

# Eureka Math

## 4th Grade Module 3 Lesson 5

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.

The image shows a transition from a presentation viewer (Screen A) to the Google Slides editor (Screen B). Screen A displays a blue slide with the text "ReadyGEN™ in Action" and "3<sup>rd</sup> Grade Unit 3, Module A Lesson 1". A red box highlights the "pop-out" button in the top right corner of the viewer. A red arrow points from this button to Screen B. Screen B shows the Google Slides editor interface for a file named "Gr3(2) U3MAL1 Sample Lesson.pptx". The "File" menu is open, and the "Make a copy..." option is highlighted with a red box. A "Copy document" dialog box is also open, showing a text input field with "Rename Your Presentation" and "OK" and "Cancel" buttons. The background of Screen B is the same blue slide as in Screen A.

**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

Share...

New

Open...

Rename...

Make a copy...

Organize...

Move to trash

Import slides...

See revision history

Language

Download as

Publish to the web...

Email collaborators...

Email as attachment...

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

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



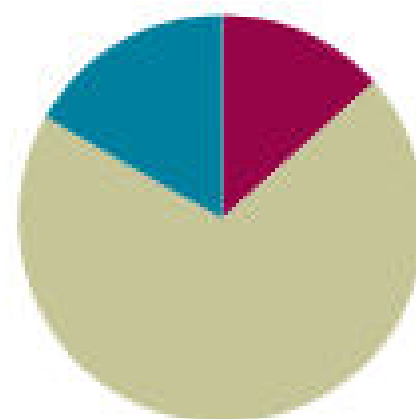
Small Group Time

## Lesson 5

**Objective:** Multiply multiples of 10, 100, and 1,000 by single digits, recognizing patterns.

### Suggested Lesson Structure

■ Fluency Practice	(8 minutes)
■ Concept Development	(42 minutes)
■ Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>





**I can multiply  
multiples of 10, 100, and 1,000  
by single digits,  
recognizing patterns.**



# Fluency Practice

Group Counting by Multiples of 10 and 100

**Count by sevens**

**When I raise my hand, stop counting and we will convert to x10.**



# Fluency Practice

Group Counting by Multiples of 10 and 100

**Count by eights**

**When I raise my hand, stop counting and we will convert to x100.**



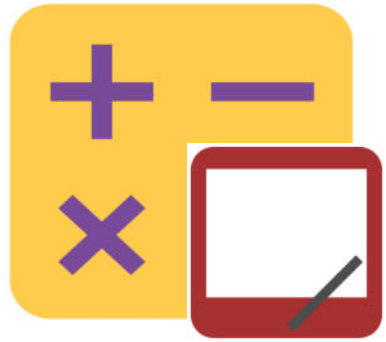
# Fluency Practice

Group Counting by Multiples of 10 and 100

**Count by nines**

**When I raise my hand, stop counting and  
we will convert to x100.**



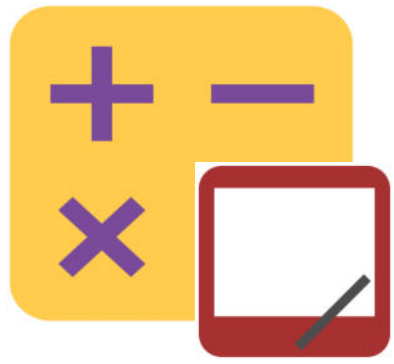


# Fluency Practice

Multiply Units

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

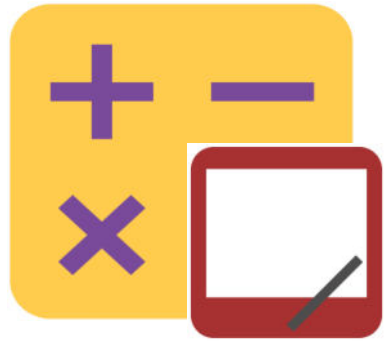
**Say the multiplication sentence in  
*unit* form.**



# Fluency Practice

Multiply Units

**On your personal white boards,  
write the answer in **standard** form.**

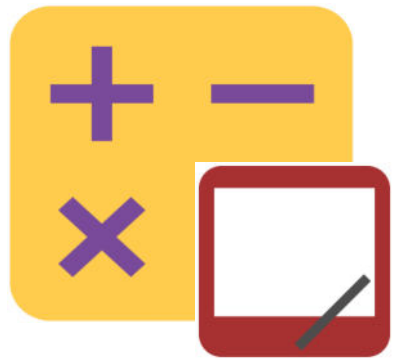


# Fluency Practice

Multiply Units

$$30 \times 2 = \underline{\hspace{2cm}}$$

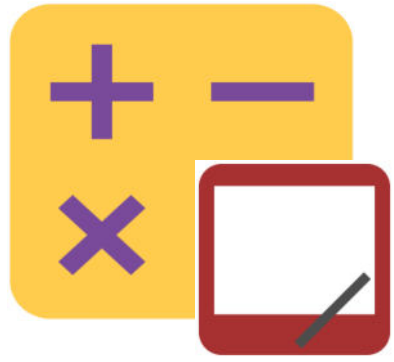
**Say the multiplication sentence  
in **unit** form.**



