LESSON MAKER PRO

Percent Power

Find parts, wholes, and percentages.

GRADE 6 · 6.RP.3c

6.RP.3c "Use ratio and rate reasoning to solve real-world and mathematical problems. Understand that a percentage is a rate per 100 and use this to solve problems involving wholes, parts, and percentages."

NAME _____ DATE _____

PERCENT MEANS PER 100

A percent is a rate out of 100. To find a part, multiply the whole by the percent written as a fraction over 100. To find a whole or a percent, use the part and whole to write an equation.

WORKED EXAMPLE

Find 35% of 80.

1. Write 35% as 35/100.
2. Multiply: 80 × 35/100 = 2,800/100.
3. Divide: 2,800/100 = 28.

Answer: 28

PRACTICE 6 problems

1 Find 25% of 64.

ANSWER _____

2 Find 15% of 60.

ANSWER _____

3 Find 12% of 50.

ANSWER _____

4 18 is what percent of 45?

ANSWER _____

5 21 is 30% of what number?

ANSWER _____

6 9 is what percent of 20?

ANSWER _____

APPLY IT Show your work

1 You have 150 game coins. You spend 40% of them on an avatar. How many coins do you spend, and how many are left?

WORK SPACE

ANSWER _____

2 At a school club fair, 18 students chose the art club. They are 60% of the students who voted. How many students voted?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game costs $55. It is on sale for 20% off. Sales tax is 5% of the sale price. What is the final cost?

WORK SPACE AND ANSWER

ANSWER KEY

Percent Power

GRADE 6 · 6.RP.3c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 25% of 64.	**16**
2	Find 15% of 60.	**9**
3	Find 12% of 50.	**6**
4	18 is what percent of 45?	**40%**
5	21 is 30% of what number?	**70**
6	9 is what percent of 20?	**45%**

PART 2 · APPLY IT

1. **60 coins spent; 90 coins left** 40/100 × 150 = 60 coins spent. Subtract 60 from 150 to get 90 coins left.
2. **30 students** Let x be the number of students who voted. Solve 60/100 × x = 18 to get x = 30.

CHALLENGE

$46.20. The discount is $11, so the sale price is $44. Tax is $2.20, giving a final cost of $46.20.

For percent questions, accept equivalent fractions or decimals if the student also gives the requested percent. In the challenge, tax must be calculated from the sale price, not the original price.