



Introduction to Groups and Subtotals

Use IT+

Introduction

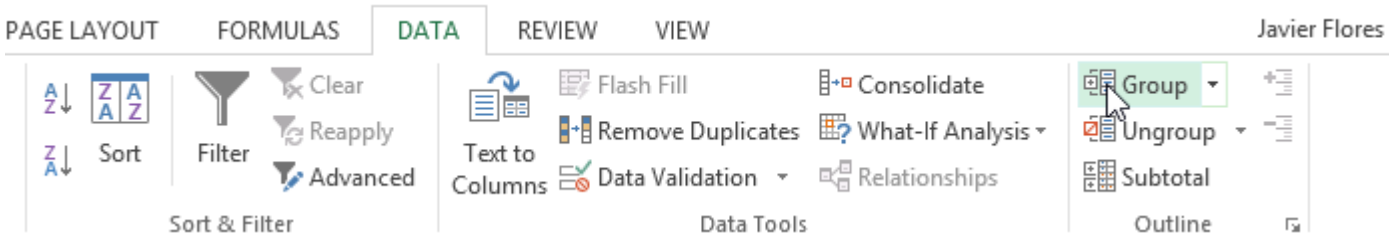
Worksheets with a lot of content can sometimes feel overwhelming and even become difficult to read. Fortunately, Excel can organize data in **groups**, allowing you to easily **show** and **hide** different sections of your worksheet. You can also summarize different groups using the **Subtotal** command and create an **outline** for your worksheet.

To group rows or columns:

1. Select the **rows** or **columns** you want to group. In this example, we'll select columns **A**, **B**, and **C**.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
2	220-B	Malik	Reynolds	Small	7-Oct
3	105	Melissa	White	Small	14-Oct
4	220-B	Windy	Shaw	Small	Pending
5	105	Esther	Yaron	Small	7-Oct
6	220-A	Brigid	Ellison	Small	7-Oct
7	220-B	Michael	Lazar	Small	7-Oct
8	135	Anisa	Naser	Small	Pending
9	220-A	Christopher	Peyton-Gomez	Small	14-Oct
10	105	Christiana	Chen	Medium	5-Oct

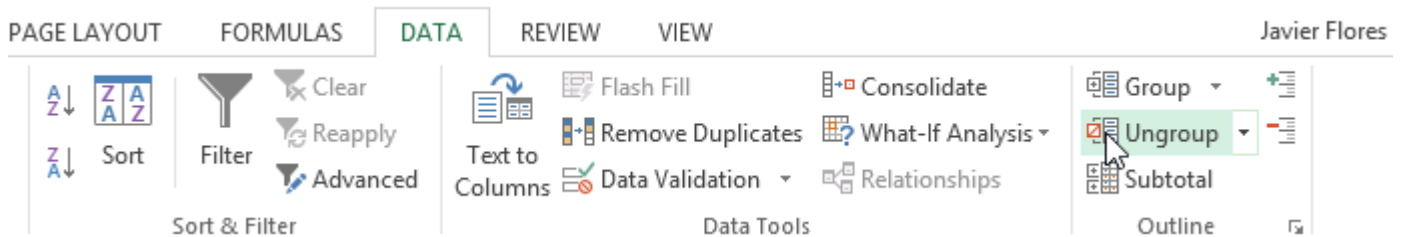
2. Select the **Data** tab on the **Ribbon**, then click the **Group** command.




3. The selected rows or columns will be **grouped**. In our example, columns **A**, **B**, and **C** are grouped together.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
2	220-B	Malik	Reynolds	Small	7-Oct
3	105	Melissa	White	Small	14-Oct
4	220-B	Windy	Shaw	Small	Pending
5	105	Esther	Yaron	Small	7-Oct
6	220-A	Brigid	Ellison	Small	7-Oct
7	220-B	Michael	Lazar	Small	7-Oct
8	135	Anisa	Naser	Small	Pending
9	220-A	Christopher	Peyton-Gomez	Small	14-Oct
10	105	Christiana	Chen	Medium	5-Oct

To ungroup data, select the grouped rows or columns, then click the **Ungroup** command.

