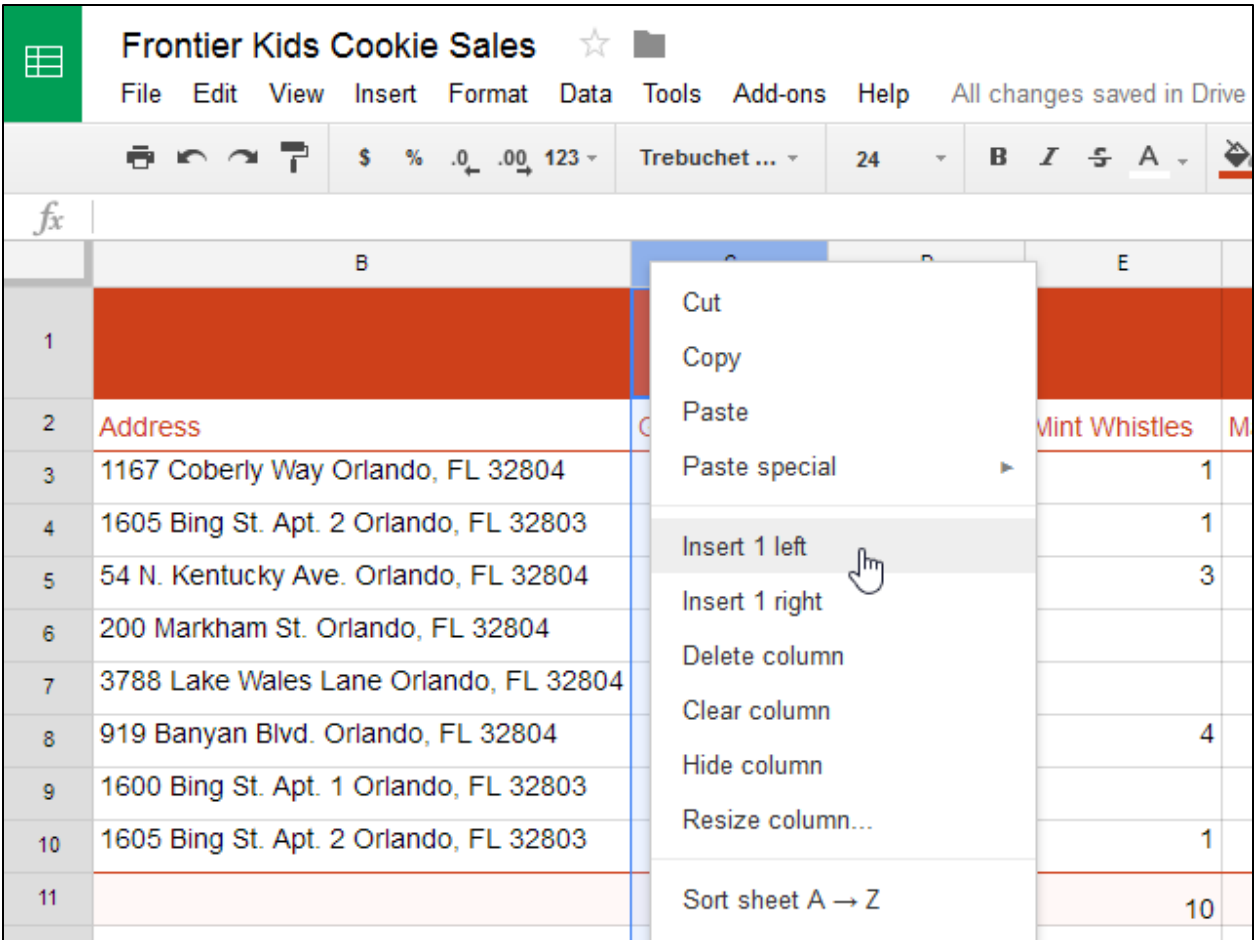
2. The **new column** will be inserted into the spreadsheet.

To insert a row:

1. Right-click a row heading. A **drop-down menu** will appear. There are two options to add a row. Select **Insert 1 above** to add a row **above** the current row, or select **Insert 1 below** to add a column **below** the current row.
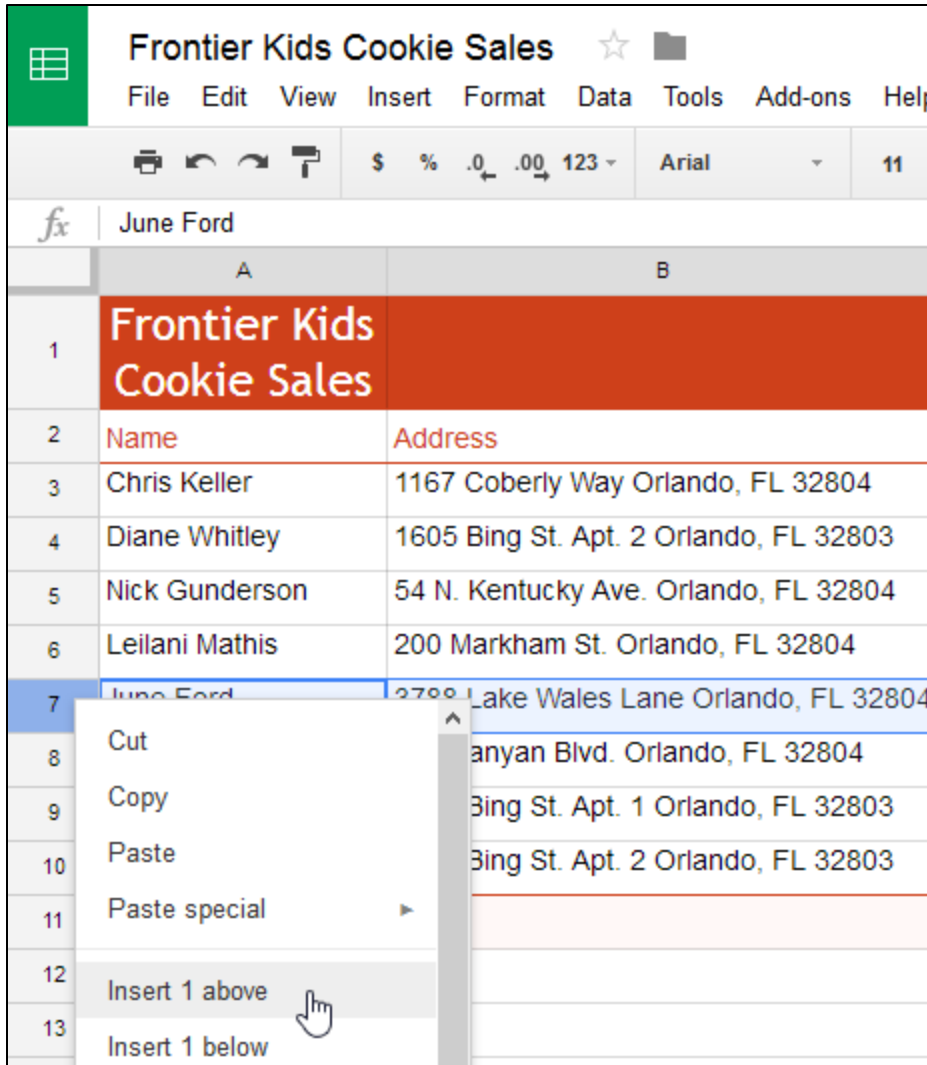
2. The **new row** will be inserted into the spreadsheet.

