Lesson 2-8

Example 1

HEALTH For an article he was preparing for a running magazine, David recorded the cholesterol levels of the twenty people on the magazine staff.

160	232	180	206	260
190	205	188	165	148
201	236	178	220	238
188	230	200	215	148

Construct a stem-and-leaf plot to display the data. Interpret the data using your plot.

Solution

For these data, the digits in the hundreds and tens columns form the stem, and the units digit is the leaf. Sort the data according to stems, and arrange the leaves in numerical order.
Be sure to provide a title and key for your plot.

Cholesterol Levels of Staff Members

Stems	Leaves
14	8 8
15	
16	0 5
17	8
18	0 8 8
19	0
20	0 1 5 6
21	5
22	0
23	0 2 6 8
24	
25	
26	0

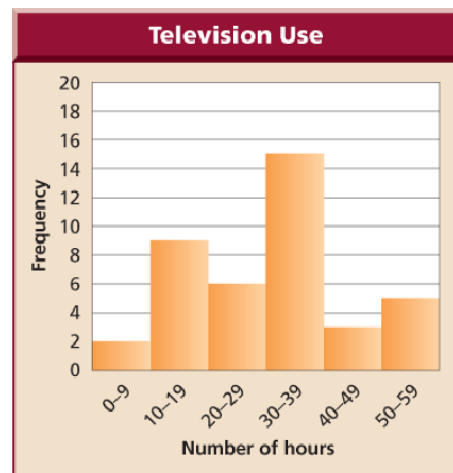Key : 14|8 represents a cholesterol level of 148

Example 2

The City Gazette surveyed 40 families and asked them to record the number of hours per week their television was in use. The results are shown in this frequency table. Construct a histogram to display these data.

Television Use

Number of Hours	Frequency
0-9	2
10-19	9
20-29	6
30-39	15
40-49	3
50-59	5

Solution

Let the horizontal axis represent the number of hours, and the vertical axis represent the frequency. Draw each bar so that its height corresponds to the frequency of the interval it represents.

Example 3

SPREADSHEET A class earned the following scores on a math test: 92, 89, 76, 68, 90, 92, 96, 74, 90, 88, 86. Make a frequency table and histogram of the data.

	A	B
1	Scores	Frequency
2	61-70	1
3	71-80	2
4	81-90	5
5	91-100	3

Solution

Create a frequency table on a spreadsheet. Use the intervals 61-70, 71-80, 81-90, and 91-100. Highlight the cells and select CHART from the INSERT menu. From the list of charts and graphs, choose bar graph. Add titles and your histogram is complete.