

## Graphs Scientific Skills

To make an effective graph, students need to use the *scientific skill* of constructing a graph that has the correct parts put together in an effective way. Scientific thinking and content understanding are involved when the student later interprets the data in the graph and makes and writes a conclusion.

## Characteristics of an Exemplary Graph

- Type of graph appropriate for data (e.g., line plot for growth, temperature, and other things that change over time; bar graphs to show discrete things, such as the number of days for each kind of precipitation—rain, hail, snow, no precipitation—in a month)*
  
- Main title, and a title for each axis of the graph. In a controlled investigation, the manipulated (changed) variable is shown on the x-axis, the responding (measured) variable is shown on the y-axis.*
  
- Reasonable intervals, numbered and labeled accurately, for each axis*
  
- Data recorded:*
  - *accurately*
  
  - *completely*
  
  - *clearly*