	A	B	C	D
1	**Frontier Kids Cookie Sales**			
2	Name	Address	Phone	Gingersnap
3	Chris Keller	1167 Coberly Way Orlando, FL 32804	321-555-2740	
4	Diane Whitley	1605 Bing St. Apt. 2 Orlando, FL 32803	321-555-2911	
5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL 32804	321-555-6900	
6	Leilani Mathis	200 Markham St. Orlando, FL 32804	321-555-6648	
7				
8	June Ford	3788 Lake Wales Lane Orlando, FL 32804	321-555-2776	
9	Marisol Colon	919 Banyan Blvd. Orlando, FL 32804	321-555-2843	
10	Lee DiMartino	1600 Bing St. Apt. 1 Orlando, FL 32803	321-555-1725	
11	Crissy Sloneker	1605 Bing St. Apt. 2 Orlando, FL 32803	321-555-9068	
12				

If you need to add more than one row at a time, you can scroll to the bottom of the spreadsheet and click the **Add** button. By default, this will add 1000 new rows to your spreadsheet, but you can also set the number of rows to add in the text box.
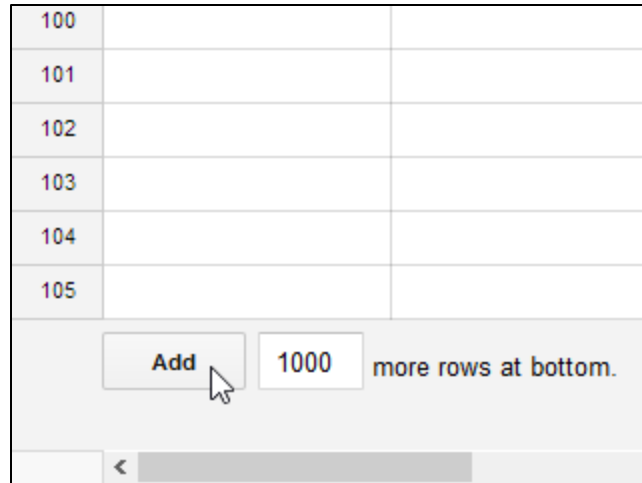
To delete a row or column:
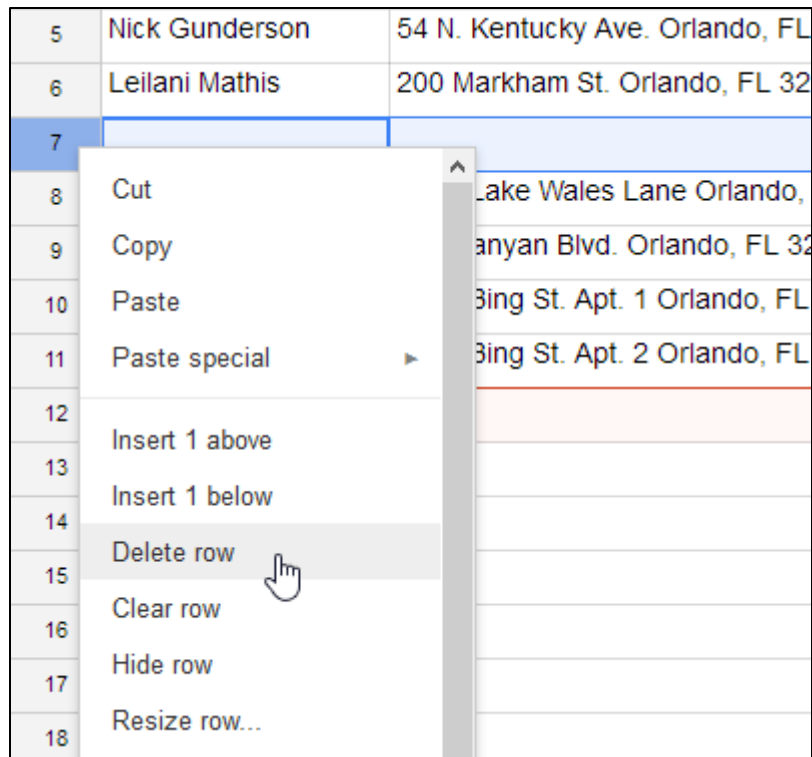
It's easy to **delete** any row or column you no longer need in your spreadsheet. In our example, we'll delete a row, but you can delete a column in the same way.

1. Select the row you want to **delete**.

2. Right-click the row heading, then select **Delete row** from the drop-down menu.

5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL
6	Leilani Mathis	200 Markham St. Orlando, FL 32
7		
8	Cut	Lake Wales Lane Orlando,
9	Copy	anyan Blvd. Orlando, FL 32
10	Paste	Bing St. Apt. 1 Orlando, FL
11	Paste special ►	Bing St. Apt. 2 Orlando, FL
12		
13	Insert 1 above	
14	Insert 1 below	
15	Delete row	
16	Clear row	
17	Hide row	
18	Resize row...	

3. The rows below the deleted row will **shift up** to take its place. In our example, row 8 is now row 7.

There's a difference between **deleting** a row or column and simply **clearing its contents**. If you want to remove the content of a row or column without causing the others to shift, right-click a heading, then select **Clear row** or **Clear column**.

To move a row or column:

Sometimes you may want to **move** a column or row to make it more accessible in your spreadsheet. In our example, we'll move a column, but you can move a row in the same way.

1. Select the column you want to move, then hover the mouse over the column heading. The cursor will become a **hand icon**.

	A	B	C	D
1	Frontier Kids Cookie Sales			
2	Name	Address	Phone	Gingersnap
3	Chris Keller	1167 Coberly Way Orlando, FL 32804	321-555-2740	
4	Diane Whitley	1605 Bing St. Apt. 2 Orlando, FL 32803	321-555-2911	
5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL 32804	321-555-6900	
6	Leilani Mathis	200 Markham St. Orlando, FL 32804	321-555-6648	
7	June Ford	3788 Lake Wales Lane Orlando, FL 32804	321-555-2776	
8	Marisol Colon	919 Banyan Blvd. Orlando, FL 32804	321-555-2843	
9	Lee DiMartino	1600 Bing St. Apt. 1 Orlando, FL 32803	321-555-1725	
10	Crissy Sloneker	1605 Bing St. Apt. 2 Orlando, FL 32803	321-555-9068	
11				

2. Click and drag the column to its **desired position**. An outline of the column will appear.

	A	B		C	D
1	**Frontier Kids Cookie Sales**				
2	Name	Address		Phone	Gingersnap
3	Chris Keller	1167 Coberly Way Orlando, FL 32804		321-555-2740	
4	Diane Whitley	1605 Bing St. Apt. 2 Orlando, FL 32803		321-555-2911	
5	Nick Gunderson	54 N. Kentucky Ave. Orlando, FL 32804		321-555-6900	
6	Leilani Mathis	200 Markham St. Orlando, FL 32804		321-555-6648	
7	June Ford	3788 Lake Wales Lane Orlando, FL 32804		321-555-2776	
8	Marisol Colon	919 Banyan Blvd. Orlando, FL 32804		321-555-2843	
9	Lee DiMartino	1600 Bing St. Apt. 1 Orlando, FL 32803		321-555-1725	
10	Crissy Sloneker	1605 Bing St. Apt. 2 Orlando, FL 32803		321-555-9068	
11					

3. Release the mouse when you are satisfied with the new location.

WRAPPING TEXT AND MERGING CELLS

Whenever you have too much cell content to be displayed in a single cell, you may decide to **wrap the text** or **merge** the cell rather than resize a column. Wrapping the text will automatically modify a cell's **row height**, allowing the cell contents to be displayed **on multiple lines**. Merging allows you to combine a cell with adjacent empty cells to create **one large cell**.