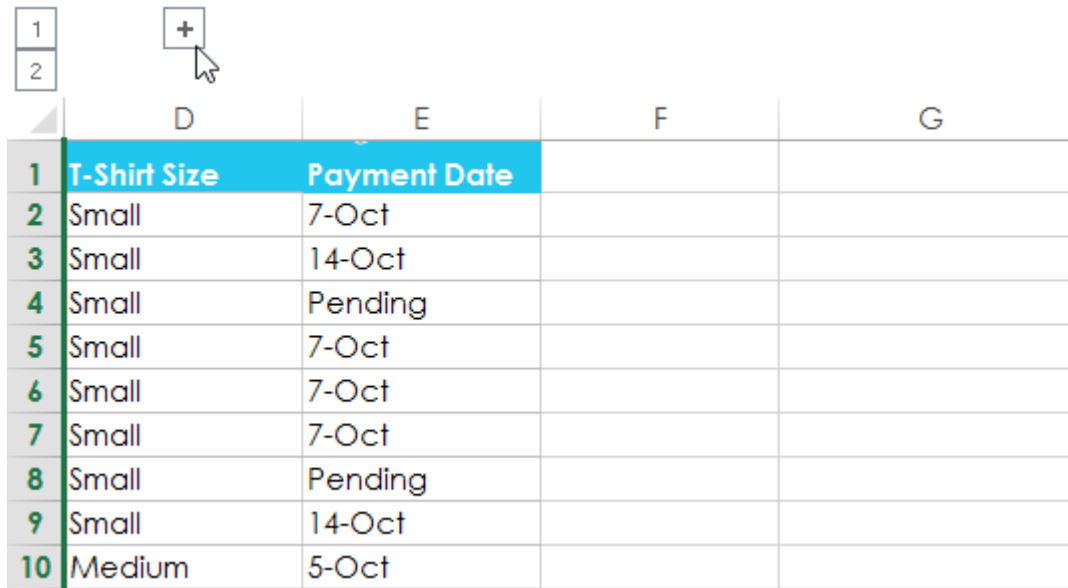


To hide and show groups:

1. To hide a group, click the **Hide Detail** button .

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
2	220-B	Malik	Reynolds	Small	7-Oct
3	105	Melissa	White	Small	14-Oct
4	220-B	Windy	Shaw	Small	Pending
5	105	Esther	Yaron	Small	7-Oct
6	220-A	Brigid	Ellison	Small	7-Oct
7	220-B	Michael	Lazar	Small	7-Oct
8	135	Anisa	Naser	Small	Pending
9	220-A	Christopher	Peyton-Gomez	Small	14-Oct
10	105	Christiana	Chen	Medium	5-Oct

2. The group will be **hidden**. To show a hidden group, click the **Show Detail** button .



	D	E	F	G
1	T-Shirt Size	Payment Date		
2	Small	7-Oct		
3	Small	14-Oct		
4	Small	Pending		
5	Small	7-Oct		
6	Small	7-Oct		
7	Small	7-Oct		
8	Small	Pending		
9	Small	14-Oct		
10	Medium	5-Oct		

Creating subtotals

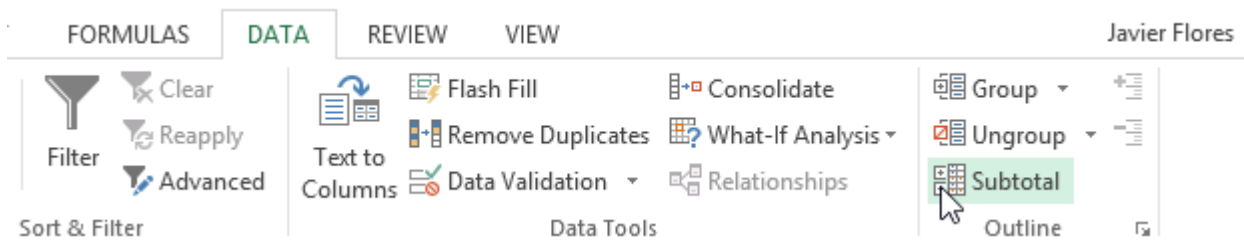
The **Subtotal** command allows you to automatically **create groups** and use common functions like SUM, COUNT, and AVERAGE to help **summarise** your data. For example, the **Subtotal** command could help to calculate the cost of office supplies by type from a large inventory order. It will create a hierarchy of groups, known as an **outline**, to help organize your worksheet. Your data must be correctly **sorted** before using the Subtotal command, so you may want to review our lesson on **Sorting Data** to learn more. To create a subtotal:

In our example, we will use the Subtotal command with a T-shirt order form to determine how many T-shirts were ordered in each size (Small, Medium, Large, and X-Large). This will create an **outline** for our worksheet with a **group** for each T-shirt size and then **count** the total number of shirts in each group.

