## Mid-Chapter Check

## **Vocabulary Check**



1. **Be Precise** Define *histogram*. Use the data set {26, 37, 35, 49, 54, 53, 30, 36, 31, 28, 29, 33, 38, 47, 54, 50, 37, 26, 35, 51} to make a histogram. (Lesson 2)

A type of bar graph used to display numerical data that have been organized into equal intervals.



## Skills Check and Problem Solving

Make a line plot for each set of data. Then describe the data. (Lesson 1)

**2.** {36, 43, 39, 47, 34, 43, 47, 39, 34, 43}



Sample answer: There are 10 pieces of data;

mean: 40.5; median: 41; mode: 43; The

median means that one half of the data is greater than 41 and one half is less.

**3.** {63, 54, 57, 63, 52, 59, 52, 63, 61, 54}

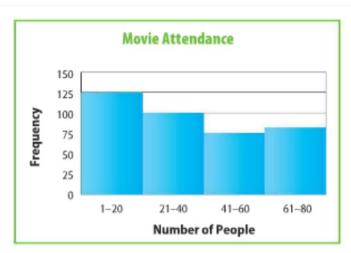


There are 10 pieces of data; mean: 57.8;

median: 58; mode: 63; The median means

that one half of the data is greater than 58 and one half is less.

- 4. The histogram shows a movie theater's attendance each time a movie is shown. Describe the data in the histogram. (Lesson 2) Sample answer: More movies had an attendance between 1 and 20 people than any other range. Less movies had an attendance between 41 and 60 people than any other range.
- **5.** Persevere with Problems In a box plot, the first quartile, median, and third quartile are x, y, and 70, respectively. Give possible values for x and y according to each of the following conditions. (Lesson 3)



- a. The median separates the box into two quartiles, each with the same range. Sample answer: x = 60, y = 65
- **b.** The box between the median and the third quartile is twice as long as the box between the median and the lower quartile. Sample answer: x = 64, y = 66