### 1.2 Displaying Categorical Data Part 2

Next, we will cover pie charts (or pie graphs). You can use a pie chart when you want to emphasize each category's relation to the whole. Pie charts are challenging to make by hand, but technology will do the job for you.

NOTE: A pie chart must include all categories that make up a whole ( $100 \%$ ), which might mean adding an "other" category in some settings.


Use the website highschool.bfwpub.com/spa3e and click on "Go to Student Site" on the right hand side.

From here, you can access resources to create different charts/graphs.
An example would be on Page 16 of your textbook that shows you the step by step process of creating a pie chart and bar chart from a frequency table.

Here are some examples of pie charts:


Each section of a pie chart is created using the relative frequency of a set of data.
Therefore, if we know the frequency of the data, we can create a pie chart.

Some pie charts include the relative frequency on them, and some just have the individuals.
With the ones that do not have the percents, we have to estimate based on the size of the individual as it relates to the whole circle.


