A	B
bar graph	A graphic form using bars to make comparisons of statistics.
box-and-whisper plot	A diagram that summarizes data using the median, the upper and lower quartiles, and the extreme values. A box is drawn around the quartile values and whiskers extend from each quartile to the extreme data points.
cluster	Data that are grouped closely together.
data	Pieces of information, often numerical, which are gathered for statistical purposes.
frequency table	A table for organizing a set of data that shows the number of pieces of data that fall within given intervals or categories.
histogram	A special kind of bar graph in which the bars are used to represent the frequency of numerical data that have been organized in intervals.
interquartile range	The range of the middle half of a set of numbers. (UQ - LQ)
interval	On a scale, the difference between the greatest and the least values in each category.
line graph	A type of statistical graph using lines to show how values change over a period of time.

line plot	A graph that uses an X above a number on a number line each time that number occurs in a set of data.
lower extreme	The least number of a set of data.
lower quartile	The median of the lower half of a set of number (LQ)
mean	The sum of the data divided by the number of items in the data set (average).
measures of central tendency	Numbers that are used to describe the center of a set of data (mean, median, and mode).
median	The middle number in a set of data when the data are arranged in numerical order from least to greatest.
mode	The number or numbers that occur most often in a set of data.
outlier	A piece of data that is quite separated from the rest of the data.
range	The difference between the greatest and the least numbers in a data set.
scale	The set of all possible values of a given measurement, including the least and greatest numbers in a set, separated by equal intervals.
scatterplot	Two sets of data are plotted as ordered pairs on the same graph.
statistics	The study of collecting, organizing and interpreting data.

stem-and-leaf plot	A system used to condense a set of data where the greatest place value of the data froms the stem and the next greatest place value forms the leaves.
upper extreme	The greatest number of a set of data.
upper quartile	The median of the upper half of a set of numbers (UQ).

A	B
observational study	a researcher observes and measures characteristics of interest of part of a population.
experiment	a treatment is applied to part of a population, and responses are observed.
simulation	the use of a mathematical or physical model to reproduce the conditions of a situation or process.
survey	an investigation of one or more characteristics of a population.
census	a measurement of an entire population
sampling	a measurement of part of a population
stratified sample	has members from each segment of a population. This ensures that each segment from the population is represented.
cluster sample	has all members from randomly selected segments of a population. This is used when the population falls into naturally occurring subgroups.
systematic sample	is a sample in which each member of the population is assigned a number. A starting number is randomly selected and sample members are selected at regular intervals.
convenience sample	consists only of available members of the population.

Qualitative Data	Consists of attributes, labels, or nonnumerical entries.
Quantitative Data	Consists of numerical measurements or counts.
Nominal	Calculated using names, labels, or qualities. No mathematical computations can be made at this level.
Ordinal	Arranged in order, but differences between data entries are not meaningful.
Interval	Arranged in order, the differences between data entries can be calculated.
Ratio	similar to the interval level, but a zero entry is meaningful.
Data	consists of information coming from observations, counts, measurements, or responses.
Statistics	is the science of collecting, organizing, analyzing, and interpreting data in order to make decisions.
Population	the collection of all outcomes, responses, measurement, or counts that are of interest.
Sample	a subset of a population.
Parameter	a numerical description of a population characteristic.
Statistic	a numerical description of a sample characteristic.

Descriptive statistics	Involves the organization, summarization, and display of data.
Inferential statistics	Involves using a sample to draw conclusions