

# Microsoft Office Virtual Learning

# **Basic Tips for Working with Data**

May 15, 2020



Lesson: May 15, 2020

Objective/Learning Target:
Students will will learn basic tips for working with data in
Excel and Google Sheets



#### Introduction

Excel and Google Sheets workbooks are designed to store a lot of information. Whether you're working with 20 cells or 20,000, Excel and Google Sheets have several features to help you organize your data and find what you need. You can see some of the most useful features below. And be sure to check out the other lessons in this tutorial to get step-by-step instructions for each of these features.



### Freezing Rows and Columns

You may want to see certain rows or columns all the time in your worksheet, especially header cells. By freezing rows or columns in place, you'll be able to scroll through your content while continuing to view the frozen cells. In this example, we've frozen the top two rows, which allows us to view the dates no matter where we scroll in the spreadsheet.

4	A	В	С	D	E	F		
1	2014-2015 Sales Data							
2	Salesperson	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014		
18	Hodges, Melissa	\$4,624.00	\$14,772.00	\$19,830.00	\$6,303.00	\$5,667.00		
19	Jameson, Robinsor	\$2,552.00	\$1,627.00	\$4,382.00	\$9,083.00	\$4,269.00		
20	Kellerman, France:	\$4,281.00	\$7,375.00	\$17,730.00	\$19,998.00	\$3,502.00		
21	Mark, Katharine	\$4,679.00	\$3,058.00	\$1,497.00	\$5,722.00	\$5,853.00		



#### Sorting Data

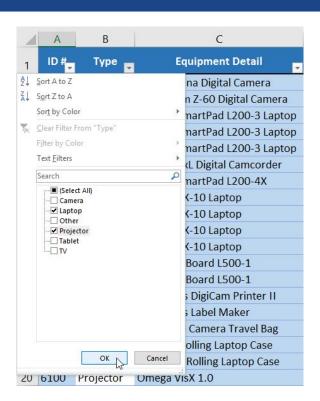
You can quickly **reorganize** a worksheet by **sorting your data**. Content can be sorted alphabetically, numerically, and in many other ways. For example, you could organize a list of contact information by last name.

A	А	В	С	D			
1	Customer Contact List						
2	CONTACT NAME	BILLING ADDRESS	PHONE	EMAIL ADDRESS			
3	Chaturvedi, Rick	2428 S Redding St #2 B	360-555-5422	info@newhaventraders.com			
4	Dean, Hank	3034 Foggy Wharf Loop	308-555-1050	hdean@venturebrewing.com			
5	Figgis, Mallory	3520 Sleepy Hearth Dr	425-555-5370	malloryf@archerproperties.com			
6	Finn, Jake	1407 Dusty Fawn Ln So	605-555-6435	jake@adventureoutfitters.com			
7	Kinkade, Chris	1028 Quiet Dale Rd Hor	443-555-4942	chris.kinkade@placervilleins.com			
8	Lawson, Miranda	5316 Colonial Pkwy Est	575-555-9255	mlawson@massairlines.com			
9	Reyes, Felicia	8544 Lazy Bluff Ave Wh	316-555-3256	felicia@everlypublishing.com			
10	Sebastian, Lil	9060 Easy Evening Ln V	207-555-7225	lil@knopeequestrian.com			
11	Silva, Vivica	8595 Thunder Brook Ci	360-555-4289	vivica@rileygardensupply.com			
12	Stark, Katie	971 Cinder Butterfly St	603-555-2460	katie.stark@ariarealestate.com			
13	Torrance, Jill	3160 Amber Gate Rd Rd	605-555-4495	jtorrance@overlookinn.com			
14	Yuen, Phillip	5108 Crystal Gate Blvd	913-555-5928	yuenp@corepharmaceuticals.com			



#### Filtering Data

Filters can be used to narrow down the data in your worksheet, allowing you to view only the information you need. In this example, we're filtering the worksheet to show only rows that contain the words Laptop or Projector in column B.