# Fluency Practice

Multiply Units

**On your personal white boards,  
write the answer in **standard** form.**



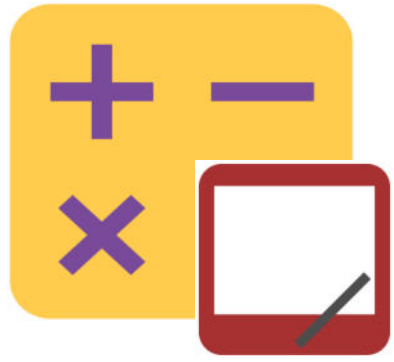
# Fluency Practice

Multiply Units

**Repeat this sequence for:**

**3 hundreds x 2**

**3 thousands x 2**



# Fluency Practice

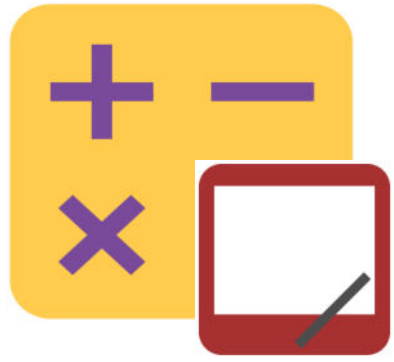
Multiply Units

**Repeat this sequence for:**

**5 ones x 3**

**5 tens x 3**

**5 hundreds x 3**



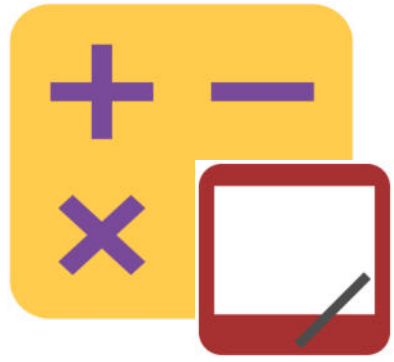
# Fluency Practice

Multiply Units

**Repeat this sequence for:**

**5 thousands x 4**

**5 tens x 4**



# Fluency Practice

Multiply Units

**Repeat this sequence for:**

**9 tens x 7**

**9 thousands x 7**



# Concept Development

## Materials



**(T) Thousands place value chart**



**(S) Personal white boards, thousands place value chart (template)**



# Concept Development

$2 \text{ ones} \times 4$

$2 \text{ tens} \times 4$

$2 \text{ hundreds} \times 4$

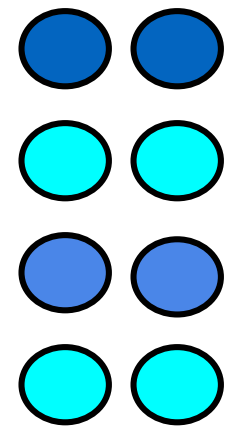
$2$

$\text{thousands} \times 4$

Show 2 ones  $\times$  4.

Circle each group of 2 ones.

$2 \text{ ones} \times 4 \text{ is } \dots ?$

thousands	hundreds	tens	ones
			



# Concept Development

2 ones x 4

2 tens x 4

2 hundreds x 4

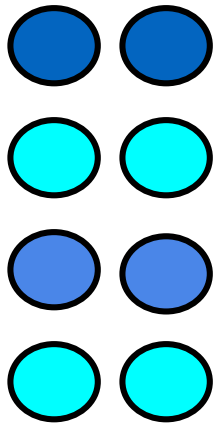
2

thousands x 4

Show 2 tens x 4.

Circle each group of 2 ones.

2 tens x 4 is...?

thousands	hundreds	tens	ones
			



# Concept Development

2 ones x 4

2 tens x 4

2 hundreds x 4

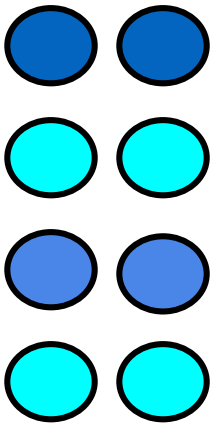
2

thousands x 4

Show 2 hundreds x 4.

Circle each group of 2 ones.

