PLACE VALUE

MILLIONS				THOUSANDS				ONES		
hundred millions	ten millions	millions	,	hundred thousands	ten thousands	thousands	,	hundreds	tens	ones

Place value tells the value of each _____ in a number. It takes _____ of each place to equal the place on its left. For example:

10 ones = 1 _____

10 tens = 1 _____

10 hundreds = 1 _____

10 thousands = _____

10 ten-thousands = 1 _____

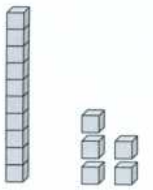
10 hundred-thousands = 1 _____

Name: _____

Visual Place Value (Less than 20)

Name:

Fill in the blanks to find the amounts.

Ex) 

1 Tens 5 Ones

Ex) 

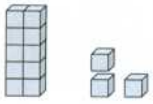
0 Tens 4 Ones

1) 

____ Tens ____ Ones

2) 

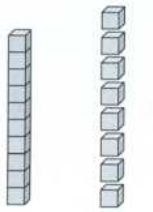
____ Tens ____ Ones

3) 

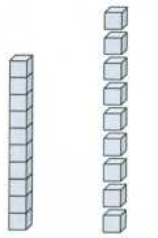
____ Tens ____ Ones

4) 

____ Tens ____ Ones

5) 

____ Tens ____ Ones

6) 

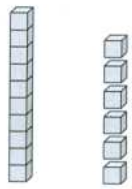
____ Tens ____ Ones

7) 

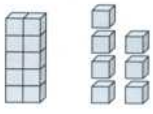
____ Tens ____ Ones

8) 

____ Tens ____ Ones

9) 

____ Tens ____ Ones

10) 

____ Tens ____ Ones

Answers

Ex. 15

Ex. 4

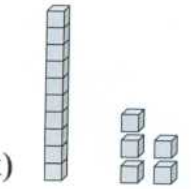
1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

1-10	90	80	70	60	50	40	30	20	10	0

Visual Place Value (Less than 20)

Name:

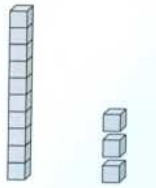
Fill in the blanks to find the amounts.

Ex) 

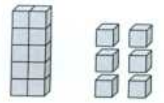
1 Tens 5 Ones

Ex) 

0 Tens 4 Ones

1) 

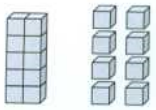
Tens Ones

2) 

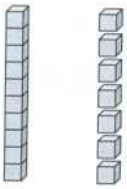
Tens Ones

3) 

Tens Ones

4) 

Tens Ones

5) 

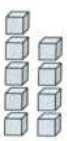
Tens Ones

6) 

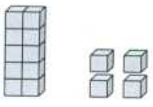
Tens Ones

7) 

Tens Ones

8) 

Tens Ones

9) 

Tens Ones

10) 

Tens Ones

Answers

Ex. 15

Ex. 4

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

thousands	hundreds	tens	ones
9	6	5	5
4	3	4	4
7	0	1	7

$2 \times 10 = 20$

$2 \times 100 = 200$

$2 \times 1{,}000 = 2{,}000$

$2 \times 10{,}000 = 20{,}000$

$2 \times 100{,}000 = 200{,}000$

$50 \times 40 =$

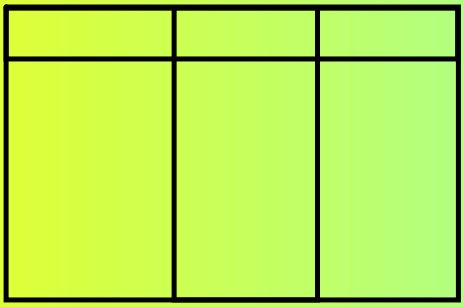
2000

10
20
30
40
50
60
70
80
90
100
110
120

Focus Standard:
4.NBT.1
4.NBT.2

Topic A

Place Value of Multi Digit Whole Numbers



Lesson 1

Objective: Interpret a multiplication equation as a comparison.

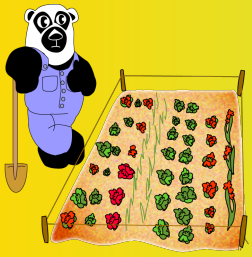
Fluency Activities (13 minutes):

-Sprint: Multiply & Divide by 10 (10 minutes)

- Place Value (3 minutes)

Application Problem (5 minutes)

Ben has a rectangular area 9 meters long and 6 meters wide. He wants a fence that will go around it as well as grass sod to cover it. How many meters of fence will he need? How many square meters of grass sod will he need to cover the entire area?



Concept Development (35 Minutes)

Problem 1

1 is 10 times as many as 1 one.

Thousands	Hundreds	Tens	Ones

Concept Development (35 Minutes)

Problem 2

One hundred is 10 times as much as 1 ten.

Thousands	Hundreds	Tens	Ones

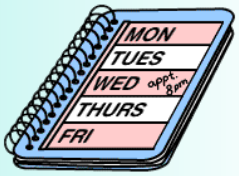
Concept Development (35 Minutes)

Problem 3

One thousand is 10 times as much as 1 hundred.

Thousands	Hundreds	Tens	Ones

Please add to your math binder:



1 ten = 10 X 1 one (1 ten is 10 times as much as 1 one)

1 hundred = 10 X 1 ten (1 hundred is 10 times as much as 1 ten)

1 thousand = 10 X 1 hundred (1 thousand is 10 times as much as 1 hundred

Concept Development (35 Minutes)

Problem 4

10 times as much as 2 ones.

Thousands	Hundreds	Tens	Ones

10 X 2 ones = _____ ones = _____ tens

Concept Development (35 Minutes)

Problem 4 (continued)

10 times as much as 4 tens.

