

# Eureka Math

## 4th Grade Module 3 Lesson 10

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.



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# Customize this Slideshow

## Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.

**Screen A**

ReadyGEN™ in Action

3<sup>rd</sup> Grade  
Unit 3, Module A  
Lesson 1

“pop-out”

**Screen B**

Gr3(2) U3MAL1 Sample Lesson.pptx

File Edit View Insert Slide Format Arrange Tools Table Help Last edit was yesterday at

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ReadyGEN™ in Action

3<sup>rd</sup> Grade  
Unit 3, Module A  
Lesson 1

# Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



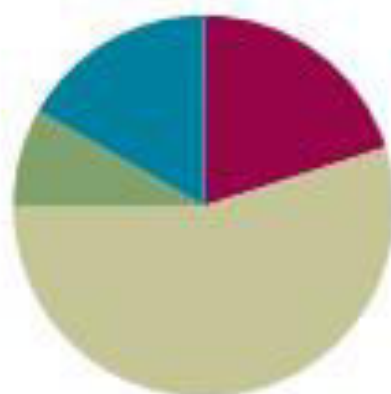
Small Group Time

## Lesson 10

**Objective:** Multiply three- and four-digit numbers by one-digit numbers applying the standard algorithm.

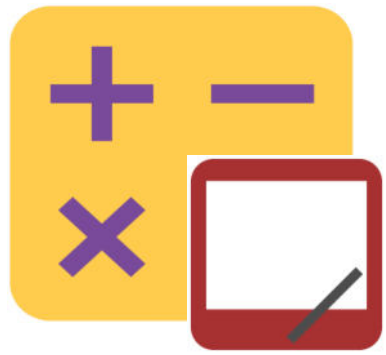
### Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(33 minutes)
■ Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>