To wrap text:

1. Select the cells you want to wrap. In this example, we're selecting cell range **C3:C10**.

2. Open the **Text wrapping** drop-down menu, then click the **Wrap** button.

3. The cells will be automatically **resized** to fit their content.

TO MERGE CELLS

1. Select the cells you want to **merge**. In this example, we're selecting cell range **A1:C1**.

2. Select the **Merge cells** button.
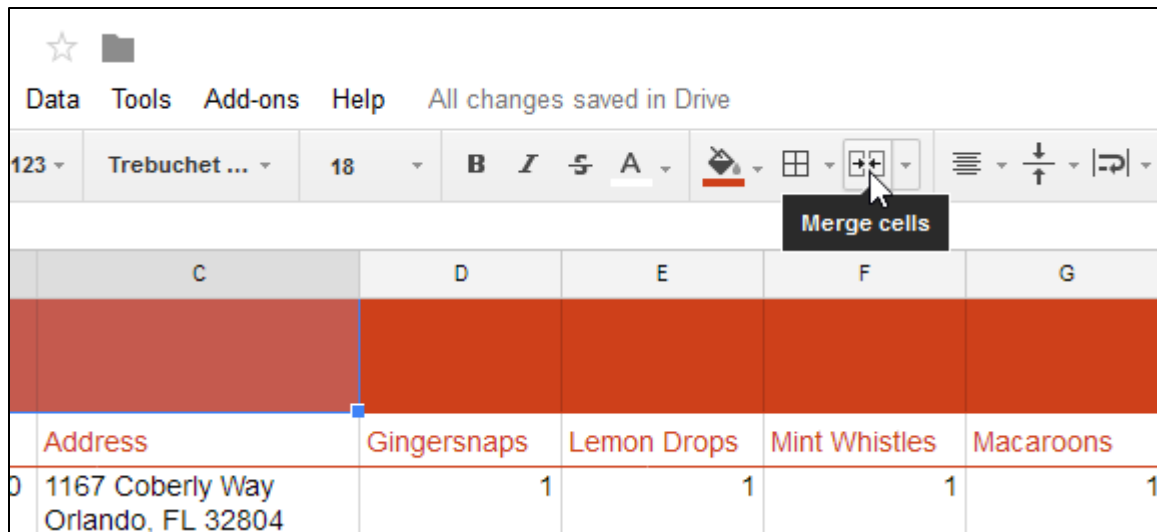
3. The cells will now be merged into a **single cell**.

To unmerge a cell, click the **drop-down arrow** next to the **Merge cells** button, then select **Unmerge** from the drop-down menu.
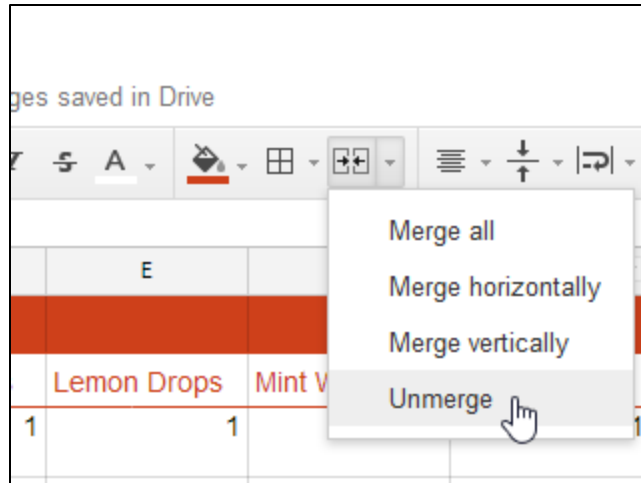
FREEZING ROWS AND COLUMNS

When working with large spreadsheets, there will be times when you'll want to see certain rows or columns all the time, especially when using **header cells** as in our example below. By **freezing** rows or columns in place, you'll be able to scroll through your spreadsheet while continuing to see the header cells.

To freeze a row:

1. Locate the row or rows you want to **freeze**. In this example, we'll freeze the top two rows. **Note**: You do not need to select the rows you want to freeze.

2. Click **View** in the toolbar. Hover the mouse over **Freeze**, then select the desired number of rows to freeze from the drop-down menu.
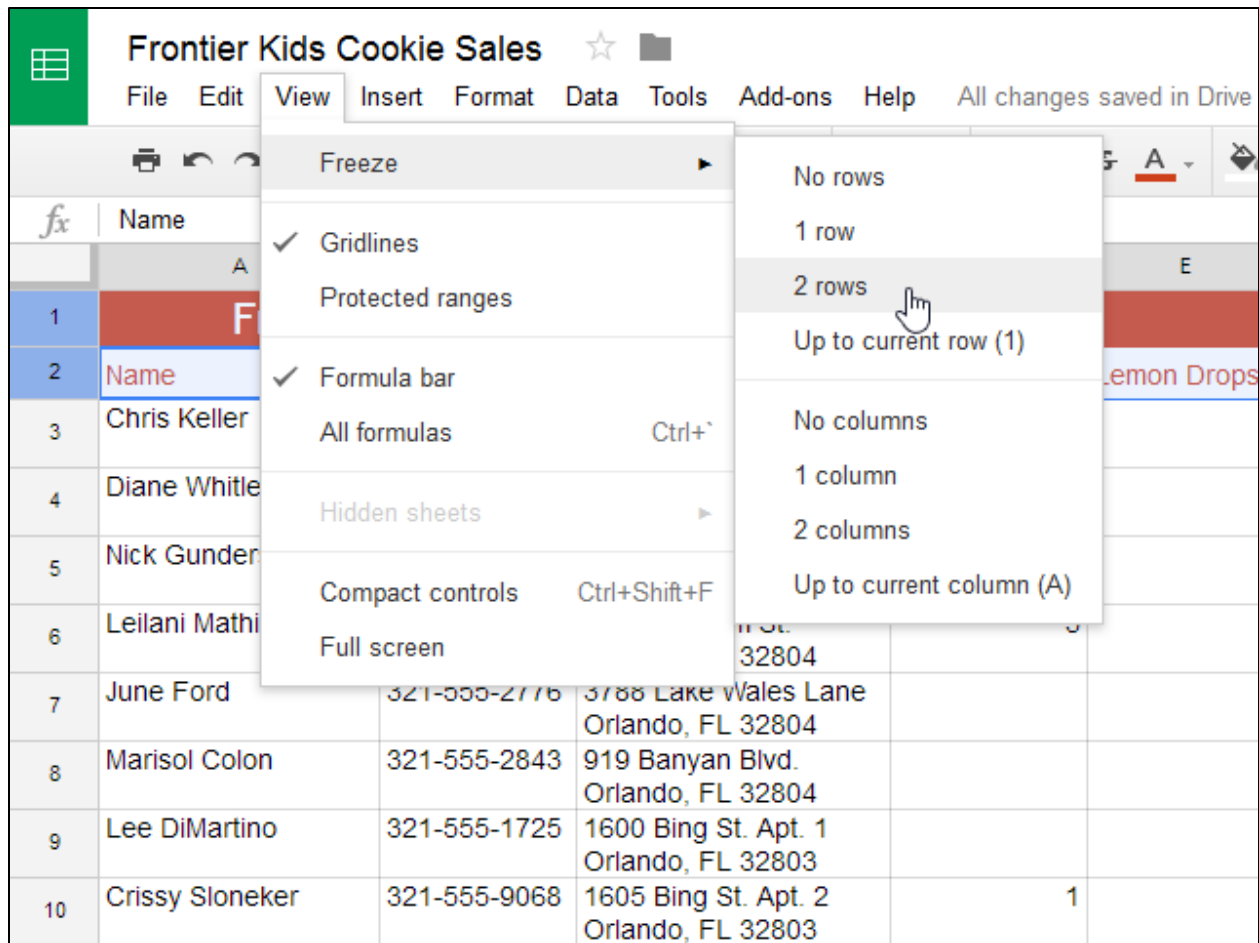
3. The top two rows are **frozen** in place. You can scroll down your worksheet while continuing to view the frozen rows at the top.