Thousands	Hundreds	Tens	Ones

10 X 4 tens = _____ tens = _____ hundreds

Concept Development (35 Minutes)

Problem 5

10 times as many as 7 hundreds

Thousands	Hundreds	Tens	Ones

10 X 7 hundreds = _____ hundreds = _____ thousands

Name _____ Date _____

1. Label the place value charts. Fill in the blanks to make the following statements true. Draw disks in the place value chart to show how you got your answer, using arrows to show any bundling.

   a. 10 × 3 ones = _____ ones = _____

   b. 10 × 2 tens =_____ tens = _____

   c. 4 hundreds × 10 = _____ hundreds = _____

2. Complete the following statements using your knowledge of place value:

   a. 10 times as many as 1 ten is _____tens.

   b. 10 times as many as _____ tens is 30 tens or _____ hundreds.

   c. _____ as 9 hundreds is 9 thousands.

   d. _____ thousands is the same as 20 hundreds.

Use pictures, numbers, and words to explain how you got your answer for Part (d).

3. Matthew has 30 stamps in his collection. Matthew's father has 10 times as many stamps as Matthew. How many stamps does Matthew's father have? Use numbers and words to explain how you got your answer.

4. Jane saved $800. Her sister has 10 times as much money. How much money does Jane's sister have? Use numbers and words to explain how you got your answer.

5. Fill in the blanks to make the statements true.

   a. 2 times as much as 4 is _____.

   b. 10 times as much as 4 is _____.

   c. 500 is 10 times as much as _____.

   d. 6,000 is _____ as 600.

6. Sarah is 9 years old. Sarah's grandfather is 90 years old. Sarah's grandfather is how many times as old as Sarah?

   Sarah's grandfather is _____ times as old as Sarah.

Student Debrief (7 minutes)

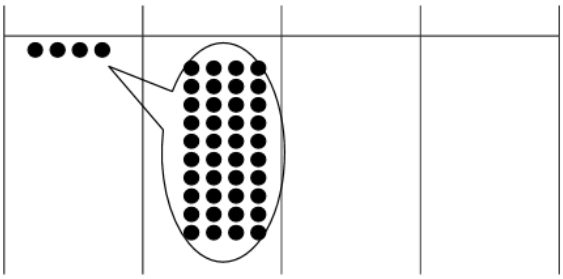
Lesson Objective: Interpret a multiplication equation as a comparison

Let's consider the following:

- What relationship do you notice between the problem of Matthew's stamps and 1 (a) and 1 (b)?
- How did Problem 1(c) help you to solve Problem 4 about Jane's savings?
- In problem 5 which solution proved most difficult to find? Why?
- How does the answer about Sarah's age and her grandfather's age relate to our lesson's objective?
- What are some ways you could model 10 times as many?
- Take 2 minutes to explain to your partner what we learned about the value of each unit as we move from right to left.

Name _____ Date _____

1. Use the number disks in the place value chart below to complete the following problems.



a. Label the place value chart.

b. Tell about the movement of the disks in the place value chart by filling in the blanks to make the following equation true and match what is happening in the place value chart.

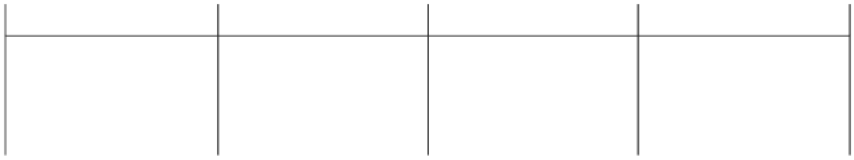
_____ × 10 = _____ = _____

c. Write a statement about this place value chart using the words "10 times as many."

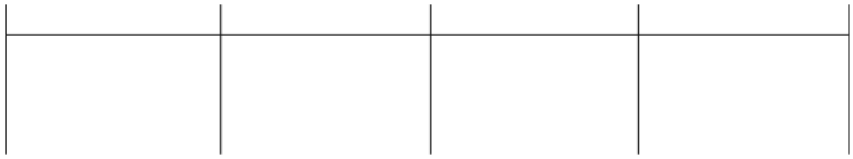
Name _____ Date _____

1. Label the place value charts. Fill in the blanks to make the following statements true. Draw disks in the place value chart to show how you got your answer.

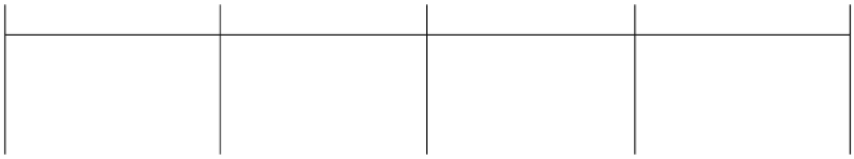
   a. 10 × 4 ones = _____ ones = _____

   b. 10 × 2 tens =_____ tens = _____

   c. 5 hundreds × 10 = _____ hundreds = _____

2. Complete the following statements using your knowledge of place value:

   a. 10 times as many as 1 hundred is _____ hundreds or _____ thousand.

   b. 10 times as many as _____ hundreds is 60 hundreds or _____ thousands.

   c. _____ as 8 hundreds is 8 thousands.

   d. _____ hundreds is the same as 4 thousands.

Use pictures, numbers, and words to explain how you got your answer for Part (d).

M | HT | TT | Th | H | T | O

Lesson 2

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

Fluency Activities (12 minutes):
-Skip Counting (4 minutes)
- Place Value (4 minutes)
-Multiply by 10 (4 minutes)

Application Problem (6 minutes)

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 all together?
b. The corner bakery has made 10 times as many muffins as Amy baked. How many muffins did the bakery produce?
BONUS: If the corner bakery packages the muffins in boxes of 100, how many boxes of 100 could they make?

