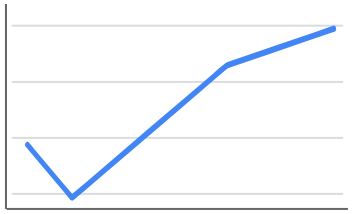
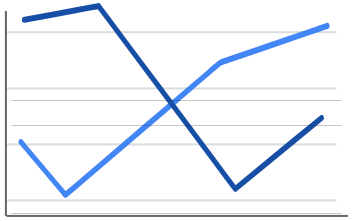
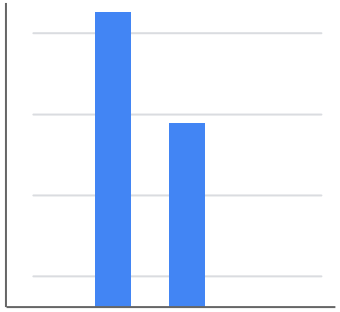
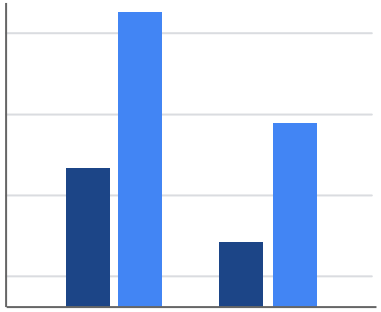
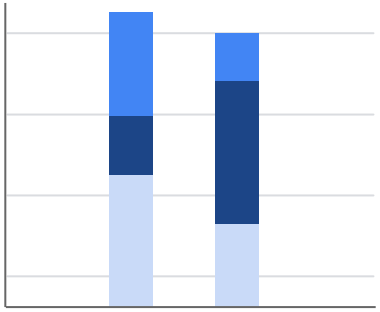
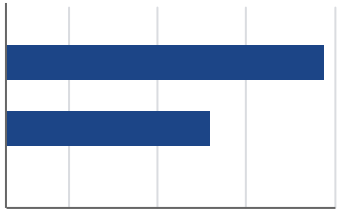
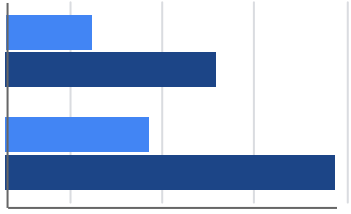
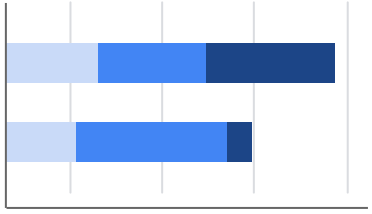
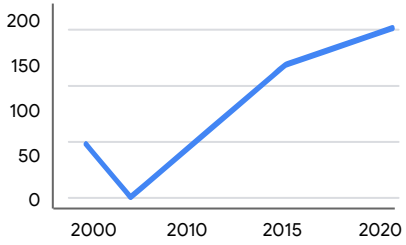
How to choose a data visualization