**I can multiply three- and four-digit numbers  
by one-digit numbers applying the  
standard algorithm.**

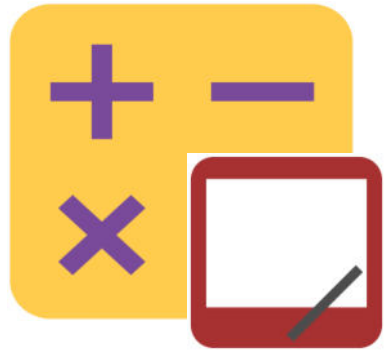


# Fluency Practice

Expanded Form

**532**

**Say the number in expanded form.**

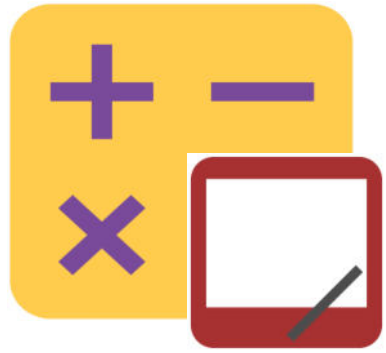


# Fluency Practice

Expanded Form

**415**

**Say the number in expanded form.**



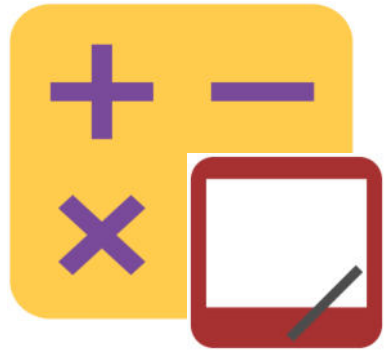
# Fluency Practice

Expanded Form

**204**

**Say the number in expanded form.**



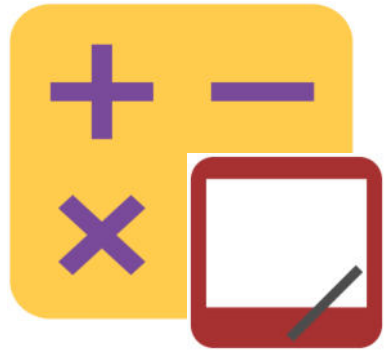


# Fluency Practice

Expanded Form

**3,241**

**Say the number in expanded form.**



# Fluency Practice

Expanded Form

**2,053**

**Say the number in expanded form.**



# Fluency Practice

Multiply Mentally

$$342 \times 2 =$$



# Fluency Practice

Multiply Mentally

$$342 \times 2 = \underline{\quad}$$

$$2 \times 2 = \underline{\quad}$$

$$40 \times 2 = \underline{\quad}$$

$$300 \times 2 = \underline{\quad}$$



# Fluency Practice

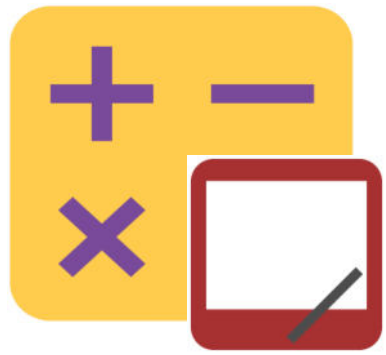
Multiply Mentally

**Repeat the process for**

$$132 \times 3$$

$$221 \times 4$$

$$213 \times 4$$

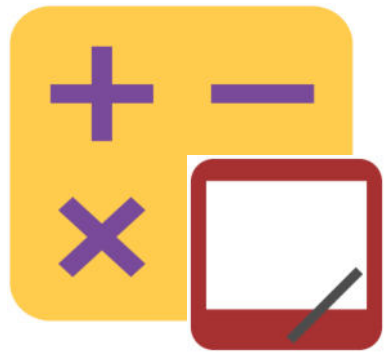


# Fluency Practice

Multiply Using Partial Products

$$322 \times 7$$

**Say it as a three-product addition expression  
in unit form**



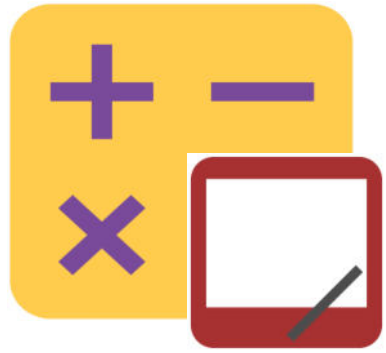
# Fluency Practice

Multiply Using Partial Products

$$322 \times 7$$

**Say it as a three-product addition expression  
in unit form**

$$(3 \text{ hundreds} \times 7) + (2 \text{ tens} \times 7) + (2 \text{ ones} \times 7)$$



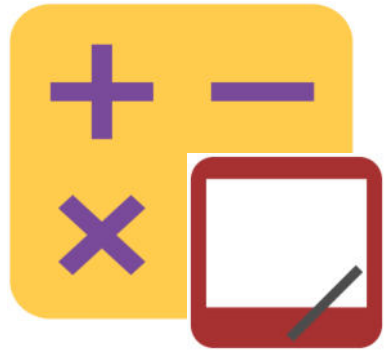
# Fluency Practice

Multiply Using Partial Products

$$322 \times 7$$

$$\begin{array}{r} 322 \\ \times 7 \\ \hline 224 \\ 2140 \\ + 2100 \\ \hline 2254 \end{array}$$