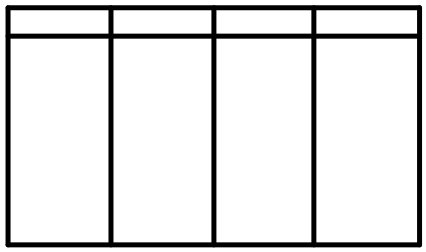
Concept Development (33 minutes):

Problem 1

Write the multiplication sentence that shows the relationship between 1 hundred and 1 thousand.

10 X 1 hundred = _____ hundreds = ___ thousand

Draw number discs on your place value chart to find the value of 10 times 1 thousand.



10 X 1 thousand =

How else can 10 thousand be represented?

Write a complete multiplication sentence to show 10 times the value of 1 thousand.

10 X 1 thousand = _____ thousand = _____ ten thousand

Concept Development (33 minutes):

10,101 x 10

Problem 1 (continued)

On your place value chart, show what 10 times the value of 1 ten thousand equals.

Hundred-Thousands	Ten-Thousands	Thousands	Hundreds	Tens	Ones

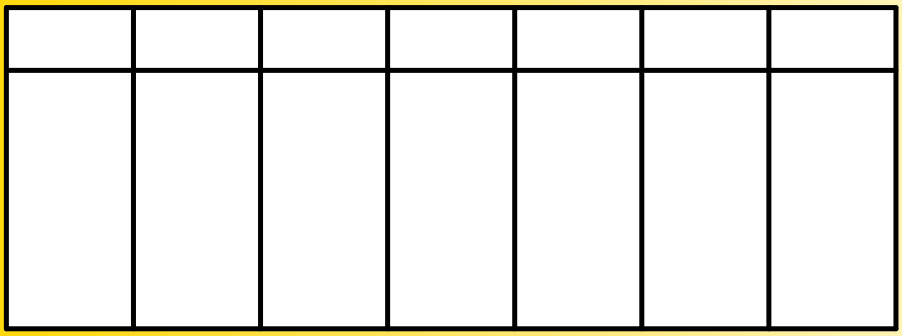
10 X 1 ten thousand = _____ ten thousands = _____ hundred thousand.

Solve to find 10 times 1 hundred thousand.
10 X 1 hundred thousand = _____ hundred thousands = _____ million

Concept Development (33 minutes):

Problem 2

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



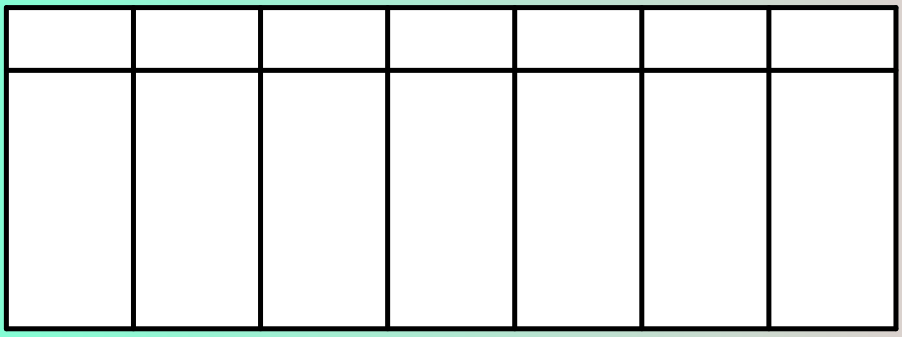
10 X 4 ten thousands = _____ ten thousands = ____ hundred thousands

Repeat with 10 X 3 hundred thousands.

Concept Development (33 minutes):

Problem 3

2 thousands ÷ 10



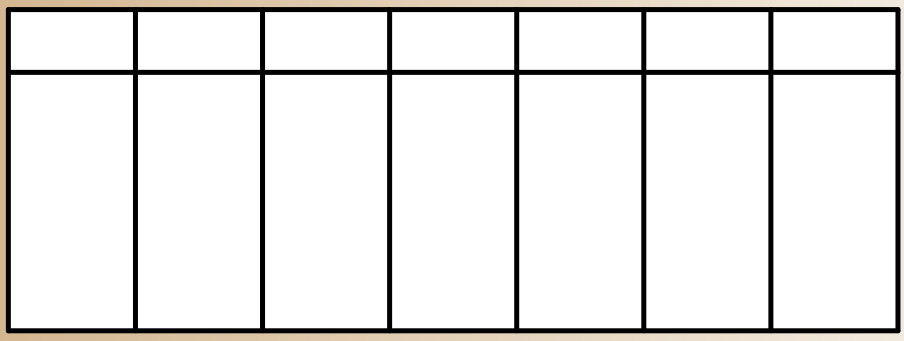
2 thousands ÷ 10 = _____ hundreds ÷ 10 = _____ hundreds

Repeat with 3 hundred thousands ÷ 10.

Concept Development (33 minutes):

Problem 4

Draw number discs to show 3 hundreds and 2 tens.
Work in pairs to solve 10 X (3 hundreds 2 tens)



10 X (3 hundreds 2 tens) = _____ = _____

Concept Development (33 minutes):

Problem 4 (continued)

(4 ten thousands 2 tens) ✱ 10

Million	Hundred Thousand	Ten Thousand	Thousand	hundreds	ten	ones
	.... x10	....		.. x10	..	
	4	0	0	2	0	0

Repeat with 10 X (4 thousands 5 hundreds).