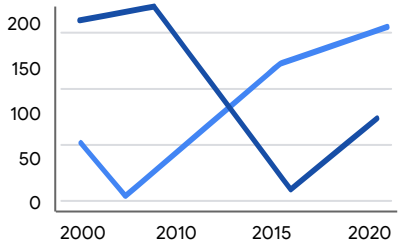
If your data has a changing variable

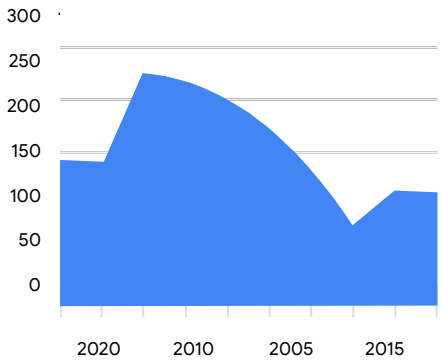
You can use these visualizations	Which look like this
Line charts Individual data points for a changing variable are connected with a continuous line Download a stacked line chart in Google Sheets	**Single:** when the changing variable is for a single category  **Stacked:** when the changing variable applies to more than one category and you want to compare categories 
Column charts (vertical bar charts) Individual data points for a changing variable are represented as ve tical columns **Note:** If the values being compared are vastly different, a column chart might be too tall. You can use a horizontal bar chart instead. Download examples in Google Sheets	**Single:** when the changing variable is for a single category  **Grouped:** when the variable change applies to more than one category and you want to compare categories  **Stacked:** when the variable change applies to more than one category and you want to compare categories without the spread of a group 
Horizontal bar charts Individual data points for a changing variable for one or more categories; these appear like rotated column charts Download examples in Google Sheets	**Single:** when the changing variable is for a single category  **Grouped:** when the variable change applies to more than one category and you want to compare categories  **Stacked:** when the variable change applies to more than one category and you want to compare categories without the spread of a group 

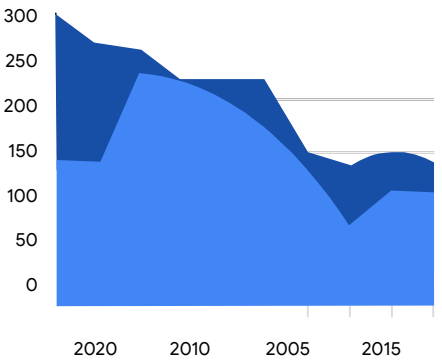
How to choose a data visualization

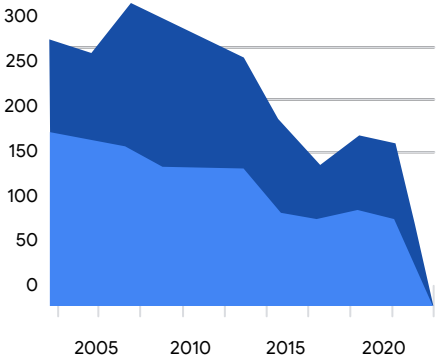
If your data has a changing variable measured over time	
You can use these visualizations	**Which look like this**
Line charts Individual data points for a changing variable are connected with a continuous line Download a stacked line chart in Google Sheets	The line charts are similar to those for a changing variable but **time** is shown on the x-axis **Single:** when the change over time is for a single item or classification **Stacked:** when the change over time is for multiple items or classifications
Area charts Individual data points for a changing variable are connected with a continuous line and the area under the line is filled in Download a stacked area chart in Google Sheets	**Single:** when the variable change is for a single category over time **Unstacked:** when data doesn't align on the x-axis (data is from different time points) **Stacked:** when data aligns on the x-axis (data is from the same time points)



