PERIOD

NAME

13 - 3

## Histograms (Pages 722–728)

A **histogram** is a special type of bar graph in which the data are organized into intervals. The **frequency**, or number of values in each interval, determines the height of each bar in a histogram. The frequency can be found in a **frequency table**, which displays each interval's amount of data. When analyzing a histogram, note that the horizontal axis shows the range of data separated into **measurement classes** and the vertical axis shows the frequency.

## Practice

Mrs. Jackson has a total of 100 students who participated in a stock market game. The students followed one stock each for a span of two weeks, then recorded the stocks current value compared to the stocks original value. For example, a stock that was originally \$10.00 per share and is now \$9.00 per share would be worth 90% of its original value. The histogram displays the percent of value of the stocks monitored by Mrs. Jackson's students. Use this information to answer the following questions.



- 1. In which interval does the median appear?
- **2.** When looking at the distribution of the data, are there any intervals with no data? If so, which interval has no data?
- **3.** When looking at the distribution of the data, would you say that the data are symmetrical? Why or why not?
- 4. How many students have a current stock value that is 50%-60% of the original value?
- 5. Which interval has the most elements?
- **6. Standardized Test Practice** According to the information in the histogram, which of the following is a true statement?
  - **A** The value of every stock is less than or equal to the original value.
  - **B** Most stocks are currently 50%-60% of their original value.
  - **C** Some stocks increased in value over the two-week span.
  - **D** The 0% 10% interval contains the least amount of data.

A. 3. No, the distribution is skewed to the right. 4. 7 5. 80%–20% 5. No, the distribution is skewed to the right. 4. 7 5. 80%–90% 6. A