Repeat with (7 hundreds 9 tens) ÷10

Name _____ Date _____

× ÷ tally

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

a. 10 × 2 thousands = 20 thousands = 2 ten thousands

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones

x10

2 x 10 = 20

2 0 0 0 0

b. 10 × 3 ten thousands = 30 ten thousands = 3 hundred thousands

million	ht	tt	th	h	t	o

x10

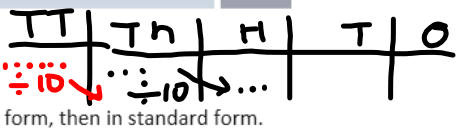
10 x 3 = 30

3 0 , 0 0 0 0

c. 4 thousands ÷ 10 = 4 hundreds ÷ 10 = 4 tens

M	HT	TT	Th	H	T	O

÷10 ÷10



2. Fill in the blanks to complete each number sentence. Respond first in unit form, then in standard form.

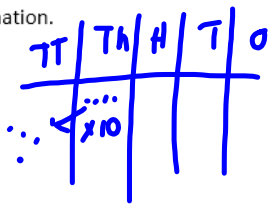
Expression	Unit form	Standard Form
10 × 6 tens	60 tens 60×10	600
7 hundreds × 10	70 hundreds	7,000
3 thousands ÷ 10	3 hundreds	300
6 ten thousands ÷ 10	6 thousands	6,000
10 x 4 thousands	40 thousands	40,000

3. Fill in the blanks to complete each number sentence. Respond first in unit form, then in standard form.

Expression	Unit form	Standard Form
(4 tens 3 ones) x 10	4 hundreds 3 tens	430
(2 hundreds 3 tens) × 10	2 thousands 3 hundreds	2,300
(7 thousands 8 hundreds) × 10	7 t. t. 8 t. h.	78,000
(6 thousands 4 tens) ÷ 10	6 hundreds 4 ones	604
(4 ten thousands 3 tens) ÷ 10	4 thousand 3 tens	4,003

4. Explain how you solved the last problem of Set 2. Use a place value chart to support your explanation.

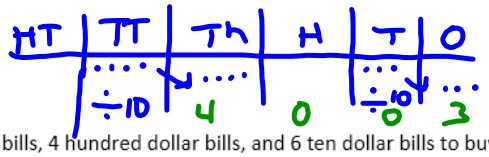
40,000 is 10 times as much as 4 thousands.



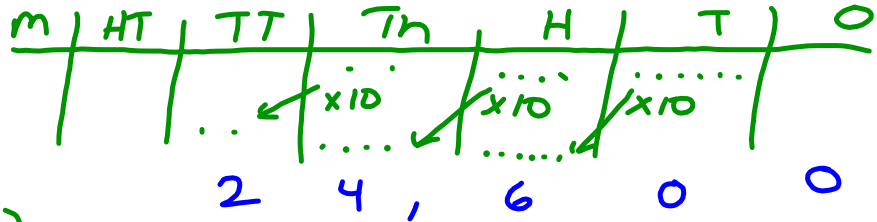
(4 ten thousands 3 tens) ÷10 = 4 thousands 3 ones

5. Explain how you solved the last problem of Set 3. Use a place value chart to support your explanation.

If you divide 4 Ten thousands by 10 you get 4 thousand.
If you divide 3 tens by 10 you get 3 ones
4,003



H/W 6. Jacob saved 2 thousand dollar bills, 4 hundred dollar bills, and 6 ten dollar bills to buy a car. The car costs 10 times as much as he has saved. How much does the car cost?

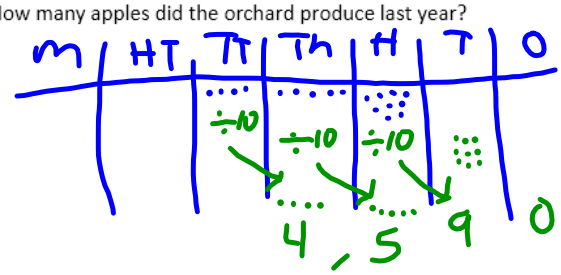


The car costs $24,600

H/W 7. Last year the apple orchard experienced a drought and didn't produce many apples. But this year, the apple orchard produced 45 thousand granny smith apples and 9 hundred red delicious apples, which is 10 times as many apples as last year. How many apples did the orchard produce last year?

45,900 ÷ 10

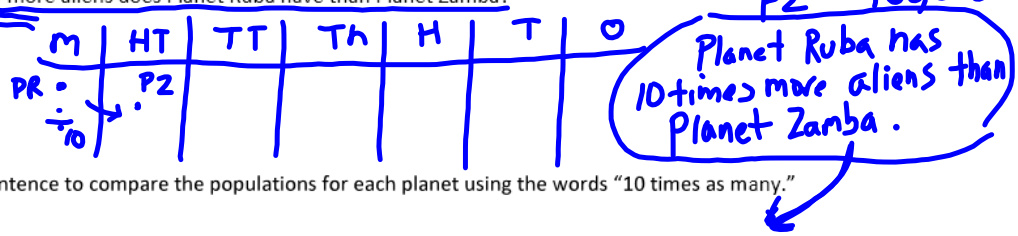
The orchard produced 4,590 apples last year.



H/W 8. Planet Ruba has a population of 1 million aliens. Planet Zamba has 1 hundred thousand aliens.

a. How many more aliens does Planet Ruba have than Planet Zamba?

PR = 1,000,000
P2 100,000



b. Write a sentence to compare the populations for each planet using the words "10 times as many."

Student Debrief (9 minutes): 

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

Let's Consider the Following

- How did we use patterns to predict the increasing units on the place value chart up to 1 *million*? Can you predict the unit that is 10 times 1 million? 100 times 1 million?
- What happens when you multiply a number by 10? 1 *ten thousand* is what times 10? 1 *hundred thousand* is what times 10?
- Gail said that she noticed that when you multiply a number by 10, you shift the digits one place to the left and 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? Use Problems 1(a) and 1(c) to help explain.
- Practice reading your answers in Problem 2 out loud. What similarities did you find in saying the numbers in unit form and standard form? Differences?In problem 7 did you write your equation as a multiplication or division sentence? Which way is correct?

