

North Penn School District  
Elementary Math Parent Letter

Grade 2

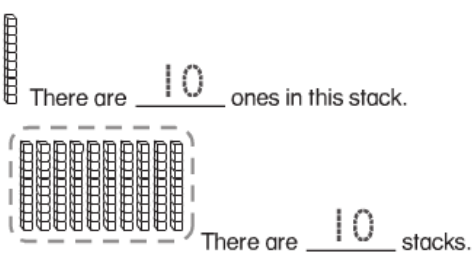
Unit 1 – Chapter 2: Numbers to 1,000

Examples for each lesson

Lesson 2.1

**Group Tens as Hundreds**

CC.2.NBT.1b  
Understand place value.



There are 10 ones in this stack.

There are 10 stacks.

10 stacks of 10 ones is 100 ones.

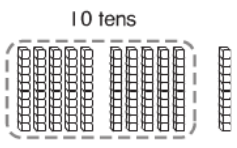
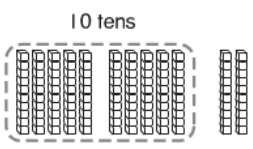
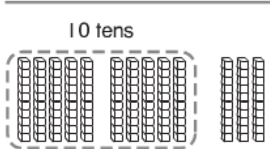
10 tens → 1 hundred → 100

More information on this strategy is available on Animated Math Model #7.

Lesson 2.2

**Explore 3-Digit Numbers**

Understand place value.

 <p>10 tens</p>	$\begin{array}{r} \underline{11} \text{ tens} \\ 1 \text{ hundred } 1 \text{ ten} \\ 110 \end{array}$
 <p>10 tens</p>	$\begin{array}{r} \underline{12} \text{ tens} \\ 1 \text{ hundred } 2 \text{ tens} \\ 120 \end{array}$
 <p>10 tens</p>	$\begin{array}{r} \underline{13} \text{ tens} \\ 1 \text{ hundred } 3 \text{ tens} \\ 130 \end{array}$

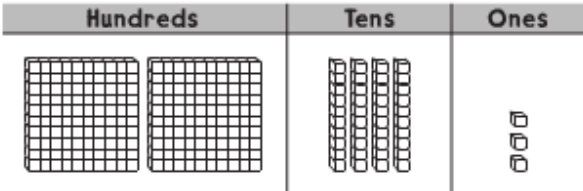
Lesson 2.3

# Model 3-Digit Numbers

Understand place value.

Show 243.


With blocks:



In a chart:

Hundreds	Tens	Ones
2	4	3

With a quick picture:

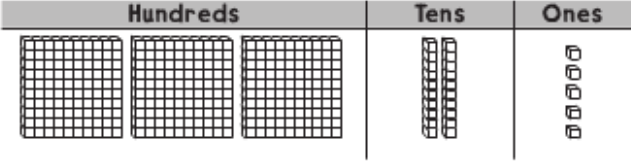


Lesson 2.4

# Hundreds, Tens, and Ones

Understand place value.

How many are there in all?



3 hundreds    2 tens    5 ones

Write how many in the chart.

Hundreds	Tens	Ones
3	2	5

Write the number as hundreds plus tens plus ones.

3 hundreds 2 tens 5 ones is the same as 300 + 20 + 5.

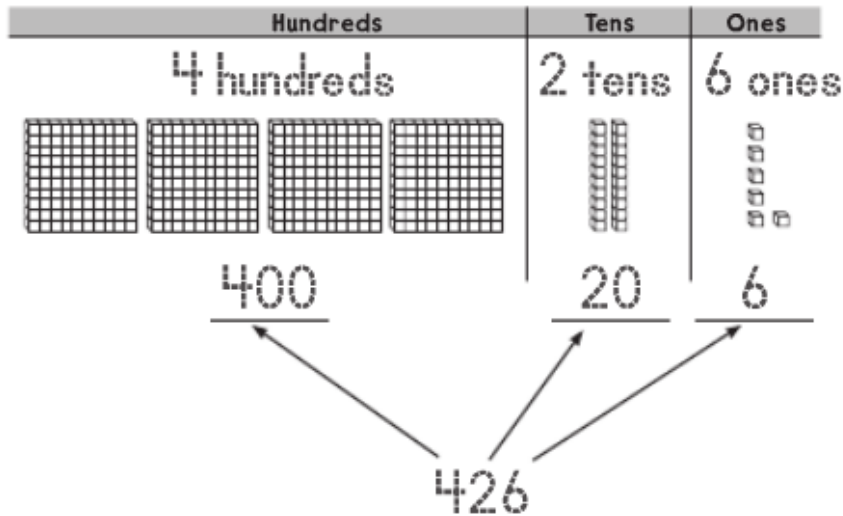
3 hundreds 2 tens 5 ones is the same as 325.

## Lesson 2.5

# Place Value to 1,000

Understand place value.

The value of each digit in 426 is shown by its place in the number.



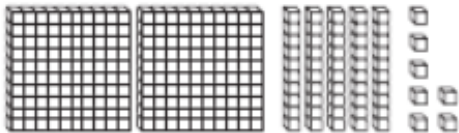
More information on this strategy is available on Animated Math Model #8.

