

Eureka Math

4th Grade Module 3 Lesson 7

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.



This work by Bethel School District (www.bethelsd.org) is licensed under the Creative Commons Attribution Non-Commercial Share-Alike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>. Bethel School District Based this work on Eureka Math by Common Core (<http://greatminds.net/maps/math/copyright>) Eureka Math is licensed under a Creative Commons Attribution Non-Commercial-ShareAlike 4.0 License.

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

3rd 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

Share...

1 New

Open...

Rename...

Make a copy...

2 Organize...

Move to trash

Import slides...

3 See revision history

Language

Download as

Publish to the web...

4 Email collaborators...

Email as attachment...

5 Page setup...

Print settings and preview

Print

Copy document

Enter a new document name:

Rename Your Presentation

Comments will not be copied to the new document.

Share it with the same people

OK Cancel

ReadyGEN™ in Action

3rd 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



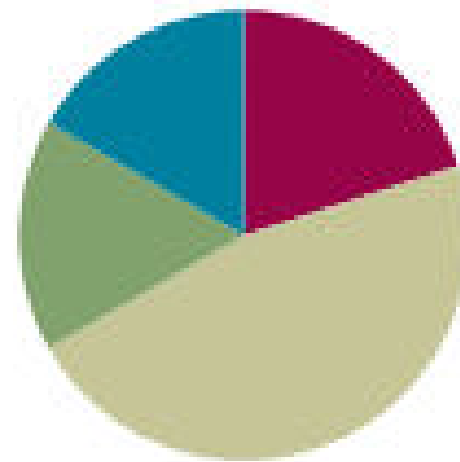
Small Group Time

Lesson 7

Objective: Use place value disks to represent two-digit by one-digit multiplication.

Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(10 minutes)
■ Concept Development	(28 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)





**I can use place value disks
to represent
two-digit by one-digit
multiplication.**



Fluency Practice

Sprint!

Follow sprint protocol

A STORY OF UNITS

Lesson 7 Sprint

4•3

A

Number Correct: _____

Multiply Multiples of 10, 100, and 1,000

1.	$3 \times 2 =$	
2.	$30 \times 2 =$	
3.	$300 \times 2 =$	
4.	$3,000 \times 2 =$	

23.	$7 \times 5 =$	
24.	$700 \times 5 =$	
25.	$8 \times 3 =$	
26.	$80 \times 3 =$	



Fluency Practice

Multiply Mentally

Say the multiplication sentence.

$$3 \times 2 = \underline{\quad}$$



Fluency Practice

Multiply Mentally

Say the multiplication sentence.

$$3 \times 2 = 6$$

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



Fluency Practice

Multiply Mentally

Say the multiplication sentence.

$$3 \times 2 = 6$$

$$40 \times 2 = 80$$

$$43 \times 2 = \underline{\quad}$$



Fluency Practice

Multiply Mentally

Say the multiplication sentence.

$$3 \times 2 = 6$$

$$40 \times 2 = 80$$

$$43 \times 2 = 86$$



Fluency Practice

Multiply Mentally

Repeat the process for

$$32 \times 3$$

$$21 \times 4$$

$$24$$

$$\times 4$$

Application Problem



The basketball team is selling T-shirts for \$9 each.

**On Monday, they sold 4 T-shirts.
On Tuesday, they sold 5 times as many
T-shirts as on Monday.**

**How much money did the team earn
altogether on Monday and Tuesday?**

Concept Development

Materials

-  (T) Ten thousands place value chart
-  (S) Personal white boards, ten thousands place value chart (template)



Concept Development

Problem 1:

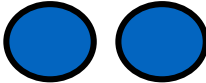
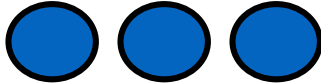
Represent 2×23 with disks.

**Write matching equation,
and record the partial products vertically**



Concept Development

Use your place value chart and draw disks to represent 23.

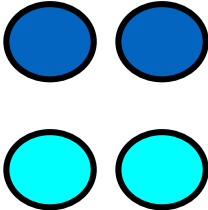
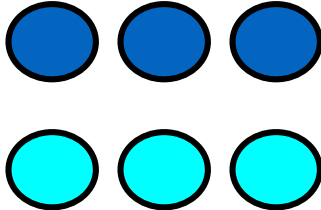
tens	ones
	



Concept Development

**Draw disks on your chart to show
1 more group of 23.**

What is the total value in the ones?