Name _____ Date _____

1. Fill in the blank to complete the number sentence. Respond with a numeral.

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

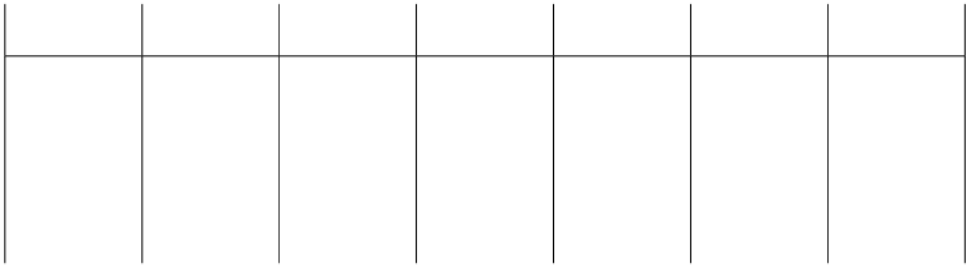
   b. (8 thousands 2 tens) ÷ 10 = _____

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?

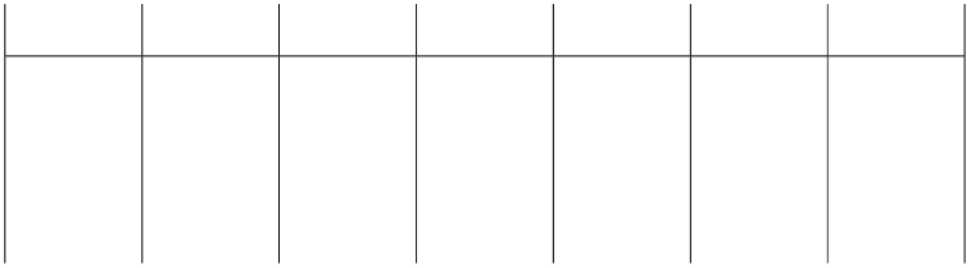
Name _____ Date _____

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

a. 10 × 4 thousands = _____ thousands = _____



b. 4 thousands ÷ 10 = _____ hundreds ÷ 10 = _____



2. Fill in the blanks to complete each number sentence. Respond first in unit form, then in standard form.

Expression	Unit Form	Standard Form
10 × 3 tens		
5 hundreds × 10		
9 ten thousands ÷ 10		
10 x 7 thousands		

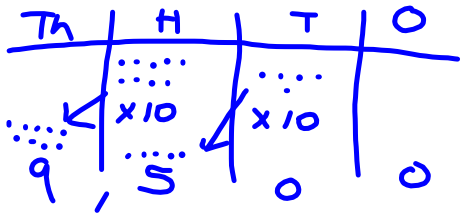
3. Fill in the blanks to complete each number sentence. Respond first in unit form, then in standard form.

Expression	Unit Form	Standard Form
(2 tens 1 one) x 10		
(5 hundreds 5 tens) × 10		
(2 thousands 7 tens) ÷ 10		
(4 ten thousands 8 hundreds) ÷ 10		

950
9,500

4. Emily collected $950 selling Girl Scout cookies all day Saturday. Emily's troop collected 10 times as much as she did. How much money did Emily's troop raise?

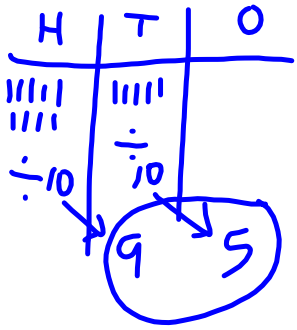
Emily's troop raised $9,500.



$950

5. On Saturday, Emily made 10 times as much as on Monday. How much money did Emily collect on Monday?

10 times less than 950



Emily collected $95 on Monday.

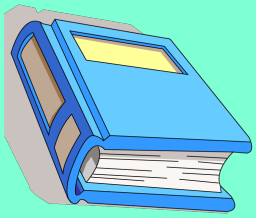
Lesson 3

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

Fluency Activities (15 minutes):
-Sprint: Multiply by 3 (10 minutes)
-Place Value and Value (3 minutes)
-Base Ten Units (2 minutes)

Application Problem (6 minutes):

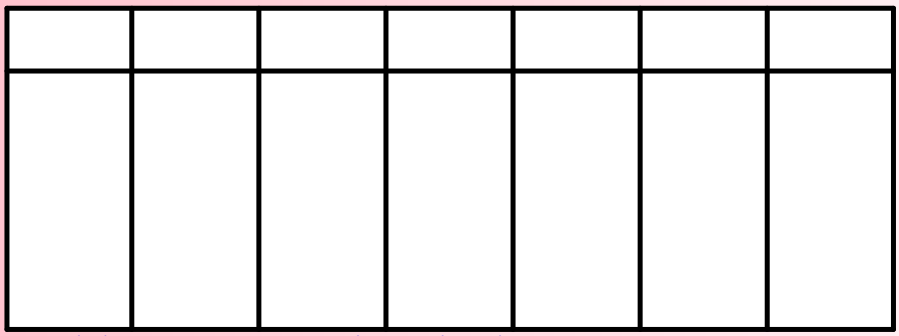
The school library has 10,600 books. The town library has 10 times as many books. How many books does the town library have?



Concept Development (32 minutes):

Label the place value headings on your place value chart.

Discuss the similarities and differences you see in those heading names.



Record this number in your place value chart: 3608430325.

- Place the commas to show grouping of units.
- How many thousands are in this number?
- How many millions are in this number?
- Name this number.

Concept Development (32 minutes):

Problem 2:
What would happen if we combined 2 groups of 5 hundreds? Draw number discs to solve.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Now solve for 5 thousands plus 5 thousands.

Solve for 4 ten thousands plus 6 ten thousands.

