This "Section-level slidedeck" uses the full unit slidedeck as a base. Only the slides aligning with the Section-level planning guide are revealed. The slides are color-coded to match the purple-orange-purple flow of the Section-level planning guides. Make a copy of the slidedeck to customize as you wish!

Wrapping Up 1,000

This Unit (All Sections) is NOT a Priority Unit for 2020-2021 as it does not focus on Major Grade-level Work … identified by IM authors

Section-Level Slidedeck

Standards addressed: 2.NBT.A.3, 3.NBT.A.2, 3.OA.D.9, 3.NBT.A.2, 3.OA.B.5, 2.NBT.B.7, 3.NBT.A.2, 3.OA.B.5, 2.NBT.B.8, 3.NBT.A.1, 3.NBT.A.2, 3.OA.B.5, 3.OA.C.7, 3.OA.D.8

Unit 3 Progression Overview

Wrapping Up 1,000

Section A
Lessons 1-3

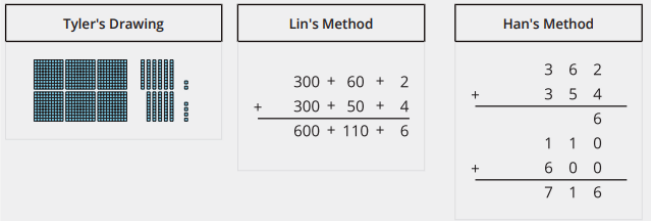
2.NBT.A.3, 3.NBT.A.2, 3.OA.D.9

- Identify arithmetic patterns and explain them using properties of operations.
- Use place value understanding to compose and decompose numbers.

Section B
Lessons 4-7

3.NBT.A.2, 3.OA.B.5

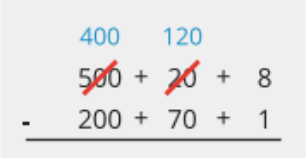
- Fluently add within 1,000 using algorithms based on place value and properties of operations.



Section C
Lessons 8-13

2.NBT.B.7, 3.NBT.A.2, 3.OA.B.5

- Fluently subtract within 1,000 using algorithms based on place value, properties of operations and the relationship between addition and subtraction.



Section D
Lessons 14-21

2.NBT.B.8, 3.NBT.A.1, 3.NBT.A.2, 3.OA.B.5, 3.OA.C.7, 3.OA.D.8

- Assess the reasonableness of answers.
- Round whole numbers to the nearest multiple of 10 and 100.
- Solve two-step word problems using addition, subtraction, and multiplication.

Adaptation
Lesson 1

Making Multiples of 100

Let’s compose hundreds using tens

2.NBT.A.1.A. 2.NBT.A.1.B, 2.NBT.A.2

Warm up

True or False: Less Than or Equal to 100

Is each statement true or false?

$100 > 99$

Be prepared to explain your reasoning.

Warm up

True or False: Less Than or Equal to 100

Is each statement true or false?

$$100 < 99 + 1$$

Be prepared to explain your reasoning.

Warm up

True or False: Less Than or Equal to 100

Is each statement true or false?

$98 + 3 = 100$

Be prepared to explain your reasoning.

Warm up

True or False: Less Than or Equal to 100

Is each statement true or false?

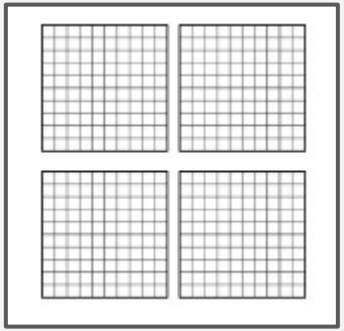
$50 + 50 + 50 > 100$

Be prepared to explain your reasoning.

Making Hundreds Using Tens

Activity #1

1. Use your base-ten blocks to show this number.

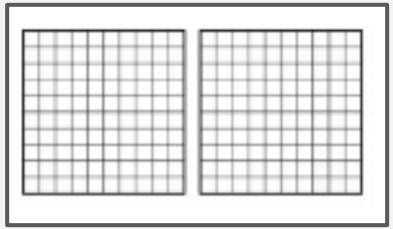


a. How many tens? _____

b. How many hundreds? _____

c. Write it as a three-digit number. ____

2. Use your base-ten blocks to show this number.



a. How many tens? _____

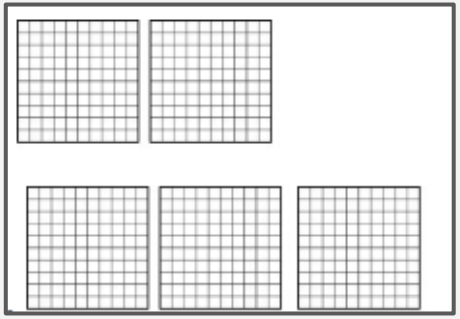
b. How many hundreds? _____

c. Write it as a three-digit number. ____

Making Hundreds Using Tens

Activity #1

4. Use your base-ten blocks to show this number.

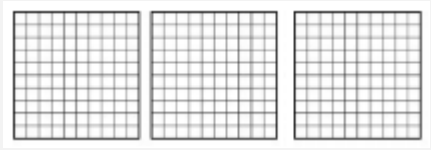


a. How many tens? _____

b. How many hundreds? _____

c. Write it as a three-digit number. ____

4. Use your base-ten blocks to show this number.



a. How many tens? _____

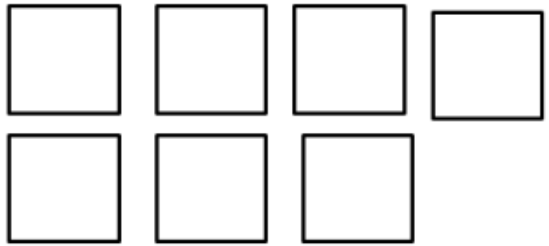
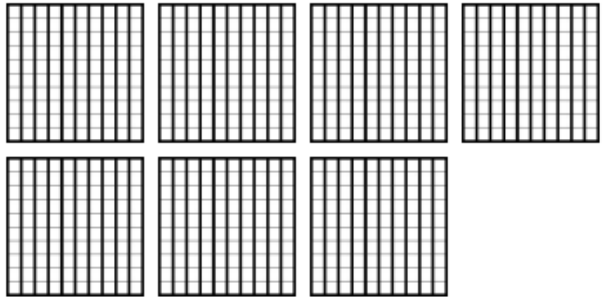
b. How many hundreds? _____

c. Write it as a three-digit number. ____

How Many Hundreds?

Activity #2

Han and Jada represented the same number using numbers, drawings, and words.

Jada	Han
	
I have 7 hundreds.	I have 70 tens.
Total Value: 700	Total value: 700

Explain how each student's representation is different and how they both represent 700.

Activity #3

What Do You Know About:

Lesson Synthesis

Today we learned that we can count by hundreds, tens, or ones to find total values. If Mai has 200 ones, what other ways could we describe this number?

Adaptation
Lesson 2

Representing Three-Digit Numbers

Let’s represent three-digit numbers in different ways.

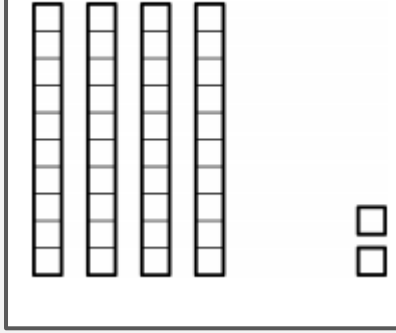
2.NBT.A.1, 2.NBT.A.3

How Many Do You See? Building Three-Digit Numbers

Warm up

How many do you see?

Image 1:



How do you see them?

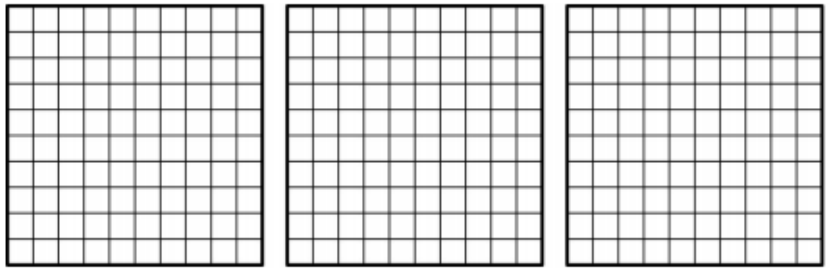
Warm up

How Many Do You See? Building Three-Digit Numbers

How many do you see?

How do you see them?