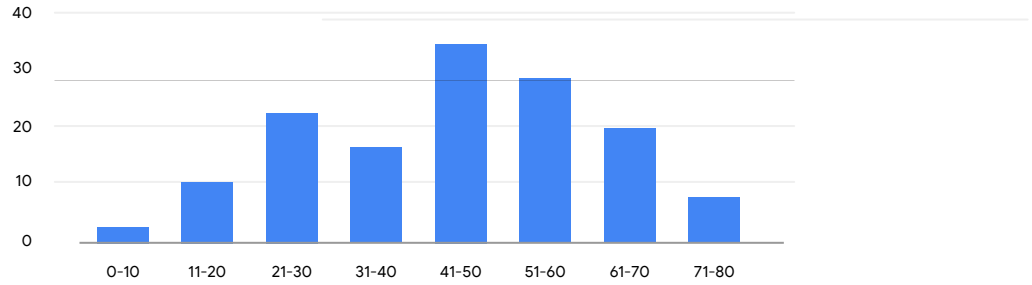
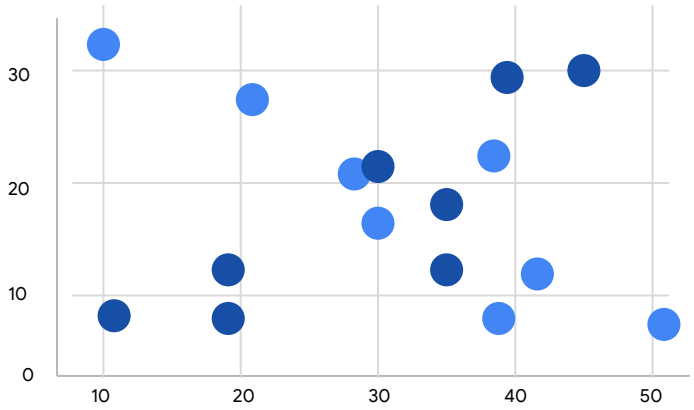
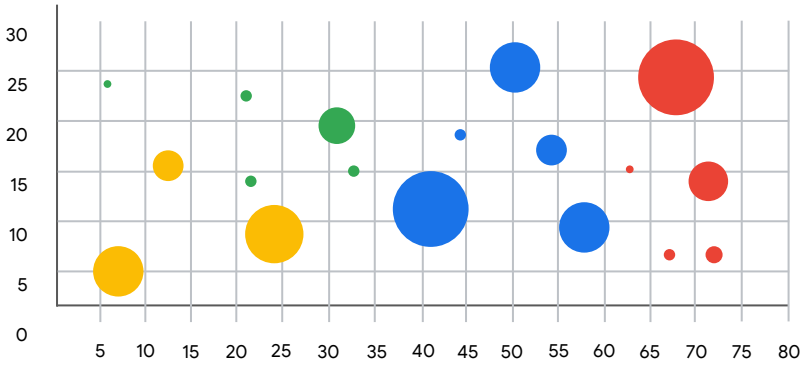




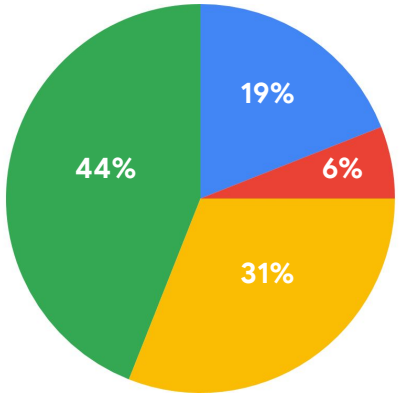
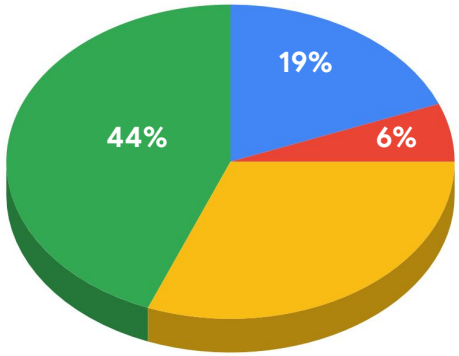
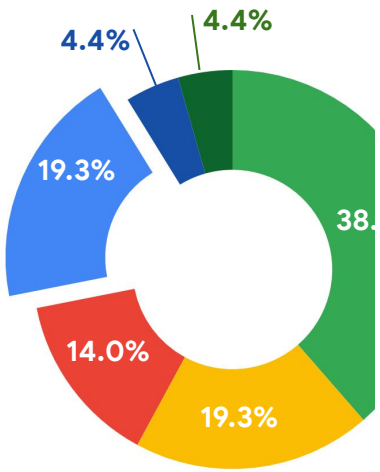
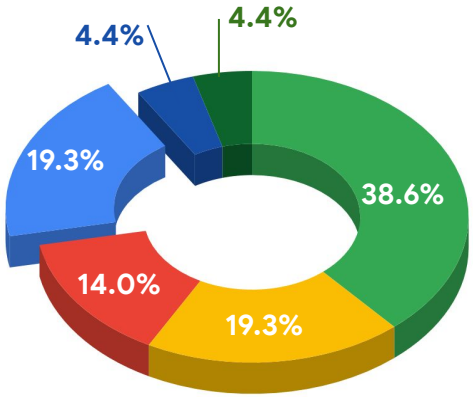




