

MICROSOFT EXCEL

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Sorting Data

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Introduction

- ▶ As you add more content to a worksheet, organizing this information becomes especially important. You can quickly **reorganize** a worksheet by **sorting** your data. For example, you could organize a list of contact information by last name. Content can be sorted alphabetically, numerically, and in many other ways.

Types of Sorting

When sorting data, it's important to first decide if you want the sort to apply to the **entire worksheet** or just a **cell range**.

- ➔ **Sort sheet** organizes all of the data in your worksheet by one column. Related information across each row is kept together when the sort is applied. In the example below, the **Contact Name** column (column **A**) has been sorted to display the names in alphabetical order.

	A	B	C	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 R	605-555-4495	jtorrance@overlookinn.com
14	Yuen, Phillip	5108 Crystal Gate Blvd	913-555-5928	yuenp@corepharmaceuticals.com

Types of Sorting

- ➔ **Sort range** sorts the data in a range of cells, which can be helpful when working with a sheet that contains several tables. Sorting a range will not affect other content on the worksheet.

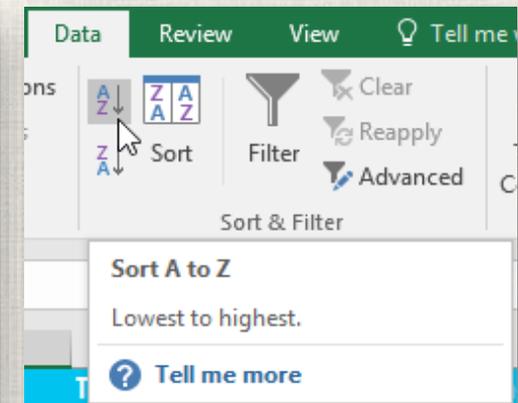
	A	B	C	D	E
1					
2	EXERCISES	SET 1		SET 2	
3		REPS	WEIGHT (lbs)	REPS	WEIGHT (lbs)
4	Bench Press	14	65	12	75
5	Bench Press (Decline)	10	60	8	70
6	Triceps Extension	15	35	20	35
7	Average	13.9	50.5	12.5	54
8					
9		Running Log			
10		Date	Distance (miles)	Time (hrs:mins)	
11		25-Jun	2.8	0:45	
12		26-Jun	3	0:44	
13		27-Jun	2.75	0:42	
14		29-Jun	3.25	0:44	
15		30-Jun	3.25	0:45	
16		2-Jul	2.5	0:44	
17		3-Jul	3	0:30	
18		Total	20.55		
19					

Sorting a sheet

In our example, we'll sort a T-shirt order form alphabetically by **Last Name** (column **C**).

1. Select a **cell** in the column you want to sort by. In our example, we'll select cell **C2**.
2. Select the **Data** tab on the **Ribbon**, then click the **A-Z** **command** to sort A to Z, or the **Z-A** **command** to sort Z to A. In our example, we'll sort A to Z.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Method
2	105	Christiana	Chen	Medium	Check Bounced
3	105	Derek	MacDonald	Large	Cash
4	105	Esther	Yaron	Small	Pending
5	105	Melissa	White	Small	Debit Card
6	105	Nathan	Albee	Medium	Check
7	105	Sidney	Kelly	Medium	Check
8	110	Gabriel	Del Toro	Medium	Cash
9	110	Kris	Ackerman	Large	Money Order



Sorting a sheet

3. The worksheet will be **sorted** by the selected column. In our example, the worksheet is now sorted by **last name**.

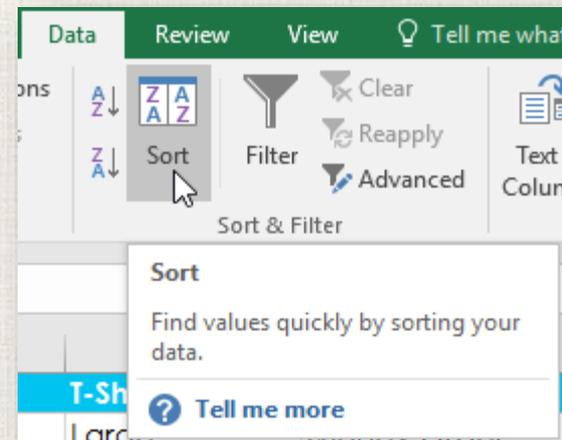
	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Method
2	110	Kris	Ackerman	Large	Money Order
3	105	Nathan	Albee	Medium	Check
4	220-B	Samantha	Bell	Medium	Check
5	110	Matt	Benson	Medium	Money Order
6	105	Christiana	Chen	Medium	Check Bounced
7	110	Gabriel	Del Toro	Medium	Cash
8	220-A	Brigid	Ellison	Small	Cash
9	220-A	Juan	Flores	X-Large	Pending

Sorting a range

In our example, we'll select a **separate table** in our T-shirt order form to sort the number of shirts that were ordered on different dates.