Image 2:



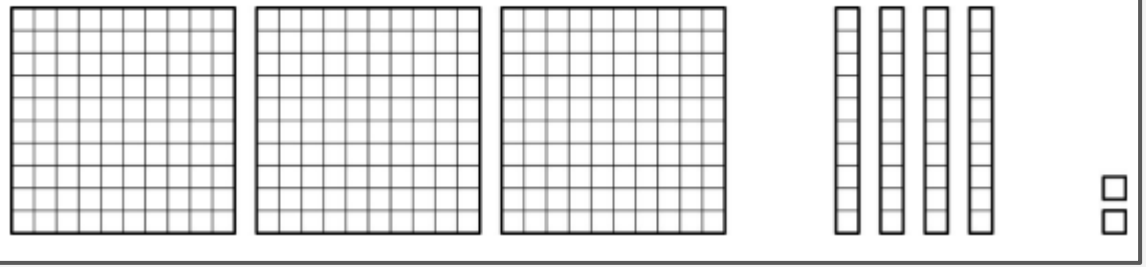
How Many Do You See? Building Three-Digit Numbers

Warm up

How many do you see?

How do you see them?

Image 3:

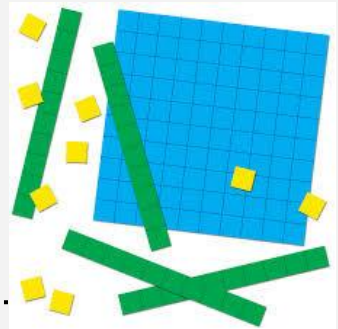


Representing 35 Tens

Activity #1

How many base-ten blocks do you have?

Represent the value with numbers or words.



Writing Expressions and Three-Digit Numbers

Activity #2

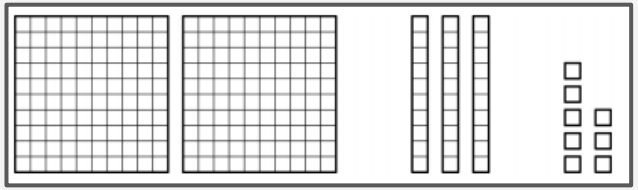
You had 350. Then I gave you 6 ones.
How many do you have now? Represent the number.

Writing Expressions and Three-Digit Numbers

Activity #2

Write each number as an expression of hundreds, tens, and ones, and a three-digit number.

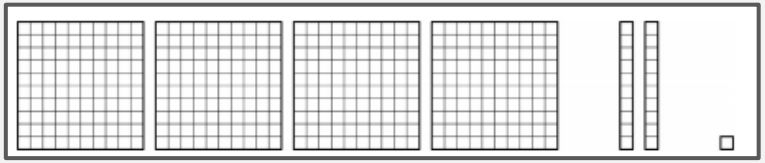
2.



Sum of hundreds, tens, and ones:

Three-digit number:

3.



Sum of hundreds, tens, and ones:

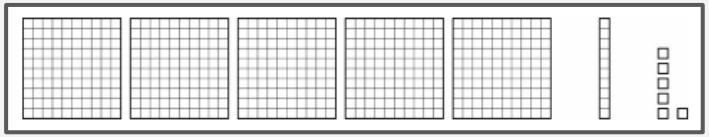
Three-digit number:

Writing Expressions and Three-Digit Numbers

Activity #2

Write each number as an expression of hundreds, tens, and ones, and a three-digit number.

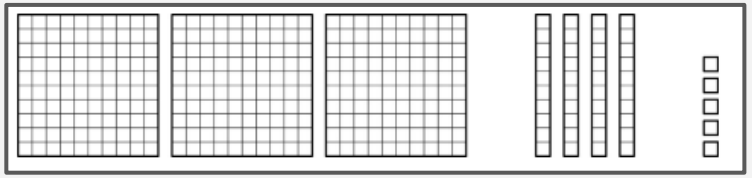
4.



Sum of hundreds, tens, and ones:

Three-digit number:

5.



Sum of hundreds, tens, and ones:

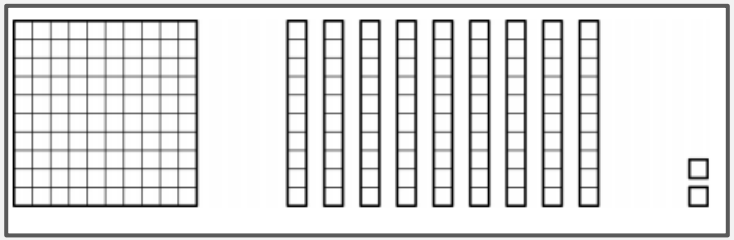
Three-digit number:

Writing Expressions and Three-Digit Numbers

Activity #2

Write each number as an expression of hundreds, tens, and ones, and a three-digit number.

6.



Sum of hundreds, tens, and ones:

Three-digit number:

Lesson Synthesis

Today we represented numbers as expressions and written numbers.

20 + 6

Explain how you know these represent the same value.

426

400 +

How could we represent 547 as the sum of hundreds, tens, and ones?

Adaptation
Lesson 3

Identifying and Writing Three-Digit Numbers

Let’s identify and write three-digit numbers.

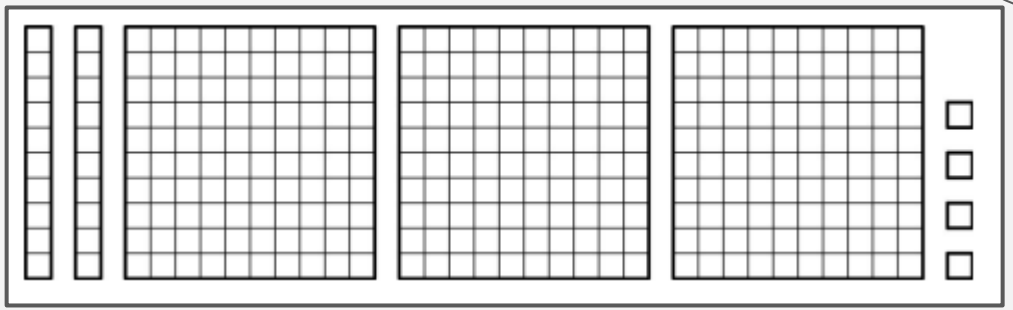
2.NBT.A.1, 2.NBT.A.3

Warm up

How Many Do You See: Base-Ten Blocks

How many do you see?

How do you see them?

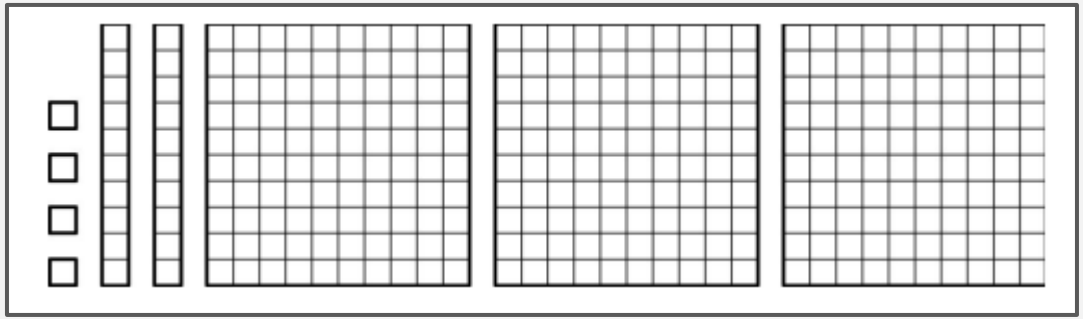


How Many Do You See: Base-Ten Blocks

Warm up

How many do you see?

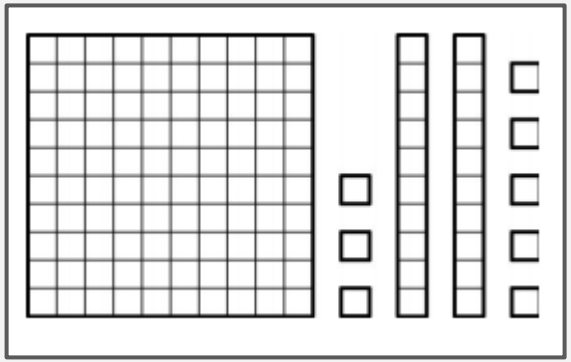
How do you see them?



How Many Do You See: Base-Ten Blocks

Warm up

How many do you see?



How do you see them?

Base-Ten Equations

Activity #1

Write the numbers that make the equation true. Use base-ten blocks or diagrams if they help.

