How can I use Google Sheets to find the maximum value within each group of data?

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Google Sheets is a powerful tool that allows users to organize and analyze data in a spreadsheet format. One useful function of Google Sheets is the ability to find the maximum value within each group of data. This feature is especially helpful when working with large datasets that contain multiple groups of data. By using the MAX function and grouping the data by a specific criteria, users can easily identify the highest value within each group. This allows for efficient and accurate data analysis, making Google Sheets a valuable tool for managing and manipulating data.

Google Sheets: Find Max Value by Group

Often you may want to find the max value of some dataset in Google Sheets based on a category or group.

For example, suppose we have the following dataset and we'd like to find the max value of "points" for each team:

	A	B	C	D
1	**Team**	**Points**		
2	Mavs	22		
3	Mavs	26		
4	Mavs	18		
5	Warriors	19		
6	Warriors	14		
7	Lakers	22		
8	Lakers	29		
9	Lakers	33		
10	Heat	13		
11	Heat	19		
12	Heat	19		
13	Celtics	14		
14	Celtics	18		
15	Celtics	22		
16	Celtics	29		
17				
18				
19				

The following step-by-step example shows how to do so.

Step 1: Enter the Data

First, enter the data values into Google Sheets:

	A	B	C	D
1	**Team**	**Points**		
2	Mavs	22		
3	Mavs	26		
4	Mavs	18		
5	Warriors	19		
6	Warriors	14		
7	Lakers	22		
8	Lakers	29		
9	Lakers	33		
10	Heat	13		
11	Heat	19		
12	Heat	19		
13	Celtics	14		
14	Celtics	18		
15	Celtics	22		
16	Celtics	29		
17				
18				
19				

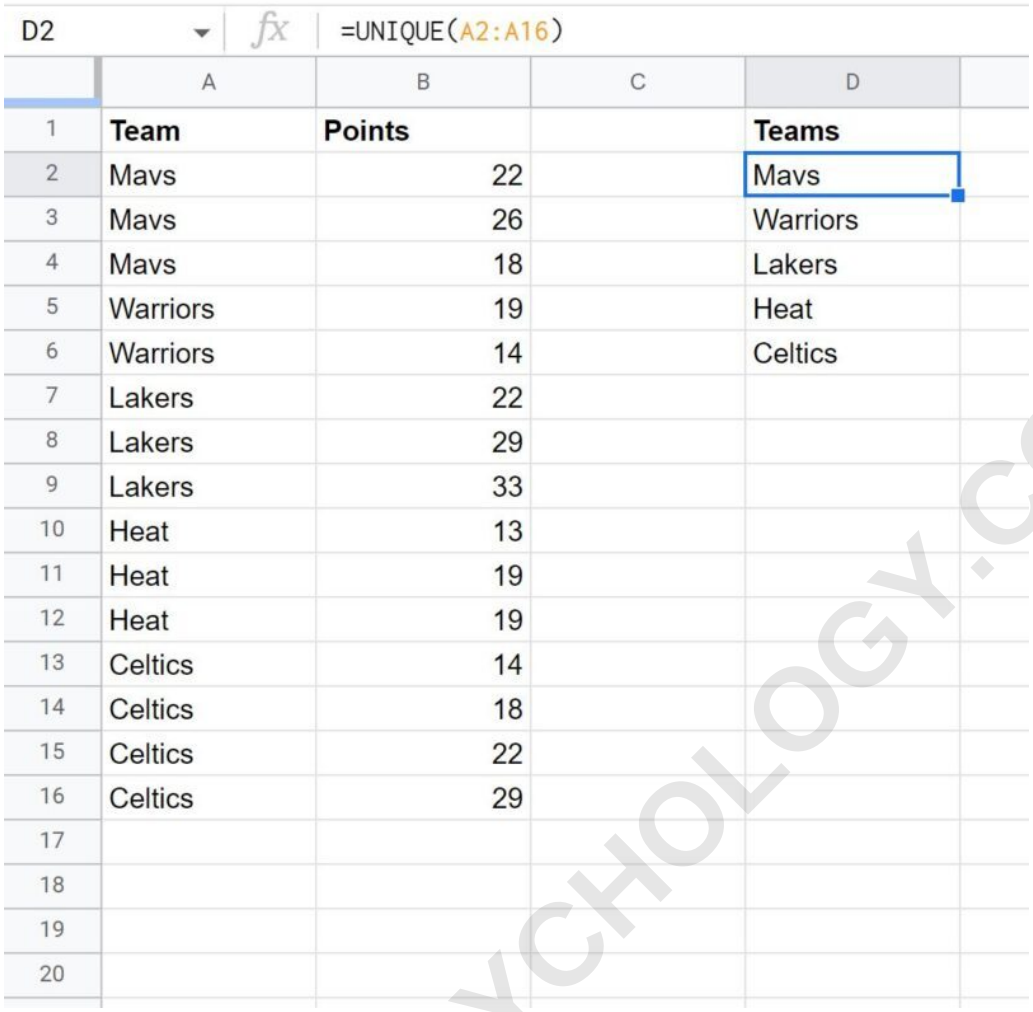
Step 2: Find the Unique Groups

Next, we need to use the =UNIQUE() function to produce a list of unique team names.

In our example, we'll type the following formula in cell D2:

=UNIQUE(A2:A16)

This will produce a list of unique teams:



D2 =UNIQUE(A2:A16)

	A	B	C	D
1	**Team**	**Points**		**Teams**
2	Mavs	22		Mavs
3	Mavs	26		Warriors
4	Mavs	18		Lakers
5	Warriors	19		Heat
6	Warriors	14		Celtics
7	Lakers	22		
8	Lakers	29		
9	Lakers	33		
10	Heat	13		
11	Heat	19		
12	Heat	19		
13	Celtics	14		
14	Celtics	18		
15	Celtics	22		
16	Celtics	29		
17				
18				
19				
20				

Step 3: Find the Max Value by Group

Next, we will use the following formula to find the max points scored by each team:

=ArrayFormula(MAX(IF(A:A=D2,B:B)))

We will type this formula into cell E2 and then drag it down to the remaining cells in column E:

E2 fx =ArrayFormula(MAX(IF(A:A=D2,B:B)))

	A	B	C	D	E
1	**Team**	**Points**		**Teams**	**Max Points**
2	Mavs	22		Mavs	26
3	Mavs	26		Warriors	19
4	Mavs	18		Lakers	33
5	Warriors	19		Heat	19
6	Warriors	14		Celtics	29
7	Lakers	22			
8	Lakers	29			
9	Lakers	33			
10	Heat	13			
11	Heat	19			
12	Heat	19			
13	Celtics	14			
14	Celtics	18			
15	Celtics	22			
16	Celtics	29			
17					
18					
19					
20					
21					

From the results we can see:

The max points scored by players on the Mavs is 26.The max points scored by players on the Warriors is 19.The max points scored by players on the Lakers is 33.The max points scored by players on the Heat is 19.The max points scored by players on the Celtics is 29.

Note: To calculate the minimum points scored by each team, simply replace the MAX in the formula with MIN.

The following tutorials explain how to perform other common tasks in Google Sheets: