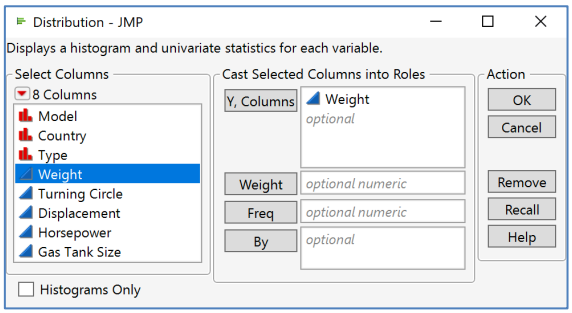
Histograms, Descriptive Statistics, and Stem and Leaf

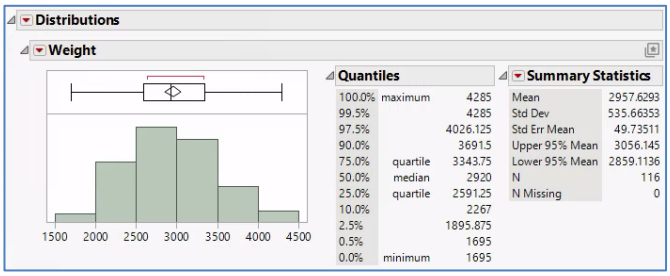
Use to summarize and display the distribution of continuous variables. Histograms and stem and leaf plots allow you to assess the shape, centering and spread of the data.

Histograms and Descriptive Statistics

1. From an open JMP® data table, select **Analyze > Distribution**.
2. Click on one or more continuous variables from **Select Columns**, and click **Y, Columns** (continuous variables have blue triangles).
3. Click **OK** to generate a histogram, outlier box plot and descriptive statistics.
   - The percentiles, including quartiles and the median, are listed under **Quantiles**.
   - The sample mean, standard deviation and other statistics are listed under **Summary Statistics**.

Car Physical Data.jmp (Help > Sample Data Folder)



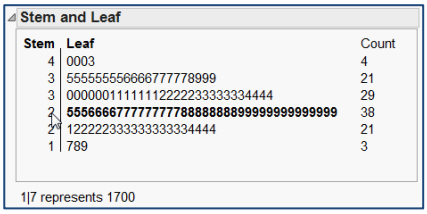


Tips:

- To change the display from vertical to horizontal (as shown), click on the **red triangle** next to the variable name and select **Display Options > Horizontal Layout**.
- Many other options on summarizing/analyzing a continuous variable is found under the **red triangle** for that variable.
- To display different summary statistics, use the **red triangle** next to **Summary Statistics**.
- To change the default display, go to **File > Preferences > Platforms > Distribution** and select options.

Stem and Leaf Plot

To generate a stem and leaf plot, click on the **red triangle** for the variable and select **Stem and Leaf**.



Tips:

- A key to interpret the values is at the bottom of the plot. The bottom three values are 1700, 1800, 1900. The top 4 values in this example is 4000, 4000, 4000, 4300 (Note: values have been rounded to the nearest 100).
- Click on values in the stem and leaf plot to select observations in both the histogram and the data table. Or, select bars in the histogram to select values in the stem and leaf plot and data table.

Visit **Discovering JMP > Visualize Your Data**, **Discovering JMP > Analyze Your Data > Analyze Distributions** and **Basic Analysis > Distributions** in **JMP Help** to learn more.