

# Eureka Math

## 4th Grade Module 1 Lesson 3

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.



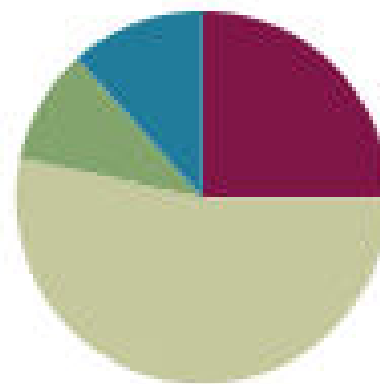
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## Lesson 3

**Objective:** Name numbers within 1 million by building understanding of the place value chart and placement of commas for naming base thousand units.

### Suggested Lesson Structure

■ Fluency Practice	(15 minutes)
■ Application Problem	(6 minutes)
■ Concept Development	(32 minutes)
■ Student Debrief	(7 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>



# Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



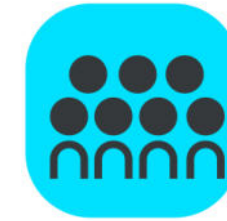
Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



Small Group Time

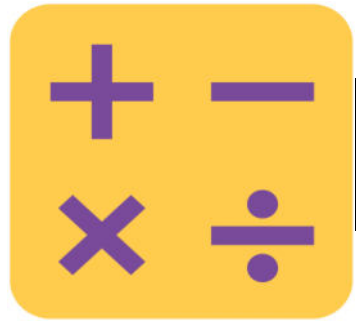


I can name numbers within 1 million by building understanding of the place value chart and placement of commas for naming base thousand units.



# Sprints

- Put your name on side A
- You have 60 seconds
- On your mark! Get set! THINK!
- Circle the last problem you completed
- Put the number you got correct at the top
- Flip over to side B
- You have 60 seconds
- On your mark! Get set! THINK!
- Put the number you got correct and your improvement



# Place Value and Value

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
1	4	6	8	3	5	7

Point to the digit 5.  
Say th digit.  
Say the place value  
Say the value of 5 tens

Point to the digit 8  
Say the digit  
Say the place value  
Say the value of 8  
thousands

Repeat for the  
digits 1 and 6



# Base Ten Units

2 tens = \_\_\_\_\_

3 tens = \_\_\_\_\_

9 tens = \_\_\_\_\_

10 tens = \_\_\_\_\_

12 tens = \_\_\_\_\_

30 tens = \_\_\_\_\_



# Application Problem

The school library has 10,600 books. The town library has 10 times as many books. How many books does the town library have?





# Patterns of base ten system

- In the last lesson, we extended the place value chart to 1 million. Take a minute to label the place value headings on your place value chart.
- What similarities and differences you see in those headings?
- What do you think the next place value after 1 million would be? How do you know?
- What about the next?
- The next?



# Placing commas

- We noticed patterns in place values: ones, tens, and hundreds; thousands, ten-thousands, hundred thousands; millions.
- To help us visually see these place values we use **COMMAS** to indicate this grouping of units.
- For example, ten billion would be 10,000,000,000
- Write 3608430325 on your white boards **WITHOUT** commas. When looking at this it is hard to see the place values, which makes it challenging to read the number.
- With your partner add commas. Remember, we use commas to show the **GROUPING** of place values.
- Where did you put your commas?



# Placing commas/reading numbers

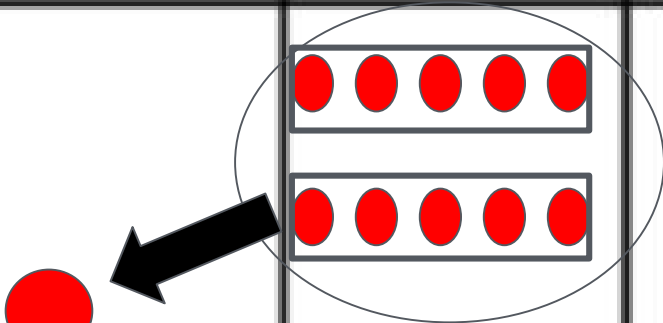
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	4	3	3	2	0	5

- Where would I place the comma? Why?
- How many TOTAL thousands are in the number?
- Listen to how I read this number.
- Your turn.



# Add to make 10 of a unit and bundling up to 1 million

- What would happen if we combined 2 groups of 5 tens?
- With your partner, draw place value disks to solve. If you need to, express your answer in the largest unit.


