



Dinosaur Bob and His Adventures with the Family Lazardo

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Program Description: Dinosaur Bob is a real friend with the Lazardo family, and...he plays baseball! LeVar spends spring training with the Oakland Athletics and gets baseball tips from the pros.

Math Concepts:

- estimation
- ordinal numbers
- measurement
- number sense
- four-sided geometric shapes
- statistics
- addition, subtraction, multiplication, division

• **Number sense.** Elicit students' prior knowledge of baseball while examining the use of number associated with the game. Work with the numbers from 1 to 10 and brainstorm examples of ways the numbers are used in baseball.

For example:

- 1** pitcher, 1 catcher, 1 ball in play, 1 batter at a time, 1 home plate, 1 designated hitter
- 2** teams play each other
- 3** bases, 3 outs, 3 strikes; a player has a "Triple Crown" if he/she has the best batting average, most home runs, and most runs batted in; 3 outfielders; 3 types of mitts (catcher, fielder, first baseman)
- 4** balls for a walk, 4 sides to the diamond, 4 umpires (1 at each base and at home plate)
- 5** home plate is a pentagon shape; full count (3 balls plus 2 strikes)
- 6** players in the infield
- 7** "7th inning stretch," best of 7 games to win World Series
- 8** the number on a player's uniform; famous players who wore number include Yogi Berra and Carl Yastrzemski; 8 White Sox players were banned from baseball after being accused of throwing the 1919 World Series
- 9** players per team, 9 innings per game
- 10** the inning played if the game is tied at the end of regulation play

- **Ordinal numbers.** While students are viewing the program, have them listen for ordinal numbers associated with baseball. Include other instances they can think of and make a list of the examples, e.g., first, second, and third base; "top of the ninth;" etc.
- **Estimation and measurement.** Use a baseball bat as an alternative unit of measurement and pose some problems for the students. Have them estimate first and then measure. For example: "Find 3 things the same length as a bat." "How many bats tall are you?" "How many bats long is our classroom?"
- **Comparing and contrasting four-sided shapes.** A baseball playing field is called a "diamond." Have students look at the shape of the field and describe it. What shape name would they use? How is a diamond shape different from a square and a rectangle? Have students brainstorm a list of things that have a diamond shape. Students might also create a tessellation using a diamond shape.
- **Estimation and measurement.** Take students out to the playground with a ball and bat and pose the question: "How far can you hit a ball?" Begin by having students estimate how many feet they think they can hit a ball, and record their estimates on a sheet of paper. Then hit the ball and measure. (They might want to record their best hit of three tries.) Compare estimates with actual distances. If you have the opportunity to do this activity on a ball diamond, students will be able to see how far they can hit a ball in relation to the distances on the field.
- **Examining statistics.** Have students look at the types of statistics for baseball teams printed in the newspaper and the stats for individual players on baseball cards. Discuss what this information means, how it was compiled, and why it is important to the game. Students will have differing backgrounds of experience with baseball, and some will be able to provide much information. Some students may be interested in how the stats are figured. You might introduce how to calculate an "average."

Do-At-Home Activity

- **Attending a baseball game.** Encourage parents to attend a baseball game (with players of any age group) or watch a baseball game on TV with their children. Stress the math concepts that are present in the above activities and suggest that they discuss the mathematics they see during the game.
- **Home-school collaboration.** Organize a parent-child baseball game. Form teams comprised of both adults and children by drawing names out of a baseball cap. Videotape the game so it can be used for a family math night activity (in which both parents and children attend) and families can work with the math concepts together.