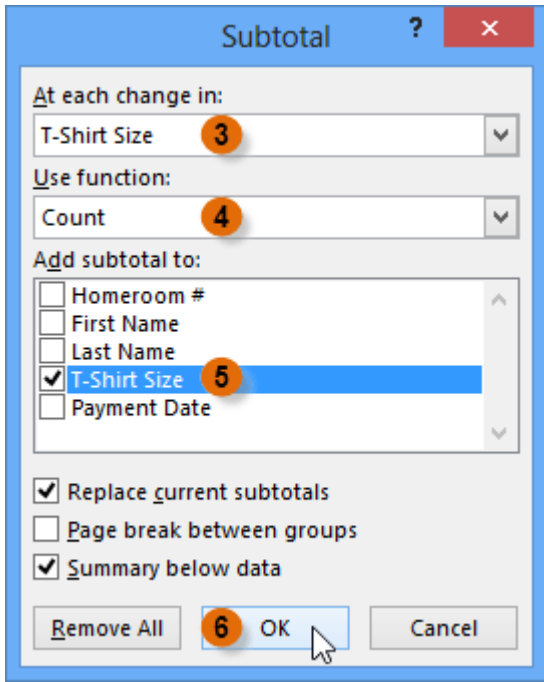
1. First, **sort** your worksheet by the data you want to subtotal. In this example, we will create a subtotal for each T-shirt size, so our worksheet has been sorted by T-shirt size from smallest to largest.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
2	220-B	Malik	Reynolds	Small	7-Oct
3	105	Melissa	White	Small	14-Oct
4	220-B	Windy	Shaw	Small	Pending
5	105	Esther	Yaron	Small	7-Oct
6	220-A	Brigid	Ellison	Small	7-Oct
7	220-B	Michael	Lazar	Small	7-Oct
8	135	Anisa	Naser	Small	Pending
9	220-A	Christopher	Peyton-Gomez	Small	14-Oct
10	105	Christiana	Chen	Medium	5-Oct
11	105	Sidney	Kelly	Medium	11-Oct
12	105	Nathan	Albee	Medium	5-Oct

2. Select the **Data** tab, then click the **Subtotal** command.



3. The **Subtotal** dialog box will appear. Click the drop-down arrow for the **At each change in:** field to select the **column** you want to subtotal. In our example, we'll select **T-Shirt Size**.
4. Click the drop-down arrow for the **Use function:** field to select the **function** you want to use. In our example, we'll select **COUNT** to count the number of shirts ordered in each size.
5. In the **Add subtotal to:** field, select the **column** where you want the **calculated subtotal** to appear. In our example, we'll select **T-Shirt Size**.
6. When you're satisfied with your selections, click **OK**.



7. The worksheet will be **outlined** into **groups**, and the **subtotal** will be listed below each group. In our example, the data is now grouped by T-shirt size, and the number of shirts ordered in that size appears below each group.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
2	220-B	Malik	Reynolds	Small	7-Oct
3	105	Melissa	White	Small	14-Oct
4	220-B	Windy	Shaw	Small	Pending
5	105	Esther	Yaron	Small	7-Oct
6	220-A	Brigid	Ellison	Small	7-Oct
7	220-B	Michael	Lazar	Small	7-Oct
8	135	Anisa	Naser	Small	Pending
9	220-A	Christopher	Peyton-Gomez	Small	14-Oct
10			Small Count		8
11	105	Christiana	Chen	Medium	5-Oct
12	105	Sidney	Kelly	Medium	11-Oct
13	105	Nathan	Albee	Medium	5-Oct
14	110			Medium	11-Oct
15	220-B			Medium	13-Oct
16	135			Medium	11-Oct
17	135	Chantal	Weller	Medium	11-Oct
18	220-A	Chevonne	Means	Medium	13-Oct
19	110	Matt	Benson	Medium	15-Oct
20	220-B	Samantha	Bell	Medium	15-Oct
21			Medium Count		10

The subtotals are inserted as new rows below each group

To view groups by level:

When you create subtotals, your worksheet is divided into different **levels**. You can switch between these levels to quickly control how much information is displayed in the worksheet by clicking the **Level** buttons to the left of the worksheet. In our example, we'll switch between all three levels in our outline. While this example contains only three levels, Excel can accommodate up to eight.

1. Click the **lowest level** to display the least detail. In our example, we'll select **level 1**, which contains only the **grand count**, or total number of T-shirts ordered.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
33			Grand Count	27	
34					
35					

2. Click the **next level** to expand the detail. In our example, we'll select **level 2**, which contains each subtotal row but hides all other data from the worksheet.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
10			Small Count	8	
21			Medium Count	10	
27			Large Count	5	
32			X-Large Count	4	
33			Grand Count	27	
34					

