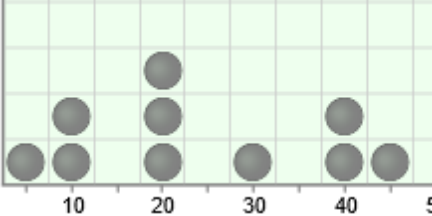


Vocabulary: Describing Data Using Statistics



Vocabulary

- **Line plot** – a graph in which each data value is represented by a dot above a number line.
 - For example, the line plot at right represents the following data set: 5, 10, 10, 20, 20, 20, 30, 40, 40, 45.
 - Line plots are also known as *dot plots*.
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- **Mean** – the sum of all the values in a data set divided by the number of values.
 - The mean of the data set 20, 30, 50, 60 is $\frac{20 + 30 + 50 + 60}{4} = \frac{160}{4} = 40$.
 - **Median** – the middle value in a set of numbers.
 - Before finding the median, all data should be in order from least to greatest.
 - If there is an odd number of values, the median is the middle number.
 - The median of the data set 20, 30, 50, 60, 80 is 50.
 - If there is an even number of values, the median is the mean of the middle two values.
 - The median of the data set 30, 50, 60, 80 is $\frac{50 + 60}{2} = \frac{110}{2} = 55$.
 - **Mode** – the most common value in a data set.
 - The mode of the data set 40, 40, 50, 70, 90 is 40 because 40 is the most common value.
 - **Outlier** – a value that is significantly different from the other values in a data set.
 - For example, in the data set 10, 10, 20, 30, 100, the number “100” may be considered an outlier.
 - **Range** – the difference between the greatest and least value in a data set.
 - The range of the data set 10, 20, 60, 80, 90 is $90 - 10 = 80$.