

We will use tables and graphs to organize, summarize, and present data.

**Def A** \_\_\_\_\_ or a \_\_\_\_\_ is a table where the first column gives values of the data (grouped into \_\_\_\_\_) and the second column gives the \_\_\_\_\_ of how many times the value(s) appear in the data set.

Suppose we collected the following data on the height of students in a class:

5'5", 5'6", 5'5", 5'2", 5'6", 5'2", 6'0", 5'10", 5'6" 5'7" 5'6" 5'4" 5'0" 5'8", 5'7", 6'0", 5'5", 5'3", 6'1", 5'0", 5'7", 5'11", 5'5", 5'4", 6'1", 5'5", 5'1", 5'8"

1. Organize the data into a frequency distribution in the table below.

Height	Height (in.)	Frequency
5'0"	60	
5'1"	61	
5'2"	62	
5'3"	63	
5'4"	64	
5'5"	65	
5'6"	66	
5'7"	67	
5'8"	68	
5'9"	69	
5'10"	70	
5'11"	71	
6'0"	72	
6'1"	73	

2. Create a frequency distribution with

(a). class width of 5

(b). class width of 2

(c). class width determined by formula using 5 classes

(d). class width of 10

**3.** For the frequency distribution with class width of 3 (i.e. 5 classes), construct the following.

(a). Relative Frequency Distribution

(b). Cumulative Frequency Distribution

(c). Histogram [Label the axes]

Does the data appear to be normally distributed?

4. Refer to the given Data Set 8: Forecast and Actual Temperatures and use the “Actual Low” temperature data.

(a). Construct a frequency distribution with a lower class limit of 39 and class width of 6.

(b). Construct a histogram (label axes).

(c). Does the data appear to be normally distributed?