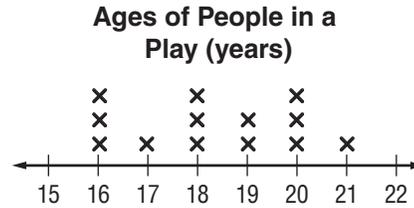# Lesson 6 Skills Practice

Analyze Data Distributions

1. **AGES** The graph shows the ages of people in a play.

   a. Describe the shape of the distribution. Identify any clusters, gaps, peaks, or outliers.

   The distribution is not symmetric. There is a cluster between 18 and 20 and no gaps. There are three peaks at 16, 18, and 20 and no outliers.
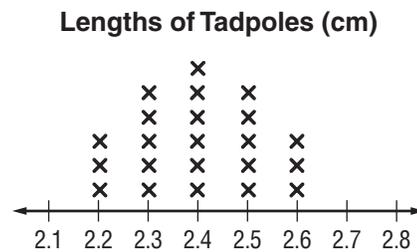
Ages of People in a Play (years)

   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 18. The spread of the data around the center is 4.

2. **SCIENCE** The graph shows the lengths of tadpoles in a small puddle.

   a. Describe the shape of the distribution. Identify any clusters, gaps, peaks, or outliers.

   The distribution is symmetric. The data are clustered between 2.2 and 2.6. There are no gaps and the peak is at 2.4. There are no outliers.

Lengths of Tadpoles (cm)

   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 surrounded by the mean of 2.4. The spread of the data around the center is 0.1375.