Eureka Math

4th Grade
Module 1
Lesson 2

Icons

Read, Draw, Write

Learning Target

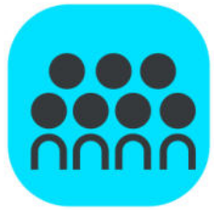
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

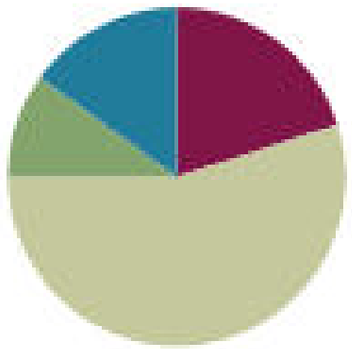
Small Group Time

Lesson 2

Objective: Recognize a digit represents 10 times the value of what it represents in the place to its right.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(6 minutes)
Concept Development	(33 minutes)
Student Debrief	(9 minutes)
Total Time	**(60 minutes)**

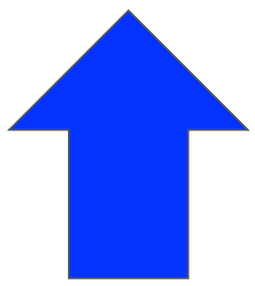


I can recognize a digit represents 10 times the value of what it represents in the place value to its right.

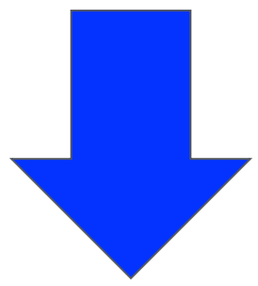
Group Counting

Count by threes forward and backward to 36.

Say all of the numbers. Watch my fingers to know whether to count up or down. A closed hand means stop.



Count up

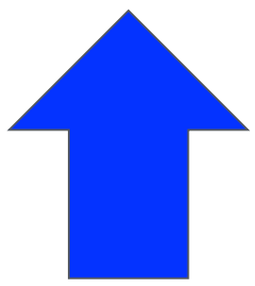


Count down

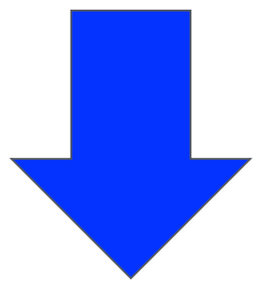
Group Counting

Count by fours forward and backward to 48.

Say all of the numbers. Watch my fingers to know whether to count up or down. A closed hand means stop.



Count up



Count down

Group Counting

Show 5 tens as place value disks and the write the number below.

Write the number below the ones column to show its value.

Say the number in UNIT form

Say the number in STANDARD form.

Multiply by 10

10 one x 10= 1 _____

Say the multiplication sentence

10 x ____ = 2 hundreds

10 x _____= 3 hundreds

10 x _____= 2 thousands

10 x _____= 8 thousands

Application Problem

Amy is baking muffins. Each baking tray can hold 6 muffins.

a. If Amy bakes 4 trays of muffins, how many muffins will she have in all?
b. The corner bakery produced 10 times as many muffins as Amy baked. How many muffins did the bakery produced?

Materials

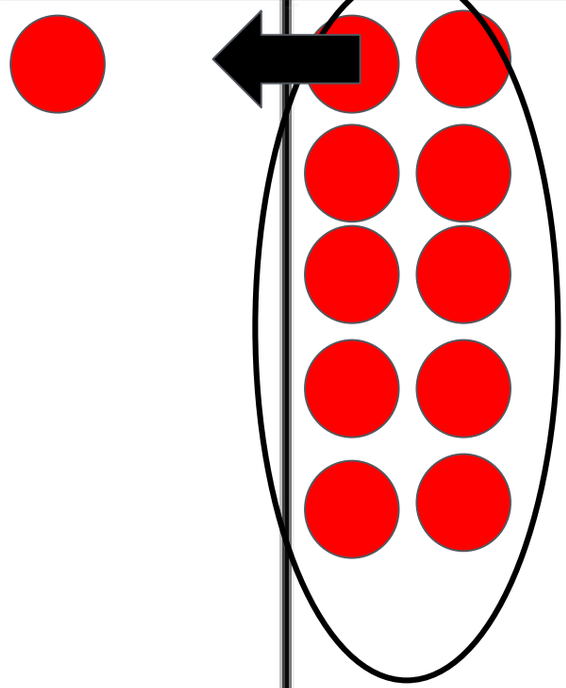
Students: Personal white board, unlabeled millions place value chart template.

