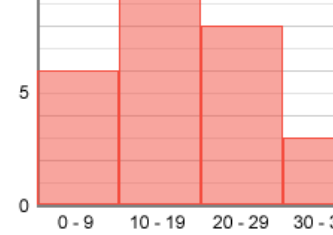# Vocabulary: Stem-and-Leaf Plots

📖 Vocabulary

- <u>Histogram</u> – a graph that uses bars or rectangles to show how many data values are in each interval.

    - On a histogram, the *x*-axis is divided into equal-sized intervals.

    - The frequency of data values in each interval is shown by the height of the bars in the histogram.

- <u>Mean</u> – the sum of all the values in a data set divided by the number of values.

    - For example, the mean of the data set 2, 3, 5, 6 is $\frac{2+3+5+6}{4} = \frac{16}{4} = 4$.

- <u>Median</u> – 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.

        - For example, the median of the data set 2, 3, 5, 6, 8 is 5.

    - If there is an even number of values, the median is the mean of the middle two values.

        - For example, the median of the data set 3, 5, 6, 8 is $\frac{5+6}{2} = \frac{11}{2} = 5.5$.

- <u>Mode</u> – the most common value in a data set.

    - For example, the mode of the data set 4, 4, 5, 7, 10 is 4 because 4 is the most common value.

- <u>Range</u> – the difference between the greatest and least value in a data set.

    - For example, the range of the data set 4, 4, 5, 7, 10 is 10 – 4 = 6.

- <u>Stem-and-leaf plot</u> – a graph that displays each data value as a "leaf" (final digit) next to its "stem" (preceding digits).

    - The stems are written vertically, and the leaves are placed next to the stems.

    - The stem-and-leaf plot shown models the data set 22, 24, 29, 33, 34, 37, 37, 41, 44, 45, 51, 53.

        - For example, "51" is displayed as the leaf (1) next to its stem (5).

Stem-and-leaf plot

2	2 4 9
3	3 4 7 7
4	1 4 5
5	1 2

Key: 2 │ 2 means 22