1. 4 hundreds + 6 tens + 2 ones = _____

2. 7 ones + 2 hundred + 6 tens = _____

3. 3 tens + 5 hundreds = _____

4. 7 ones + 3 hundreds = _____

5. 315 = _____ hundreds + _____ ones + _____ ten

6. 462 = 2 + 400 + _____

Base-Ten Riddles

Activity #2

Solve each riddle. Write the number as a three-digit number and the sum of hundreds, tens, and ones.

1. I have 6 hundreds, 2 ones and 7 tens.

   What number am I? three-digit number _____

   sum of hundreds, tens, and ones _____

2. I have 3 ones and 5 tens. The number of hundreds I have is the sum of my ones and tens.

   What number am I? three-digit number _____

   sum of hundreds, tens, and ones _____

Base-Ten Riddles

Activity #2

Solve each riddle. Write the number as a three-digit number and the sum of hundreds, tens, and ones.

3. I have fewer ones than hundreds. I have 4 tens and 1 hundred.

   What number am I? three-digit number _____

   sum of hundreds, tens, and ones _____

4. I have 1 hundred and 2 tens. The sum of my digits is 5.

   What number am I? three-digit number _____

   sum of hundreds, tens, and ones _____

Base-Ten Riddles

Activity #2

Solve each riddle. Write the number as a three-digit number and the sum of hundreds, tens, and ones.

5. The value of my hundreds is 700. I have 4 ones. I have no tens.

   What number am I? three-digit number _____

   sum of hundreds, tens, and ones _____

6. I have more tens than ones. I have 6 hundreds and 4 ones.

   What number am I? three-digit number _____

   sum of hundreds, tens, and ones _____

Lesson Synthesis

Today we learned that three-digit numbers can be represented with their hundreds, tens and ones out of order. We learned that it is very important to put those digits in the correct place when representing the quantity with a three-digit number.

Han says 5 tens + 4 ones + 7 hundreds = 547. What would you say to Han about his thinking?

Adaptation
Lesson 4

Composing and Decomposing Three-Digit Numbers

Let's make and break apart numbers in different way.

2.NBT.A.1, 2.NBT.A.2

True or False: Value of Digits

Warm up

Is it statement true or false?

$$800 + 90 + 7 = 897$$

Be prepared to explain your reasoning.

True or False: Value of Digits

Warm up

Is it statement true or false?

$$156 = 50 + 100 + 6$$

Be prepared to explain your reasoning.

True or False: Value of Digits

Warm up

Is it statement true or false?

$$407 = 70 + 400$$

Be prepared to explain your reasoning.

True or False: Value of Digits

Warm up

Is it statement true or false?

$$632 = 22 + 10 + 600$$

Be prepared to explain your reasoning.

Breaking Apart 214

Activity #1

Break apart 214 in more than 1 way using hundreds, tens, and ones.

Show your thinking using drawings, numbers or words.

Different Ways to Make 523

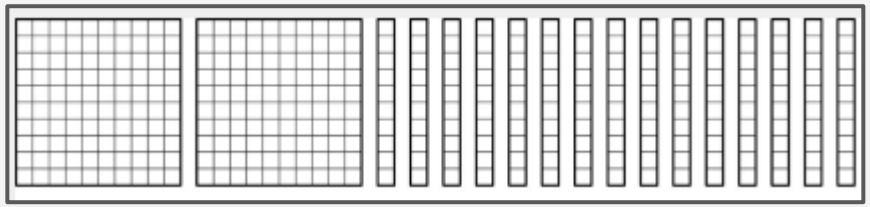
Activity #2

Find different ways to make 523. Show your thinking using drawings, numbers, or words.

523	523	523	523

Lesson Synthesis

Today we represented numbers with different amounts of hundreds, tens, and ones.



Han says this represents 350 but Tylers says that can't be right because there are only 2 hundreds. What do you think?

Adaptation
Lesson 5

Representing Numbers in Different Ways with Hundreds, Tens and Ones

Let’s represent more numbers with hundreds, tens and ones.

2.NBT.A.1, 2.NBT.A.2, 2.NBT.A.3

Warm up

Estimation Exploration: How Many Ones?

What is the value of the blocks?

Record an estimate that is:

too low	about right	too high

What's the Number?

Activity #1

Write the three-digit number. Use base-ten blocks or drawings if they help.

1. 2 hundreds, 15 tens, 1 one = _____
2. 4 tens, 2 hundreds, 11 ones = _____
3. 3 ones, 17 tens =_____
4. 4 hundreds, 10 tens =_____
5. 3 hundreds, 12 tens, 14 ones = _____
6. 1 hundred, 36 tens, 2 ones =_____

Finding Missing Parts

Activity #2

1. Find 2 different ways to compose 423.

   423 = 3 hundreds + _____ tens + _____ ones

   423 = 3 hundreds + _____ tens + _____ ones

2. 141 = _____ tens + 1 one

   141 = 13 tens + _____ ones

3. 203 = _____ tens + _____ ones

   203 = 19 tens + _____ ones

4. 228 = 2 hundreds + 1 ten + _____ ones

   228 = 1 hundred + _____ tens + 8 ones

5. 105 = _____ tens + _____ ones

   105 = _____ ones

Lesson Synthesis

There are lots of ways we can compose numbers using hundreds, tens and ones. We know we can use 1 hundred or 10 tens to make the same number. We can also use 1 ten or ten ones.

Number	Hundreds	Tens	Ones
149	1	4	9
149	1	3	19
149	1	2	29
149	1	0	49

Explain the pattern you see and why it happens?

Section A Goals

- Measure length in centimeters and meters
- Represent and solve one-step story problems within 100.

Lesson 1
Warm up

Notice and Wonder: The Addition Table

What do you notice?

What do you wonder?

+	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5						
2	3	4	5	6						
3	4	5	6	7						
4	5	6	7	8						
5										
6										
7										
8										
9										
10										

Patterns in the Addition Table

Lesson 1
Activity
#1

1. Fill in the rest of the addition table.

+	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5						
2	3	4	5	6						
3	4	5	6	7						
4	5	6	7	8						
5										
6										
7										
8										
9										
10										

2. List some patterns you see in the addition table.

3. Choose one of the patterns you found in the addition table and explain why it works.

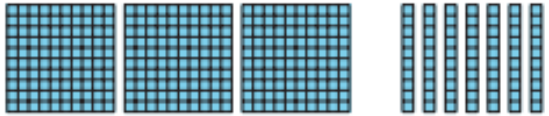
Scavenger Hunt!

1. Find objects or pictures that show a pattern of adding 2 each time.
2. Find objects or pictures that show a pattern of doubling.

Lesson 2
Warm-up

Which One Doesn't Belong: Numbers within 1,000

A.



B. $300 + 70 + 1$

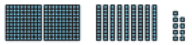
C. $300 + 60 + 10$

D. $400 - 30$

Card Sort: Numbers in Their Different Forms

Lesson 2
Activity
#1

Your teacher will give you a set of cards that show numbers in different forms. Find the cards that match. Be ready to explain your reasoning.

A 175	E three hundred twenty-nine	I 299
B $800 + 10 + 3$	F 371	J 
C 	G one hundred seventy-five	K 329
D two hundred ninety-nine	H 813	L $100 + 60 + 15$

Numbers in Different Forms Round Table

Lesson 2
Activity #2

Part 1

1. Write a three-digit number in Box 1 on your recording sheet. (wait for teacher instructions)

2. In Box 2, show a way that the number could be decomposed. (wait for teacher instructions)

3. In Box 3, show a way that the number could be decomposed that's different from Box 2. (wait for teacher instructions)

4. In Box 4, show a way that the number could be decomposed that's different from Boxes 2 and 3.

Numbers in Different Forms Round Table

Lesson 2
Activity #2

Part 2

1. Look at what was filled in to represent your number. Write down any connections you notice between the different ways the number was decomposed.

2. Look at all of the recording sheets for your group. What patterns do you notice across the sheets that show how place value can be used to decompose numbers in different ways?

Lesson 3
Warm up

Number Talk:
Place Value Practice

$$300 + 20 + 6$$

Find the value of each expression mentally.

Lesson 3
Warm up

Number Talk:
Place Value Practice

$$300 + 10 + 16$$

Find the value of each expression mentally.

Lesson 3
Warm up

Number Talk:
Place Value Practice

$$200 + 120 + 6$$

Find the value of each expression mentally.

Lesson 3
Warm up

Number Talk:
Place Value Practice

$$300 + 120 + 16$$

Find the value of each expression mentally.

Lesson 3
Activity #1

You Know I Got Problems

We are going to solve some problems about some famous places.
What are some famous landmarks that you know about?