To freeze a column:

1. Locate the column or columns you want to freeze. In this example, we'll freeze the leftmost column. **Note**: You do not need to select the columns you want to freeze.

2. Click **View** in the toolbar. Hover the mouse over **Freeze**, then select the desired number of columns to freeze from the drop-down menu.
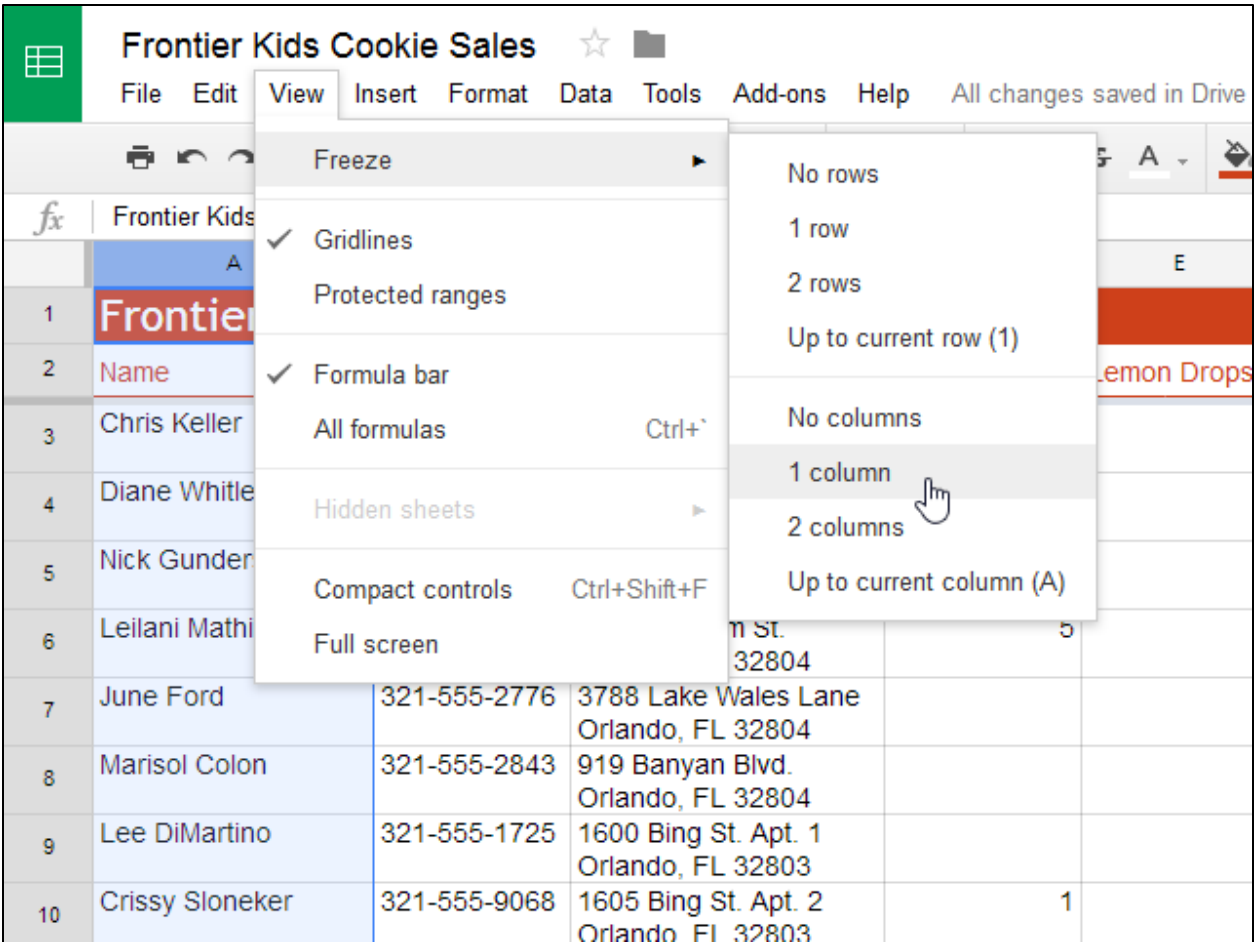
3. The leftmost column is now **frozen** in place. You can scroll across your worksheet while continuing to view the frozen column on the left.

	A	D	E	F	G	
1	Frontier Kids					
2	Name	Gingersnaps	Lemon Drops	Mint Whistles	Macaroons	Shortb
3	Chris Keller	1	1	1	1	
4	Diane Whitley	1	1	1		
5	Nick Gunderson			2	3	
6	Leilani Mathis	5				
7	June Ford			1		1
8	Marisol Colon			3	4	
9	Lee DiMartino			2		
10	Crissy Sloneker	1			1	5

To unfreeze rows, click **View**, hover the mouse over **Freeze**, then select **No rows**. To unfreeze columns, click **View**, hover the mouse over **Freeze**, then select **No columns**.

FORMATTING CELLS

Every cell in a new spreadsheet uses the same default **formatting**. As you begin to build a spreadsheet, you can customize the formatting to make your information easier to view and understand. In our example, we will be using a spreadsheet to plan and organize a garden plot.

Watch the video below to learn the basics of formatting cells.

To change the font size:

Modifying the **font size** can help call attention to important cells and make them easier to read. In our example, we will be increasing the size of our **header cells** to help distinguish them from the rest of the spreadsheet.

