

Multiply with Muscle

Use place value to multiply larger numbers.

GRADE 4 • 4.NBT.B

CCSS.Math.Content.4.NBT.B "Use place value understanding and properties of operations to perform multi-digit arithmetic."

NAME _____

DATE _____

BUILD PARTIAL PRODUCTS

Break one factor into hundreds, tens, and ones. Multiply each place-value part, then add the partial products to find the total.

WORKED EXAMPLE

$$243 \times 3$$

1. $3 \times 3 = 9$ ones.

2. $3 \times 40 = 120$.

3. $3 \times 200 = 600$.

4. $600 + 120 + 9 = 729$.

Answer: 729

PRACTICE 6 problems

1 $126 \times 4 = ?$

ANSWER _____

2 $305 \times 6 = ?$

ANSWER _____

3 $418 \times 2 = ?$

ANSWER _____

4 $23 \times 14 = ?$

ANSWER _____

5 $31 \times 22 = ?$

ANSWER _____

6 $47 \times 16 = ?$

ANSWER _____

APPLY IT Show your work

- 1** At a trading-card event, you put 128 cards into each of 5 storage boxes. How many cards do you store?

WORK SPACE

ANSWER _____

- 2** Your robotics club makes 15 badge sheets. Each sheet has 24 badges. How many badges does the club make?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A school orders 408 pencils for each of 27 classrooms. How many pencils does the school order?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$126 \times 4 = ?$	504
2	$305 \times 6 = ?$	1,830
3	$418 \times 2 = ?$	836
4	$23 \times 14 = ?$	322
5	$31 \times 22 = ?$	682
6	$47 \times 16 = ?$	752

PART 2 • APPLY IT

1. **640 cards** Multiply 128 by 5. $128 \times 5 = 640$.
2. **360 badges** Multiply 15 by 24. $15 \times 24 = 360$.

CHALLENGE

11,016 pencils

Accept correct partial-products work or the standard multiplication algorithm. Students may write answers with or without commas when the value is correct.