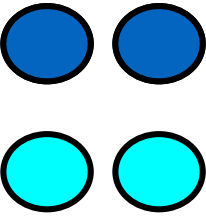
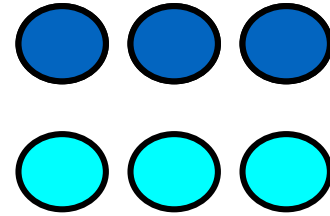
tens	ones
	



Concept Development

**Write 2 x 3 ones under the ones column.
Record it vertically.**

$$\begin{array}{r} 23 \\ \times 2 \\ \hline 6 \end{array}$$

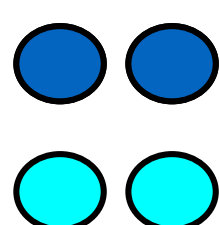
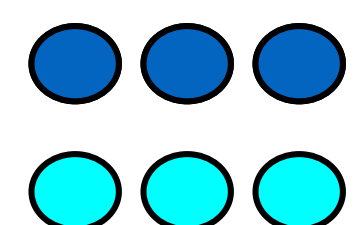
tens	ones
	 $2 \times 3 \text{ ones} =$ 6 ones



Concept Development

**Write 2 x 2 tens under the tens column.
Record it vertically.**

$$\begin{array}{r} 23 \\ \times 2 \\ \hline 6 \\ + 40 \\ \hline 46 \end{array}$$

tens	ones
 $2 \times 2 \text{ tens} =$ 4 tens	 $2 \times 3 \text{ ones} =$ 6 ones



Concept Development

Problem 2:

Model and solve 4×54 .



Concept Development

Draw disks to represent 54 on your place value chart.

What is 54 in unit form?



Concept Development

**Draw three more groups
of 54 on your chart, and
then write the expression**

$$4 \times 54$$

vertically on your personal white board.

What is the value on the ones now?



Concept Development

Record the value of the ones.

What is the value of the tens?

Record the value of the tens.