Concept Development (32 minutes):

Problem 2 (continued):

Solve
3 hundred thousands + 7 hundred thousands
23 thousands + 4 ten thousands
43 ten thousands + 11 thousands

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Concept Development (32 minutes):

Problem 3:
What is ten times 5 hundreds 3 tens?

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

10 X 1 ten thousand 5 thousands 3 hundreds 2 ones = _____

Name _____ Date _____

1. Rewrite the following numbers including commas where appropriate:

a. 1234 1,234 b. 12345 12,345 c. 123456 123,456

d. 1234567 1,234,567 e. 12345678901 12,345,678,901

billions, million, Thousand

2. Complete the following chart:

number

Expression	Standard Form
5 tens + 5 tens 50+50	100
3 hundreds + 7 hundreds 300 + 700	1,000
400 thousands + 600 thousands 400,000 + 600,000	1,000,000
8 thousands + 4 thousands 8,000 + 4,000	12,000

600,000
+ 400,000
1,000,000

3. Represent each addend with number disks in the place value chart. Show the composition of larger units from 10 smaller units. Write the sum in standard form.

a. 4 thousands + 11 hundreds = 5,100

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
			5	1	0	0

b. 24 ten thousands + 11 thousands = 251,000

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
	2	5	1	0	0	0

4. Use the place value chart to represent the following equations with numbers or disks. Write the product in standard form.

a. 10 x 3 thousands = 30,000

How many thousands are in the answer? 30

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
		3	0	0	0	0

b. (3 ten thousands 2 thousands) x 10 = 320,000

How many thousands are in the answer? 320

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
		3	2	0	0	0

c. (32 thousands 1 hundred 4 ones) x 10 = 321,040

How many thousands are in your answer? 321

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
		3	2	1	4	0

5. Lee and Gary visited South Korea. They exchanged their dollars for South Korean bills. Lee received 15 ten thousand South Korean bills. Gary received 150 thousand bills. Use disks or numbers on a place value chart to compare Lee and Gary's money.

Lee 150,000
150,000

HT	TT	TH	H	T	O
1	5	0	0	0	0

Lee and Gary both have $150,000.

Student Debrief (7 minutes):

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

Let's Consider the Following:

- In Problem 1, how did you know where to place commas within a number?
- Read aloud the numbers in Problems 1(d) and 1(e) with your partner. What role do the commas have as you read across the number?
- What did you discover as you solved Problem 3? How did part (a) help you to solve part (b)?
- How did you use the place value chart to help you compare unlike units in Problem 5?

Name _____ Date _____

1. In the spaces provided, rewrite the following units as digits. 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 the place value chart to write 26 thousands and 13 hundreds using digits.

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones

How many thousands are in your answer? _____

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 3 Homework 4•1

Name _____ Date _____

1. Rewrite the following numbers including commas where appropriate:

   a. 4321 _____ b. 54321 _____

   c. 224466 224,466 d. 2224466 2,224,466

   e. 10010011001 10,010,011,001

2. Complete the following chart:

numbers

Expression	Unit Form (Use the largest units possible)	Standard Form
4 tens + 6 tens	1 hundred	100
8 hundreds + 2 hundreds		
5 thousands + 7 thousands	12 thousands 1 Ten Th + 2 thousands	12,000

3. Represent each addend with number disks in the place value chart. Show the composition of larger units from 10 smaller units. Write the sum in standard form.

   a. 2 thousands + 12 hundreds = 3,200

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
			3	2	0	0

   b. 14 ten thousands + 12 thousands = 152,000

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
	1	5	2	0	0	0

4. Use the place value chart to represent the following equations with numbers or disks. Write the product in standard form.

a. 10 x 5 thousands = 50 thousands = 50,000

How many thousands are in the answer? 50

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
		5	0	0	0	0

b. (4 ten thousands 4 thousands) x 10 = 440,000

How many thousands are in the answer? 440

27,000

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
	4	4	0	0	0	0

c. (27 thousands 3 hundreds 5 ones) x 10 = 273,050

How many thousands are in your answer? 273

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
	2	7	3	0	5	0

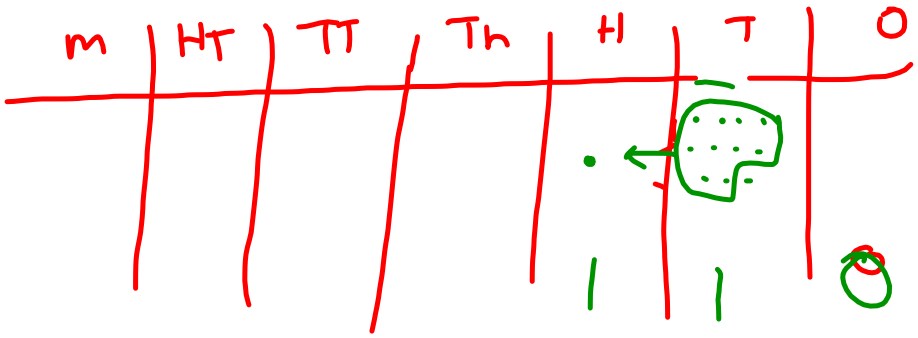
5. A large grocery store received an order of 2 thousand apples. A neighboring school received an order of 20 boxes of apples with 100 apples in each. Use disks or numbers on a place value chart to compare the number of apples received by the school and the number of apples received by the grocery store.

