## Chapter **Multiply by One-Digit Numbers**

## Dear Family,

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In this chapter, your student is learning how to multiply one-digit numbers by tens, hundreds, and thousands. The lessons address determining whether an equation is true or false, how to estimate products by rounding, and to multiply using properties and partial products. The vocabulary words associated with this chapter are: Distributive Property and partial products.

Your student can practice multiplying by one-digit numbers while looking at prices at home or at the store!

- While shopping, look at whole-number price tags. For items that are less than \$10, ask your student to name a two-digit number, then find the total cost of that many of the item. For example, if a jar of peanut butter costs \$4, ask, "How could you find the total cost of 23 jars of peanut butter? What would the total cost be?" Encourage your student to explain more than one strategy for finding the answer. Have your student draw an area model and explain how it can be used to multiply.
- At home, look through advertisements for items that have a three-digit price. Have your student point out the digits in each place value. Then, have him or her use partial products to find the total cost of several of the items. Remember to select a single-digit number of items. For example, your student might select a \$425 TV. Guide your student to find the total cost of 3 TVs. Ask, "What is the product of 3 and 4 hundreds? What is the product of 3 and 2 tens? What is the product of 3 and 5 ones?" Then, have your student add the partial products. Continue by asking, "Can you find an item that costs about 3 times as much as your item? Is there an item that costs about 8 times as much?"
- Ask your student to name two items that might have a three-digit price. Look up the cost of each item online. Roll a number cube to represent the number of the item that could be purchased. Repeat with the second item. Have your student write an equation showing the first item to the left of the equals sign and the second item to the right. Use the equation to compare the costs. Ask your student if the equation is true or false and to explain why.

By the end of this chapter, your student should feel confident with the learning targets and success criteria on the next page. Encourage your student to think of other contexts in which he or she can multiply by one-digit numbers, such as finding the number of minutes in the hours of school each day, and then the minutes each week.

Have a great time practicing multiplication!



## Multiply by One-Digit Numbers (continued)

	Learning Target	Success Criteria
Chapter 2 Multiply by One- Digit Numbers	Understand multiplying by one- digit numbers.	<ul> <li>I can multiply by tens, hundreds, and thousands.</li> <li>I can write factors in expanded form.</li> <li>I can use partial products to multiply.</li> <li>I can use regrouping to multiply.</li> </ul>
2.1 Multiplication Facts and Equations	Identify, write, and solve equations involving multiplication.	<ul> <li>I can use multiplication facts that have factors up to 12.</li> <li>I can tell whether an equation is true or false.</li> <li>I can write and solve a multiplication equation to solve a problem.</li> </ul>
2.2 Understand Multiplicative Comparisons	Use multiplication to compare two numbers.	<ul> <li>I can write addition or multiplication equations given a comparison sentence.</li> <li>I can write a comparison sentence given an addition or a multiplication sentence.</li> <li>I can solve comparison word problems involving multiplication.</li> </ul>
2.3 Multiply Tens, Hundreds, and Thousands	Use place value to multiply by tens, hundreds, or thousands.	<ul> <li>I can find the product of a one-digit number and a multiple of ten, one hundred, or one thousand.</li> <li>I can describe a pattern when multiplying by tens, hundreds, or thousands.</li> </ul>
2.4 Estimate Products by Rounding	Use rounding to estimate products.	<ul> <li>I can use rounding to estimate a product.</li> <li>I can find two estimates that a product is between.</li> <li>I can tell whether a product is reasonable.</li> </ul>
2.5 Use the Distributive Property to Multiply	Use the Distributive Property to multiply.	<ul> <li>I can write a number in expanded form.</li> <li>I can multiply by tens and hundreds.</li> <li>I can explain how to use the Distributive Property to multiply.</li> </ul>
2.6 Use Partial Products to Multiply	Use place value and partial products to multiply.	<ul> <li>I can use place value to tell the value of each digit in a number.</li> <li>I can write the partial products for a multiplication problem.</li> <li>I can add the partial products to find a product.</li> </ul>
2.7 Multiply Two- Digit Numbers by One-Digit Numbers	Multiply two-digit numbers by one- digit numbers.	<ul> <li>I can multiply to find the partial products.</li> <li>I can show 10 ones regrouped as 1 ten.</li> <li>I can find the product.</li> </ul>
2.8 Multiply Three- Digit Numbers by One-Digit Numbers	Multiply three-digit numbers by one- digit numbers.	<ul> <li>I can multiply to find the partial products.</li> <li>I can show how to regroup more than 10 tens.</li> <li>I can find the product.</li> </ul>
2.9 Use Properties to Multiply	Use properties to multiply.	<ul> <li>I can use the Commutative Property of Multiplication to multiply.</li> <li>I can use the Associative Property of Multiplication to multiply.</li> <li>I can use the Distributive Property to multiply.</li> </ul>
2.10 Problem Solving: Multiplication	Solve multi-step word problems involving multiplication.	<ul> <li>I can understand a problem that involves multiplication.</li> <li>I can make a plan to solve using letters to represent the unknown numbers.</li> <li>I can solve a problem using an equation.</li> </ul>