LESSON MAKER PRO

Rates in Action

Find what one unit tells you.

GRADE 6 · 6.PR.A.2

6.PR.A.2 "Use unit rates to represent and describe ratio relationships."

NAME _____ DATE _____

THE BIG IDEA

A unit rate tells how much of one quantity goes with 1 of another quantity. Divide the first amount by the second amount, then name the units using the word per.

WORKED EXAMPLE

You earn 55 gems in 11 game levels. What is the unit rate in gems per level?

1. Divide gems by levels: 55 ÷ 11.
2. 55 ÷ 11 = 5.
3. Name the rate: 5 gems per level.

Answer: 5 gems per level

PRACTICE 6 problems

1 You read 18 pages in 3 minutes. How many pages do you read per minute?

ANSWER _____

2 Eight notebooks cost $24. What is the cost per notebook?

ANSWER _____

3 A photo booth prints 63 photos in 9 minutes. How many photos does it print per minute?

ANSWER _____

4 You can buy 16 game tickets for $2. How many tickets do you get per dollar?

ANSWER _____

5 A player scores 90 points in 10 games. What is the unit rate in points per game?

ANSWER _____

6 A cyclist travels 27 miles in 2 hours. What is the speed in miles per hour?

ANSWER _____

APPLY IT Show your work

1 Ava collects 30 coins in 3 game levels. Ben collects 48 coins in 8 game levels. Who collects more coins per level, and how many more?

WORK SPACE

ANSWER _____

2 A student council team packs 72 supply bags in 12 minutes. At the same rate, how many bags can the team pack in 13 minutes?

WORK SPACE

ANSWER _____

CHALLENGE One step up

One game pass costs $27 for 3 visits. Another costs $48 for 8 visits. Which pass costs less per visit? If you buy enough passes of one type for 24 visits, how much would you save with the less expensive type? Show how unit rates support your answer.

WORK SPACE AND ANSWER

ANSWER KEY

Rates in Action

GRADE 6 · 6.PR.A.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	You read 18 pages in 3 minutes. How many pages do you read per minute?	**6 pages per minute**
2	Eight notebooks cost $24. What is the cost per notebook?	**$3 per notebook**
3	A photo booth prints 63 photos in 9 minutes. How many photos does it print per minute?	**7 photos per minute**
4	You can buy 16 game tickets for $2. How many tickets do you get per dollar?	**8 tickets per dollar**
5	A player scores 90 points in 10 games. What is the unit rate in points per game?	**9 points per game**
6	A cyclist travels 27 miles in 2 hours. What is the speed in miles per hour?	**13.5 miles per hour**

PART 2 · APPLY IT

1. **Ava, by 4 coins per level** Ava collects 30 ÷ 3 = 10 coins per level, and Ben collects 48 ÷ 8 = 6 coins per level. The difference is 4 coins per level.
2. **78 bags** The team packs 72 ÷ 12 = 6 bags per minute. In 13 minutes, it packs 6 × 13 = 78 bags.

CHALLENGE

The $48 pass costs $6 per visit, while the $27 pass costs $9 per visit. The $48 pass costs less per visit and saves $72 over 24 visits.

Accept equivalent ways to write unit rates, such as $3/notebook. For the challenge, students may compare the total costs of enough whole passes instead of multiplying each unit rate by 24.