2 hundreds x 4 is...?

thousands	hundreds	tens	ones
			



# Concept Development

2 ones x 4

2 tens x 4

2 hundreds x 4

2

thousands x 4

**What would happen if  
we multiplied  
2 thousands x 4**



# Concept Development

Repeat the process with

$30 \times 3$

$300 \times 3$

$3,000 \times 3$

<b>thousands</b>	<b>hundreds</b>	<b>tens</b>	<b>ones</b>



# Concept Development

**With your partner,  
solve these multiplication problems in **unit** form.**

$$8 \times 2$$

$$8 \times 20$$

$$8 \times 200$$

$$8 \times$$

**2,000**

**What do you notice?**



# Concept Development

**What happens if we change the unit from**

**$8 \times 2$  hundreds**

**to**

**$8$  hundreds  $\times 2$ ?**

**Does the answer change?**





# Concept Development



**What happens if we change the unit from**

**$8 \times 2$  hundreds**

**to**

**$8$  hundreds  $\times 2$ ?**

**Does the answer change?**



# Concept Development

**Repeat the process with these numbers.**

$$5 \times 2$$

$$5 \times 20$$

$$5 \times 200$$

$$5 \times 2,000$$

**What do you notice?**

# Concept Development

**Francisco played a video game and earned 60 points for every coin he collected. He collected 7 coins.**

**How many points did he earn for the coins that he collected?**

# Concept Development

**Francisco also earned 200 points for every level he completed in the game.**

**He completed 7 levels.**

**How many points did he earn for the levels that he completed?**

# Concept Development

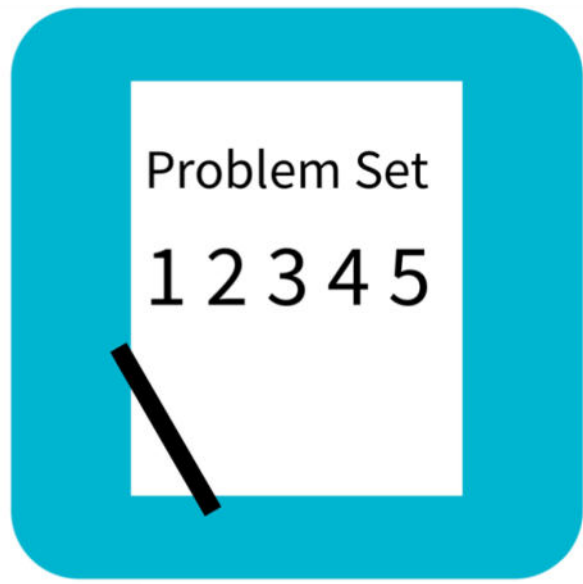
**What was the total number of points  
that Francisco earned?**

# Concept Development

**At a concert, there were 5,000 people in the audience. That was 1,000 times the number of performers.**

**How many performers were at the concert?**

**Write an equation to solve for how many performers were at the concert. Solve using a method of your choice.**



# Problem Set

Name \_\_\_\_\_ Date \_\_\_\_\_

Draw place value disks to represent the value of the following expressions.

1.  $2 \times 3 = \underline{\quad}$

2 times      ones is      ones.

thousands	hundreds	tens	ones

$$\begin{array}{r} 3 \\ \times 2 \\ \hline \end{array}$$

2.  $2 \times 30 = \underline{\quad}$

2 times      tens is      .

thousands	hundreds	tens	ones

$$\begin{array}{r} 30 \\ \times 2 \\ \hline \end{array}$$

# Debrief

**What pattern did you notice while solving Problems 1, 2, and 3?**

**Sometimes, we decompose using addition, such as saying  $30 = 10 + 10 + 10$ , and sometimes we decompose using multiplication, such as saying  $30 = 3 \times 10$ . What are some possible decompositions of 24 using addition? Multiplication?**

**What did you notice about  $5 \times 2$ ,  $5 \times 20$ ,  $5 \times 200$ , and  $5 \times 2,000$ ? (Note: Try to elicit that there is a “hidden” or “extra” zero because  $5 \times 2$  ones is 1 ten,  $5 \times 2$  tens is 10 tens, etc.)**



# Debrief

**Explain to your partner how you solved for the Problems 5(i)–(l).  
Explain to your partner the value and importance of the number zero in the factor and the product.**

**What significant math vocabulary did we use today to communicate precisely?**

**How did the last lesson prepare you for this lesson?**

# Exit Ticket

Name \_\_\_\_\_

Date \_\_\_\_\_

Draw place value disks to represent the value of the following expressions.

1.  $4 \times 200 =$  \_\_\_\_\_

4 times \_\_\_\_\_ is \_\_\_\_\_.

thousands	hundreds	tens	ones

$$\begin{array}{r} 200 \\ \times 4 \\ \hline \end{array}$$

2.  $4 \times 2,000 =$  \_\_\_\_\_

\_\_\_\_\_ times \_\_\_\_\_ is \_\_\_\_\_.

thousands	hundreds	tens	ones

$$\begin{array}{r} 2,000 \\ \times 4 \\ \hline \end{array}$$