You Know I Got Problems

Lesson 3
Activity #1

Solve each problem. Explain or show your reasoning

1. Iguazu Falls in South America marks the border between Paraguay, Brazil, and Argentina. It is the largest waterfall in the world. The waterfall falls in two parts. The waterfalls 115 feet in the first part and 131 feet in the second part. How far does the waterfall go altogether?

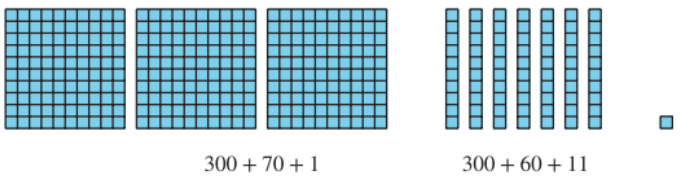
2. In Washington DC, there are many monuments to famous people in American history. The Lincoln Memorial is 99 feet tall. The Washington Monument is 555 feet tall. How much taller is the Washington Monument than the Lincoln Memorial?

3. The Eiffel Tower in Paris, France has 674 steps that go from the ground to the second floor. There are 328 steps from the ground to the first floor. How many steps are there from the first floor to the second floor?

Section A Summary

In this section we learned about patterns and reviewed different ways we can represent numbers, including different ways we can decompose numbers. Also, we solved problems involving addition and subtraction.

+	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	8	10	11
2	3	4	5	6	7	8	9	9	11	12
3	4	5	6	7	8	9	10	10	12	13
4	5	6	7	8	9	10	11	11	13	14
5	6	7	8	9	10	11	12	12	14	15
6	7	8	9	10	11	12	13	13	15	16
7	8	9	10	11	12	13	14	14	16	17
8	9	10	11	12	13	14	15	15	17	18
9	10	11	12	13	14	15	16	16	18	19
10	11	12	13	14	15	16	17	17	19	20



371 $300 + 70 + 1$ $300 + 60 + 11$

Adaptation
Lesson 6

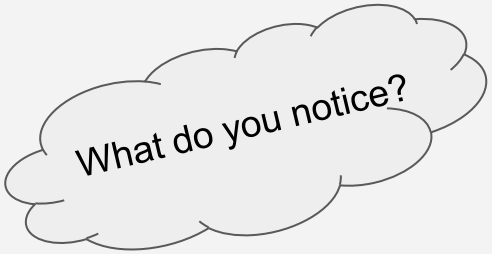
Decomposing to Subtract

Let's subtract.

2.NBT.B.7

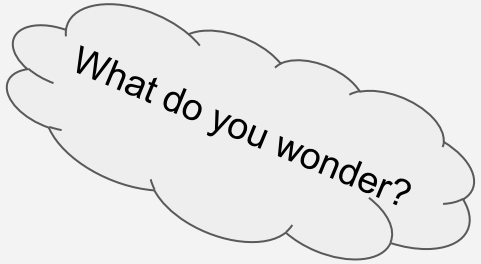
Warm up

Notice and Wonder: Equations



$$38 + 5 = 43$$

$$43 - 5 = 38$$



Decomposing to Subtract

Activity #1

1. 335 - 7

Write an equation that shows the difference.

2. 335 - 42

Write an equation that shows the difference.

Decomposing with Base-Ten Blocks

Activity #2

Use base-ten blocks to find the difference.

1. 224 - 42

Write an equation to show the difference. _____

2. 443 - 71

Write an equation to show the difference. _____

3. 224 - 8

Write an equation to show the difference. _____

Decomposing with Base-Ten Blocks

Activity #2

Use base-ten blocks to find the difference.

4. 143 - 7

Write an equation to show the difference. _____

5. 355 - 62

Write an equation to show the difference. _____

6. 351 - 15

Write an equation to show the difference. _____

Lesson Synthesis

Today we saw that sometimes we need to decompose a hundred or a ten to subtract. How is decomposing a hundred like decomposing a ten?

Adaptation
Lesson 7

Planning for Decompositions

Let’s think about decomposing before subtracting

2.NBT.B.7

Warm up

Choral Count

Subtraction Sort

Activity #1

346 - 273	542 - 321	449 - 288
624 - 415	237 - 129	340 - 234
457 - 245	735 - 472	648 - 382
905 - 312	673 - 413	866 - 428
534 - 126	347 - 124	227 - 115

Sort the expressions into 3 categories:

decompose a ten	decompose a hundred	no decompositions

Subtraction Sort

Activity #1

Choose 1 expression from each category and find the difference.
Show your thinking using drawings, symbols, or other representations.

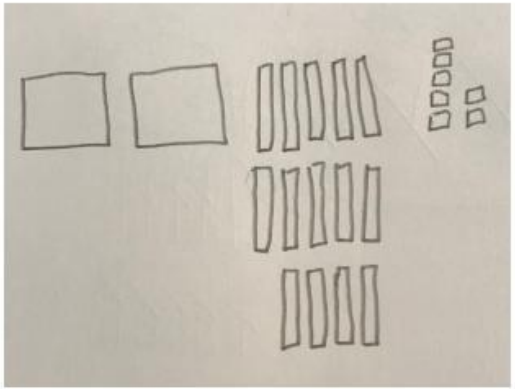
decompose a ten
decompose a hundred
no decompositions

Tyler's Representations

Activity #2

Tyler is finding the difference between 347 and 64.

He started by representing 347 with a drawing.



Why did Tyler represent 347 like this? How will it help him subtract?

Choose one expression from the sort in activity 1 and show how Tyler might represent the number with a drawing.

Lesson Synthesis

Today we looked at expressions and figured out what decompositions were needed before subtracting. Why is it helpful to think about the decompositions that are needed before beginning to find the difference?

Section B Goals

- Fluently add within 1,000 using algorithms based on place value and properties of operations.

Lesson 5
Warm up

Which One Doesn't Belong: 247

A. $200 + 30 + 17$	B. 247
C. $200 + 47 + 10$	D. $100 + 140 + 7$

Lesson 4
Activity #1

Strategies to Add

Find the value of each sum in any way that makes sense to you. Explain or show your reasoning.

1. $325 + 102$

2. $301 + 52$

3. $276 + 118$

4. $298 + 305$

Two Ways to Add

Lesson 4
Activity
#2

Andre added $276 + 118$. His work is shown.

$200 + 100 = 300$
$70 + 10 = 80$
$6 + 8 = 14$
$300 + 80 + 14 = 394$

Clare added $286 + 118$. Her work is shown.

$6 + 8 = 14$
$70 + 10 = 80$
$200 + 100 = 300$
$14 + 80 + 300 = 394$

With your partner, discuss:

- What's different about Clare and Andre's work?
- What's the same?

How Many Do You See?
Products of 4 and 6

Lesson 6
Warm-up

How many do you see?

How do you see them?

How Many Do You See?
Products of 4 and 6

Lesson 6
Warm-up

How many do you see?

How do you see them?

How Many Do You See?
Products of 4 and 6

Lesson 6
Warm-up

How many do you see?

How do you see them?

Warm up

Number Talk: Hundreds, Tens, and Ones

$$200 + 40 + 7$$

Find the value of each expression mentally.

Warm up

Number Talk: Hundreds, Tens, and Ones

$$50 + 300 + 2$$

Find the value of each expression mentally.

Warm up

Number Talk: Hundreds, Tens, and Ones

$$40 + 600 + 12$$

Find the value of each expression mentally.

Warm up

Number Talk: Hundreds, Tens, and Ones

$$500 + 17 + 130$$

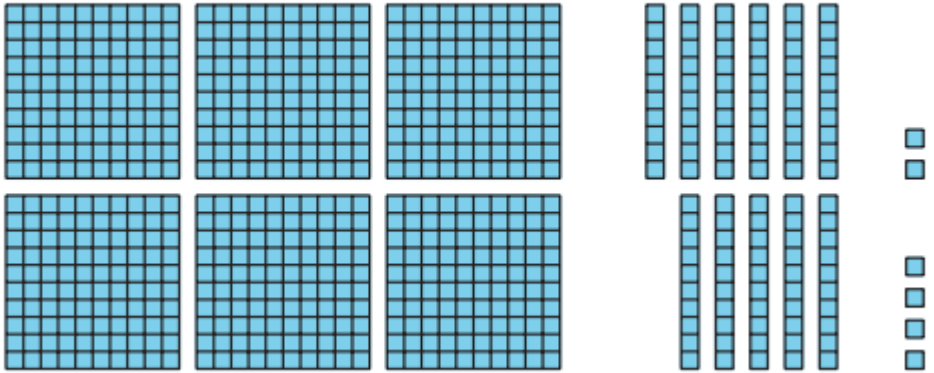
Find the value of each expression mentally.

Lesson 5
Activity #1

What is an Algorithm?

Three students added 362 + 354 as shown. Explain how each method works.

1. Tyler's Drawing



Lesson 5
Activity #1

What is an Algorithm?

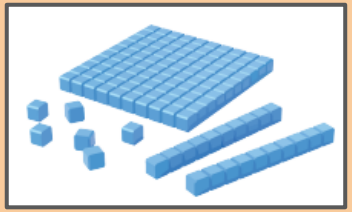
Three students added 362 + 354 as shown. Explain how each method works.

2. Lin's Method

$$\begin{array}{rr} & 300 + 60 + 2 \\ + & 300 + 50 + 4 \\ \hline & 600 + 110 + 6 \end{array}$$

3. Han's Method

$$\begin{array}{rr} & 362 \\ + & 354 \\ \hline & 6 \\ & 110 \\ + & 600 \\ \hline & 716 \end{array}$$



A New Addition Algorithm

Lesson 6
Activity #1

Two algorithms for adding 367 + 231 are shown.

Han's Algorithm

$$\begin{array}{r} 367 \\ +\ 231 \\ \hline 8 \\ 900 \\ +\ 500 \\ \hline 598 \end{array} \quad \begin{array}{l} \\ \\ \text{step 1} \\ \text{step 2} \\ \text{step 3} \\ \text{step 4} \end{array}$$

Elena's Algorithm

$$\begin{array}{r} 367 \\ +\ 231 \\ \hline 8 \end{array} \ \text{step 1} \qquad \begin{array}{r} 367 \\ +\ 231 \\ \hline 98 \end{array} \ \text{step 2} \qquad \begin{array}{r} 367 \\ +\ 231 \\ \hline 598 \end{array} \ \text{step 3}$$

Discuss with your partner:

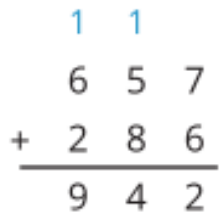
1. How is Elena's algorithm different from Han's algorithm?

2. Why do both algorithms work?

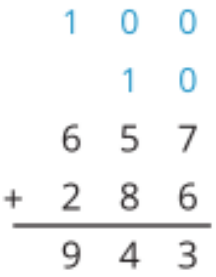
Just Ones

Lesson 7
Activity #1

Two ways of recording the addition of 657 + 286 are shown.



$$\begin{array}{r} {\scriptstyle 1\ 1\ \ } \\ 6\ 5\ 7 \\ +\ 2\ 8\ 6 \\ \hline 9\ 4\ 2 \end{array}$$



$$\begin{array}{r} {\scriptstyle 1\ 0\ 0} \\ {\scriptstyle \ \ 1\ 0} \\ 6\ 5\ 7 \\ +\ 2\ 8\ 6 \\ \hline 9\ 4\ 3 \end{array}$$

1. How is the newly composed ten and hundred recorded differently in each example?

Just Ones

Lesson 7
Activity #1

2. Try the second way of recording to add these numbers:

Two ways of recording the addition of 657 + 286 are shown.

$$\begin{array}{r} {\scriptstyle 1\ 1\ \ } \\ 6\ 5\ 7 \\ +\ 2\ 8\ 6 \\ \hline 9\ 4\ 2 \end{array}$$

$$\begin{array}{r} {\scriptstyle 1\ 0\ 0} \\ {\scriptstyle \ \ 1\ 0\ \ } \\ 6\ 5\ 7 \\ +\ 2\ 8\ 6 \\ \hline 9\ 4\ 3 \end{array}$$

$a.\quad 602 + 179$

$c.\quad 438 + 364$

$b.\quad 493 + 161$

$d.\quad 329 + 381$

Try an Algorithm

Lesson 5
Activity #2

Try an algorithm to find the value of each sum.
Show your thinking. Organize it so it can be followed by others.

1. $475 + 231$

2. $136 + 389$

3. $670 + 257$

Lesson 7
Activity #2

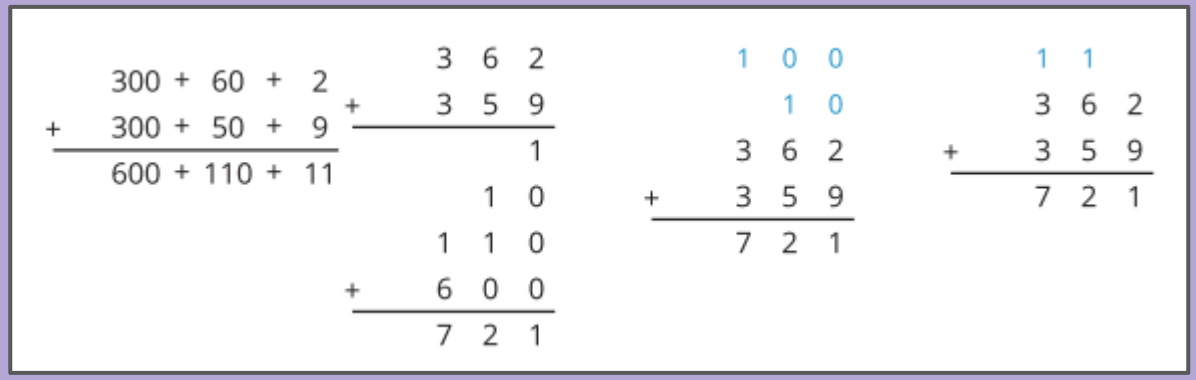
How Would You Add?

Use a strategy or algorithm of your choice to find the value of each sum. Show your thinking. Organize it so it can be followed by others.

1. $199 + 348$
2. $264 + 359$
3. $203 + 75$
4. $316 + 198$
5. $399 + 499$

Section B Summary

In this section, we learned that an algorithm is a set of steps that works every time as long as the steps are carried out correctly. Then we learned algorithms to add numbers within 1,000. We also learned that we can choose to add with a strategy that may not work for every sum or an algorithm based on the numbers.



Section C Goals

- Fluently subtract within 1,000 using algorithms based on place value, properties of operations and the relationship between addition and subtraction.

Number Talk: Subtract Two-Digit Numbers

Lesson 8
Warm up

$$50 - 10$$

Find the value of each expression mentally.

Number Talk: Subtract Two-Digit Numbers

Lesson 8
Warm up

$$58 - 10$$

Find the value of each expression mentally.

Number Talk: Subtract Two-Digit Numbers

Lesson 8
Warm up

$$258 - 20$$

Find the value of each expression mentally.

Number Talk: Subtract Two-Digit Numbers

Lesson 8
Warm up

$$258 - 24$$

Find the value of each expression mentally.

Lesson 8
Activity
#1

Strategies to Subtract

Find the value of each difference in any way that makes sense to you.
Explain or show your reasoning.

1. $428 - 213$

2. $505 - 398$

3. $394 - 127$

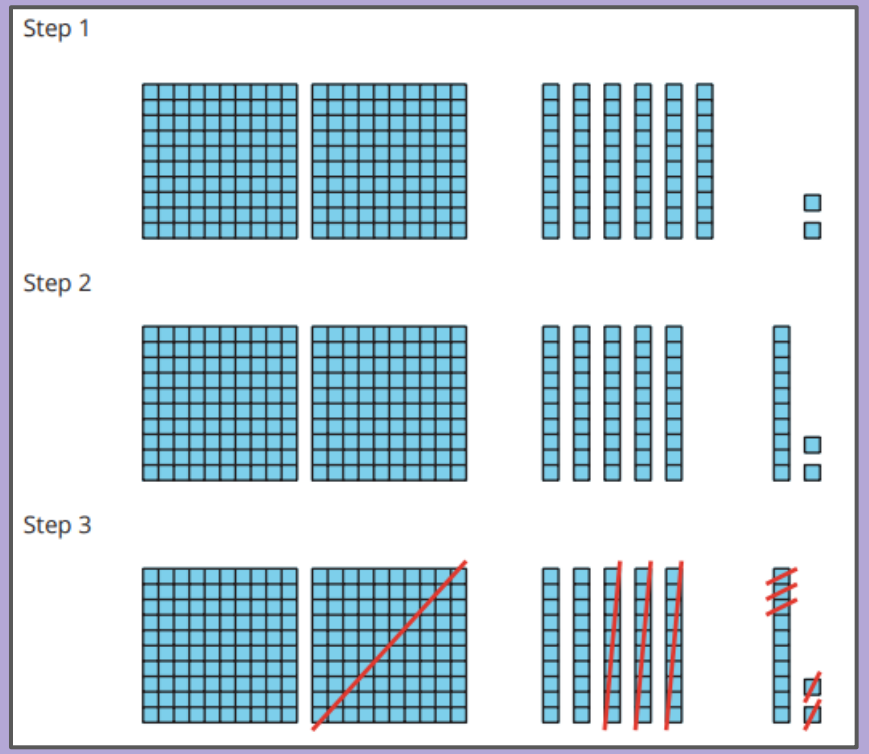
Base-ten Drawings

Lesson 8
Activity
#2

Han used base-ten blocks to subtract 262 - 135.

A drawing of his work is shown.

Explain how Han used the blocks.



Base-ten Drawings

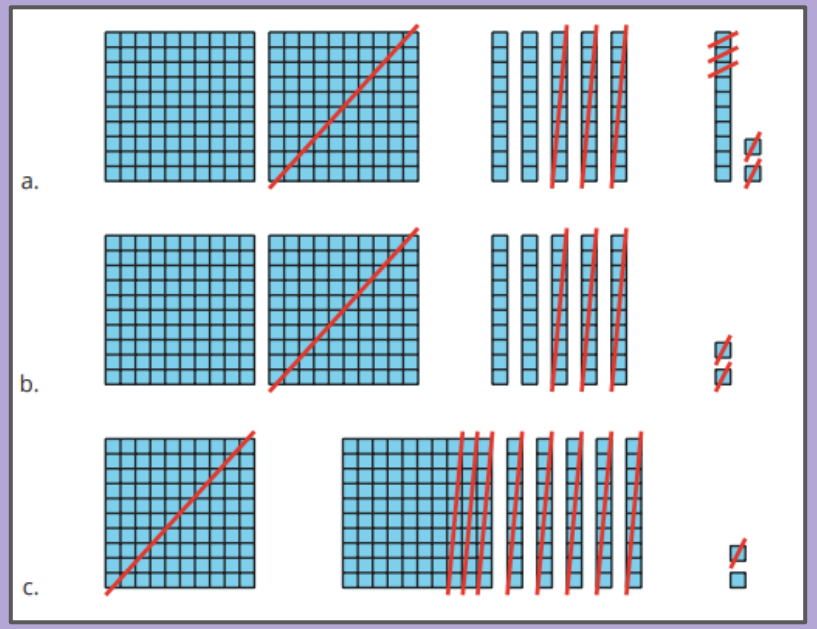
Lesson 8
Activity
#2

Write each expression next to the matching diagram, then find the difference.

1. $252 - 181$

2. $262 - 135$

3. $252 - 132$



Lesson 9
Warm up

Number Talk: Subtraction Strategies

$$100 - 98$$

Find the value of each expression mentally.

Lesson 9
Warm up

Number Talk: Subtraction Strategies

$$100 - 99$$

Find the value of each expression mentally.

Lesson 9
Warm up

Number Talk: Subtraction Strategies

$$200 - 98$$

Find the value of each expression mentally.

Lesson 9
Warm up

Number Talk: Subtraction Strategies

$$204 - 98$$

Find the value of each expression mentally.

Warm up

True or False: Does It Commute?

Is it statement true or false?

$$4 \times 5 = 5 \times 4$$

Be prepared to explain your reasoning.

Warm up

True or False: Does It Commute?

Is it statement true or false?

Be prepared to explain your reasoning.

$$125 + 200 = 200 + 125$$

Warm up

True or False: Does It Commute?

Is it statement true or false?

Be prepared to explain your reasoning.

$$300 - 100 = 100 - 300$$

Activity #1

Revise Subtraction Work

Lin's subtraction of $428 - 156$ is shown.

$$\begin{array}{rr} & 400 + 20 + 8 \\ - & 100 + 50 + 6 \\ \hline & 300 + 30 + 2 \end{array}$$

1. What did Lin do?

2. What would you tell or show Lin so she can revise her work?

Activity #2

Try the Algorithm

Try Kiran's algorithm to find the value of each difference.
Show your thinking. Organize it so it can be followed by others.

1. $283 - 159$
2. $425 - 192$
3. $639 - 465$
4. $591 - 128$
5. $832 - 575$

Lesson 11
Warm up

Notice and Wonder: Disappearing Digits

What do you notice?

What do you wonder?

From Drawings to an Algorithm

Lesson 9
Activity #1

Kiran's Algorithm

$$\begin{array}{rrcrcr} & & 80 & & 11 & \\ & 300 & + & \cancel{90} & + & \cancel{1} \\ - & 200 & + & 10 & + & 5 \\ \hline \end{array}$$

1. Explain how Kiran's algorithm starts.

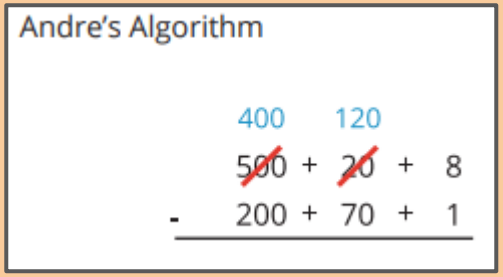
2. Explain how Kiran recorded the decomposition of the ten into more ones.

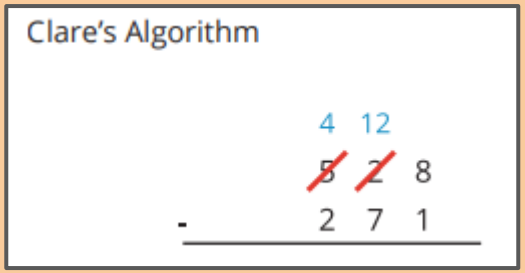
3. Finish Kiran's work.

A New Subtraction Algorithm

Lesson 11
Activity #1

Andre and Clare subtracted 528 - 271.
This is how they started their work.





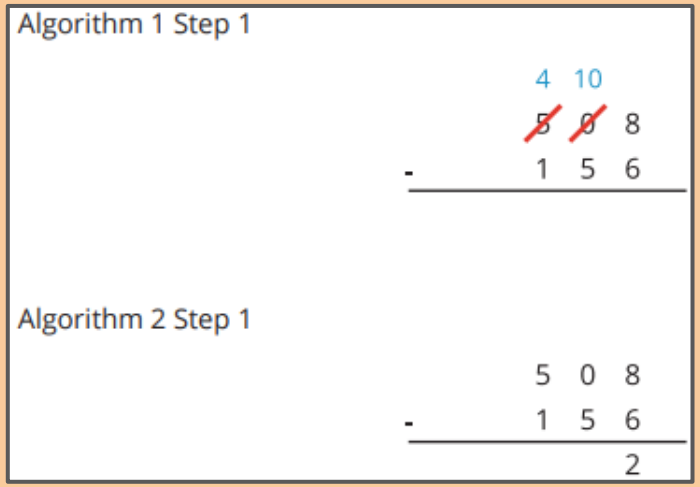
1. Complete both problems to find the difference.

2. How did the different ways of getting started change the steps used to subtract the numbers?

Compare Two Subtraction Algorithms

Lesson 12
Activity #2

1. The first steps of two algorithms are shown.



How are the steps different?

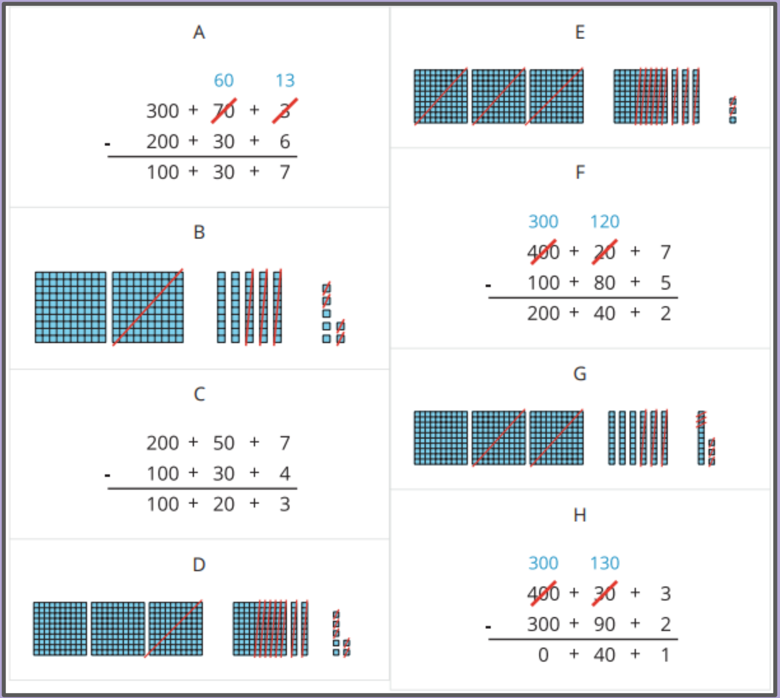
2. Use each algorithm to subtract:

824 - 541

Card Sort: Diagrams and Algorithms

Lesson 9
Activity #2

Your teacher will give you a set of cards. Match each diagram with an algorithm.