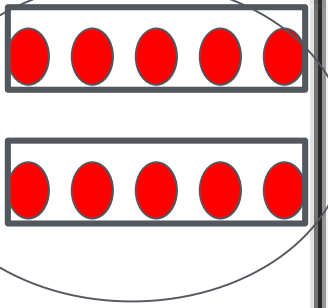
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
						

- What is your final answer?



# Add to make 10 of a unit and bundling up to 1 million

- What would happen if we combined 2 groups of 5 hundreds?
- With your partner, draw place value disks to solve. If you need to, express your answer in the largest unit.

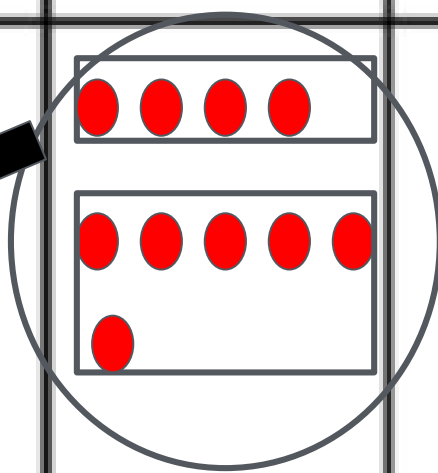
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
						

- What is your final answer?



# Add to make 10 of a unit and bundling up to 1 million

- What would happen if we combined 4 hundreds and 6 hundreds?
- With your partner, draw place value disks to solve. If you need to, express your answer in the largest unit.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
			●			

- What is your final answer?



# Add to make 10 of a unit and bundling up to 1 million

- What would happen if we combined 3 hundred thousand + 7 hundred thousand
- With your partner, draw place value disks to solve. If you need to, express your answer in the largest unit.

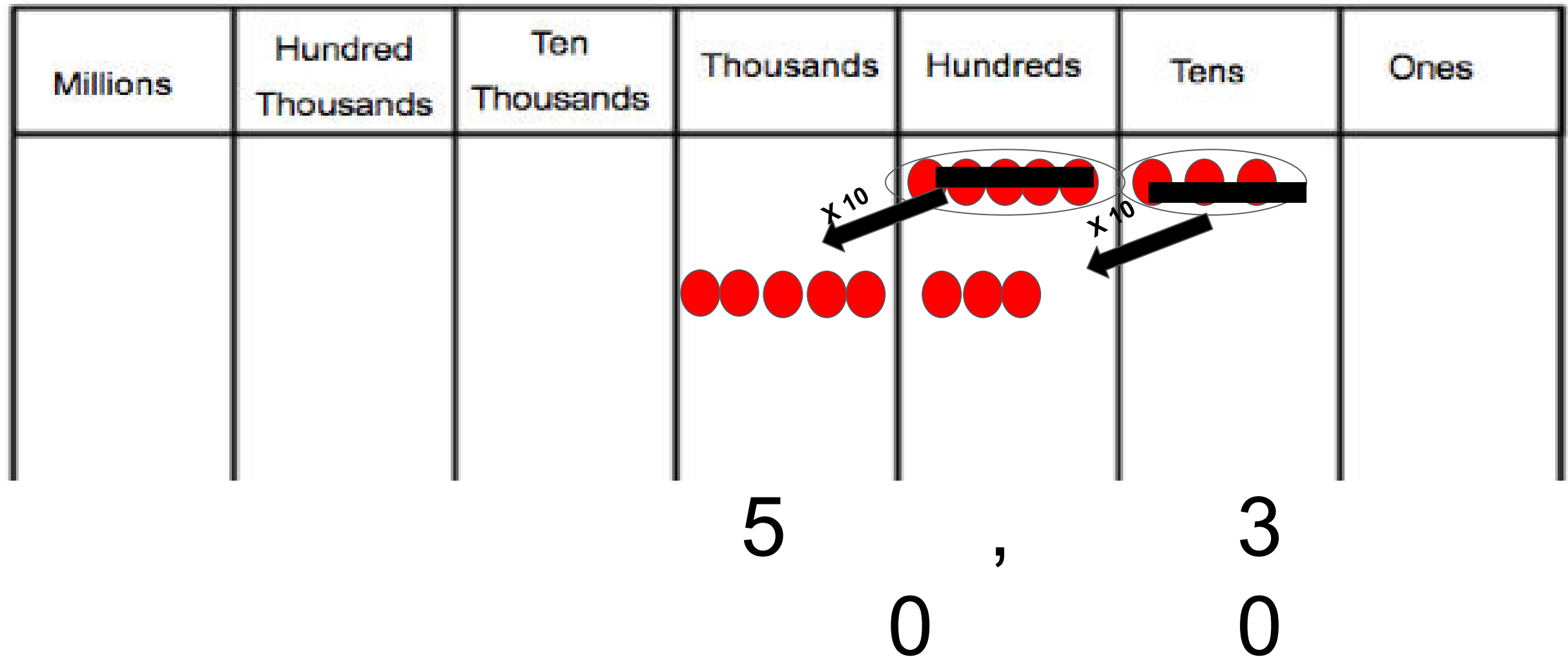
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		3				
		7				