3. Click the **highest level** to view and expand all of your worksheet data. In our example, we'll select **level 3**.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
2	220-B	Malik	Reynolds	Small	7-Oct
3	105	Melissa	White	Small	14-Oct
4	220-B	Windy	Shaw	Small	Pending
5	105	Esther	Yaron	Small	7-Oct
6	220-A	Brigid	Ellison	Small	7-Oct
7	220-B	Michael	Lazar	Small	7-Oct
8	135	Anisa	Naser	Small	Pending
9	220-A	Christopher	Peyton-Gomez	Small	14-Oct
10			Small Count	8	
11	105	Christiana	Chen	Medium	5-Oct
12	105	Sidney	Kelly	Medium	11-Oct
13	105	Nathan	Albee	Medium	5-Oct

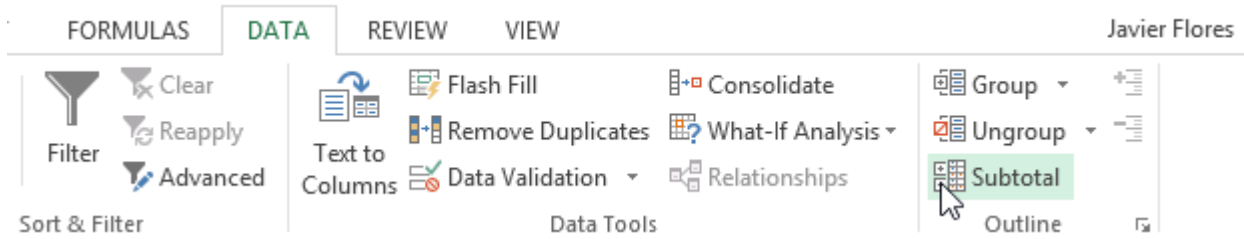
You can also use the **Show** and **Hide Detail** buttons to show and hide the groups within the outline.

	A	B	C	D	E
1	Homeroom #	First Name	Last Name	T-Shirt Size	Payment Date
10			Small Count	8	
21			Medium Count	10	
22	110	Kris	Ackerman	Large	Pending
23	135	Jordan	Weller	Large	1-Oct
24	135	Alex	Yuen	Large	5-Oct
25	105	Derek	MacDonald	Large	1-Oct
26	110	Regina	Olivera	Large	Pending
27			Large Count	5	
32			X-Large Count	4	
33			Grand Count	27	
34					

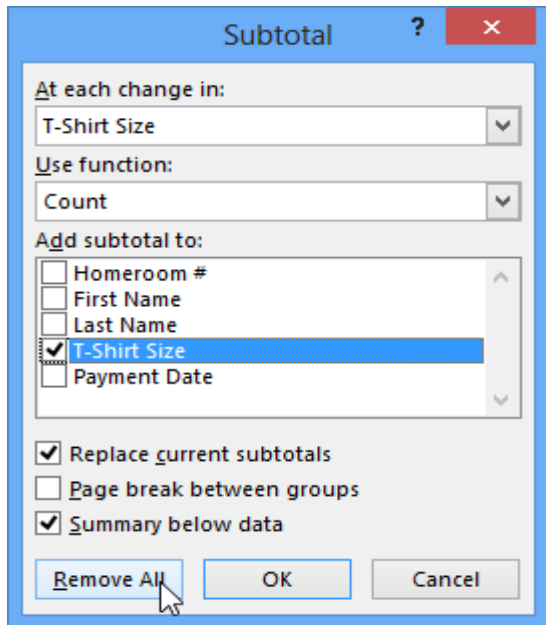
To remove subtotals:

Sometimes you may not want to keep subtotals in your worksheet, especially if you want to reorganise data in different ways. If you no longer want to use subtotaling, you'll need **remove it** from your worksheet.

1. Select the **Data** tab, then click the **Subtotal** command.

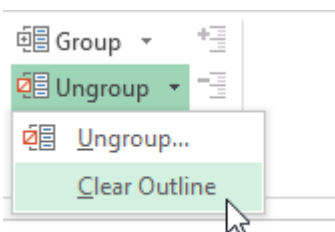


2. The **Subtotal** dialog box will appear. Click **Remove All**.



3. All worksheet data will be **ungrouped**, and the subtotals will be **removed**.

To remove all groups without deleting the subtotals, click the **Ungroup** command drop-down arrow, then choose **Clear Outline**.



Exercise!

1. Open an existing Excel workbook. If you want, you can use our **practice workbook**.
2. Try **grouping** a range of rows or columns together. If you are using the example, group columns **D** and **E**.
3. Use the **Show** and **Hide Detail** buttons to hide and unhide the group.
4. Try **ungrouping** the group. If you are using the example, **ungroup** columns **D** and **E**.
5. **Outline** your worksheet using the **Subtotal** command. If you are using the example, outline by **T-shirt size**.
6. **Remove subtotaling** from your worksheet.