1. Select the cell or cells you want to modify.

2. Locate and select the **Font Size** button in the toolbar, then choose the desired font size from the drop-down menu.

In our example, we will choose **14** to make the
text **larger**.
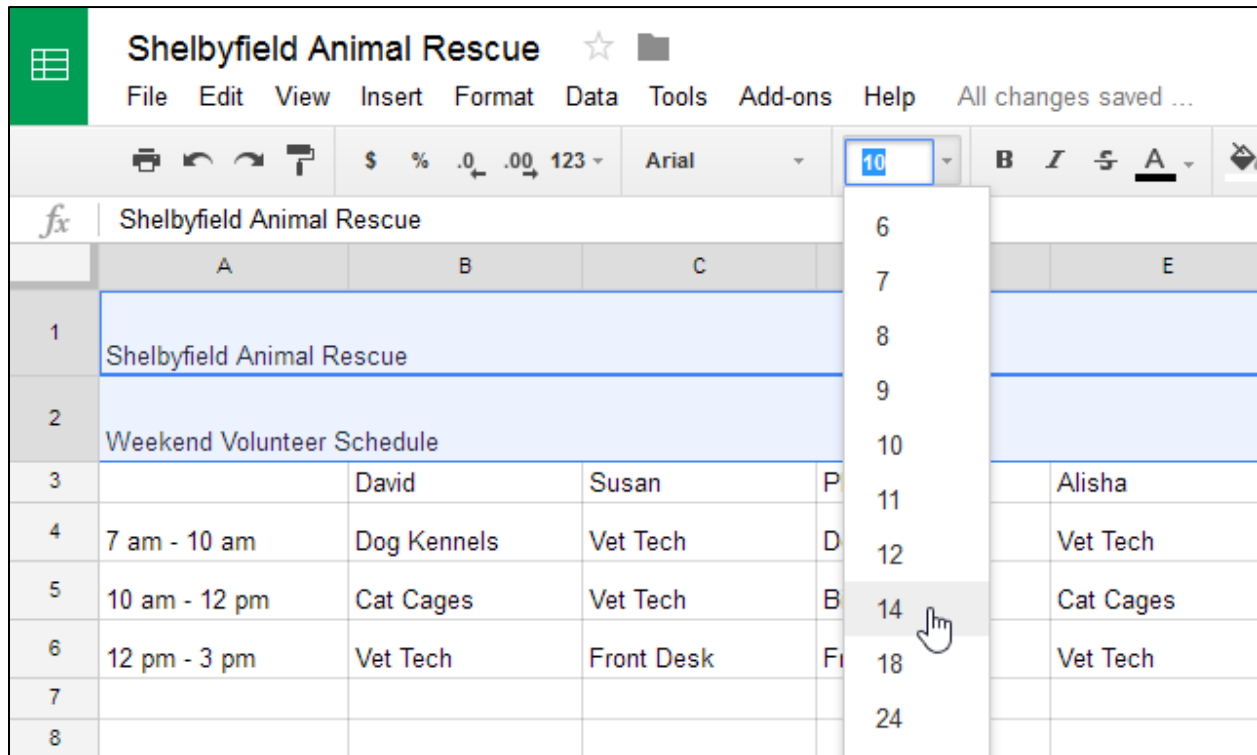
3. The text will change to the **new font size**.
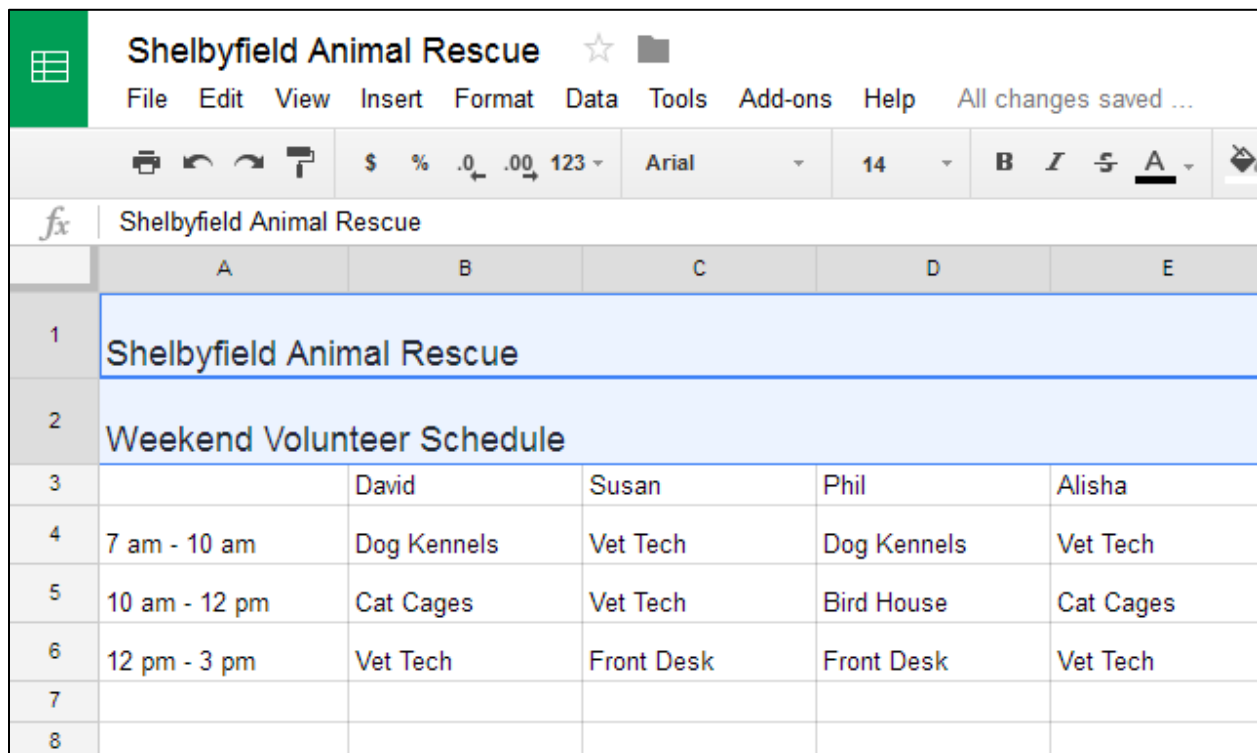
To change the font:

Choosing a different **font** can help to further separate certain parts of your spreadsheet—like the header cells—from the rest of your information.

1. Select the cell or cells you want to modify.

2. Locate and select **Format** in the toolbar menu.

3. Hover the mouse over **Font**, then select a new font from the drop-down menu. In our example, we'll select Georgia.

4. The text will change to the **new font**.

To change the text color:

