

4th Grade: Multiply Whole Numbers

$$16 \times 28 = ?$$

One way to multiply two-digit numbers is by using an area model. With this strategy, your child multiplies using the place value of each digit.

The area model below shows the number 16 as $10 + 6$ along the top, and the number 28 as $20 + 8$ at the left. Find the individual products, then add the products together to find the total product of the multiplication.

	10	+	6
20	20×10 2 tens \times 1 ten = 2 hundreds 200		20×6 2 tens \times 6 = 12 tens 120
+			
8	8×10 8×1 ten = 8 tens 80		$8 \times 6 = 48$

$$200 + 80 + 120 + 48 = 448$$

$$\text{So, } 16 \times 28 = 448$$

You can also multiply two-digit numbers using partial products.

$$\begin{array}{r} 16 \\ \times 28 \\ \hline \mathbf{48} \rightarrow 8 \text{ ones} \times 6 \text{ ones} \\ \mathbf{80} \rightarrow 8 \text{ ones} \times 1 \text{ ten} \\ \mathbf{120} \rightarrow 2 \text{ tens} \times 6 \text{ ones} \\ + \mathbf{200} \rightarrow 2 \text{ tens} \times 1 \text{ ten} \\ \hline 448 \end{array}$$