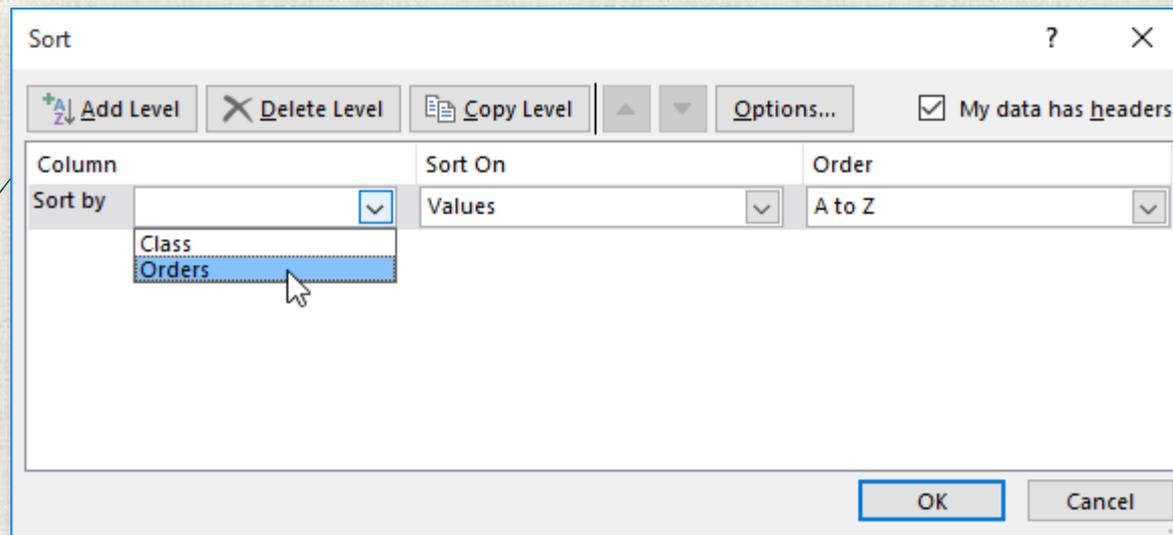
1. Select the **cell range** you want to sort. In our example, we'll select cell range **G2:H6**.
2. Select the **Data** tab on the **Ribbon**, then click the **Sort** command.

	F	G	H	I
		Total Orders (by Grade)		
		Class	Orders	
		Freshmen	5	
		Sophomore	7	
		Junior	10	
		Senior	5	