Concept Development

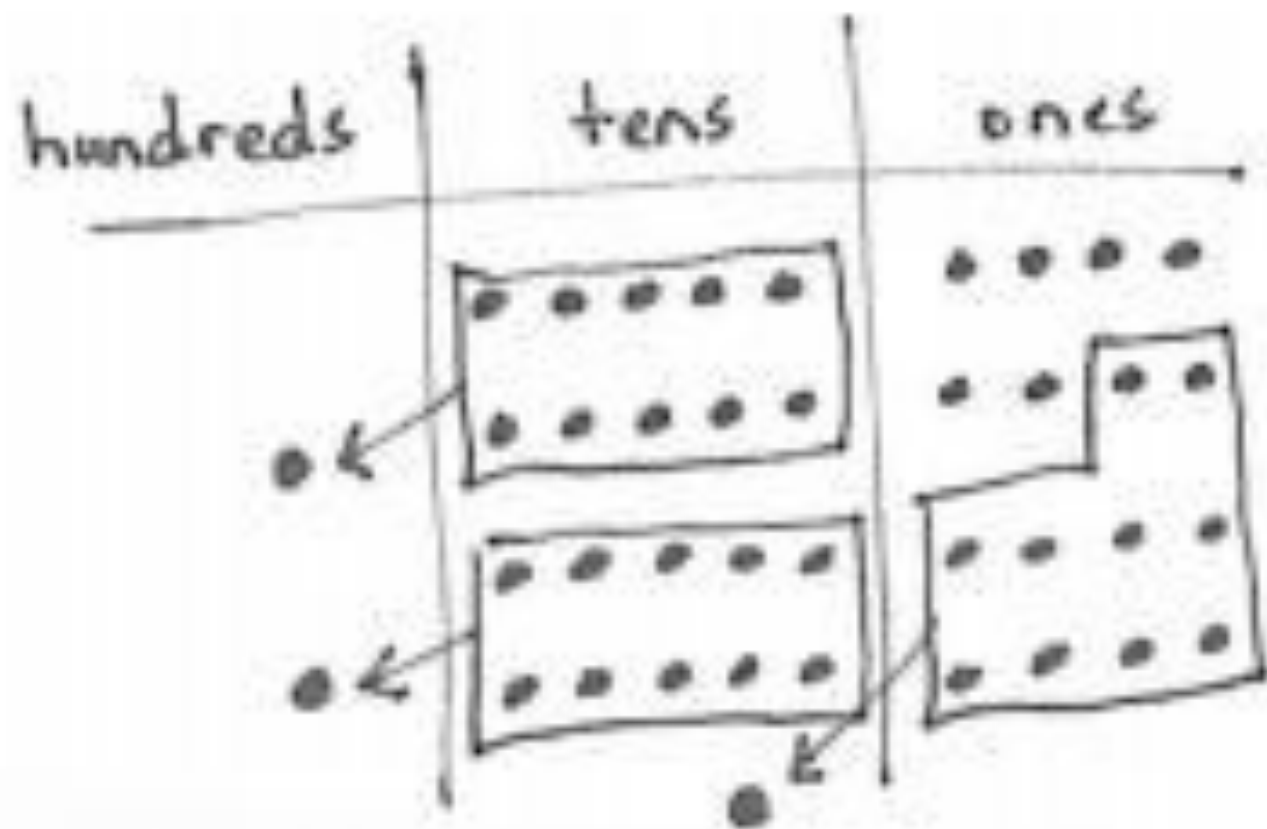


**Add up the
partial products
you recorded.
What is the **sum**?**

Let's look at our place value chart to confirm.

Concept Development

We can change **10 ones for 1 ten** and
10 tens for 1 hundred twice.



$$\begin{array}{r} 54 \\ \times 4 \\ \hline 16 \leftarrow 4 \times 4 \text{ ones} \\ + 200 \leftarrow 4 \times 5 \text{ tens} \\ \hline 216 \end{array}$$