1. Select the cell or cells you want to modify.

2. Locate and select the **Text color** button in the toolbar.

3. A drop-down menu of different **text colors** will appear.

4. Select the color you want to use. In our example, we'll select **red**.
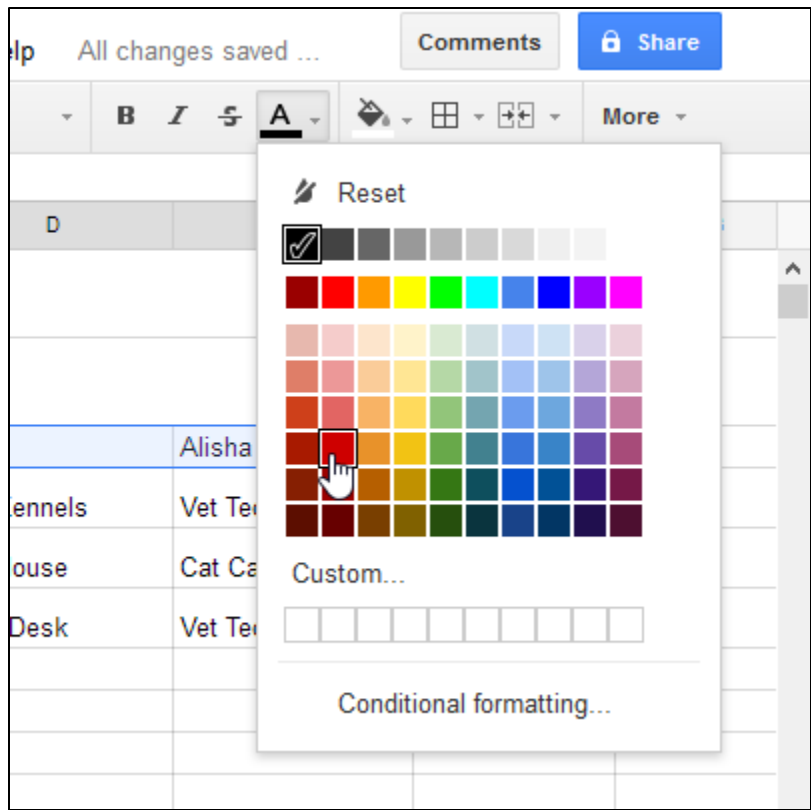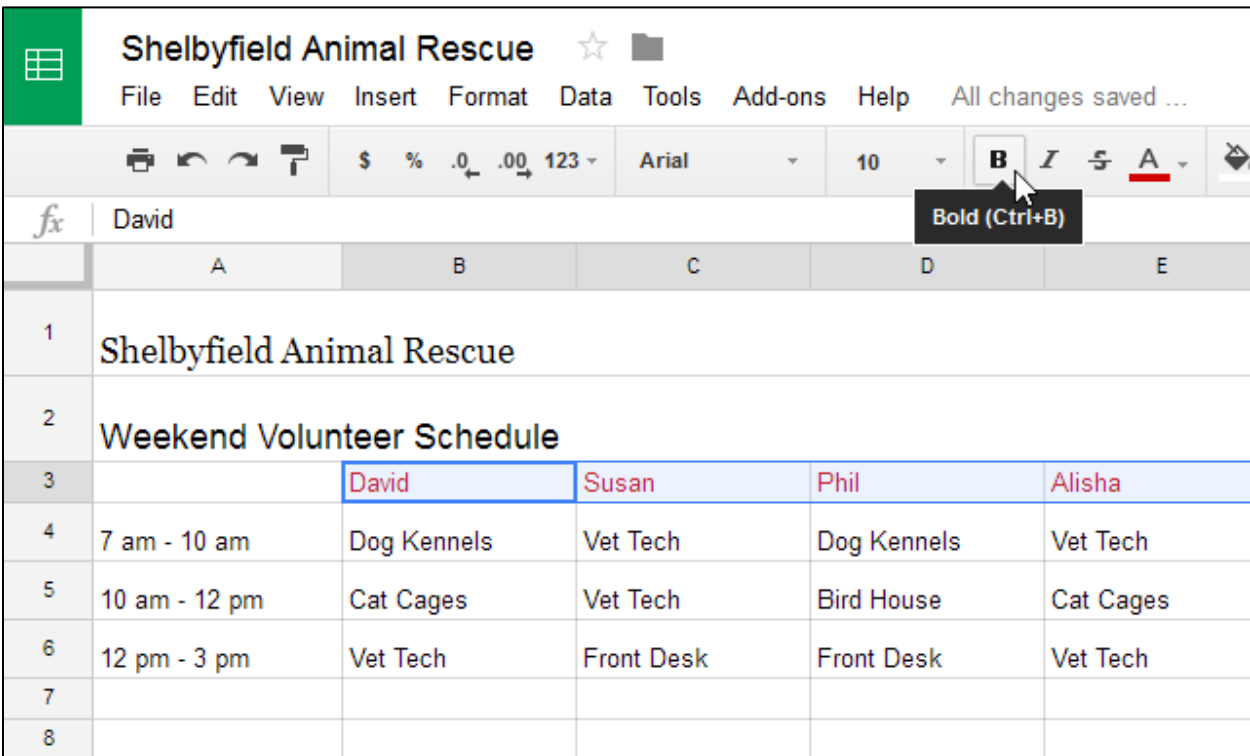
5. The text will change to the **new color**.

To make text bold:

1. Select the text you want to modify.

2. To **bold** text, click the **Bold text** button or press **Ctrl+B** (Windows) or **Command+B** (Mac) on your keyboard.

3. The text will change to **bold**.

Press **Ctrl+I** (Windows) or **Command+I** (Mac) on your keyboard to add *italics*. Press **Ctrl+U** (Windows) or **Command+U** (Mac) to add underlining.
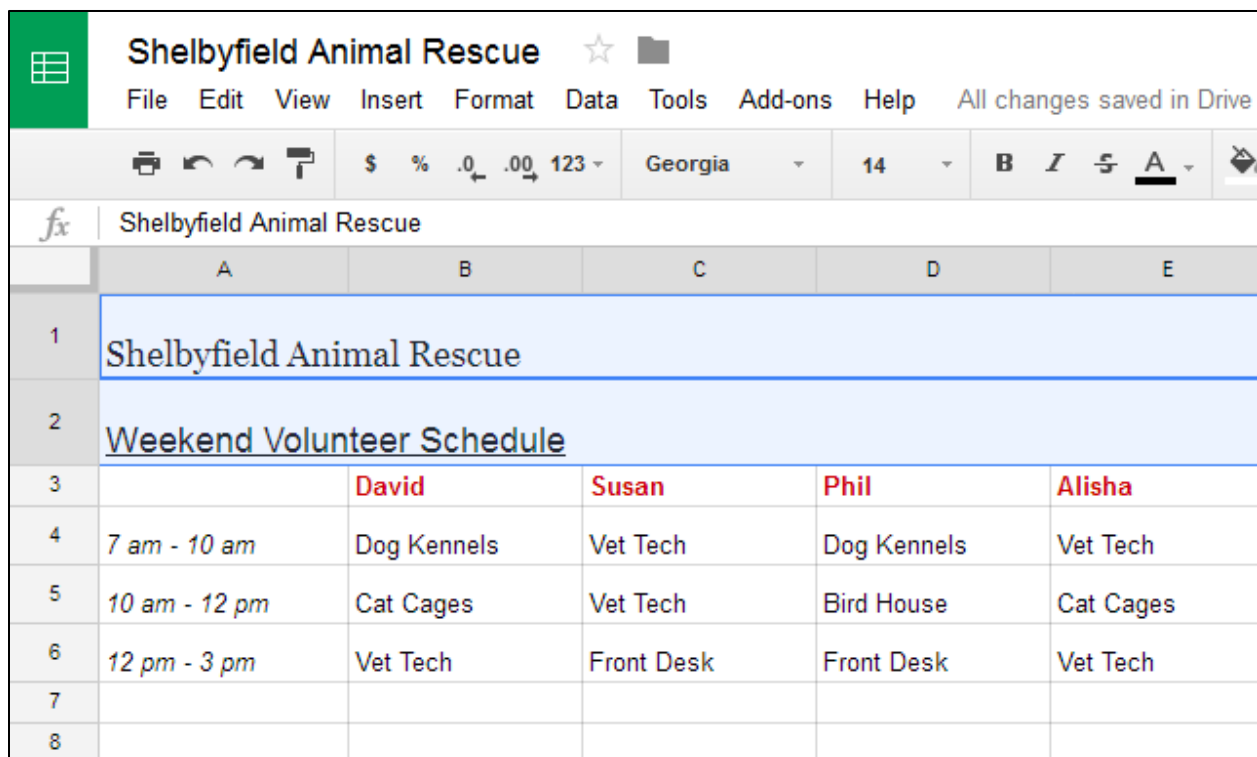
TEXT ALIGNMENT

By default, any text entered into your spreadsheet will be aligned to the bottom-left of a cell. Any numbers will be aligned to the bottom-right of a cell. Changing the **alignment** of your cell content allows you to choose where the content will appear.