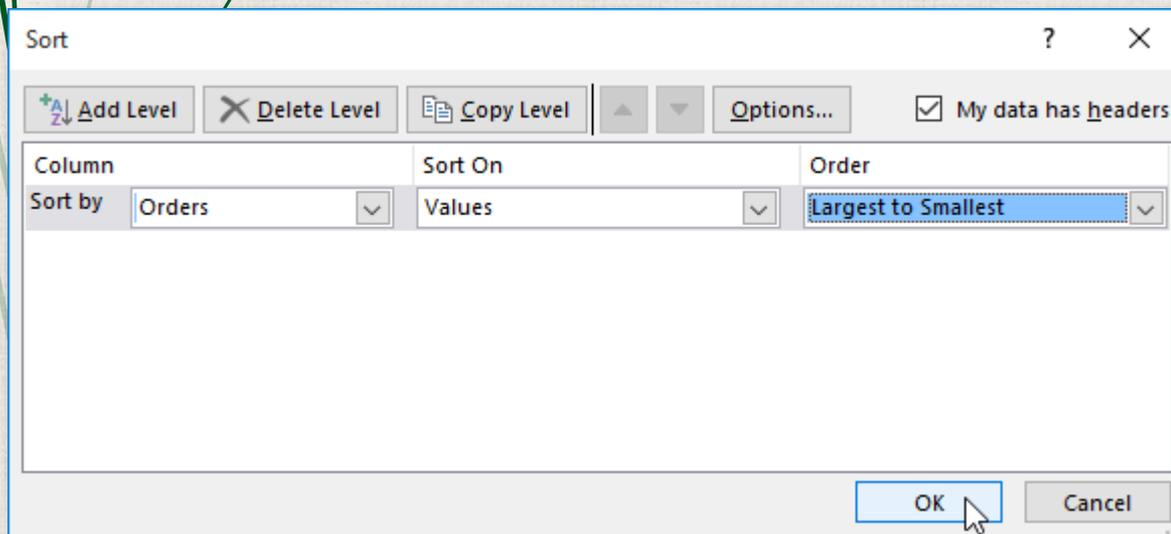
Sorting a range

3. The **Sort** dialog box will appear. Choose the **column** you want to sort by. In our example, we want to sort the data by the number of T-shirt orders, so we'll select **Orders**.



Sorting a range

4. Decide the **sorting order** (either ascending or descending). In our example, we'll use **Largest to Smallest**.
5. Once you're satisfied with your selection, click **OK**.
6. The cell range will be **sorted** by the selected column. In our example, the Orders column will be sorted from **highest to lowest**. Notice that the other content in the worksheet was not affected by the sort.



	F	G	H	I
		Total Orders (by Grade)		
		Class	Orders	
		Junior	10	
		Sophomore	7	
		Freshmen	5	
		Senior	5	

Sorting a range

- If your data isn't sorting properly, double-check your cell values to make sure they are entered into the worksheet correctly. Even a small typo could cause problems when sorting a large worksheet. In the example below, we forgot to include a hyphen in cell A18, causing our sort to be slightly inaccurate.

	A	B	C	D
1	Homeroom #	First Name	Last Name	T-Shirt Size
16	135	Jordan	Weller	Large
17	135	Alex	Yuen	Large
18	220A	Christopher	Peyton-Gomez	Small
19	220-A	Brigid	Ellison	Small
20	220-A	Juan	Flores	X-Large
21	220-A	Chevonne	Means	Medium

Custom Sorting

- ▶ Sometimes you may find that the default sorting options can't sort data in the order you need. Fortunately, Excel allows you to create a **custom list** to define your own sorting order.

Creating a custom sort

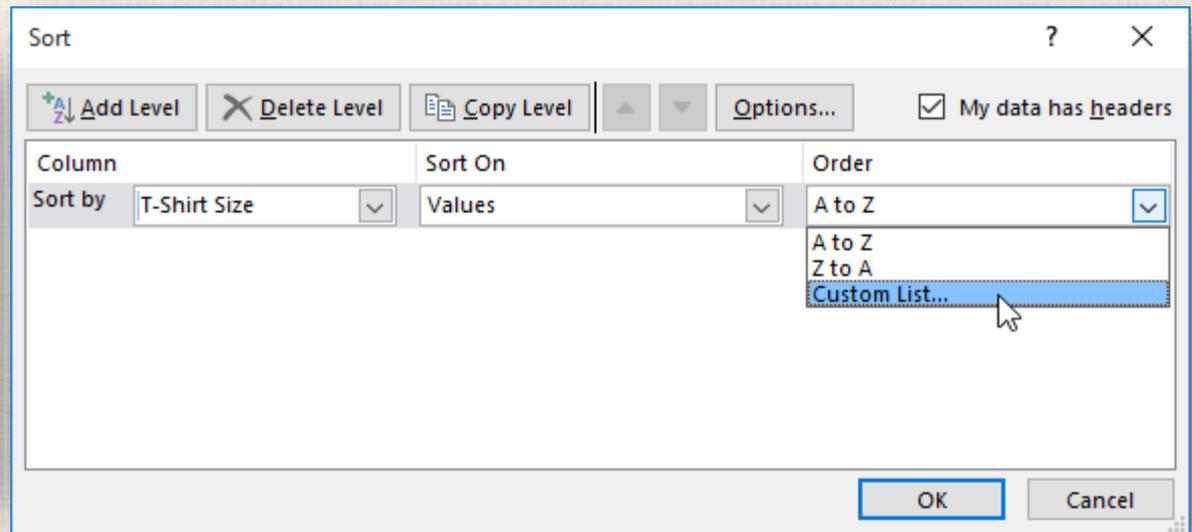
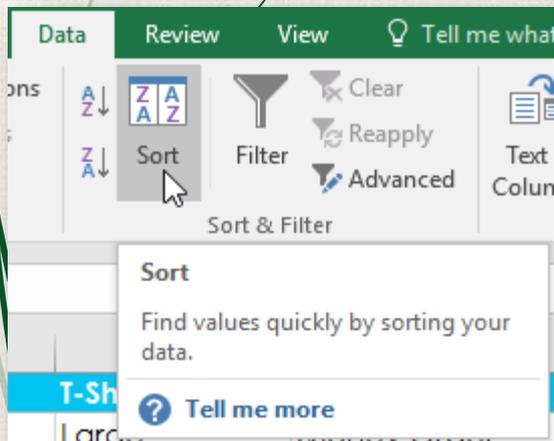
In our example below, we want to sort the worksheet by **T-Shirt Size** (column **D**). A regular sort would organize the sizes alphabetically, which would be incorrect. Instead, we'll create a custom list to sort from smallest to largest.