Lesson 10
Activity #2

Try the Algorithm

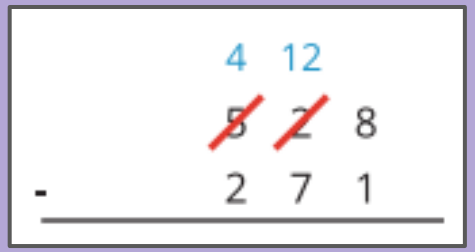
Try Kiran's algorithm to find the value of each difference.
Show your thinking. Organize it so it can be followed by others.

1. $283 - 159$
2. $425 - 192$
3. $639 - 465$
4. $591 - 128$
5. $832 - 575$

Try Clare's Algorithm

Lesson 11
Activity #2

Clare's Algorithm



Use Clare's algorithm to find the value of each difference.

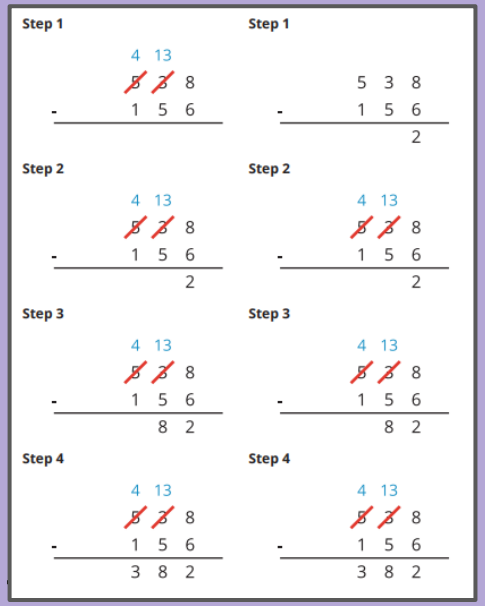
1. $691 - 358$

2. $926 - 584$

Section C Summary

In this section, we learned algorithms to subtract numbers within 1,000. We also learned that we can choose to subtract with a strategy that may not work for every difference, or an algorithm based on the numbers.

	600	130	
	~~700~~	+ ~~30~~	+ 9
-	200	+ 50	+ 5
	400	+ 80	+ 4



Adaptation
Lesson 8

Numbers on the Number Line

Let’s create and analyze number lines.

2.MD.B.6, 2.NBT.A.2

Warm up

True or False: Making Tens to Add

Is each statement true or false?

$$5 + 27 + 5 = 10 + 27$$

Be prepared to explain your reasoning.

Warm up

True or False: Making Tens to Add

Is each statement true or false?

$$20 + 27 = 27 + 5 + 10$$

Be prepared to explain your reasoning.

Warm up

True or False: Making Tens to Add

Is each statement true or false?

$$20 + 48 = 5 + 48 + 10 + 5$$

Be prepared to explain your reasoning.

Building a Human Number Line

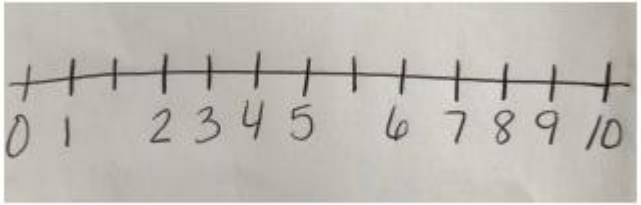
Activity #1

- Today, you are going to create a human number line.
- As I call out numbers, find your place on the number line.

Analyzing Number Lines

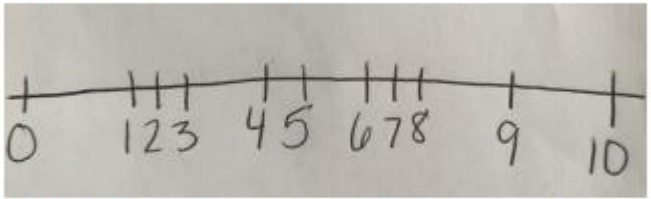
Activity #1

1. Jada's number line:



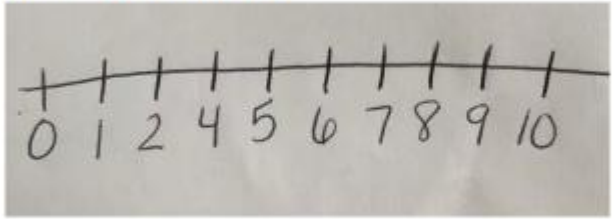
What should Jada do to fix her number line?

2. Andre's number line



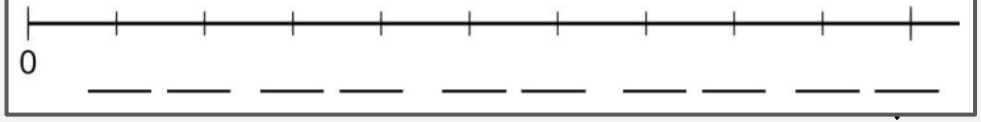
What should Andre do to fix his number line?

3. Elena's number line:



What should Elena do to fix her number line?

4. Fill in the numbers to create your own number line.



Lesson Synthesis

Today we created our own human number line and analyzed number line. What do we need to think about when creating number line?

Section D Goals

- Round whole numbers to the nearest multiple of 10 and 100.
- Assess the reasonableness of answers.
- Solve two-step word problems using addition, subtraction, and multiplication.

Lesson 17
Warm up

Estimation Exploration: Jars of Beads

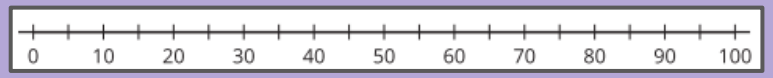
Record an estimate that is:

too low	about right	too high

Lesson 14
Activity #1

What is Close To?

1. What is an amount that is close to the amount the student is describing, but not exactly that amount? You can use the number line to show your reasoning.



a. Noah is wrapping gifts and says he needs about 100 feet of ribbon for all the gifts.
b. Mai says about 35 people came to her last soccer game.
c. Priya has about 75 stuffed animals in her bedroom.

2. Why don't we need an exact amount in these situations?

3. What is a situation in which you'd want to make sure you got the exact amount?

Card Sort:
Situations, Equations, and Diagrams

Lesson 18
Activity #1

Your teacher will give you a set of cards that shows situations, equations, and diagrams. Find the cards that match. Be ready to explain your reasoning

A

Clare had 225 beads. A friend gave her a pack of 48 beads. Then she used 70 beads to make a necklace. How many beads does Clare have now?

B

C

$225 - (10 \times 5) = ?$

D

Elena has 7 notebooks. Each notebook has 10 paper clips in it. Elena also has a box of 225 paper clips. How many paper clips does Elena have?

E

$225 + (6 \times 10) = ?$

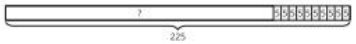
F

$? = 225 + 48 - 70$

G

Andre has 225 crayons. He buys 6 more packs and each pack has 10 crayons. How many crayons does Andre have now?

H



I

Diego has a collection of 225 baseball cards. He gets 35 more cards from a friend, then buys 72 cards. How many cards does Diego have now?

J

Han has 225 beads. Then he makes 10 bracelets for his friends. Each bracelet has 5 beads. How many bead does Han have now?

K

L

$? = (7 \times 10) + 225$

Choral Count: Tens and Hundreds

Lesson 15 Warm-up

- Count by 10, starting at 0
- Count by 100, starting at 0
- What patterns do you see?

What Am I Rounding To?

Lesson 14
Activity #2

What do you notice? What do you wonder?

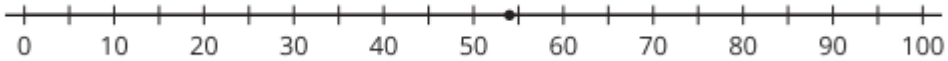
	Andre rounded to	Clare rounded to
82	80	100
17	20	0
63	60	100
47	50	0
99	100	100

What Am I Rounding To?

