LESSON MAKER PRO

Multiply in Parts

Use place value to make big products manageable.

GRADE 4 · 4.NBT.5

4.NBT.5 "Use strategies based on place value and the properties of multiplication to: Multiply a whole number of up to four digits by a one-digit whole number. Multiply a pair of two-digit numbers. Use appropriate models to explain the calculation..."

NAME _____ DATE _____

THE BIG IDEA

Break numbers into place-value parts. Multiply the parts, then add the partial products to find the total.

WORKED EXAMPLE

Find the total shown by the area model.

	10	6
20	200	120
7	70	42

1. 20 × 10 = 200 and 20 × 6 = 120.
2. 7 × 10 = 70 and 7 × 6 = 42.
3. 200 + 120 + 70 + 42 = 432.

Answer: 432

PRACTICE 4 problems

1 Find 1,203 × 4.

ANSWER _____

2 Find 2,314 × 3.

ANSWER _____

3 Find 42 × 13.

ANSWER _____

4 Find 58 × 24.

ANSWER _____

APPLY IT Show your work

1 The model shows rows and columns of stickers on a poster. How many stickers are on the poster?

	10	5
30	300	150
2	20	10

ANSWER _____

2 At a school game, each of 4 teams earns 1,328 points. How many points do they earn altogether?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find the total shown by the model. Write four partial products to explain.

	20	8
40	800	320
6	120	48

WORK SPACE AND ANSWER

ANSWER KEY

Multiply in Parts

GRADE 4 · 4.NBT.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Find 1,203 × 4.	**4,812**
2	Find 2,314 × 3.	**6,942**
3	Find 42 × 13.	**546**
4	Find 58 × 24.	**1,392**

PART 2 · APPLY IT

1. **480 stickers** Add the four parts: 300 + 150 + 20 + 10 = 480.
2. **5,312 points** Multiply 1,328 × 4 = 5,312.

CHALLENGE

800 + 320 + 120 + 48 = 1,288

Accept any correct place-value method. For the challenge, accept the four partial products in any order.