1. Select a **cell** in the column you want to sort by. In our example, we'll select cell **D2**.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Method
2	110	Kris	Ackerman	Large	Money Order
3	105	Nathan	Albee	Medium	Check
4	220-B	Samantha	Bell	Medium	Check
5	110	Matt	Benson	Medium	Money Order
6	105	Christiana	Chen	Medium	Check Bounced
7	110	Gabriel	Del Toro	Medium	Cash
8	220-A	Brigid	Ellison	Small	Cash
9	220-A	Juan	Flores	X-Large	Pending
10	220-B	Tyrese	Hanlon	X-Large	Debit Card

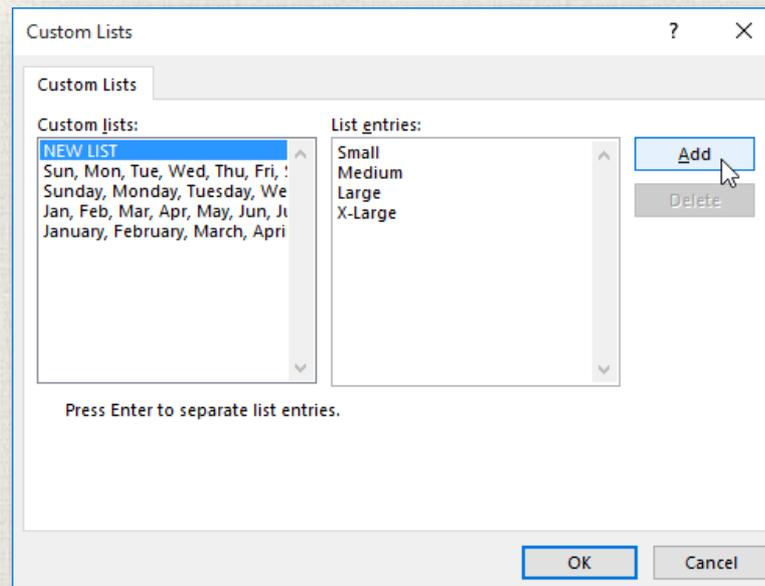
Creating a custom sort

2. Select the **Data** tab, then click the **Sort** command.
3. The **Sort** dialog box will appear. Select the **column** you want to sort by, then choose **Custom List...** from the **Order** field. In our example, we will choose to sort by **T-Shirt Size**.



