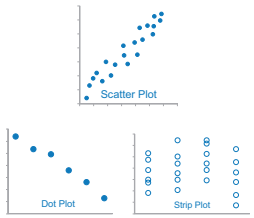
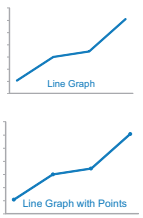
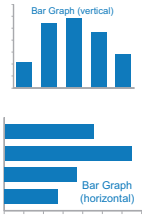
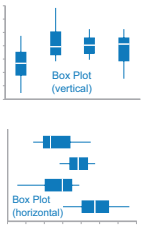
perceptual edge

Graph Selection Matrix

Featured Relationships	Value-Encoding Objects: Points	Lines	Bars	Boxes
				
Time Series Values display how something changed through time (yearly, monthly, etc.)	**Sometimes** (As a *dot plot*, if values occur at irregular intervals of time)	**Often** (To feature overall trends and patterns and to support their comparisons)	**Sometimes** (Vertical bars only, to feature individual values and to support their comparisons)	**Sometimes** (Vertical boxes only, to display how a distribution changes through time)
Ranking Values are ordered by size (descending or ascending)	**Sometimes** (As a *dot plot*, especially when the quantitative scale does not begin at zero)	**Sometimes** (As a *bumps chart*, to show how rankings change through time)	**Often**	**Sometimes** (To display a ranked set of distributions)
Part-to-Whole Values represent parts (proportions) of a whole (for example, regional portions of total sales)	**Sometimes** (Especially when the visual weight of bars creates excessive clutter)	**Sometimes** (To display how parts of a whole have changed through time)	**Often**	**Sometimes** (When displaying typical part-to-whole values along with the ranges across which they vary)
Deviation The difference between two sets of values (for example, the variance between actual and budgeted expenses)	**Sometimes** (As a *dot plot*, especially when the quantitative scale does not begin at zero)	**Often** (When also featuring a time series)	**Often**	**Sometimes** (When displaying typical deviation values along with the ranges across which they vary)
Distribution Counts of values per interval from lowest to highest (for example, counts of people by age intervals of 10 years each)	**Often** (As a *strip plot*, to feature individual values in one or more distributions)	**Often** (As a *frequency polygon*, to feature the overall shape of one or more distributions)	**Often** (As a *histogram*, especially when displaying a single distribution)	**Often** (Only when comparing multiple distributions)
Correlation Comparison of two or more sets of values to determine if there is a relationship between them	**Often** (As a *scatter plot*, when displaying the relationship between two sets of values)	**Sometimes** (Only when summarizing correlations as lines of best fit without displaying individual correlation values)	**Sometimes** (As a *table lens*, especially when your audience is not familiar with *scatter plots*)	**Never**
Geospatial Values are located in space (e.g., on a map) to show their location	**Often** (As bubbles of various sizes on a map)	**Sometimes** (To display routes on a map)	**Sometimes** (Only when there is enough space for bars to vary enough in length for easy comparisons)	**Never** (Although you might want to show distributions using boxes on a map, it isn't practical)
Nominal Comparison A simple comparison of unordered discrete values	**Sometimes** (As a *dot plot*, especially when the quantitative scale does not begin at zero)	**Never**	**Often**	**Never** (A nominal comparison consists solely of discrete values along a nominal scale)