

Chapter 6 / Example 1

Drawing a bar chart from a frequency table

In the opening problem, you studied the marks of 32 students who took a test with maximum mark 10. Their scores are listed below:

0, 1, 1, 2, 2, 2, 3, 3, 4, 4, 4, 5, 5, 5, 5, 5, 6, 6, 6, 6, 7, 7, 7, 7, 7, 7, 8, 8, 8, 8, 9, 10.

Construct a frequency table for this data, and draw a bar chart for it.

Open a new document and add a Lists & Spreadsheet page.

Type 'score' in the first cell.

Type each of the numbers from 0 to 10 in the first column.

Press **enter** or **▼** after each number to move to the next cell.

	A	B	C	D
1	0			
2	1			
3	2			
4	3			
5	4			

Note: The word 'score' is a label that will be used later to create the chart. You can use any letter or name to label the list.

Type 'f' in the cell to the right of 'score'.

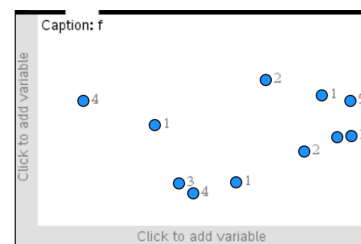
Enter the frequencies of each of the scores in the second column.

Use the **▲ ▼ ► ◀** keys on the touchpad to navigate the spreadsheet.

	A	B	C	D
1	score	f		
2	0	1		
3	1	2		
4	2	3		
5	3	2		
6	4	3		

Add a new Data & Statistics page to your document by pressing **ctrl** **doc** (**+** **page**) 5: Add Data & Statistics.

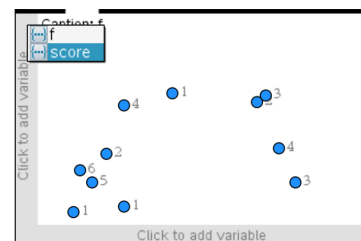
Note: Ignore the screen display that you see when this page first opens.



Press **menu** 2: Plot Properties | 5: Add X Variable.

The GDC displays the two variables you created in the spreadsheet: 'f' and 'score'.

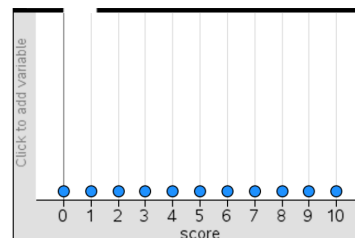
Select 'score' with the touchpad.



Chapter 6 / Example 1

Drawing a bar chart from a frequency table

The GDC displays the values of score that you entered in the spreadsheet on the x-axis.

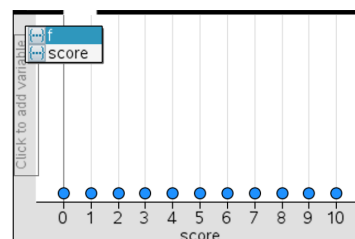


Press **menu** 2:Plot Properties | 9: Add Y Summary List.

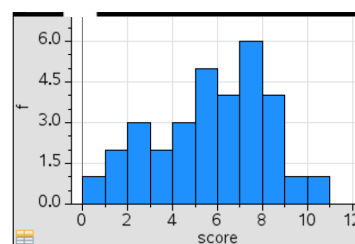
The GDC displays the two variables you created in the spreadsheet: 'f' and 'score'.

Select 'f' with the touchpad.

The term 'summary list' on this GDC is used to denote frequency.



The GDC displays a histogram of the data as this is the default display. Since this is discrete data, we use a bar chart rather than a histogram.



Press **menu** 2:Plot Properties | B:Force Categorical X

You will need to scroll down the menu to get to B, or you can type 'B' directly from the keyboard.

The GDC displays a bar chart with the test score on the x-axis, and the frequency (that is, the number of students who attained each score) on the y-axis.

