## Treasure Hunt Answers

- 1. A baseball infield is in the shape of a square, with each base at a vertex. The area is 90x90 square feet, or 8100 square feet, or 900 square yards.
- 2. The bases are 90 feet apart.
- 3. It is 60 feet, 6 inches from the pitchers mound to home plate.

  www.mlb.com/NASApp/mlb/mlb/baseball\_basics/mlb\_basics\_objectives.jsp

  \* is a Web site with all the rules of baseball.
- 4. There are 14 American League teams and 16 National League teams in the major leagues. Most of the teams are on the East Coast.

  www.ballparks.com/baseball/index.htm\* has a map of where the teams are located. (Click on facts and figures to see the maps.)
- 5. The Milwaukee Brewers, the Pittsburgh Pirates and the Detroit Tigers built stadiums in this century. Wrigley Field was built in 1926.

  www.ballparks.com/baseball/index.htm\* has a history of the teams and ballparks. (Click on facts and figures to the left.)
- 6. A baseball weighs 5 oz. It is 9 in. to 9.25 in. in circumference.
- 7. Home plate is 17 inches wide. Home plate is a pentagon with a top side of 17 inches; the two opposite parallel sides are 8 1/2 inches, and two 12 inch sides that meet at a vertex.
- 8. It takes .46 seconds for the ball to reach home plate (about half a second).
- 9. Students should measure the distance from their shoulders to their waist, half it, then measure from this point to the midpoint of their knee. The plate is 17 inches wide.
- 10. Third base is 127.28 feet ( $d^2 = 90^2 + 90^2$ ) or 127 feet, 3 3/8 inches. Same for home to second since it is a square. Pythagorean relationship is required.

See <a href="https://www.mlb.com/NASApp/mlb/mlb/baseball\_basics/mlb\_basics\_stats\_101.jsp">www.mlb.com/NASApp/mlb/mlb/baseball\_basics/mlb\_basics\_stats\_101.jsp</a>\* for definitions of the statistics kept in baseball.