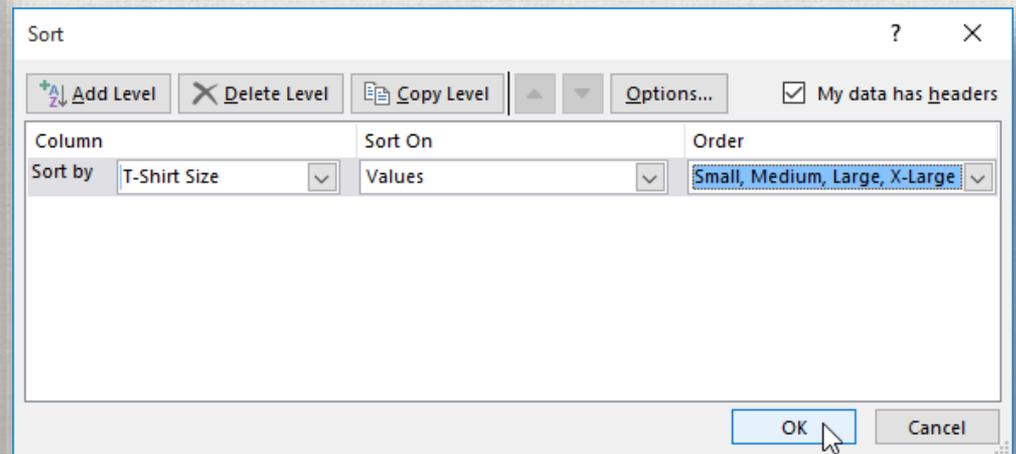
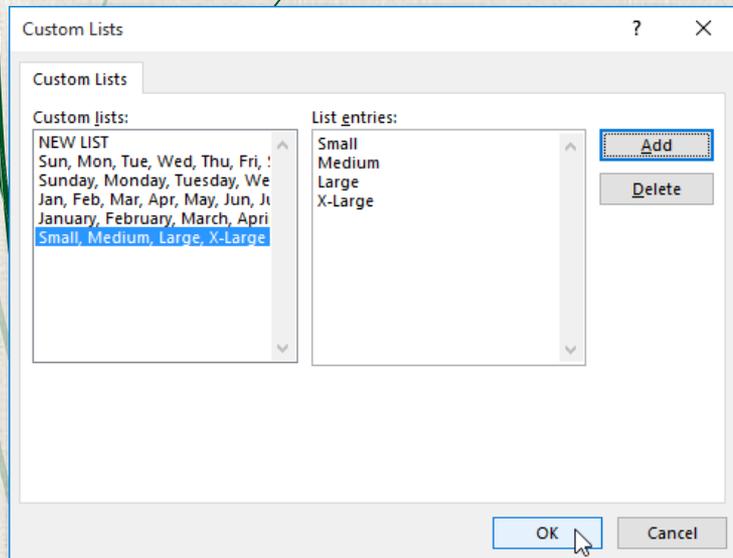
Creating a custom sort

4. The **Custom Lists** dialog box will appear. Select **NEW LIST** from the **Custom Lists:** box.
5. Type the items in the desired custom order in the **List entries:** box. In our example, we want to sort our data by T-shirt size from **smallest** to **largest**, so we'll type **Small, Medium, Large, and X-Large**, pressing **Enter** on the keyboard after each item.



Creating a custom sort

6. Click **Add** to save the new sort order. The new list will be added to the **Custom lists:** box. Make sure the new list is **selected**, then click **OK**.
7. The **Custom Lists** dialog box will close. Click **OK** in the **Sort** dialog box to perform the custom sort.



Creating a custom sort

8. The worksheet will be **sorted** by the custom order. In our example, the worksheet is now organized by T-shirt size from smallest to largest.

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

Sorting Levels

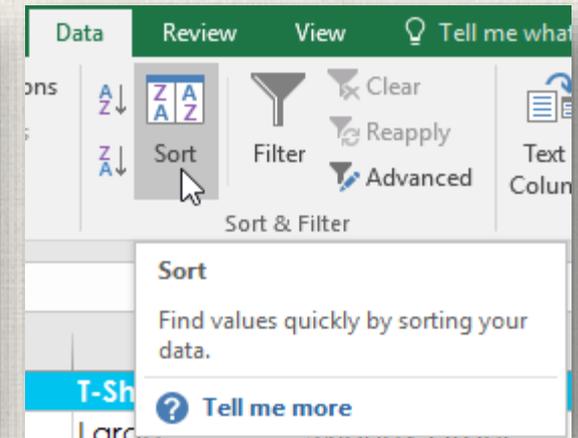
- ▶ If you need more control over how your data is sorted, you can add multiple **levels** to any sort. This allows you to sort your data by **more than one column**.

Adding a level

In our example below, we'll sort the worksheet by **T-Shirt Size** (Column **D**), and then by **Homeroom Number** (column **A**).

