DATE

## **Lesson 6 Homework Practice**

## Analyze Data Distributions

- **1. CARNIVALS** The number of people that attended the carnival each year is shown in the graph at the right.
  - **a.** Describe the shape of the distribution. Identify any clusters, gaps, peaks, or outliers.

The distribution is not symmetric. There is a cluster between 2012 and 2013 and a peak at 2013. There are no gaps and no outliers.

**b.** Describe the center and spread of the distribution. Justify your response based on the shape of the distribution.

The distribution is not symmetric, so the median and interquartile range are appropriate measures to use. The data are centered around the median 21.5. The spread of the data around the center is 13.5.

- **2. APPLES** Mr. Kelly's homeroom went apple picking. The line plot shows the number of pounds of apples that were collected.
  - **a.** Describe the shape of the distribution. Identify any clusters, gaps, peaks, or outliers.

The distribution is symmetric. There is a cluster from 18 to 22, no gaps, a peak at 20, and no outliers.

**b.** Describe the center and spread of the distribution. Justify your response based on the shape of the distribution.

The distribution is symmetric, so the mean and mean absolute deviation are appropriate measures to use. The data are centered around the mean of 20. The spread of the data around the center is about 0.9.

- **3. TEMPERATURE** The line plot shows the high temperatures for various days through the summer.
  - **a.** Describe the shape of the distribution. Identify any clusters, gaps, peaks, or outliers.

The distribution is not symmetric. There is a cluster from 97 to 98 and 101 to 102. There is a gap between 98 and 101. The peak is at 101 and there are not outliers.

**b.** Describe the center and spread of the distribution. Justify your response based on the shape of the distribution.

The distribution is not symmetric, so the median and interquartile range are appropriate measures to use. The data are centered around the median 101. The spread of the data around the center is 3.



**High Temperatures** 

×××

98

99

100

X

97

××××××

101



102