LESSON MAKER PRO

Break It Apart

Use parts and wholes to solve multiplication and division.

GRADE 3 · 3.PAR.3

3.PAR.3 "Use part-whole strategies to solve real-life, mathematical problems involving multiplication and division with whole numbers within 100."

NAME _____ DATE _____

USE PARTS AND WHOLES

To multiply, split one factor into easier parts and add the partial products. To divide, think about how many equal groups fit in the whole, or use a related multiplication fact. Keep the parts connected to the same whole.

WORKED EXAMPLE

There are 2 rows of 13 chairs. How many chairs are there?

1. Break 13 into 10 and 3.
2. 2 x 10 = 20.
3. 2 x 3 = 6.
4. 20 + 6 = 26.

Answer: 26 chairs

PRACTICE 6 problems

1 Use parts to find 4 x 8.

ANSWER _____

2 Use a related multiplication fact to find 56 / 7.

ANSWER _____

3 Use parts to find 9 x 9.

ANSWER _____

4 Use a related multiplication fact to find 72 / 8.

ANSWER _____

5 Use parts to find 4 x 12.

ANSWER _____

6 Use a related multiplication fact to find 63 / 7.

ANSWER _____

APPLY IT Show your work

1 Maya puts 8 stickers on each of 7 badge sheets for her club. How many stickers does Maya use?

WORK SPACE

ANSWER _____

2 At a basketball game, 72 fans sit in 8 equal sections. How many fans sit in each section?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A library puts 9 new books on each of 9 shelves. Then 18 books are checked out. How many new books are still on the shelves? Show your part-whole thinking.

WORK SPACE AND ANSWER

Break It Apart

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use parts to find 4 x 8.	**32**
2	Use a related multiplication fact to find 56 / 7.	**8**
3	Use parts to find 9 x 9.	**81**
4	Use a related multiplication fact to find 72 / 8.	**9**
5	Use parts to find 4 x 12.	**48**
6	Use a related multiplication fact to find 63 / 7.	**9**

PART 2 · APPLY IT

1. **56 stickers** Multiply the number of sheets by the stickers on each sheet. 7 x 8 = 56.
2. **9 fans** Divide the total number of fans into 8 equal sections. 72 / 8 = 9.

CHALLENGE

63 books

Accept correct break-apart equations, equal-group thinking, or related multiplication facts. For the challenge, students may find 9 x 9 = 81, then subtract 18 to get 63.