

**CONCEPT** Graphs are visual aids that provide summaries or can illustrate a complex process.

## BACKGROUND

The basic idea of graphs was first introduced in the 18th century by Swiss mathematician Leonhard Euler. He pioneered the field of graph theory. In this theory, a graph is an abstract representation of a number of points that are connected by lines. Each point is usually called a vertex (more than one are called vertices), and the lines are called edges.

## REAL WORLD CONNECTIONS

- When doing calculations in everyday life we need the basic knowledge of making use of graphs.
- Technology Usage
- Science Classes
- GPS Systems
- Energy Consumption in our homes
- Weather
- Surveys
- Tests
- Stock Market
- Monitor Body movement and functions (cholesterol, blood sugar, temperature)



## EXAMPLES

There are several different types of graphs. The most common are line graphs, bar graphs, and pie charts.

- Line graphs show you how numbers have changed over time. They are used when you have data that are connected, and to show trends.
- Bar graphs to show numbers that are independent of each other.
- Pie charts to show you how a whole is divided into different parts.