Multiply single digits by 10: Problem 1

- Label your place value chart. (ones, tens…)
- Write the relationship between 1 hundred and 1 thousand on your whiteboard.
- Draw place value disks to find the value of 10 times 1 thousand.
- What did we get?
- Can this be represented in a different way?
- What do you think the next place value is after thousand?
- What is the new multiplication sentence for our work?

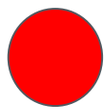
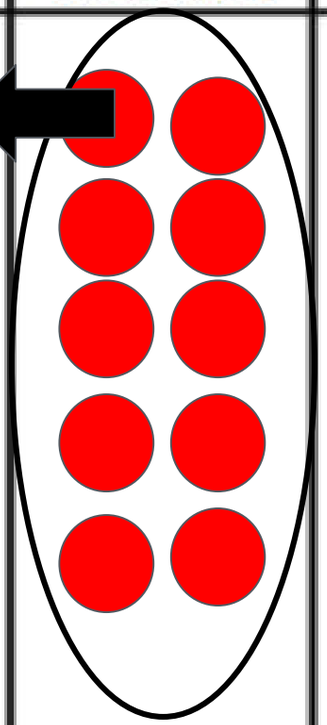
Multiply single digits by 10: Problem 1

- Now let's show what 10 times 1 ten thousand is.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
						

Multiply single digits by 10: Problem 1

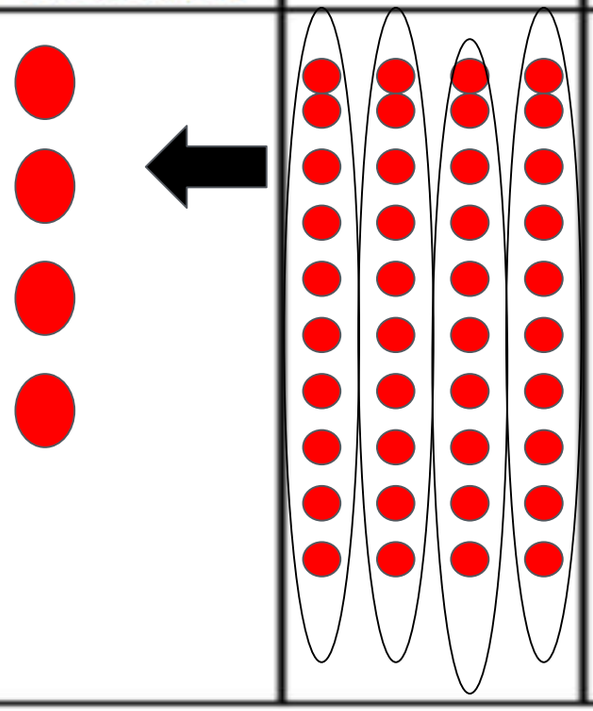
- Now show what 10 x 1 hundred thousand is.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
						

Multiply multiple digits by 10: Problem 2

Draw and write a multiplication sentence to show the value of 10 times 4 ten thousands.

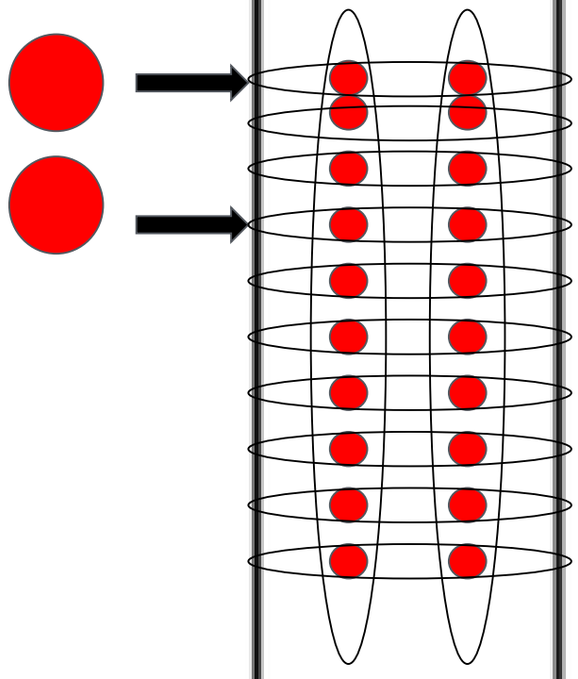
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones



