

Lesson Plan

Player Percentages

Book: *Elena Delle Donne*

Series: WNBA Superstars

Level: Navigator

Objective

To help students practice solving simple word problems involving percentages.

Supplies

- *Elena Delle Donne* book
- Player Percentages worksheet (attached)
- Pencils

Before the Activity

Read the *Elena Delle Donne* book out loud, or assign it to students to read on their own. Print a copy of the Player Percentages worksheet for each student.

Activity

Chapter 4 (“Moving to the Mystics”) of the *Elena Delle Donne* book talks about her impressive free-throw percentages. Read the following excerpt from pages 25–26 aloud:

- “Many basketball experts said Delle Donne was the best free-throw shooter in the game. Her career free-throw percentage was the highest in the WNBA. It was also higher than any National Basketball Association (NBA) player’s free-throw percentage. . . . In fact, she became the first WNBA player to join the 50-40-90 club. That season, she shot more than 50 percent from the field. She hit above 40 percent from three-point range. And she was well above 90 percent at the line. By the end of 2020, only eight NBA players had reached the 50-40-90 mark.”

Explain that a percentage is an amount out of 100. For example, if Delle Donne shot more than 50 percent from the field, that means she made more than 50 out of every 100 shots from the field. A percentage can also be written as a fraction. For example, 50 percent is the same as $\frac{50}{100}$. Walk students through using multiplication or division to convert fractions with other denominators (such as 25 or 200) to denominators of 100. Then pass out the Player Percentages worksheets. Students should use what they learned about percentages to solve the three word problems and answer the question at the bottom.

Evaluation

Collect the worksheets. Use the attached answer key to give students up to 3 points for each word problem and 1 point for the question at the bottom, for up to 10 points total.

Standards

This lesson may be used to address the Common Core State Standards' mathematics standards, grade 6 (CCSS.MATH.CONTENT.6.RP.A.3.C).

Player Percentages

Part I: Solve each word problem.

1. Player 1 shot 100 times from the field, 50 times from the three-point range, and 25 times at the line. She made 55 shots from the field, 22 shots from the three-point range, and 20 shots at the line. What percent of each type of shot did she make?

2. Player 2 shot 300 times from the field, 100 times from the three-point range, and 50 times at the line. She made 180 shots from the field, 45 shots from the three-point range, and 46 shots at the line. What percent of each type of shot did she make?

3. Player 3 shot 200 times from the field, 25 times from the three-point range, and 50 times at the line. She made 124 shots from the field, 5 shots from the three-point range, and 35 shots at the line. What percent of each type of shot did she make?

Part II: Based on your answers above, which player could be part of the 50-40-90 club?

Player Percentages **ANSWER KEY**

Part I: Solve each word problem.

1. Player 1 shot 100 times from the field, 50 times from the three-point range, and 25 times at the line. She made 55 shots from the field, 22 shots from the three-point range, and 20 shots at the line. What percent of each type of shot did she make?

$$55/100 = 55 \text{ percent}$$

$$22/50 = 44/100 = 44 \text{ percent}$$

$$20/25 = 80/100 = 80 \text{ percent}$$

2. Player 2 shot 300 times from the field, 100 times from the three-point range, and 50 times at the line. She made 180 shots from the field, 45 shots from the three-point range, and 46 shots at the line. What percent of each type of shot did she make?

$$180/300 = 60/100 = 60 \text{ percent}$$

$$45/100 = 45 \text{ percent}$$

$$46/50 = 92/100 = 92 \text{ percent}$$

3. Player 3 shot 200 times from the field, 25 times from the three-point range, and 50 times at the line. She made 124 shots from the field, 5 shots from the three-point range, and 35 shots at the line. What percent of each type of shot did she make?

$$124/200 = 62/100 = 62 \text{ percent}$$

$$5/25 = 20/100 = 20 \text{ percent}$$

$$35/50 = 70/100 = 70 \text{ percent}$$

Part II: Based on your answers above, which player could be part of the 50-40-90 club?

Player 2