Name _KEY '15_____ Date_____

9.4 - Choosing a Data Display – Part 2

KEY CONCEPTS

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

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

1) the price of a stock over the last 5 years

Line graph because it shows how data changes over time.

2) the numbers of breads, rolls, muffins, and cookies baked this week

Bar graph because it shows data in categories.

3) the number of runners in each 10-year age bracket

Histogram because it shows frequency in same size intervals.

4) the comparison of city population and the number of fire stations

Scatter plot because it shows a relationship between two data sets.

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.

Scatter plot because it shows a relationship between two data sets.

6) What type of data display is appropriate for showing the averages of data over a period of time?

Line graph because it shows how data change over 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.

Box and whisker plot because it shows variability of data

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.
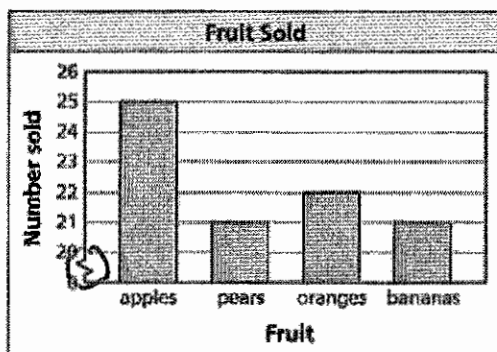
Pictograph shows data (in picture form) of specific categories.

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.

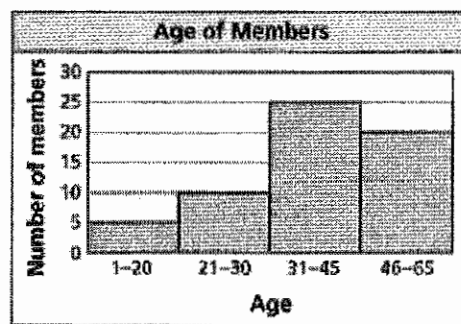Stem-and-Leaf plot because it orders data and shows the distribution.

Explain why the data set is misleading.

10)

The frequency (y-axis) is skewed because of the saw tooth which makes it look like way more apples were sold when that is not the case.

11)

The intervals are not even so the data is skewed.