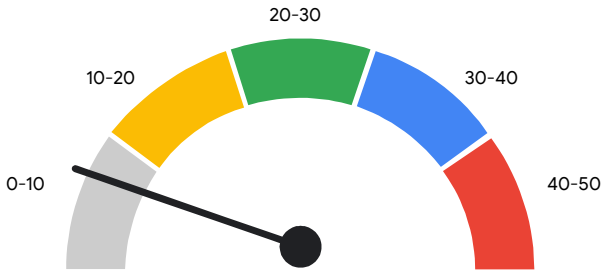
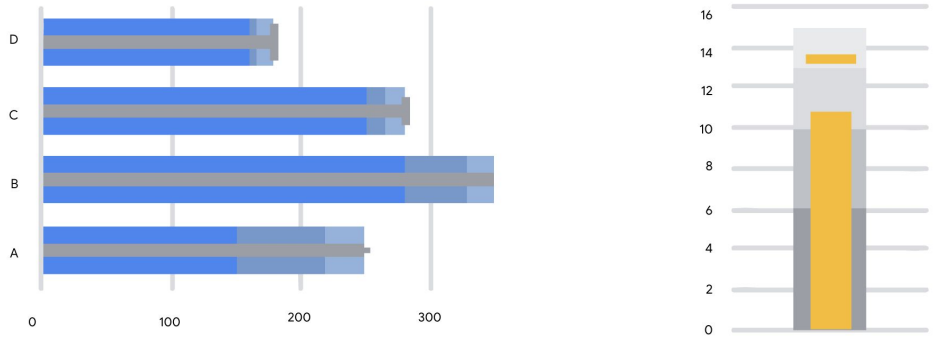
How to choose a data visualization

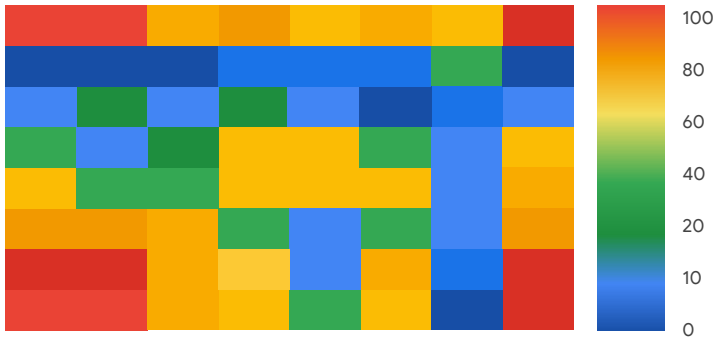
If your data has a numeric trend	
You can use these visualizations	**Which look like this**
Histograms Individual data points are categorized into columns that each represent a different range of values Download a histogram in Google Sheets	
Scatter charts Individual data points are displayed, but without a connecting line like in a line chart Download a scatter chart in Google Sheets	
Bubble charts Individual data points are displayed as bubbles like in a scatter plot, but numeric values are compared relative size of the bubbles Download a bubble chart in Google Sheets	

How to choose a data visualization

If your data has partial and whole results	
You can use these visualizations	**Which look like this**
Pie charts 2D or 3D proportions (slices) are shown adding up to a whole or 100% Download a 2D pie chart in Google Sheets	Two-dimensional:  Three-dimensional: 
Donut charts 2D or 3D proportions (segments) adding up to a whole or 100% Download a 2D donut chart in Google Sheets	Two-dimensional:  Three-dimensional: 

How to choose a data visualization

If your data is progressive	
You can use these visualizations	**Which look like this**
Gauge charts Single result is shown within a progressive range of values allowed Download gauge charts in Google Sheets	
Bullet charts Progressive result is shown as a horizontal or vertical bar chart moving towards a desired value	

If your data has intensity or frequency	
You can use these visualizations	**Which look like this**
Heat maps Results are shown by color gradations representing the strength or frequency of values; higher or more frequent values have more intense color	

How to choose a data visualization

If your data has intensity or frequency (continued)	
You can use these visualizations	**Which look like this**
Density maps Results are shown by color representing the number or frequency of data points in a given area on a map