Divide multiple copies of one unit by 10: Problem 3

2 thousands divided by 10

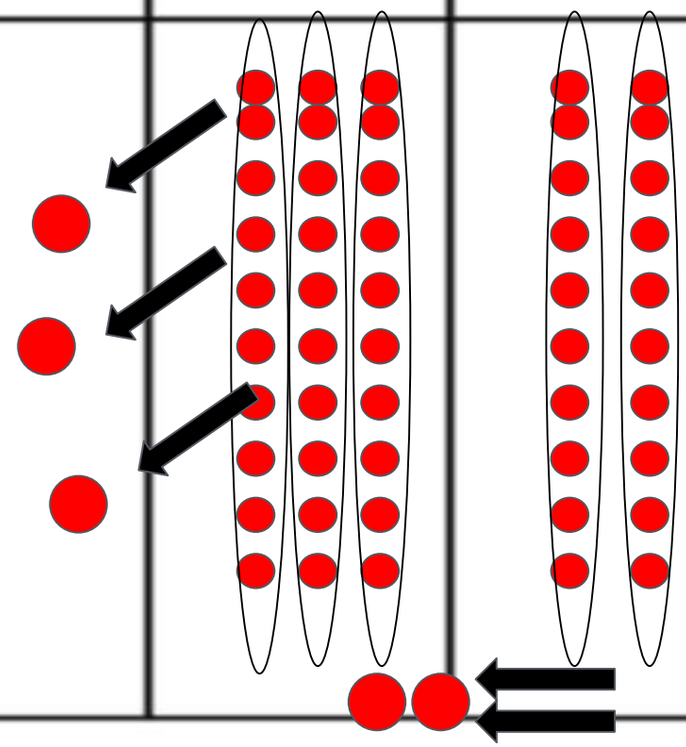
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones



Multiply/divide multiple copies of two different units by 10

- Draw disks to show 3 hundreds 2 tens
- Solve for 10 x (3 hundreds 2 tens)
- What is your product (answer)?

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

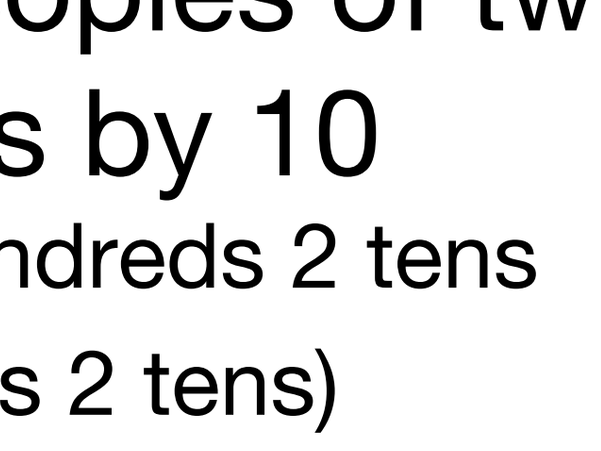


3 2

Multiply multiple copies of two different units by 10

- Draw digits to show 3 hundreds 2 tens
- Solve for 10 x (3 hundreds 2 tens)
- What is your product (answer)?

