# **At-Home Learning Guide**

**Grade: Third** Subject: Math

Module 4: Multiplication

& Area

Topic C: Area Model and **Arithmetic Properties** 

Big Idea: In third grade learners work to understand concepts of area and relate area to multiplication and addition.

With some practice...

#### Here are some things your learner will be proud they can do!

- ✓ I can measure area by counting square units.
- ✓ I can use different strategies to find area. (For example, adding squares to find the total area or multiplying the number of squares in a row times the number in the column.)
- ✓ I can apply the distributive property to find the total area of a large rectangle by adding two products.

### Chat (< 5 min)

Here are some handv questions to get conversation started.

Question	Potential Answer(s)	
ea of a square that has 4 cm	It's totally OK if your learner needs to	

What is the area of a square that has 4 cm sides? What's the multiplication fact that helps you figure out the area?	It's totally OK if your learner needs to draw this. The area is 16 sq cm. 4x4 is the problem that will help them figure out the area.	
What's the difference between area and perimeter?	Perimeter is the distance around the outside of a shape. Area measures the space inside a shape.	

#### Coach (≅10-15 min.)

Got a little more time? Check out this quick description of what your learner needs to know, advice for how to help them. and 1-2 websites for further learning.

In third grade, learners need to be able to describe what area is. Literature is a great way for learners to engage with math concepts in real-word contexts. Click here to read and listen to Spaghetti and Meatballs for All: A Mathematical Story by Marilyn Burns. Your learner will see a practical application of area and perimeter. As you read, ask your learner: What do you notice is happening in the story? (They want to sit together so they push the tables together.) Click here to practice measuring area by counting square units.

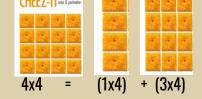
Click here to practice measuring area by counting square units. (Note: To start, select the box that says, "Only Draw Rectangular Shapes".)

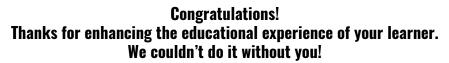
#### Create (≅15-20 min.)

Get inspired by ideas and create vour own at-home **learning** experiences.

Learners first learn about area using square tile manipulatives and eventually progress to drawing their own area models. You can use Cheez-Its or any other square crackers as a way to introduce the concept of area and perimeter. Start out creating squares and rectangles and find the area and perimeter. After creating rectangles and squares, have your learner divide their rectangles and squares into two. Learners can see how a 4x4 square has 16 tiles and can be divided into (1x4) + (3x4).

Click here for a video about using the distributive property.







# At-Home Learning Guide

Grade: Fourth
Subject: Math
Module 3: Multi-digit
Multiplication
Topic C: Multiplication of up
to Four Digits by Single-Digit
Numbers

Big Idea: In fourth grade, learners work to multiply three-and four-digit numbers by one-digit numbers applying the standard algorithm and partial product strategy.

With some practice...

#### Here are some things your learner will be proud they can do!

- ✓ I can multiply three and four digit numbers by one digit numbers.
- ✓ I can relate partial product to the standard algorithm.
- I can explain which method, partial product or standard algorithm, is easier and most efficient for me.

### Chat (< 5 min)

Here are some handy questions to get conversation started.

#### Question Potential Answer(s)

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-	What is the answer of a multiplication problem called? What does partial mean?	Product. Partial means part. Click <u>here</u> for a two-minute video that explains partial products.	
	What will the product of 347 x 3 be close to?	The first step of any math problem should be estimation. Your learner should "read" the problem, and make sense of it, as the first step to solving the problem. Listen and see if they say 300 three times is 900 and almost 50 three times is 150. So the answer is going to be close to 1050. Estimation prevents all kinds of calculation errors.	

#### Coach (≅10-15 min.)

Got a little more time? Check out this quick description of what your learner needs to know, advice for how to help them, and 1-2 websites for further learning. To help your learner with multiplication, have them describe what's happening when you solve a problem using the <u>partial product strategy</u>. **Always have them estimate before calculation**. Estimating, 472x6 is slightly less than 500 six times, so the answer will be less than but close to 3000.

47 <mark>2</mark> <u>x 6</u> 12	4 <mark>7</mark> 2 <u>x <mark>6</mark></u> 12 <mark>420</mark>	472 <u>x 6</u> 12 420 2400	472 <u>x 6</u> 12 420 <u>+ 2400</u> 2832
First, we multiply the ones. 2x6= 12	Next, we multiply the tens. 70x6= 420	Then, we multiply the hundreds.	Finally, we add all the partial products together.

## Create (≅15-20 min.)

Get inspired by ideas and create your own at-home learning experiences. Click <u>here</u> for an online multiplication game you learner can play.

Multi-digit multiplication can be made easier if your learner knows all their facts.

Click <a href="https://example.com/here">here</a> to for some guidance in helping your learner memorize all their multiplication facts.



# At-Home Learning Guide

Grade: Fifth Subject: English/ Language Arts

Topic: Short Responses

With some practice...

An important skill in fifth grade is the ability to respond, in writing, to a question about a text.

Here are the literacy skills and vocabulary your learner can practice as you share, discuss and write about different kinds of texts, including books, photographs, videos, articles, poems, and websites.

✓ I can use RACE to format short responses to texts.

I can use PQPA—Part of the Question, Part of the Answer to begin my answer/restate the question.

✓ I can participate in a text talk.

### Chat (< 5 min)

Here are some handy questions to get conversation started.

### Question Potential Answer(s)

How would you restate this question? How did the character change from 2000 to 2020? What is the theme of Chapter 1 in Hatchet?	From 2000 to 2020 (part of the question) the character changed from being to being  The theme of chapter 1 in Hatchet (part of the question) is
What does RACE stand for and how does it help you answer short response questions.	R- Restate the question, A- Answer the question C- Cite your evidence. E- Explain - make a connection. Answers will vary for how it helps, but you are listening for how it helps them create a complete answer.

#### Coach (≅10-15 min.)

Got a little more time? Check out this quick description of what your learner needs to know, advice for how to help them, and 1-2 websites for further learning. While one goal is to write and answer questions about text, the overall goal is understanding. It's difficult to write about what you don't fully understand, so **start by talking about texts!** 

#### Text Talk Steps:

- 1. Have them read/listen through the text once. Don't stop—but they can annotate.
  - What do they notice?
  - Where does the text require more careful reading? Why?
  - What other texts would they connect to this one?
- 2. Read/listen a second time.
  - What do you notice now? About the text? About your reading?

Here are some links to some texts your learner can read/listen to.

- Fiction- Eleven, A Boy Called Slow, On Turning Ten
- Non-Fiction- Fun and Games, Two Finalists Vie to be Masterchef Junior, Act Your Age

#### Create (≅15-20 min.)

Get inspired by ideas and create your own at-home learning experiences. After the second reading, discuss these two questions:

- What is the writer trying to tell the reader—the central idea or ideas (because sometimes there is more than one idea!)?
- How do they know?

Now, use RACE to help them organize and write their responses to questions about fiction and non-fiction pieces. Start with the question below.

 What is the central idea of the text? Use two details from the article to support your response.

# Congratulations! Thanks for enhancing the educational experience of your learner. We couldn't do it without you!

