Section 1.4 Presenting Scientific Data
(pages 22–25)
This section describes how scientists organize and communicate data.

Reading Strategy (page 22)
Comparing and Contrasting  After you read this section, compare the types of graphs by completing the table. For more information on this Reading Strategy, see the Reading and Study Skills in the Skills and Reference Handbook at the end of your textbook.

<table>
<thead>
<tr>
<th>Type of Graph</th>
<th>Description</th>
<th>Used For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line graph</td>
<td>A graph in which a line is plotted to describe changes that occur in related variables</td>
<td>Showing how a variable responds to changes in another</td>
</tr>
<tr>
<td>Bar graph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circle graph</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Organizing Data (pages 22–24)
1. Circle the letters of tools that scientists use to organize their data.
   a. the Internet  b. newspapers  c. graphs

2. The simplest way to organize data is to present them in a(n) __________.
   Circle the correct answer.
   line graph    bar graph    data table

3. Circle the letter of the place on a line graph where the manipulated variable is generally plotted.
   a. the y-axis    b. the x-axis    c. the run

4. On a line graph, the ratio of the vertical change to the corresponding horizontal change is called the line’s __________. Circle the correct answer.
   rise    run    slope
6. Scientists can report results of their experiments by writing in ____________ and by speaking at ____________.

7. Why is peer review an important part of scientific research?