#### Summarizing Data

The **Subtotal feature** allows you to quickly summarize your data. In our example, we've created a subtotal for **each T-shirt size**, which makes it easy to see how many we'll need in each size.

2 3	1	Α	В	С	D	E
	1	Homeroom #	First Name	Last Name	<b>Payment Method</b>	T-Shirt Size
[ •	2	105	Melissa	White	Debit Card	Small
	3	105	Esther	Yaron	Pending	Small
-	4	135	Anisa	Naser	Check Bounced	Small
	5	220-A	Brigid	Ellison	Cash	Small
	6	220-A	Christopher	Peyton-Gomez	Check	Small
•	7	220-B	Michael	Lazar	Cash	Small
	8	220-B	Malik	Reynolds	Cash	Small
	9	220-B	Wendy	Shaw	Cash	Small
	10				Small Count	8
[ •	11	105	Nathan	Albee	Check	Medium
	12	105	Christiana	Chen	Check Bounced	Medium
	13	105	Sidney	Kelly	Check	Medium
	14	110	Matt	Benson	Money Order	Medium
	15	110	Gabriel	Del Toro	Cash	Medium
	16	135	James	Panarello	Check	Medium
	17	135	Chantal	Weller	Debit Card	Medium
	18	220-A	Chevonne	Means	Money Order	Medium
	19	220-B	Samantha	Bell	Check	Medium
	20	220-B	Avery	Kelly	Debit Card	Medium
-	21				Medium Count	10



### Formatting Data as a Table

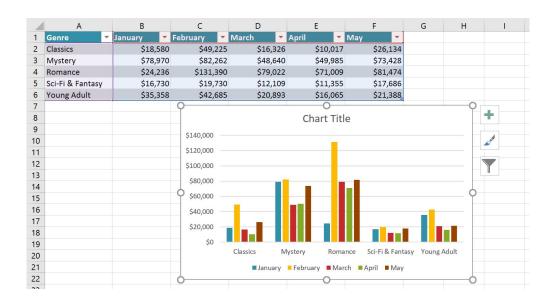
Just like regular formatting, **tables** can improve the **look and feel** of your workbook, but they'll also help you **organize** your content and make your data easier to use. For example, tables have built-in sorting and filtering options. Excel also includes several **predefined table styles**, allowing you to create tables quickly.

Catering Invoice Sabrosa Empanadas & More Invoice #: 5686B 1202 Biscayne Bay Drive Date: 05/10/16 Orlando, FL 32804 UNIT PRICE QUANTITY LINE TOTAL **MENU ITEM** Empanadas: Beef Picadillo \$2.99 15 \$44.85 Empanadas: Chipotle Shrimp \$39.90 \$3.99 10 5 Tamales: Chicken Tinga \$2.29 \$45.80 20 Tamales: Vegetable \$2.29 \$68.70 30 Arepas: Carnitas \$2.89 10 \$28.90 8 Arepas: Queso Blanco \$2.49 \$49.80 20 9 Beverages: Horchata \$1.89 25 \$47.25 10



### Visualizing Data with Charts

It can be difficult to interpret Excel workbooks that contain a lot of data. **Charts** allow you to illustrate your workbook data **graphically**, which makes it easy to visualize **comparisons** and **trends**.





## Adding Conditional Formatting

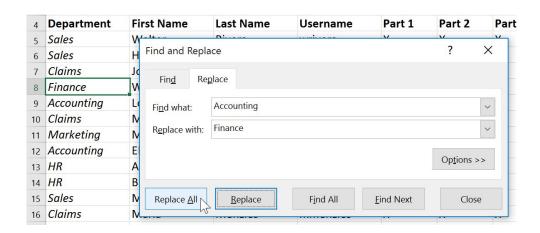
Let's say you have a worksheet with thousands of rows of data. It would be extremely difficult to see patterns and trends just from examining the raw information. Conditional formatting allows you to automatically apply cell formatting—such as colors, icons, and data bars—to one or more cells based on the cell value.

