



# Build Multiplication Fluency

Let's multiply multi-digit whole numbers, using the standard algorithm.

Warm-up

## Notice and Wonder: Same Solution

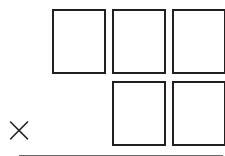
What do you notice? What do you wonder?

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

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

## Activity 1

### Greatest Product



Directions:

- Each partner uses their own handout.
- Partner A: Choose a number card. Write the number in one of the blanks for Round 1.
- Partner B: Choose a number card. Write the number in one of the blanks for Round 1.
- Repeat until each partner has a three-digit-number-by-two-digit-number multiplication problem.
- Find the product.
- The partner with the greater product wins a point.
- The partner with more points after 5 rounds wins the game.

## Activity 2

### Targeted Products

1. Use the digits 3, 5, 6, 8, and 9 to make a product with a value that is close to 50,000.

$$\begin{array}{r} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \\ \times \quad \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \\ \hline \end{array}$$

2. Use the digits 3, 5, 6, 8, and 9 to make a product with a value that is close to 20,000.

$$\begin{array}{r} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \\ \times \quad \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \\ \hline \end{array}$$