## Collecting, Analyzing, and Graphing Data

Collecting and analyzing data can help summarize the trends in data in a visually appealing graph. We'll take a look at some various types of graphs. We will also collect data, organize it in a table, and then make a graph.

Types of Graphs

## Types of Graphs

## Sample uses of graphs

A line graph can be used to show the rise in cost of a brand name of tennis shoes over the past three years.

A bar graph can be used to show the number of tennis shoes per store comparing the sales in four different stores.

A pie graph can be used to show the results of a survey which type of tennis shoe is the most popular.

A line plot can be used to show the number of pairs of tennis shoes sold per hour over a 3 hour period.

| Type of Graph | Description | Use |
| :---: | :--- | :--- |
| line | A graph that uses lines to <br> show changes in data | Shows how data changes <br> over a period of time |
| Bar | A graph that uses bars to <br> display data | Compares data, usually <br> have a number per category |
| Pie | A graph that uses a circle <br> to display data | Compares data, usually is <br> the results of a survey of a <br> whole amount |
| Line Plot | Dots or symbols that <br> represent clusters of data. | Displays the results of a <br> collection of data |

## Line Graph



## Bar Graph



## Pie Chart



## Line Plot

## Tennis Shoe Sales