	A	В	С	D	E	F	G
1	MP		Į.	Westbro	ook Par	ker Sal	es Data
2	Salesperson	May	June	July	August	September	October
3	Albertson, Kathy	<b>\$3,799.00</b>	\$557.00	\$3,863.00	\$1,117.00	= \$8,237.00	= \$8,690.00
4	Allenson, Carol	▲ \$18,930.00 <b>▼</b>	\$1,042.00 =	\$9,355.00	\$1,100.00	= \$10,185.00	<b>\$18,749.00</b>
5	Altman, Zoey	<b>▼</b> \$5,725.00 <b>▼</b>	\$3,072.00	\$6,702.00	\$2,116.00	= \$13,452.00	\$8,046.00
6	Bittiman, William	<b>▼</b> \$1,344.00 <b>▼</b>	\$3,755.00	\$4,415.00	\$1,089.00	\$4,404.00	<b>\$20,114.00</b>
7	Brennan, Michael	<b>\$8,296.00</b>	\$3,152.00 =	\$11,601.00	\$1,122.00	\$3,170.00	<b>\$10,733.00</b>
8	Carlson, David	<b>\$3,945.00</b>	\$4,056.00	\$3,726.00	\$1,135.00	\$8,817.00	<b>\$18,524.00</b>
9	Collman, Harry		\$4,906.00 ==	\$9,007.00	\$2,113.00	= \$13,090.00	= \$13,953.00
10	Counts, Elizabeth	<b>▼</b> \$3,742.00 <b>▼</b>	\$521.00	\$4,505.00	\$1,024.00	\$3,528.00	<b>\$15,275.00</b>
11	David, Chloe	<b>\$7,605.00</b>	\$3,428.00	\$3,973.00	\$1,716.00	\$4,839.00	<b>\$13,085.00</b>
12	Davis, William	<b>▼</b> \$5,304.00 <b>▼</b>	\$1,562.00	\$2,945.00	\$1,176.00	\$9,642.00	<b>\$13,714.00</b>
13	Dumlao, Richard	⇒ \$9,333.00 ▼	\$2,779.00	\$7,549.00	\$1,101.00	\$5,850.00	<b>\$15,065.00</b>
14	Farmer, Kim	▼ \$1,103.00 <b>▼</b>	\$3,470.00	\$3,862.00	\$1,040.00	= \$10,024.00	<b>\$18,389.00</b>
15	Ferguson, Elizabeth	<b>▼</b> \$1,333.00 <b>▼</b>	\$1,913.00	\$4,596.00	\$1,126.00	\$5,503.00	<b>\$10,686.00</b>
16	Flores, Tia	<b>□</b> \$12,398.00 <b>▼</b>	\$2,883.00	\$2,142.00	\$2,014.00	= \$13,547.00	<b>\$21,983.00</b>
17	Ford, Victor	▼ \$3,251.00 <b>▼</b>	\$4,931.00 =	\$8,283.00	\$1,054.00	\$9,543.00	<b>\$11,967.00</b>
18	Hodges, Melissa	<b>\$4,624.00</b>	\$4,798.00	\$8,420.00	\$1,389.00	\$10,468.00	<b>\$12,677.00</b>
19	Jameson, Robinson	<b>\$2,552.00</b>	\$4,459.00	\$2,248.00	\$1,058.00	\$6,267.00	<b>\$14,982.00</b>
20	Kellerman, Frances	<b>▼</b> \$4,281.00 <b>▼</b>	\$4,172.00 =	\$11,074.00	\$1,282.00	\$2,365.00	= \$9,380.00



### Using Find and Replace

When working with a lot of data, it can be difficult and time consuming to locate specific information. You can easily search your workbook using the Find feature, which also allows you to modify content using the Replace feature.





#### For More Resources:

#### Microsoft Excel:

https://edu.gcfglobal.org/en/excel2016/basic-tips-for-working-with-data/1/



