Activity One

1. Graphs sometimes misrepresent the data that they are based on – accidentally or deliberately. Discuss with a classmate the headlines and graphs that follow.
   a. List the flaws in each graph.
   b. Discuss why each graph might have had these flaws.
   c. List the changes you would make so that each combination of headline and graph clearly and honestly tells a story.

i. Crime rates skyrocket!

![Graph showing crime rates increasing from January 2006 to July 2008.]

ii. New Zealand becomes couch potato nation!

![Bar chart showing percentage of children spending more than 3 hours watching TV from 2000 to 2008.]
iii. Sky Tower up there with the best of them!

Height of Tallest Buildings

iv. Students not drinking enough water

- Don't bring a drink to school
- Bring a water bottle to school
- Bring another type of drink to school

v. Students not getting healthy food message

Snacks Bought at Interval

<table>
<thead>
<tr>
<th>Snack</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana</td>
<td>🍌</td>
</tr>
<tr>
<td>Chips</td>
<td>🍟</td>
</tr>
<tr>
<td>Burgers</td>
<td>🍔</td>
</tr>
<tr>
<td>Apples</td>
<td>🍏</td>
</tr>
<tr>
<td>Chocolate</td>
<td>🍫</td>
</tr>
</tbody>
</table>
2. Choose one of the graphs in question 1 and recreate it, making the changes that you said were needed. Discuss your finished graph with a classmate.

Activity Two

Collect a variety of graphs from newspapers, the Internet, magazines, and/or technical journals. With a classmate, evaluate them according to these criteria:

A good graph:
- accurately shows the facts
- grabs the reader’s attention
- makes text more interesting
- shows trends or changes
- is clear and easy to read
- has a title and labels
- uses colour or patterns to show differences
- clearly shows what the data has to say.

(Statistics New Zealand)