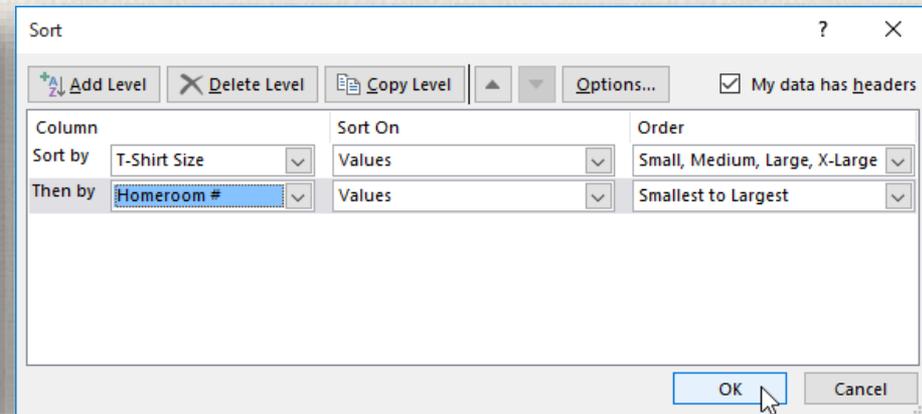
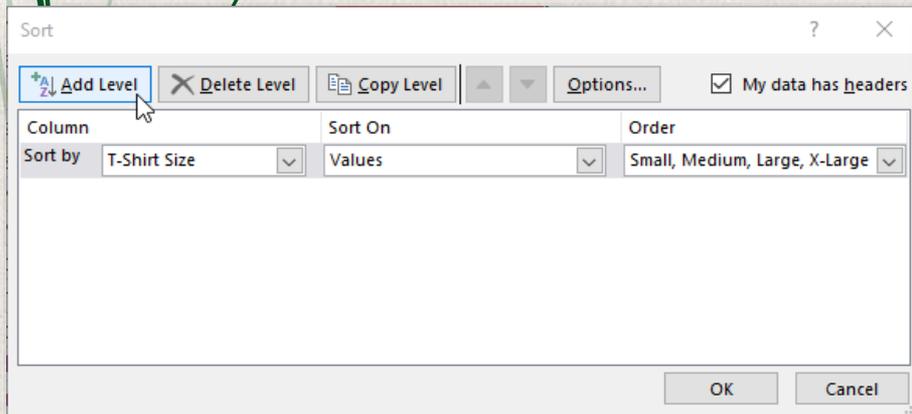
1. Select a **cell** in the column you want to sort by. In our example, we'll select cell **A2**.
2. Click the **Data** tab, then select the **Sort** command.

A	B	C	D	E
Homeroom #	First Name	Last Name	T-Shirt Size	Payment Method
220-A	Brigid	Ellison	Small	Cash
220-B	Michael	Lazar	Small	Cash
135	Anisa	Naser	Small	Check Bounced
220-A	Christopher	Peyton-Gomez	Small	Check
220-B	Malik	Reynolds	Small	Cash
220-B	Wendy	Shaw	Small	Cash
105	Melissa	White	Small	Debit Card
105	Esther	Yaron	Small	Pending
105	Nathan	Albee	Medium	Check



Adding a level

3. The **Sort** dialog box will appear. Select the first column you want to sort by. In this example, we will sort by **T-Shirt Size** (column **D**) with the custom list we previously created for the Order field.
4. Click **Add Level** to add another column to sort by.
5. Select the next column you want to sort by, then click **OK**. In our example, we'll sort by **Homeroom #** (column **A**).