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
			3	2		



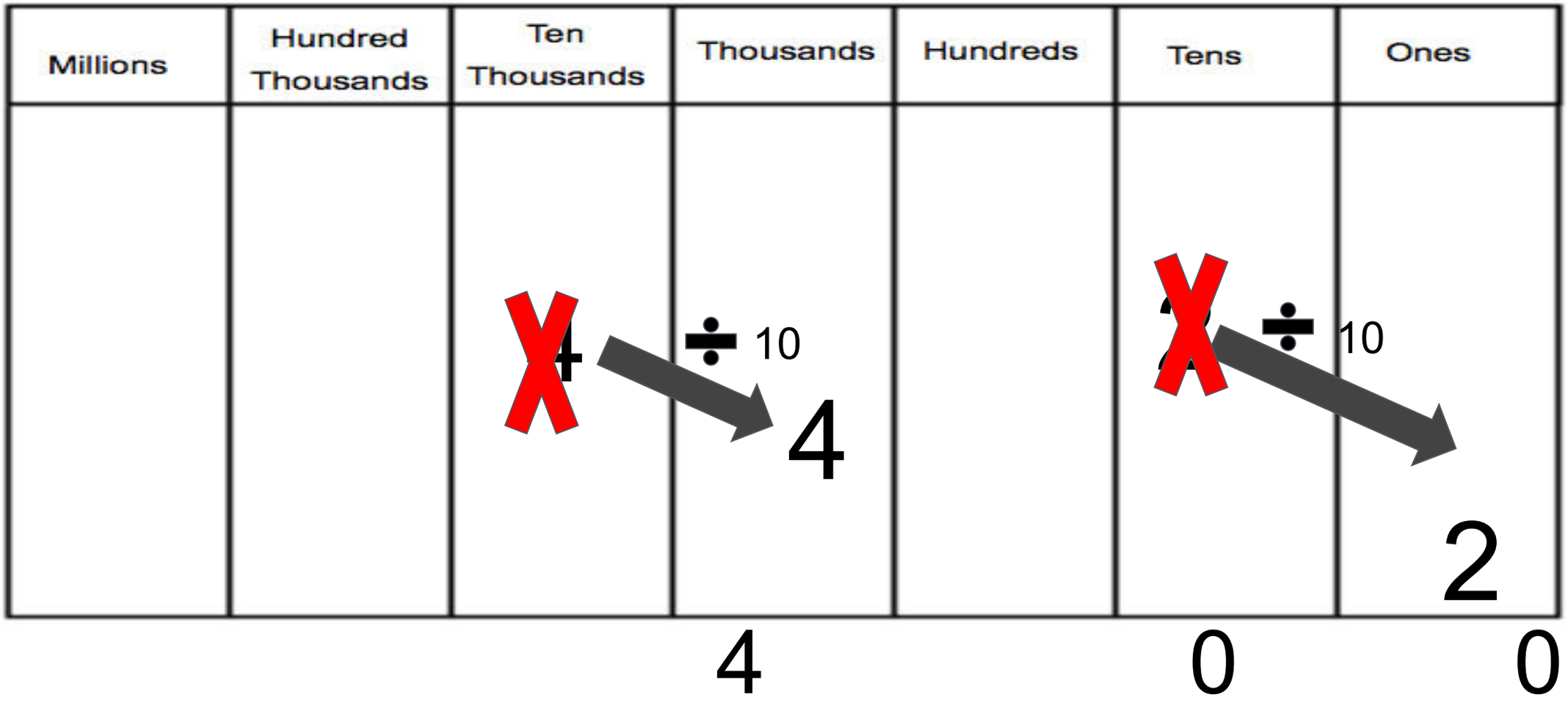
3 2 0

0

Divide multiple copies of two different units by 10

Show 4 ten thousand 2 tens on your place value chart.

