

Name \_\_\_\_\_

**Chapter  
3**

## More Multiplication Facts and Strategies

Dear Family,

In this chapter, your student is learning strategies for multiplying by 3, 4, 6, 7, 8, and 9, and for multiplying three factors. These strategies include how to use a model to multiply, how to use the Distributive Property (with addition or subtraction) to multiply, and how to use a problem-solving plan to solve multiplication word problems.

The vocabulary words associated with this chapter are: Distributive Property (with addition), Distributive Property (with subtraction), and Associative Property of Multiplication.

One time you can practice multiplication is when you and your student are shopping for clothes! The racks and shelves are great models for practicing multiplication strategies.

- Check out the shelves at a shoe store. Pick a shelf that displays a row of shoe boxes. Ask your student how many shoes (2) are in each box. Then ask, "How many shoes are there on this shelf?" "How many shoes are on [x] number of shelves with the same number of boxes?" This is an example of multiplying three factors, which is covered in Lesson 3.7.
- For example: for 2 shoes per box, 5 boxes on each shelf, and 4 shelves, you have  $(2 \times 5) \times 4$ .
- Ask how the answer is affected by regrouping as  $2 \times (5 \times 4)$ . Showing them that the product stays the same demonstrates the Associative Property of Multiplication.
- Model other scenarios with clothing items. For example, when browsing a rack of shirts, ask, "If the store sells 3 shirts every week, how many shirts will the store sell in three weeks?" You can model this scenario by moving nine shirts into three equal groups of shirts. Encourage your student to think of multiplication equations that can help solve the question.

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 ways to use clothing items in multiplication contexts, such as how much money a store makes if the store sells a single item [x] number of times.

Have a great time browsing!

<b>Lesson</b>	<b>Learning Target</b>	<b>Success Criteria</b>
3.1 Multiply by 3	Multiply by 3.	<ul style="list-style-type: none"> <li>I can use a model to multiply by 3.</li> <li>I can use known multiplication facts to multiply by 3.</li> <li>I can find the product of a number and 3.</li> </ul>
3.2 Multiply by 4	Multiply by 4.	<ul style="list-style-type: none"> <li>I can use a model to multiply by 4.</li> <li>I can use known multiplication facts to multiply by 4.</li> <li>I can find the product of a number and 4.</li> </ul>
3.3 Multiply by 6	Multiply by 6.	<ul style="list-style-type: none"> <li>I can use a model to multiply by 6.</li> <li>I can use known multiplication facts to multiply by 6.</li> <li>I can find the product of a number and 6.</li> </ul>
3.4 Multiply by 7	Multiply by 7.	<ul style="list-style-type: none"> <li>I can use a model to multiply by 7.</li> <li>I can use known multiplication facts to multiply by 7.</li> <li>I can find the product of a number and 7.</li> </ul>
3.5 Multiply by 8	Multiply by 8.	<ul style="list-style-type: none"> <li>I can use a model to multiply 8.</li> <li>I can use known multiplication facts to multiply by 8.</li> <li>I can find the product of a number and 8.</li> </ul>
3.6 Multiply by 9	Multiply by 9.	<ul style="list-style-type: none"> <li>I can use a model to multiply by 9.</li> <li>I can use known multiplication facts to multiply by 9.</li> <li>I can find the product of a number and 9.</li> </ul>
3.7 Practice Multiplication Strategies	Use a strategy to multiply two factors.	<ul style="list-style-type: none"> <li>I can choose a strategy to multiply two factors.</li> <li>I can multiply two factors and write the product.</li> <li>I can explain the strategy I used.</li> </ul>
3.8 Multiply Three Factors	Use the Associative Property of Multiplication.	<ul style="list-style-type: none"> <li>I can explain the Associative Property of Multiplication.</li> <li>I can change the grouping of factors.</li> <li>I can multiply three factors to find a product.</li> </ul>
3.9 More Problem Solving: Multiplication	Use the problem-solving plan to solve word problems.	<ul style="list-style-type: none"> <li>I can understand a problem.</li> <li>I can make a plan to solve.</li> <li>I can solve a problem.</li> </ul>