100 x 20 = 2,000

M	HT	TT	Th	H	T	O
			11		DD x100	
			11			

The number of apples they both got is equal. 2000 apples

4 tens x 10 = _____



4 tens + 7 tens = _____

2. Fill in the blanks to complete each number sentence. Respond first in unit form, then in standard form.

Expression	Unit form	Standard Form
10 × 6 tens		
7 hundreds × 10		
3 thousands ÷ 10		
6 ten thousands ÷ 10		
10 x 4 thousands		

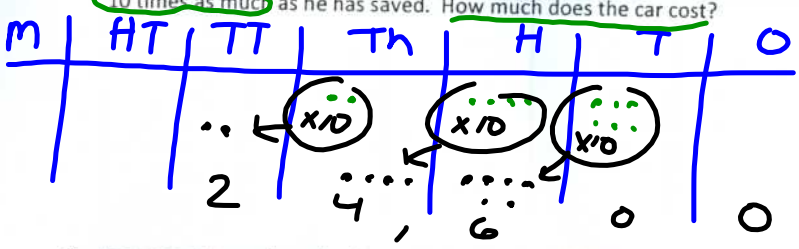
3. Fill in the blanks to complete each number sentence. Respond first in unit form, then in standard form.

Expression	Unit form	Standard Form
(4 tens 3 ones) x 10		
(2 hundreds 3 tens) × 10		
(7 thousands 8 hundreds) × 10		
(6 thousands 4 tens) ÷ 10		
(4 ten thousands 3 tens) ÷ 10		

4. Explain how you solved the last problem of Set 2. Use a place value chart to support your explanation.

5. Explain how you solved the last problem of Set 3. Use a place value chart to support your explanation.

6. Jacob saved 2 thousand dollar bills, 4 hundred dollar bills, and 6 ten dollar bills to buy a car. The car costs 10 times as much as he has saved. How much does the car cost?



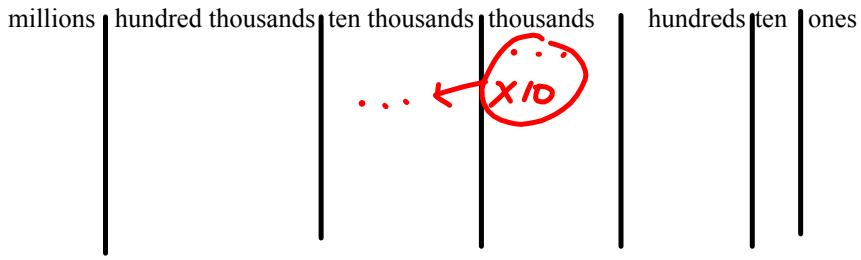
The car cost $24,600.

7. Last year the apple orchard experienced a drought and didn't produce many apples. But this year, the apple orchard produced 45 thousand granny smith apples and 9 hundred red delicious apples, which is 10 times as many apples as last year. How many apples did the orchard produce last year?

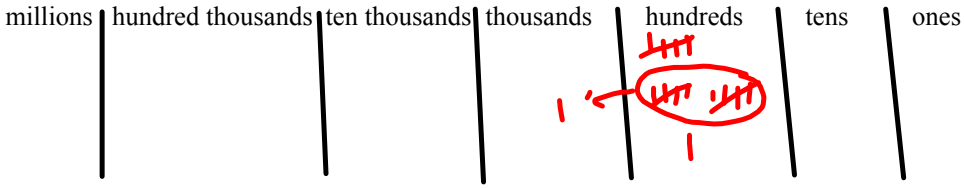
8. Planet Ruba has a population of 1 million aliens. Planet Zamba has 1 hundred thousand aliens.
   a. How many more aliens does Planet Ruba have than Planet Zamba?

   b. Write a sentence to compare the populations for each planet using the words "10 times as many."

3 thousands x 10 = _____



5 hundreds + 11 hundreds = _____



Lesson 4

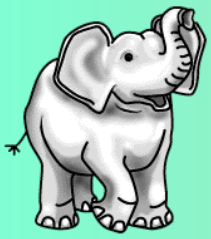
Objective: Read and write multi-digit numbers using base ten numerals, number names, and expanded form.

43 : Forty three

Fluency Activities (13 minutes):
-Sprint: Skip Counting (3 minutes)
-Place Value (2 minutes)
-Numbers expressed in different base units (8 minutes)

Application Problem (6 minutes):

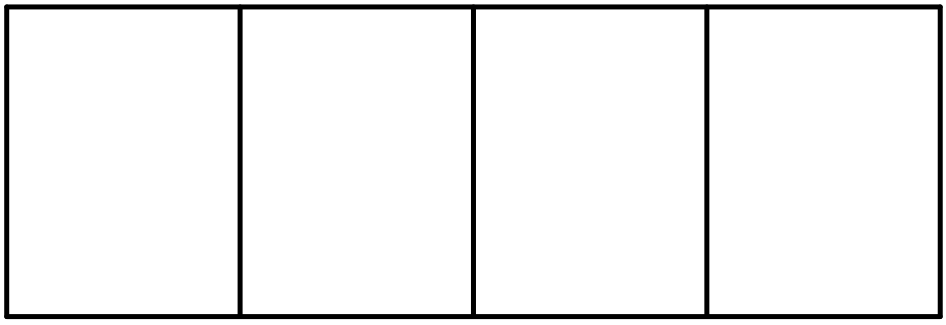
There are about forty-one thousand Asian elephants and about four hundred seventy thousand African elephants left in the world. About how many Asian and African elephants are left in total?



Concept Development (26 minutes):

Problem 1:

On your place value chart write 1, 708.

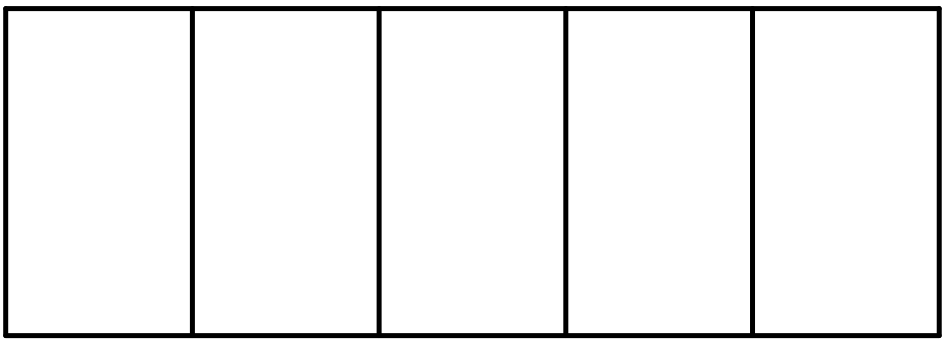


Write a number sentence to show the equation we just discussed.

