Keyword/Expression	Example Questions	Type of Visualization
Compare categories	How do sales compare across regions?	Bar chart, Column chart, Dot plot, Grouped bar chart, Lollipop chart, Radar chart, Tornado chart
Show trends over time	What are the sales trends over the past five years?	Line chart, Area chart, Step chart, Sparkline, Time-series plot, Candlestick chart, Ribbon chart
Distribution	What is the distribution of customer satisfaction scores?	Histogram, Box plot, Violin plot, Density plot, Raincloud chart, Ridgeline plot, Rug plot
Relationship between variables	Is there a relationship between marketing spend and sales?	Scatter plot, Bubble chart, Heatmap, Correlation matrix, Pair plot, Network diagram, Chord diagram
Part-to-whole	What percentage of total sales comes from each product?	Pie chart, Stacked bar chart, Treemap, Donut chart, Sunburst chart, Waterfall chart
Progress toward goal	How close are we to meeting our quarterly sales targets?	Bullet chart, Gauge chart, Progress bar, Thermometer chart, Radial progress chart
Correlation	Do higher prices correlate with lower sales?	Correlation matrix, Scatter plot, Bubble chart, Heatmap, Pair plot, Diverging bar chart
Anomalies or outliers	Are there any unusual spikes in sales data?	Box plot, Scatter plot, Z-score plot, Control chart, Funnel plot, Run chart
Show comparison of ranges	What is the range of temperatures across cities?	Range plot, Box plot, Violin plot, Error bars, Interval plot, Candlestick chart
Ranking	Which are the top-performing products this year?	Bar chart, Column chart, Dot plot, Lollipop chart, Slope chart, Bump chart
Deviation	How much do our actual sales deviate from the forecast?	Diverging bar chart, Waterfall chart, Dumbbell plot, Slope chart, Range bar chart
Flow or processes	What is the flow of users through our sales funnel?	Sankey diagram, Flow chart, Gantt chart, Process map, Alluvial diagram, Funnel chart
Geographical data	Where are our customers located globally?	Choropleth map, Heatmap, Scatter map, Bubble map, Cartogram, Hexbin map
Hierarchical data	How are our products categorized within our portfolio?	Treemap, Sunburst chart, Dendrogram, Circle packing, Icicle plot, Nested bar chart
Change over time	How have website visits changed month by month?	Line chart, Step chart, Ribbon chart, Slope chart, Sparklines
Frequency	How often do customers make repeat purchases?	Histogram, Bar chart, Dot plot, Frequency polygon
Cumulative data	What is the cumulative revenue by quarter?	Waterfall chart, Area chart, Cumulative frequency chart, Cumulative line chart
Comparison of subgroups	How do different age groups respond to our campaign?	Grouped bar chart, Stacked bar chart, Dot plot, Multiple line charts, Small multiples
Distribution comparison	How does the distribution of salaries differ by department?	Box plot, Violin plot, Ridgeline plot, Split violin plot, Density plot
Cycle or periodic data	What is the pattern of sales throughout the year?	Circular bar chart, Polar area chart, Radial bar chart, Cycle plot

Clusters or groupings	Which customer segments are most profitable?	Scatter plot, Clustered bar chart, K-means plot, Heatmap
Relationships in network data	How are different teams connected in our organization?	Network diagram, Chord diagram, Force-directed graph, Matrix plot
Highlight changes or transitions	How did the market share transition after the new product launch?	Step chart, Waterfall chart, Slope chart, Area chart
Summarize data with central values	What is the median income level among survey respondents?	Box plot, Violin plot, Mean plot, Strip plot
Flow or movement	What is the movement of goods from our warehouses?	Flow map, Sankey diagram, Alluvial diagram, Arrow chart
Probability distribution	What is the probability of machine failure over time?	Probability density plot, Violin plot, Histogram
Composition change over time	How has the composition of sales channels evolved?	Stacked area chart, Stacked bar chart, 100% stacked area chart
Time intervals	What is the project timeline for the new initiative?	Gantt chart, Timeline, Step line chart, Calendar heatmap
Multivariate data	What are the factors affecting product quality?	Parallel coordinates plot, Radar chart, Bubble chart, Star plot
Patterns and correlations	What patterns exist in customer behavior?	Heatmap, Scatter plot matrix, Pair plot, Correlation matrix
Magnitude of change	How much did revenue change year over year?	Bar chart, Column chart, Lollipop chart, Diverging bar chart
Forecasting or predictions	What are the predicted sales for next quarter?	Line chart with confidence intervals, Ribbon chart, Forecast plot
Outcomes or results	What are the results of the recent marketing campaign?	Bar chart, Pie chart, Dot plot, Likert scale chart
Resource allocation or budgeting	How are resources distributed across departments?	Waterfall chart, Sankey diagram, Gantt chart
Distribution by categories	How is revenue distributed across product lines?	Stacked bar chart, Grouped bar chart, Heatmap
Value ranges	What are the high and low temperatures across the country?	Box plot, Violin plot, Range chart, Error bar plot