## Lesson 2.6

# Number Names

Understand place value.

You can write a number using words.



What is shown with the hundreds blocks?

two hundred

What is shown with the tens and ones blocks?

fifty-seven

So you write 257 as two hundred fifty-seven.

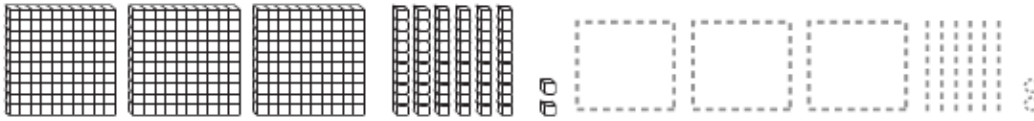
Lesson 2.7

# Different Forms of Numbers

Understand place value.

There is more than one way to show and write a number.

three hundred sixty-two



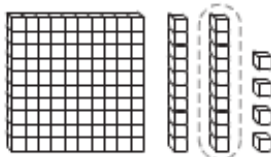
$$\begin{array}{r}
 3 \text{ hundreds} \quad 6 \text{ tens} \quad 2 \text{ ones} \\
 \underline{300} + \underline{60} + \underline{2} \\
 \underline{362}
 \end{array}$$

Lesson 2.8

# Algebra • Different Ways to Show Numbers

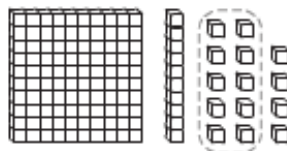
Understand place value.

These two models can both be used to show the number 124.



Hundreds	Tens	Ones
1	2	4

I ten has the same value as 10 ones.



Hundreds	Tens	Ones
1	1	14

More information on this strategy is available on Animated Math Model #9.

## Lesson 2.9

### Count On and Count Back by 10 and 100

Use place value understanding and properties of operations to add and subtract.

**10 less than 234**

2 hundreds 2 tens 4 ones

224

**100 less than 234**

1 hundred 3 tens 4 ones

134

Notice what digit changes.

**10 more than 234**

2 hundreds 4 tens 4 ones

244

**100 more than 234**

3 hundreds 3 tens 4 ones

334

## Lesson 2.10

### Algebra • Number Patterns

Use place value understanding and properties of operations to add and subtract.

Find a counting pattern.

421, 431, 441, 451, ■, ■

Which digit changes from number to number?

The tens digit changes.

How does it change?

by one each time

Look at the chart. Find the next two numbers in the pattern.

401	402	403	404	405	406	407	408	409	410
411	412	413	414	415	416	417	418	419	420
421	422	423	424	425	426	427	428	429	430
431	432	433	434	435	436	437	438	439	440
441	442	443	444	445	446	447	448	449	450
451	452	453	454	455	456	457	458	459	460
461	462	463	464	465	466	467	468	469	470
471	472	473	474	475	476	477	478	479	480
481	482	483	484	485	486	487	488	489	490
491	492	493	494	495	496	497	498	499	500

The next two numbers are 461 and 471.

## Lesson 2.11







### Problem Solving • Compare Numbers

Understand place value.

At the zoo, there are 137 birds and 142 reptiles.

Are there more birds or more reptiles at the zoo?

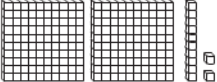
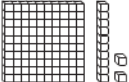
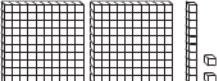
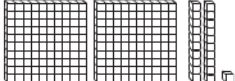
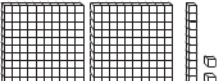
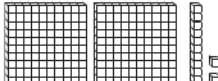
#### Unlock the Problem

<b>What do I need to find?</b> I need to find if there are more <u>birds</u> or <u>reptiles</u> .	<b>What information do I need to use?</b> There are <u>137</u> birds. There are <u>142</u> reptiles.		
<b>Show how to solve the problem.</b>  <table><tr><td style="text-align: center;">Birds </td><td style="text-align: center;">Reptiles </td></tr></table> The number of hundreds is the same. There are more tens in the number of reptiles. There are more <u>reptiles</u> at the zoo.		Birds 	Reptiles 
Birds 	Reptiles 		

## Lesson 2.12

### Algebra • Compare Numbers

Understand place value.

<b>To compare 3-digit numbers, first compare hundreds.</b>	
	
$2\underline{1}2$ has more hundreds than $\underline{1}12$ .	$212 > 112$
<b>If hundreds are equal, then compare tens.</b>	
	
$2\underline{1}2$ has fewer tens than $2\underline{2}1$ .	$212 < 221$
<b>If hundreds and tens are equal, then compare ones.</b>	
	
$21\underline{2} = 21\underline{2}$	

More information on this strategy is available on Animated Math Model #10.

## **Vocabulary**

**Compare** – to describe whether numbers are equal to, less than, or greater than one another

**Hundred** – a quantity that is equivalent to 10 tens

**Is greater than ( $>$ )** – a symbol used to compare two numbers when the first number has the greater value

**Is less than ( $<$ )** – a symbol used to compare two numbers when the first number has the lesser value

**Is equal to ( $=$ )** – a symbol used to compare two numbers having the same value

**Thousand** – a quantity that is equivalent to 10 hundreds