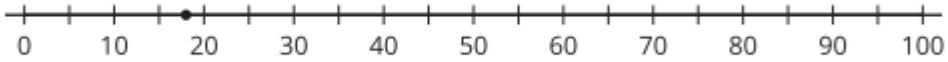
Lesson 14
Activity #2

Did Diego round to the nearest multiple of 10 or the nearest multiple of 100? Explain your reasoning.

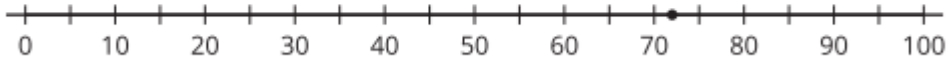
1. Diego says the number marked on this number line rounds to 100.



2. Diego says the number marked on this number line rounds to 0.



3. Diego says the number marked on this number line rounds to 70.



Where Am I Rounding To?

Lesson 15
Activity #2

Tyler and Clare are rounding 372 to the nearest multiple of 10.

Tyler rounded 372 to 400. Clare said 372 rounds to 370.

Who do you agree with and why?

Where Am I Rounding To?

Lesson 15
Activity #2

Complete the table.
Be prepared to explain your reasoning.

Number	Round to the nearest multiple of 10	Round to the nearest multiple of 100
72		
418		
798		
349		
502		

Quick Estimate

Lesson 17
Activity #1

1. There are 212 beads in a plastic bag. Then, 98 beads are used to make a necklace. Finally, 308 beads are dumped in the bag. Priya makes an estimate that there are about 400 beads in the bag now. Do you agree with Priya? Explain your reasoning.

2. Use Priya's rounding strategy to estimate the answer for each of these problems.

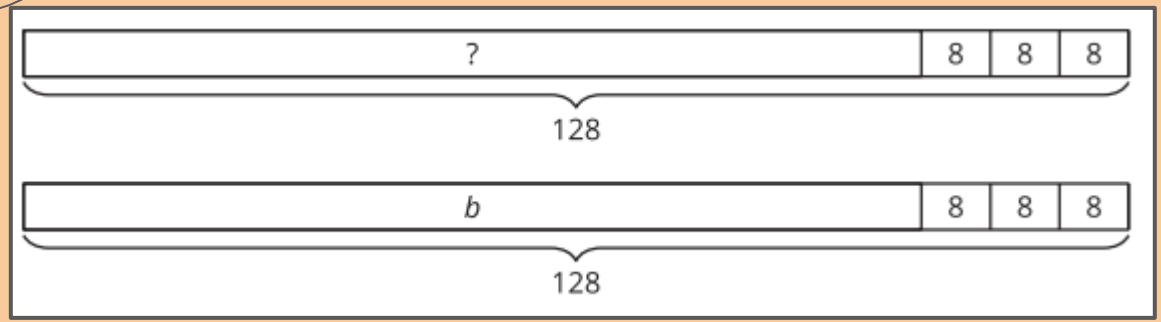
a. Clare was counting her steps walking from home to the bus stop. She walked 252 steps, then backtracked 92 steps to pick up something she dropped, then walked another 203 steps to arrive at the bus stop. How many steps is it from Clare's house to the bus stop?

b. Han picked 558 blueberries and put them in a bucket. His little sister poured 302 blueberries from her basket into the bucket. They used about 250 blueberries to make a pie. How many blueberries do they have left?

Notice and Wonder: The Unknown

Lesson 19
Warm up

What do you notice?



What do you wonder?

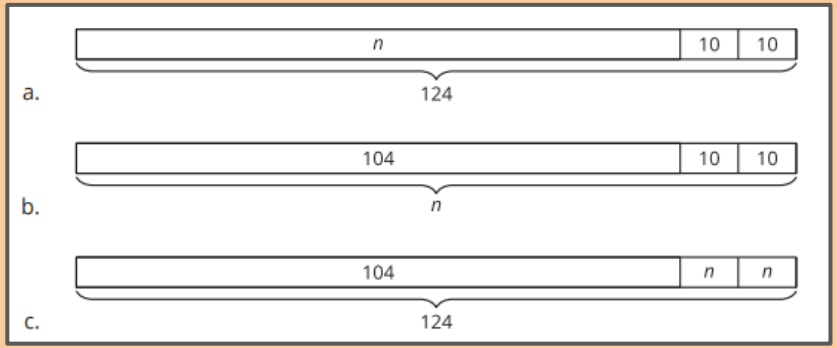
Mai's Beads

Lesson 19
Activity
#1

Part 1

Match each diagram with a situation. Be ready to explain your reasoning.

1. Mai had 104 beads. She bought two packs of beads and now she has 124 beads. How many beads were in each pack?
2. Mai had some beads. She bought 2 more packs of beads and each pack has 10 beads in it. Now she has 124 beads. How many beads did Mai have before?
3. Mai had 104 beads. She bought 2 more packs of beads and each pack has 10 beads in it. How many beads does she have now?

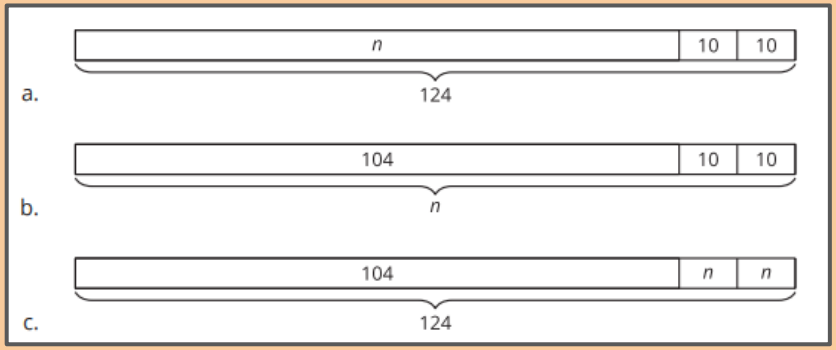


Mai's Beads

Lesson 19
Activity
#1

Part 2

Match each equation with a letter for the unknown quantity to a situation in Part 1



1. $104 + 2 \times 10 = n$

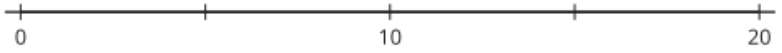
2. $104 + (2 \times n) = 124$

3. $n + 10 + 10 = 124$

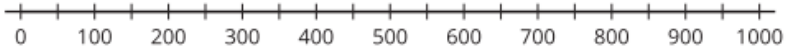
Round to the Nearest Multiple of 10 or 100

Lesson 15
Activity #1

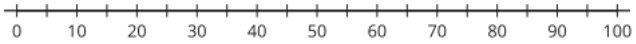
1. Plot 3, 5, and 18 on the number line. Then round each number to the nearest multiple of 10.



2. Plot 90, 528, and 891 on the number line. Then round each number to the nearest multiple of 100.



3. Round each number to the nearest multiple of 10. You can use the number line.



a. 14

b. 68

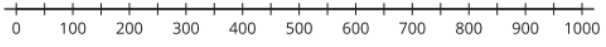
c. 25

4. Round each number to the nearest multiple of 100. You can use the number line.

a. 110

b. 872

c. 250



Represent, Solve, Explain

Lesson 19
Activity #2

Peanut butter is on sale at the grocery store. There were 104 jars of peanut butter. Then, 9 customers each bought 2 jars of peanut butter. How many jars of peanut butter are there now?

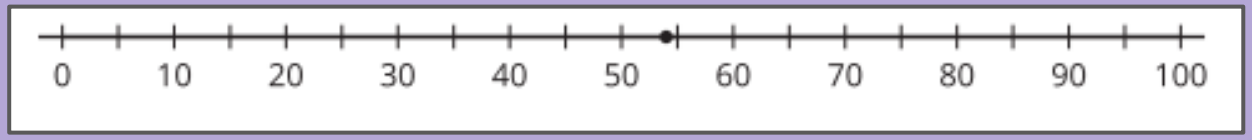
1. Write an equation with a letter for the unknown quantity to represent the situation.

2. Solve the problem. Show or explain your reasoning.

3. Explain how you know your answer makes sense.

Section D Summary

In this section, we learned that rounding is a formal way to decide what multiple of 10 or 100 a number is closest to.



Then we applied our rounding understanding to estimate answers to problems. This helped us decide if our answers to problems made sense based on the situation and the numbers in the situation. We also wrote equations with an unknown and used diagrams to solve for the exact answer in problems.

Situation:	Elena has 7 notebooks. Each notebook has 10 paper clips in it. Elena also has a box of 225 paper clips. How many paper clips does Elena have?
Diagram:	
Equation with an unknown:	$? = (7 \times 10) + 225$