

■ Chart Cheat Sheet: Which Columns to Use?

Category	Chart	X-axis	Y-axis / Data	Notes
Distribution	Histogram	Numeric	Count (auto)	Shows frequency distribution
Distribution	Density Plot (KDE)	Numeric	Probability Density	Smooth version of histogram
Distribution	Boxplot	Numeric	Category (optional)	Spread, median, outliers
Comparison	Bar/Column	Categorical	Numeric	Compare categories
Comparison	Count Plot	Categorical	Count (auto)	Frequency of categories
Comparison	Violin Plot	Categorical	Numeric	Boxplot + density
Trend	Line Chart	Time/Date	Numeric	Show trends over time
Trend	Area Chart	Time/Date	Numeric	Line chart with fill
Relationship	Scatter Plot	Numeric	Numeric	Relationship between 2 numbers
Relationship	Bubble Plot	Numeric	Numeric (+ size)	Bubble size = 3rd numeric variable
Relationship	Hexbin Plot	Numeric	Numeric	Density of scatter points
Relationship	Pair Plot	Multiple numeric	Multiple numeric	Scatter plots between all pairs
Proportion	Pie/Donut	Categorical	Numeric	Parts of a whole
Proportion	Treemap	Categorical	Numeric	Hierarchical proportions
Geographical	Map Plot	Longitude	Latitude	Tooltip/Color = extra info
Geographical	Choropleth	Region	Numeric	Shaded maps by value