# Fluency Practice

Multiply Using Partial Products

**Repeat the process for the following:**

**7 thousands, 1 hundred, 3 tens, 5 ones x 5**

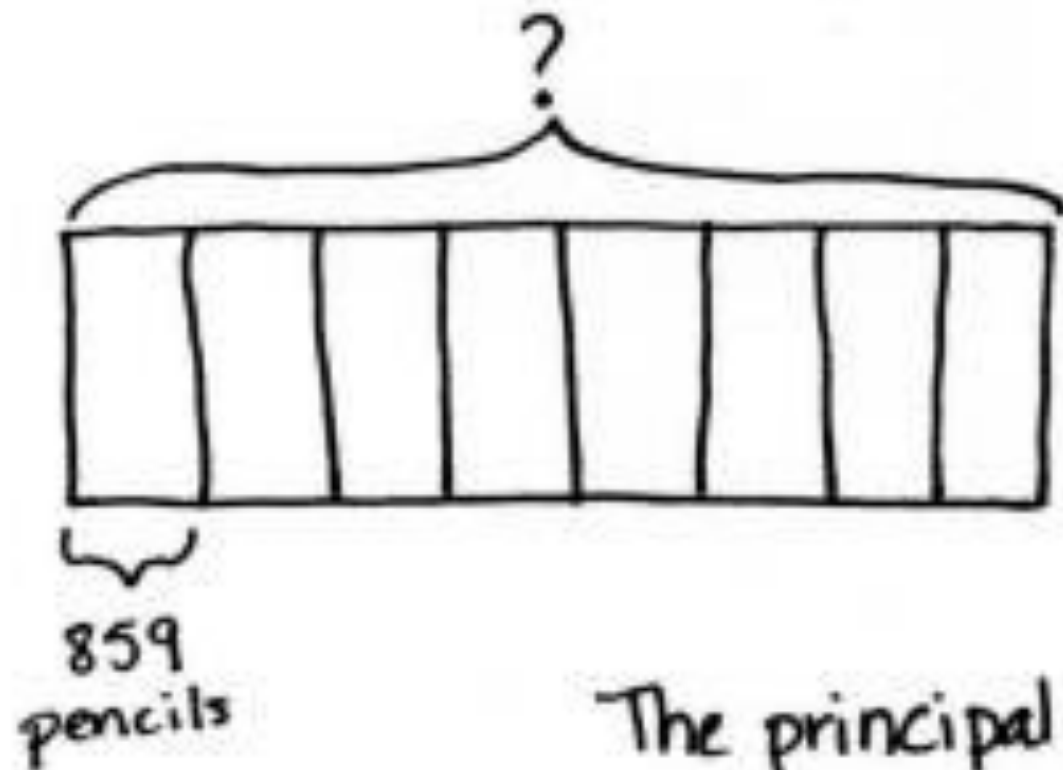
$$3 \times 7,413$$

# Application Problem

**The principal wants to buy 8 pencils for every student at her school.**

**If there are 859 students,  
how many pencils does the  
principal need to buy?**

# Application Problem



$$\begin{aligned} 1 \text{ unit} &= 859 \\ 8 \text{ units} &= 859 \times 8 \end{aligned}$$

$$\begin{array}{r} 859 \\ \times 8 \\ \hline 6,872 \end{array}$$

The principal needs to buy 6,872 pencils.



# Concept Development

## Materials

**(S) Personal white boards**



# Concept Development

## **Problem 1:**

**With your partner,  
solve  $5 \times 2,374$   
using partial products.**



# Concept Development

**Problem 1:**

**Solve  $5 \times 2,374$**

**Now let's solve using the algorithm**



# Concept Development

ten thousands	thousands	hundreds	tens	ones
			..	
		...	.....	
	.	.....		
.				

$10,000 + 1,000 + 800 + 70 + 0 = 11,870$

$$\begin{array}{r} 2,374 \\ \times 5 \\ \hline 20 \\ 350 \\ + 1,500 \\ \hline 10,000 \\ \hline 11,870 \end{array}$$

$$\begin{array}{r} 2,374 \\ \times 5 \\ \hline 11,870 \end{array}$$



# Concept Development

**Repeat using  $9 \times 3,082$**





# Concept Development

**Problem 2:**

**Solve  $6 \times 3,817$   
using the algorithm**



# Concept Development

## Problem 3:

**There are 5,280 feet in a mile. If Bryan ran 4 miles, how many feet did he run?**

**Discuss with your partner how you would solve this problem.**

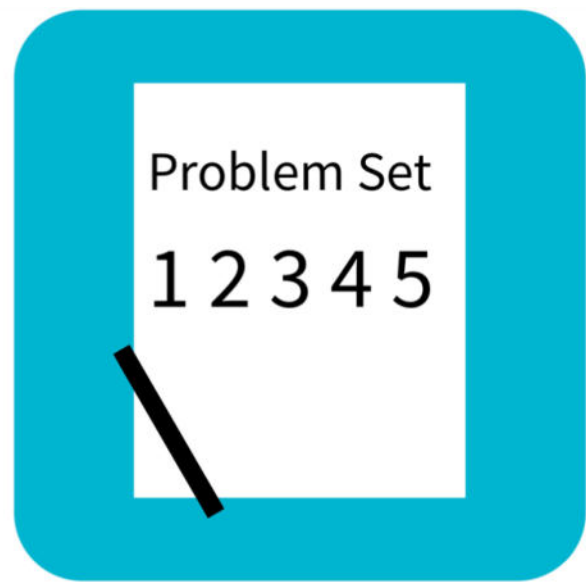


# Concept Development

## Problem 3:

**There are 5,280 feet in a mile. If Bryan ran 4 miles, how many feet did he run?**

**On your own, use the algorithm to solve.**



# Problem Set

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Solve using the standard algorithm.

a.  $3 \times 42$

b.  $6 \times 42$

c.  $6 \times 431$

d.  $3 \times 431$

# Debrief

**What pattern did you notice while solving Problems 1(a) and (b)?**

**What happens to the product if one factor is doubled? Halved?**

**What other patterns did you notice while working on Problem 1?**

**Problem 3 only gave one factor. How did you find the other factor?**

**If one of your classmates was absent for the past week, how would you explain how you solved Problem 4? Describe any visuals you could use to help you with your explanation.**

**How did Lesson 9 help you to understand today's lesson?**

# Exit Ticket

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Solve using the standard algorithm.

a.  $2,348 \times 6$

b.  $1,679 \times 7$