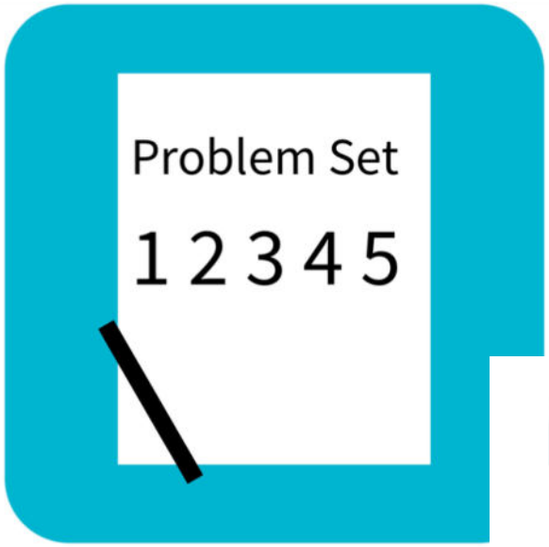
(4 ten thousands 2 tens) ÷ 10=



Divide multiple copies of two different units by 10

- Your turn.
- Try 10 x (4 thousands 5 hundreds)
- (7 hundreds 9 tens) ÷ 10

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

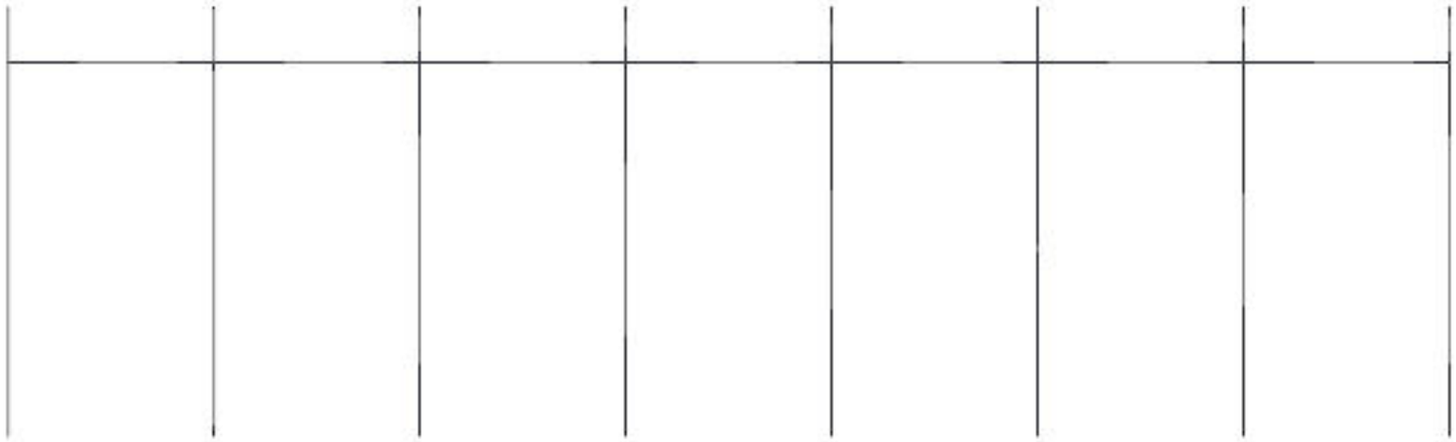


Problem Set

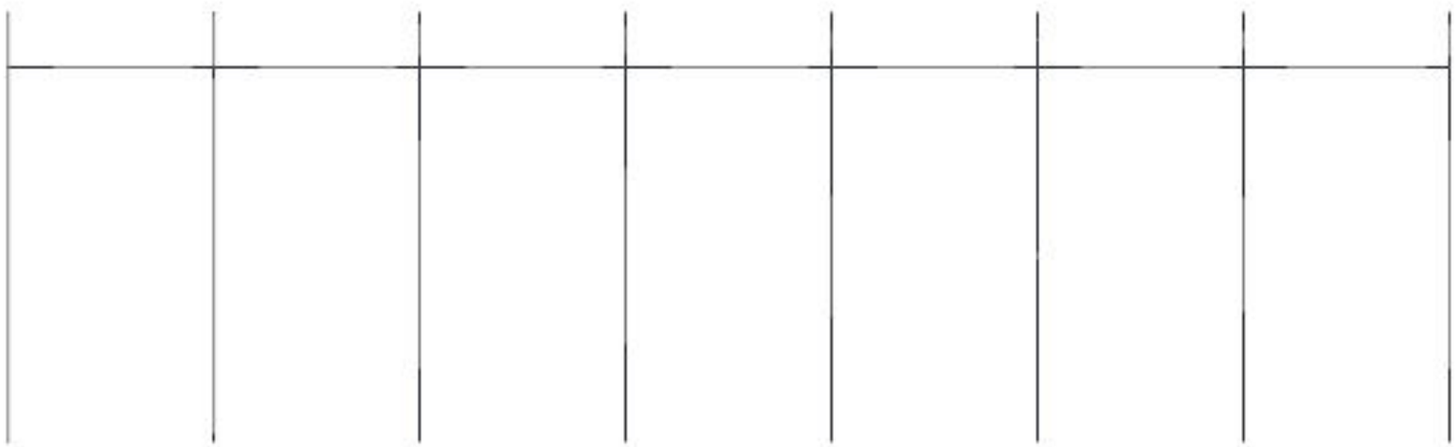
Name _____ Date _____

1. As you did during the lesson, label and represent the product or quotient by drawing disks on the place value chart.

   a. 10 × 2 thousands = _____ thousands = _____



   b. 10 × 3 ten thousands = _____ ten thousands = _____



Debrief

- How did we use patterns to predict the increasing units on the place value chart up to 1 million?
- What happens when you multiply a number by 10? 1 TEN THOUSAND is what times 10? 1HUNDRED THOUSAND is what times 10?
- Gail noticed that when you multiply a number by 10, you shift the digits one place to the left a put a zero in the ones place. Is she correct?
- How can you use multiplication and division to describe the relationship between units on the place value chart?

Exit Ticket

Name _____ Date _____

1. Fill in the blank to make a true number sentence. Use standard form.

   a. (4 ten thousands 6 hundreds) × 10 = _____

   b. (8 thousands 2 tens) ÷ 10 = _____

2. The Carson family saved up $39,580 for a new home. The cost of their dream home is 10 times as much as they have saved. How much does their dream home cost?