



In these activities you will describe and compare distributions of different sets of data. After completing each activity, discuss and/or present your findings to the rest of the class.



### Activity 1 [Page 1.3]

1. Create two statistical questions you think you can answer using the 'all', 'max speed' plot. Share your questions and answers with a classmate. Explain why you think the questions are statistical questions.
  
2. Reset the page and choose the file that has the maximum speeds of land animals, all. Would you agree or disagree with the following statements? Explain your reasoning.
  - a. The lion is one of the fastest animals on the list.
  
  - b. The elephant is one of the slowest land animals.
  
  - c. The distribution of maximum speeds is skewed left.
  
  - d. The maximum speed of the cheetah is much faster than the maximum speeds of all of the other land animals.
  
3. Reset the page. Then select birds and create the graph of the maximum speeds of the birds.
  - a. Does the distribution of the maximum speeds of the selected birds seem skewed, moundshaped, or rectangular? Why or why not?



- b. Which of the following would you say describes the typical maximum speed of the birds on the list:
- 1) speeds from 32 mph (robin) to 90 mph (frigate bird);
  - 2) 79 – 80 mph (gyrfalcon, golden eagle, merganser, and albatross) and 60 – 61 mph (trumpeter swan, Canada goose, ostrich, and hummingbird);
  - 3) 120 mph (swift).
- c. Name the two birds with the lowest maximum speeds.



### Activity 2 [Page 2.2]

1. Reset page 2.2. Create a graph showing the maximum speeds of fish.
  - a. Is the distribution of the maximum speeds of fish skewed or relatively symmetric? Explain your thinking.
  - b. Describe any clusters or gaps you see in the distribution of the speeds of fish.
  - c. What is the range of the speeds of the selected fish?

