

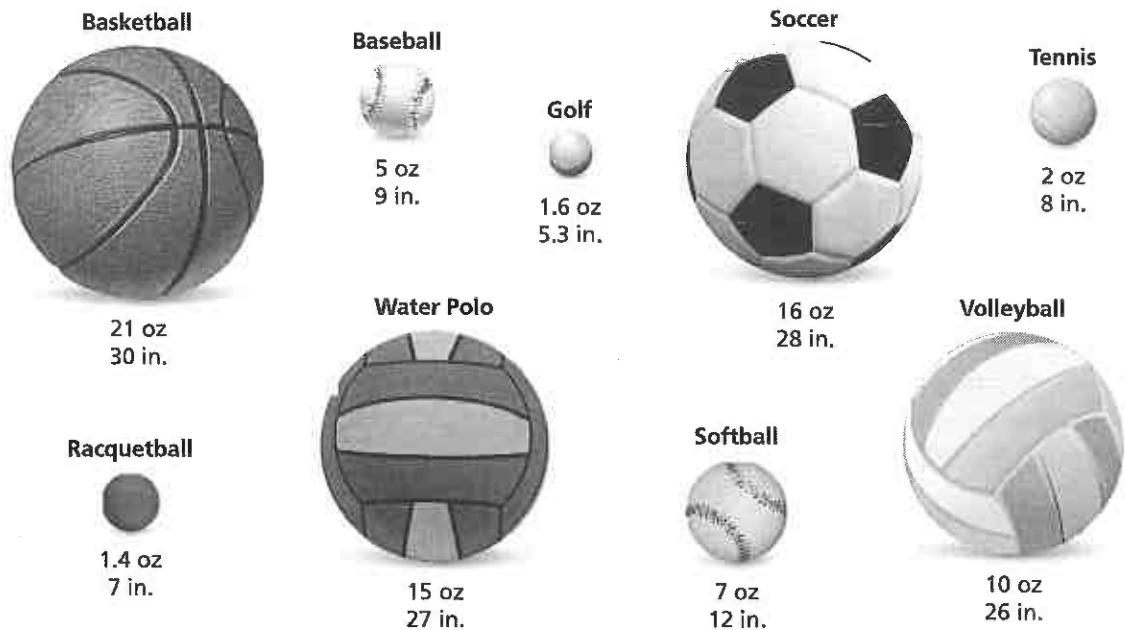
9.1

Scatter Plots
For use with Activity 9.1

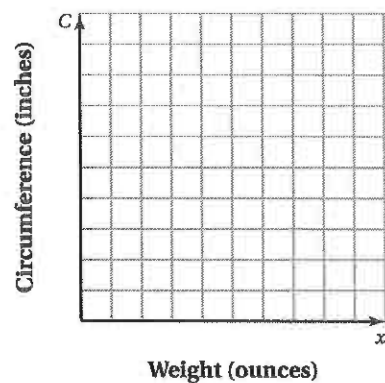
Essential Question How can you construct and interpret a scatter plot?

1 ACTIVITY: Constructing a Scatter Plot

Work with a partner. The weights x (in ounces) and circumferences C (in inches) of several sports balls are shown.



- Choose a scale for the horizontal axis and the vertical axis of the coordinate plane shown.
- Write the weight x and circumference C of each ball as an ordered pair. Then plot the ordered pairs in the coordinate plane.
- Describe the relationship between weight and circumference. Are any of the points close together?



9.1 Scatter Plots (continued)

- d. In general, do you think you can describe this relationship as *positive* or *negative*? *linear* or *nonlinear*? Explain.

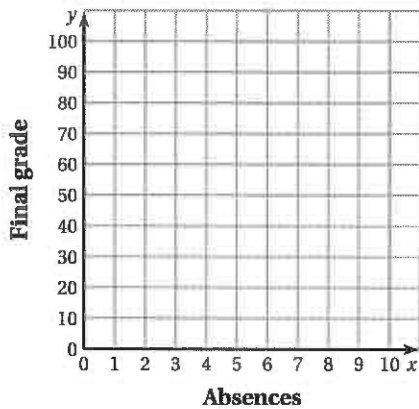
- e. A bowling ball has a weight of 225 ounces and a circumference of 27 inches. Describe the location of the ordered pair that represents this data point in the coordinate plane. How does this point compare to the others? Explain your reasoning.

2 ACTIVITY: Constructing a Scatter Plot

Work with a partner. The table shows the number of absences and the final grade for each student in a sample.

Absences	Final Grade
0	95
3	88
2	90
5	83
7	79
9	70
4	85
1	94
10	65
8	75

- a. Write the ordered pairs from the table. Then plot them in the coordinate plane.



- b. Describe the relationship between absences and final grade. How is this relationship similar to the relationship between weight and circumference in Activity 1? How is it different?