To modify the horizontal text alignment:

1. Select the text you want to modify.

2. Click the **Horizontal align** button in the toolbar, then select the desired **alignment** from the drop-down menu.

3. The text will realign.
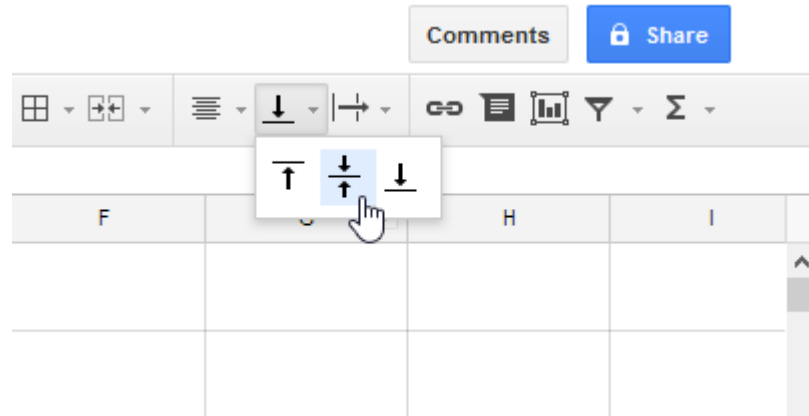

To modify the vertical text alignment:

1. Select the text you want to modify.

2. Click the **Vertical align** button in the toolbar, then choose the desired **alignment** from the drop-down menu.

3. The text will realign.

You can apply **both** vertical and horizontal alignment settings to any cell.

CELL BORDERS AND BACKGROUND COLORS

Cell borders and background colors make it easy to create clear and defined boundaries for different sections of your spreadsheet.

To add cell borders:

1. Select the cell or cells you want to modify.

2. Select the **Borders** button and choose the desired **border option** from the drop-down menu. In our example, we'll choose to display **all cell borders**.
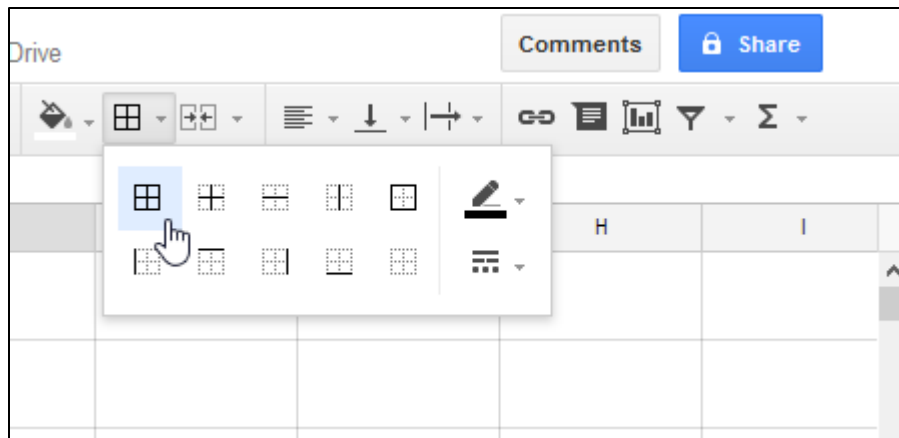
3. The new cell borders will appear.

To change the fill color:

It's easy to change the background color of any cell, which is known as the **fill color**.

1. Select the cell or cells you want to modify.

2. Locate and select the **Fill color** button from the toolbar.

3. Select a **color** from the drop-down menu. In our example, we'll choose **blue**.
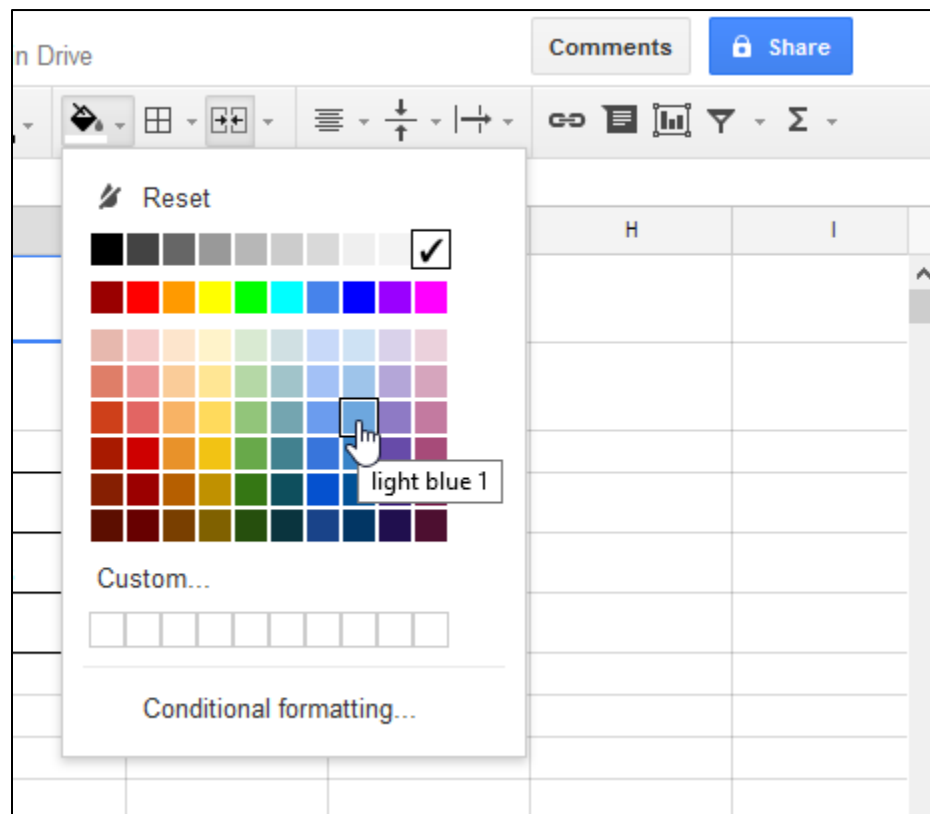
4. The new fill color will appear.

Formatting text and numbers

The ability to apply specific **formatting** for text and numbers is one of the most powerful tools in Google Sheets. Instead of displaying all cell content in exactly the same way, you can use formatting to change the appearance of **dates**, **times**, **decimals**, **percentages (%)**, **currency ($),** and much more.

Learn more about formatting numbers in our **Understanding Number Formats** lesson.

1. Select cells **B3:E3**. **Bold** the text and add an **outside border**.

2. Select the merged cell in row 1 and **change the font** to something other than Arial.

3. With the cell still selected, change the **font size** to 18 pt and **bold** the text.

4. For the same cell, change the **fill color** to purple and the **font color** to white.

CREATING SIMPLE FORMULAS

A convenient and time-saving feature of Google Sheets is its ability to add, subtract, multiply, and divide numerical information for you. Google Sheets uses mathematical expressions called **formulas** that make handling these calculations easy. In this lesson, we'll focus on formulas that contain **one mathematical operator**.

Most of the time, you will be using a **cell's address** in the formula. This is called using a **cell reference**. The advantage of using cell references is that you can change a value in a referenced cell and the formula will automatically recalculate. Using cell references in your formulas will make sure the values in your formulas are accurate.

Watch the video below to learn how to work with simple formulas in Google Sheets.

Mathematical operators

Google Sheets uses standard operators for formulas: a **plus sign** for addition (**+**), **minus sign** for subtraction (**-**), **asterisk** for multiplication (*****), **forward slash** for division (**/**), and **caret** (**^**) for exponents.

Addition	+
Subtraction	-
Multiplication	*
Division	/
Exponents	^

All formulas must begin with an **equals sign** (**=**). This is because the cell contains—or is equal to—the formula and the value it calculates.