- What is your final answer?



# Multiply multiple digits by 10: Problem 3

- Model 5 hundreds and 3 tens.
- What is 10 ***TIMES*** 5 hundreds and 3 tens?







# Multiply multiple digits by 10:

## Problem 3

Model 5 thousands and 3 hundreds.

What is 10 ***TIMES*** 5 thousands and 3 hundreds?

Where would I place the comma? Let's read this number together.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
		5	<del>5</del>	3	0	0
			0	0		

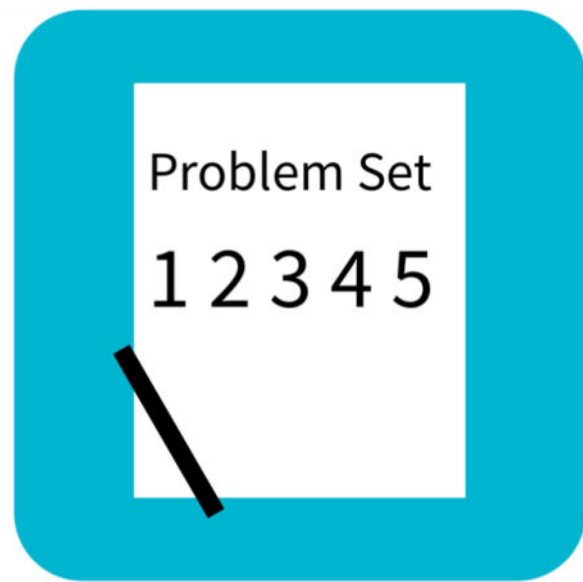
The table illustrates the place value chart for the number 5,300. The digits are placed in the Ten Thousands, Hundreds, Tens, and Ones columns. A comma is placed between the Thousands and Hundreds columns. Two arrows labeled "x 10" point from the digit 5 in the Ten Thousands column to the Thousands column, and from the digit 3 in the Hundreds column to the Tens column. Red 'X' marks are placed over the original digits 5 and 3 in the Thousands and Hundreds columns, respectively, indicating they have been moved or replaced.



# Multiply multiple digits by 10: Problem 3

Solve  $10 \times 15,309$ . Use the place value chart to show your thinking.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones



# Problem Set

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

1. Rewrite the following numbers including commas where appropriate:

a. 1234 \_\_\_\_\_ b. 12345 \_\_\_\_\_ c. 123456 \_\_\_\_\_

d. 1234567 \_\_\_\_\_ e. 12345678901 \_\_\_\_\_

2. Solve each expression. Record your answer in standard form.

Expression	Standard Form
5 tens + 5 tens	
3 hundreds + 7 hundreds	
400 thousands + 600 thousands	
8 thousands + 4 thousands	



# Debrief

- In problem 1, how did you know where to place commas within a number?
- Read aloud the numbers in problem 1(d) and (e) with your partner. How do you think the commas help you read it?
- How did you use the place value chart to help you compare unlike units in problem 5?
- When might it be useful to omit commas?

# Exit Ticket

Name \_\_\_\_\_

Date \_\_\_\_\_

1. In the spaces provided, write the following units in standard form. Be sure to place commas where appropriate.

a. 9 thousands 3 hundreds 4 ones \_\_\_\_\_

b. 6 ten thousands 2 thousands 7 hundreds 8 tens 9 ones \_\_\_\_\_

c. 1 hundred thousand 8 thousands 9 hundreds 5 tens 3 ones \_\_\_\_\_

2. Use digits or disks on the place value chart to write 26 thousands 13 hundreds.