Concept Development (26 minutes):

Problem 2:

On your place value chart write 27,085



With your partner write an addition sentence.

Concept Development (26 minutes):

Problem 3:

2	7	0 ,	8	5	0

Read this number. Tell your partner how you can match the word form to the standard form

Write this number in your place value chart.

Write this number in expanded form. Tell your partner your equation.

Let's Try Again!

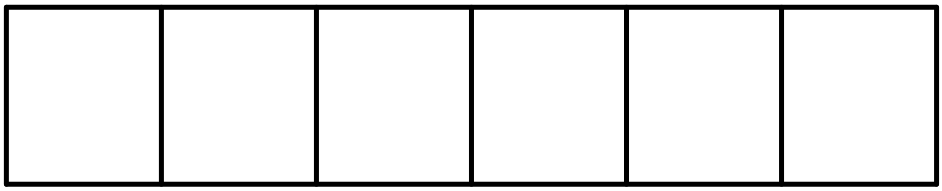
	6	4,	0	0	3

Concept Development (26 minutes):

Problem 4:

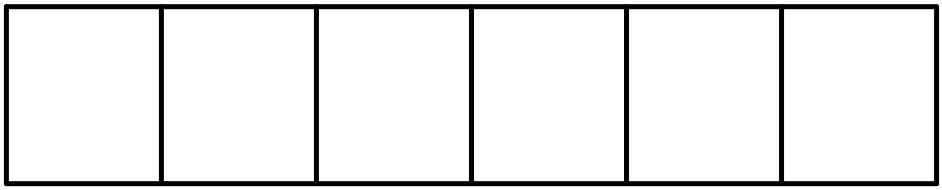
Write this number in your place value chart: 700,000 + 8,000 + 500 + 70 + 3

My sum is 78,573. Compare your sum with mine.



Write this number in words.

Write this number in your place value chart and then in words: 500,000 + 30,000 + 10 + 3



Name _____ Date _____

1. On the place value chart below, label the units and represent the number 90,523.

Millions	Hundred thousands	Ten thousands	thousands	hundreds	tens	ones
		9	0 ,	5	2	3

a. Write the number in word form.

Ninety thousand, Five hundred twenty-three

b. Write the number in expanded form.

90,000 + 500 + 20 + 3

2. Represent the number 905,203.

M	HT	TT	Th	H	T	O
	9	0	5,	2	0	3

a. Write the number in word form.

nine hundred five thousand, two hundred three

b. Write the number in expanded form.

900,000 + 5,000 + 200 + 3

3. Complete the following chart:

Number	Word Form	Expanded Form
2,480	two thousand, four hundred eighty	2,000 + 400 + 80
20,482	Twenty thousand, Four hundred eighty-two	20,000 + 400 + 80 + 2
64,106	sixty-four thousand, one hundred six	60,000 + 4,000 + 100 + 6
604,016 600,000 4,000 10 6	Six hundred four thousand, Sixteen	600,000 + 4,000 +10 + 6
1,060,060		

16

20,000 + 400 + 80 + 2 = 20,482

4. Black Rhinos are endangered, with only 4,400 left in the world. Timothy read that number as "four thousand, four hundred." But his father read the number as "44 hundred." Who read the number correctly? Use pictures, numbers, or words to explain your answer.

TT	Th	H	T	O
	4 ,	4	0	0
	4 ,	4	0	0

Both Tim + his father are correct. 44 hundreds = 4 thousands and 4 hundreds

Student Debrief (15 minutes):

Lesson Objective: Read and write multi-digit numbers using base ten numerals, number names, and expanded form.

Let's consider the following:

- Compare the numbers in Problems 1 and 2. What do you notice?
- As you completed the chart on Page 2, what number words were tricky to write? Which number words can be confused with other number words? Why? What strategies did you use to spell number words?
- Timothy and his dad read a number word in two ways. What other numbers can be read more than one way? Which way of reading a number best helps you solve? When?
- Two students discussed the importance of zero. Nate said that zero is not important, while Jill said that zero is extremely important. Who is right? Why do you think so?What role can zero play in a number?
- How is expanded form related to the standard form of a number?
- When might you use expanded form to solve?

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 4 Exit Ticket 4•1

Name _____ Date _____

1. Use the place value chart below to complete the following.

million	hundred thousands	ten thousands	thousands	hundreds	tens	ones
	8	0	6	3	0	2

a. Label the units on the chart.

b. Write the number 800,000 + 6,000 + 300 + 2 in the place value chart.

c. Write the number in word form. Eight hundred six thousand, three hundred two

2. Write one hundred sixty thousand, five hundred eighty-two in expanded form.

160,582

100,000 + 60,000 + 500 + 80 + 2

160582
100000
60000
500
80
2

Name _____ Date _____

1. On the place value chart below, label the units and represent the number 50,679.

a. Write the number in word form.

b. Write the number in expanded form.

2. On the place value chart below, label the units and represent the number 506,709.

a. Write the number in word form.

b. Write the number in expanded form.

3. Complete the following chart:

Number	Word Form	Expanded Form
	five thousand, three hundred seventy	
		50,000 + 300 + 70 + 2
	thirty-nine thousand, seven hundred one	
309,017		
1,070,070		

4. Use pictures, numbers, and words to explain another way to say "sixty-five hundred."