Using cell references

When a formula contains a cell address, it is using a **cell reference**. Creating a formula with cell references is useful because you can update the numerical values in cells without having to rewrite the formula.

	A	B
1	7	
2	3	
3	? =A1+A2	
4		

	A	B
1	7	
2	3	
3	10	
4		

	A	B
1	8	
2	3	
3	11	
4		

	A	B
1	8	
2	3	
3	11	
4		

By combining a mathematical operator with cell references, you can create a variety of simple formulas in Google Sheets. Formulas can also include a combination of a cell reference and a number.
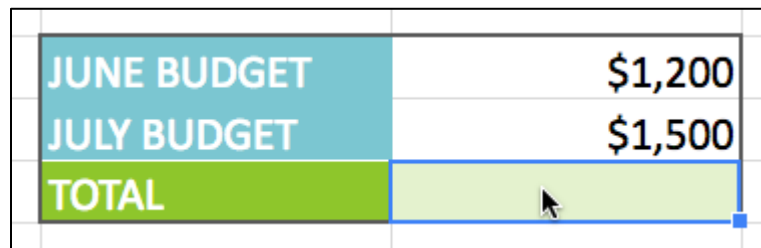
=A1+A2	Adds cells A1 and A2
=C4-3	Subtracts 3 from cell C4
=E7/J4	Divides cell E7 by J4
=N10*1.05	Multiplies cell N10 by 1.05
=R5^2	Finds the square of cell R5

CREATING FORMULAS

In our example, we'll use simple formulas and cell references to help calculate a budget.
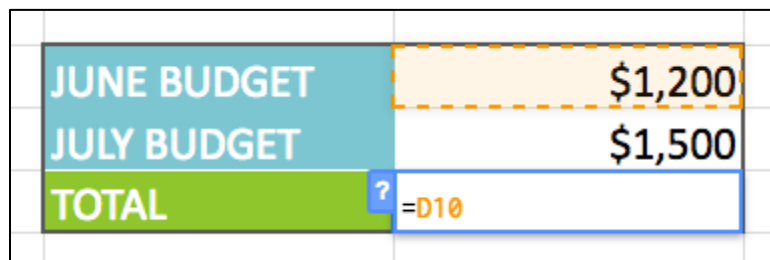
To create a formula:

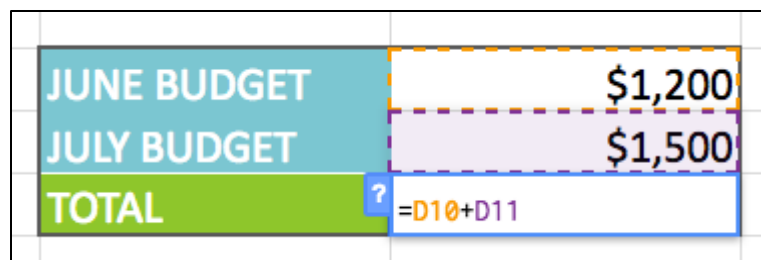1. Select the **cell** that will display the calculated value.

JUNE BUDGET	$1,200
JULY BUDGET	$1,500
TOTAL	

2. Type the **equals sign (=)**.

3. Type the **cell address** of the cell you want to reference first in the formula. A dotted border will appear around the cell being referenced.

JUNE BUDGET	$1,200
JULY BUDGET	$1,500
TOTAL	=D10

4. Type the **operator** you want to use. For example, type the **addition sign (+)**.

5. Type the **cell address** of the cell you want to reference second in the formula.

JUNE BUDGET	$1,200
JULY BUDGET	$1,500
TOTAL	=D10+D11

6. Press the **Enter** key on your keyboard. The formula calculates, and Google Sheets displays the result.

JUNE BUDGET	$1,200
JULY BUDGET	$1,500
TOTAL	$2,700

To see how the formula recalculates, try changing the value in either cell. The formula automatically displays the new value.

JUNE BUDGET	$1,500
JULY BUDGET	$1,500
TOTAL	$3,000

Google Sheets **will not always tell you** if your formula contains an error, so it's up to you to check all of your formulas. To learn how to do this, read our article on why you should **Double-Check Your Formulas**.

To create a formula using the point-and-click method:

Rather than type cell addresses, you can **point and click** the cells you want to include in your formula.

1. Select the **cell** that will display the calculated value.

2. Type the **equals sign** (**=**).

3. Click the **cell** you want to reference first in the formula.
    The address of the cell appears in the formula.

4. Type the **operator** you want to use in the formula. For
    example, type the **multiplication sign** (*).

5. Click the **cell** you want to reference second in the formula. The address of the cell appears in the formula.

	A	B	C	D	E
1	SABROSA Empanadas & More	Budget & Paper Supplies Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804			
2	PAPER SUPPLY ORDERS				
3	ITEM	QUANTITY	PRICE PER UNIT	LINE TOTAL	
4	Plastic Silverware (box of 100)	15	$8.75	=B4*C4	
5	Napkins (box of 250)	18	$2.59		
6	Plates (box of 50)	9	$14.25		
7	Hot Sauce (gallon bottle)	12	$11.99		
8	TOTAL				
9					

6. Press the **Enter** key on your keyboard. The formula will be calculated, and the value will appear in the cell.

	A	B	C	D	E
1	SABROSA Empanadas & More	Budget & Paper Supplies Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804			
2	PAPER SUPPLY ORDERS				
3	ITEM	QUANTITY	PRICE PER UNIT	LINE TOTAL	
4	Plastic Silverware (box of 100)	15	$8.75	$131.25	
5	Napkins (box of 250)	18	$2.59		
6	Plates (box of 50)	9	$14.25		
7	Hot Sauce (gallon bottle)	12	$11.99		
8	TOTAL				
9					

TO EDIT A FORMULA

Sometimes you may want to modify an existing formula. In our example, we typed an incorrect cell address in our formula, so we need to correct it.

1.   Double-click the **cell** containing the formula you want to edit. The formula will be displayed in the cell.

2.   Make the desired edits to the formula. In our example, we will replace **C4** with **C5**.

3.   When you're finished, press the **Enter** key on your keyboard. The formula recalculates, and the new value displays in the cell.

	A	B	C	D	E
1	SABROSA Empanadas & More	Budget & Paper Supplies Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804			
2	PAPER SUPPLY ORDERS				
3	ITEM	QUANTITY	PRICE PER UNIT	LINE TOTAL	
4	Plastic Silverware (box of 100)	15	$8.75	$131.25	
5	Napkins (box of 250)	18	$2.59	$46.62	
6	Plates (box of 50)	9	$14.25		
7	Hot Sauce (gallon bottle)	12	$11.99		
8	TOTAL				

1. Change the quantity in cell **B4** to 15. You should also see cells D4 and D7 change.

2. When you're finished, your spreadsheet should look something like this:

	A	B	C	D
1	SABROSA Empanadas & More	Budget & Paper Supplies Sabrosa Empanadas & More 1202 Biscayne Bay Drive Orlando, FL 32804		
2	PAPER SUPPLY ORDERS			
3	ITEM	QUANTITY	PRICE PER UNIT	LINE TOTAL
4	Note Pads - Unlined (3" x 3")	15	$5.39	$80.85
5	Legal Envelopes (11" x 14")	5	$2.27	$11.35
6	Standard Copy Paper (8.5" x 11")	17	$6.72	$114.24
7	TOTAL			$206.44