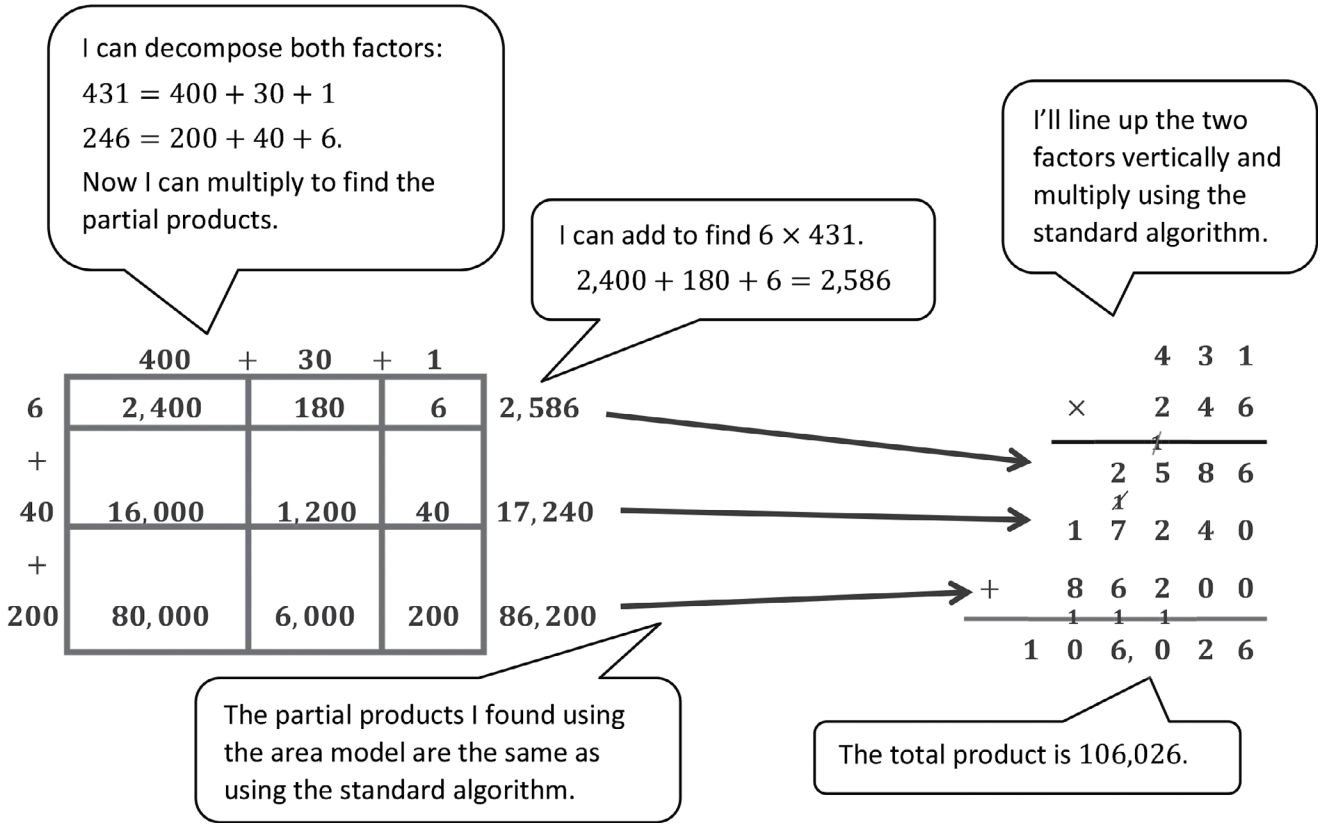
1. Draw an area model. Then, solve using the standard algorithm. Use arrows to match the partial products from the area model to the partial products in the algorithm.

$431 \times 246 = \underline{\mathbf{106,026}}$



2. Solve by drawing the area model and using the standard algorithm.

$2{,}451 \times 107 = \underline{\mathbf{262,257}}$

I can decompose $2{,}451$ and use it as the length.
$2{,}451 = 2{,}000 + 400 + 50 + 1$

I multiply to find the partial products.

	$2{,}000$	$+$ 400	$+$ 50	$+$ 1	
7	$14{,}000$	$2{,}800$	350	7	$17{,}157$
$+$					
100	$200{,}000$	$40{,}000$	$5{,}000$	100	$245{,}100$

$$\begin{array}{r} 2,\ 4\ 5\ 1 \\ \times\quad 1\ 0\ 7 \\ \hline 1\ 7\ 1\ 5\ 7 \\ +\ 2\ 4\ 5\ 1\ 0\ 0 \\ \hline 2\ 6\ 2,\ 2\ 5\ 7 \end{array}$$

I decompose the width, 107.
$107 = 100 + 7$
Since there's a 0 in the tens place, there are 0 tens in the width of the area model.

3. Solve using the standard algorithm.

$7{,}302 \times 408 = \underline{\mathbf{2,979,216}}$

8 ones $\times$ 3 hundreds $= 24$ hundreds $=$ 2 thousands 4 hundreds. I'll record 2 in the thousands place and write 4 in the hundreds place.

8 ones $\times$ 2 ones $= 16$ ones $=$ 1 ten 6 ones. I'll record 1 in the tens place and write 6 in the ones place.

4 hundreds $\times$ 3 hundreds $=$ 12 ten thousands. I'll record 1 in the hundred thousands place and write 2 in the ten thousands place.

$$\begin{array}{r} 7,\ 3\ 0\ 2 \\ \times\quad 4\ 0\ 8 \\ \hline 5\ 8\ 4\ 1\ 6 \\ +\ 2\ 9\ 2\ 0\ 8\ 0\ 0 \\ \hline 2,\ 9\ 7\ 9,\ 2\ 1\ 6 \end{array}$$

4 hundreds $+$ 8 hundreds $= 12$ hundreds $=$ 1 thousand 2 hundreds. I'll record 1 in the thousands place and write 2 in the hundreds place.

Name _____ Date _____

1. Draw an area model. Then, solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in your algorithm.

   a. 273 × 346

   ```
     2 7 3
   × 3 4 6
   ```

   b. 273 × 306

   ```
     2 7 3
   × 3 0 6
   ```

   c. Both Parts (a) and (b) have three-digit multipliers. Why are there three partial products in Part (a) and only two partial products in Part (b)?

2. Solve by drawing the area model and using the standard algorithm.

   a. 7,481 × 290

   b. 7,018 × 209

3. Solve using the standard algorithm.

   a. 426 × 357

   b. 1,426 × 357

c. 426 × 307

d. 1,426 × 307

4. A high school football stadium holds a maximum of 4,505 people. If 219 games were sold out, how many tickets were purchased in all for the sold out games?

5. One Saturday at the farmer's market, each of the 94 vendors made $502 in profit. How much profit did all vendors make that Saturday?