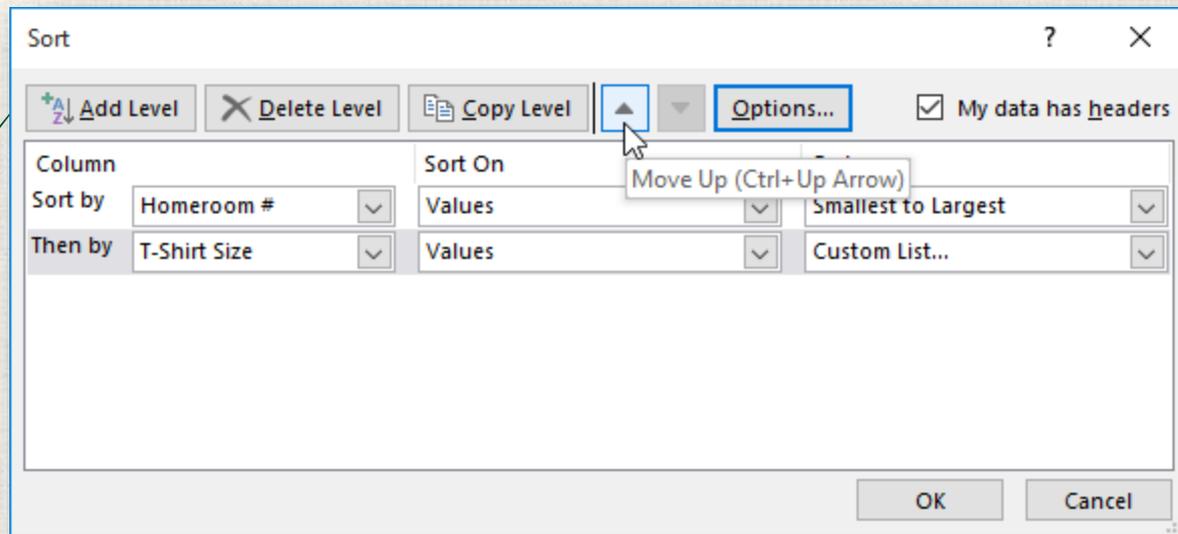
Adding a level

6. The worksheet will be **sorted** according to the selected order. In our example, the orders are sorted by T-shirt size. Within each group of T-shirt sizes, students are sorted by homeroom number.

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

Adding a level

- If you need to change the order of a multilevel sort, it's easy to control which column is sorted first. Simply select the desired **column**, then click the **Move Up** or **Move Down** arrow to adjust its priority.



Practice

- Open our **practice workbook**.
- Click the **Camp** tab in the bottom-left of the workbook.
- For the main table, create a **custom sort** that sorts by **Grade** from **Smallest to Largest** and then by **Camper Name** from **A to Z**.
- Create a sort for the **Additional Information** section. Sort by **Counselor (Column H)** from **A to Z**.

Solution



CAMP KATONKA

NORDMAN, ID

Camper Name	Gender	Grade	Cabin Color	Counselor
Bennett Hobbs	Male	6	Blue	Hernandez
Claire Smith	Female	6	Pink	Stone
Kacey Cranston	Female	6	Pink	Stone
Kia Willard	Female	6	Pink	Stone
Ricardo Gonzalez	Male	6	Blue	Hernandez
Tia Carter	Female	6	Pink	Stone
William Krywinski	Male	6	Blue	Hernandez
Flora Jones	Female	7	Green	Gorecki
Kelly Suvari	Female	7	Green	Gorecki
Ken Crowder	Male	7	Black	Patel
Mark Mealer	Male	7	Black	Patel
Priyanka Chopra	Female	7	Green	Gorecki
Taquan Holder	Male	7	Black	Patel
Brenna Alexander	Female	8	Yellow	Chang
Haruto Takamani	Male	8	Orange	Smith
Jenna Hobbs	Female	8	Yellow	Chang
John Gibbs	Male	8	Orange	Smith
Mary Clarence	Female	8	Yellow	Chang
Miles Goldstein	Male	8	Orange	Smith
Shivangi Patel	Female	8	Yellow	Chang
Susana Jimenez	Female	8	Yellow	Chang
Adir Hassan	Male	9	Purple	Assaf
Jessica Locklear	Female	9	Red	Leslie
Jordan Hargett	Male	9	Purple	Assaf
Mariela Flores	Female	9	Red	Leslie
Niall St. Clair	Male	9	Purple	Assaf
Nimah Al Massri	Female	9	Red	Leslie
Priya Dwivedi	Female	9	Red	Leslie

Additional Information			
Camper Name	Counselor	Allergy	Emergency Contact
Bennett Hobbs	Hernandez	Bees, Cashews	555-982-6987
Ricardo Gonzalez	Hernandez	Dairy	555-298-2984
Mariela Flores	Leslie	Bees, Tomatoes	555-492-6721
Nimah Al Massri	Leslie	Nuts, Eggs	555-786-1932
Taquan Holder	Patel	Peanuts	555-281-4192
Kacey Cranston	Stone	Milk, Soy, Eggs	555-293-3245



THE END

THE END