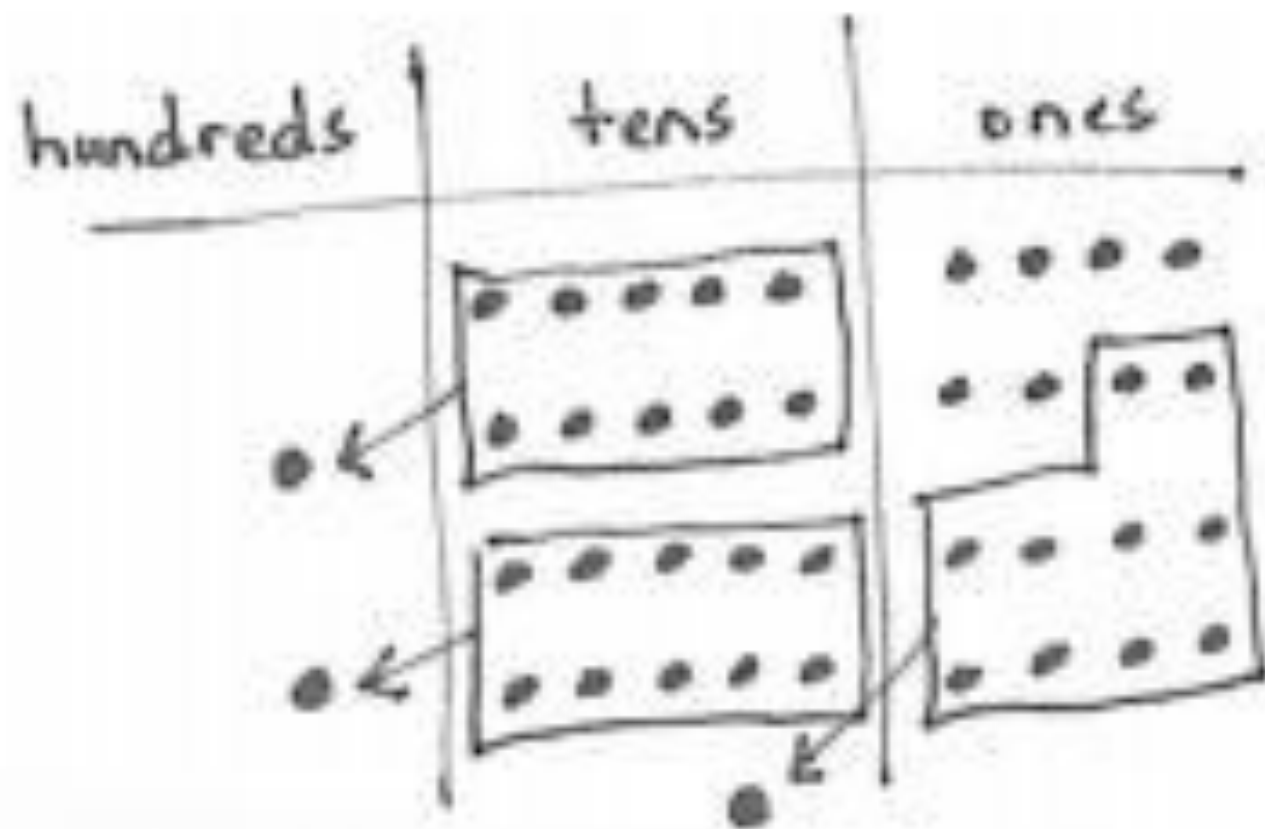
$$20 \text{ tens} + 16 \text{ ones}$$

$$2 \text{ hundreds} + 1 \text{ ten} + 6 \text{ ones} = 216$$



Concept Development

What value is represented on the place value chart?

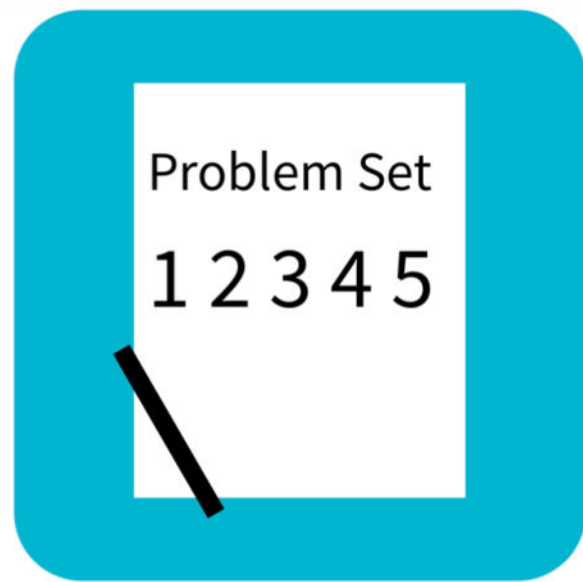


$$\begin{array}{r} 54 \\ \times 4 \\ \hline 216 \end{array}$$

$16 \leftarrow 4 \times 4 \text{ ones}$
 $+ 200 \leftarrow 4 \times 5 \text{ tens}$

20 tens + 16 ones

$$2 \text{ hundreds} + 1 \text{ ten} + 6 \text{ ones} = 216$$



Problem Set

Name _____

Date _____

1. Represent the following expressions with disks, regrouping as necessary, writing a matching expression, and recording the partial products vertically as shown below.

a. 1×43

tens	ones
● ● ● ●	● ● ●

$$\begin{array}{r} 43 \\ \times 1 \\ \hline 3 \\ + 40 \\ \hline 43 \end{array} \begin{array}{l} \rightarrow 1 \times 3 \text{ ones} \\ \rightarrow 1 \times 4 \text{ tens} \end{array}$$

Debrief

What pattern do you notice in the answers to Problems 1(a), 1(b), 1(c), and 1(d)?

Describe the renaming you had to do when solving Problem 2(a). How is it different from the renaming you had to do when solving Problem 2(b)?

Why did some of the problems require you to use a hundreds column in the place value chart, but others did not?

When you start solving one of these problems, is there a way to tell if you are going to need to change 10 tens to 1 hundred or 10 ones to 1 ten?

Debrief

How did the Application Problem connect to today's lesson?

If we found the total number of T-shirts sold first (24) and then multiplied to find the total amount of money, what would our multiplication problem have been? (24×9 .)

What do the partial products for 24×9 represent in the context of the word problem?

Talk to your partner about which method you prefer. Do you prefer writing the partial products or using a place value chart with disks? Is one of these methods easier for you to understand? Does one of them help you solve the problem faster?

Exit Ticket

Name _____

Date _____

Represent the following expressions with disks, regrouping as necessary. To the right, record the partial products vertically.

1. 6×41

hundreds	tens	ones