

# 9.4 - Choosing a Data Display – Part 2

## KEY CONCEPTS

|                     |  |  |   |
|---------------------|--|--|---|
| <b>Data Display</b> | <b>What does it do?</b>  |  |   |
| <b>Pictograph</b>   | shows data using pictures                                      |  | <b>Stem-and-Leaf Plot</b> orders numerical data and shows how they are distributed                            |
| <b>Bar Graph</b>    | shows data in specific categories                              |  | <b>Box-and-Whisker Plot</b> shows the variability of a data set by using quartiles                            |
| <b>Circle Graph</b> | shows data as parts of a whole                                 |  | <b>Dot Plot</b> shows the number of times each value occurs in a data set                                     |
| <b>Line Graph</b>   | shows how data change over time                                |  | <b>Scatter Plot</b> shows the relationship between two data sets by using ordered pairs in a coordinate plane |
| <b>Histogram</b>    | shows frequencies of data values in intervals of the same size |  |   |

Choose an appropriate data display for the situation. Explain your reasoning.

- 1) the price of a stock over the last 5 years
  
- 2) the numbers of breads, rolls, muffins, and cookies baked this week
  
- 3) the number of runners in each 10-year age bracket
  
- 4) the comparison of city population and the number of fire stations
  
- 5) An EMT wants to use a data display to show students the relationship between the speed of the vehicle and the number of accidents. Choose an appropriate data display for the situation. Explain your reasoning.

- 6) What type of data display is appropriate for showing the averages of data over a period of time?
- 7) The home insurance industry wants to use a data display to show the variability in the costs of insurance for a \$200,000 home. Choose an appropriate data display for the situation. Explain your reasoning.
- 8) A nutritionist wants to use a data display to show kindergarteners the recommended amounts of fruits, vegetables, breads, meats, and dairy that should be consumed each day. Choose an appropriate data display for the situation. Explain your reasoning.
- 9) The Smithsonian has been collecting data over the last 60 days. They want to use a data display to both put the data in order and to display how the data is distributed. Choose an appropriate data display for the situation. Explain your reasoning.

Explain why the data set is misleading.

