

Distribution of a quantitative variable	Tells us what values a variable takes and how often it takes them.  Shows the pattern of variation of a (quantitative) variable.
Stem-and-leaf plot	A sideways histogram that shows the individual values. Bins/intervals might be the tens places with the ones places strung out sequentially to the right.
Back-to-back stem-and-leaf plot	Useful for comparing two related distributions with a moderate number of observations.
Dotplot	Graphs a dot for each case against a single axis. (see pg. 49)
(Relative Frequency) Histogram	Uses adjacent, equal-width bars to show the distribution of values in a quantitative variable. Each bar represents the (percentage) count falling in a particular interval of values. (% are useful for comparing several distributions with different numbers of observations.)
A good estimate for how many bars will give a decent histogram =	$\frac{\text{Number of observations}}{5}$
Once we make a picture, we describe a distribution by telling about its	Shape, center, spread, and any unusual features.
Shape	Uniform, single, multiple modes  Symmetry vs. skewed
Uniform	A distribution that is roughly flat.
Mode	A hump or local high point in the shape of the distribution of a variable (unimodal, bimodal, multimodal).
Symmetric	A distribution where the two halves on either side of the center look approximately like mirror images of each other.
Skewed (left/right) [Strewn or drawn out] (see pg. 51)	A non-symmetrical distribution where one tail stretches out further (to the left/right) than the other.
Center	A "typical" value that attempts the impossible, summarizing the entire distribution with a single number. {midpoint}
Spread	A numerical summary of how tightly the values are clustered around the "center." {range}
Outliers	Extreme values that don't appear to belong with the rest of the data.

