

# Reveal

# MATH<sup>®</sup>

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Reveal the Full Potential  
in Every Student

# Place Value to 1,000

## Focus Question

How can I use place value to understand and compare numbers to 1,000?

### Hi, I'm Sienna.

I want to be a nutritionist. I like to learn about different foods and plan healthy meals! I know each orange slice has 10 calories. 10 groups of 10 oranges makes 100 calories. Understanding place value will help me do my job!

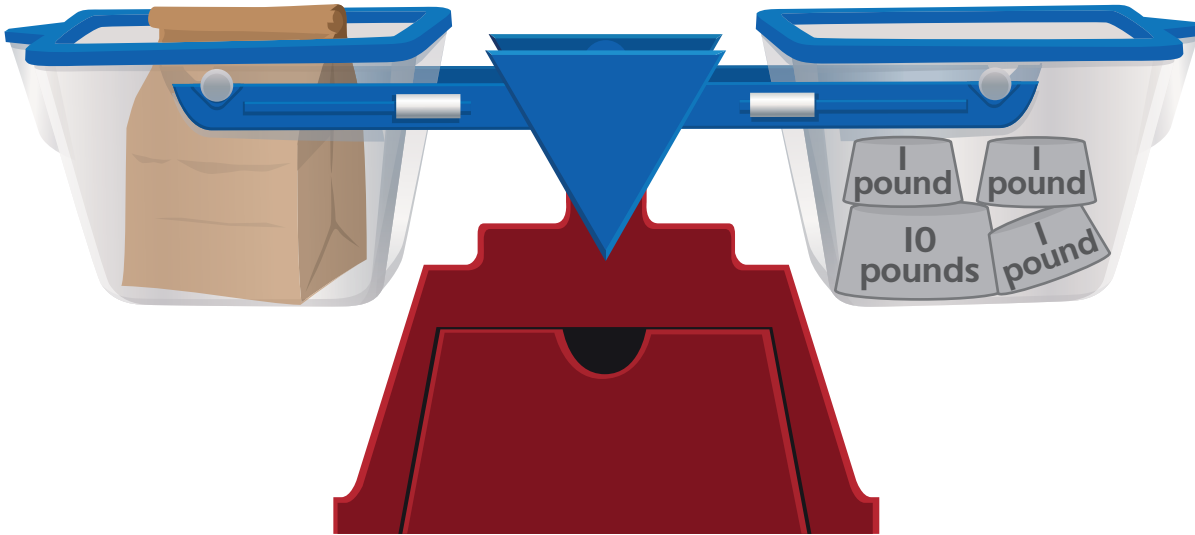


Name \_\_\_\_\_

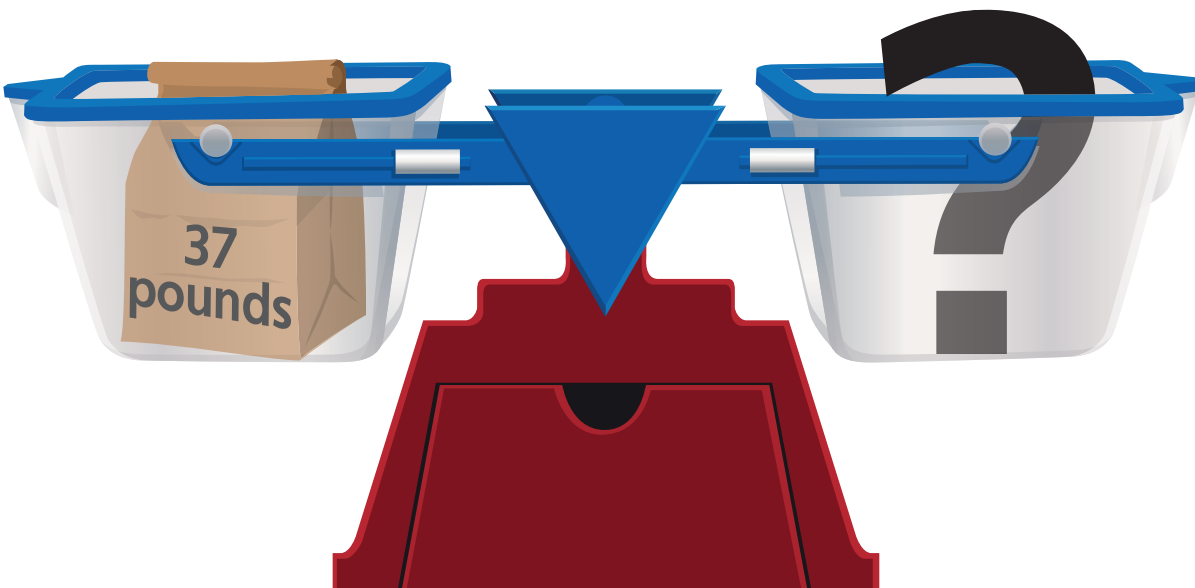
## Different Ways to Balance

Use base-ten blocks. Find all ways to balance the scales with ten-pound and one-pound weights.

### Scale 1



### Scale 2



# Understand Hundreds



## Be Curious

**What do you notice?  
What do you wonder?**



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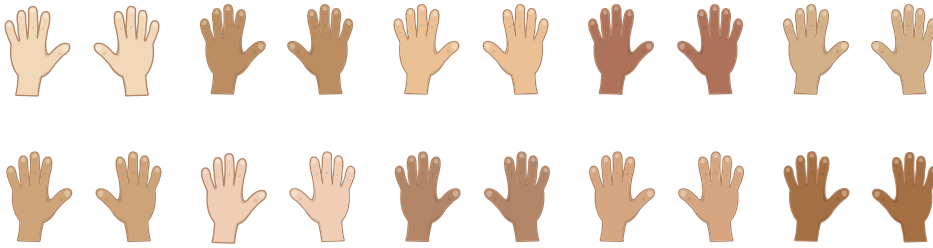
**Math is... Mindset**

How can you show respect to others?

# Learn

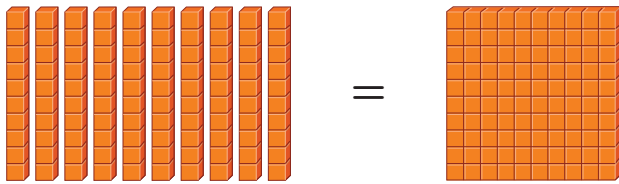
10 students raise both of their hands.

How many fingers are there?



You can use a tens rod to represent each student's 10 fingers.

10 **tens** are equal to 1 **hundred**.



10 tens

1 hundred

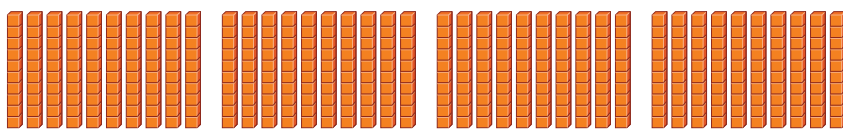
Math is... **Modeling**

Why is a tens rod a good way to represent each student's fingers?

You can group 10 tens to make 100.

## Work Together

What is the value of the base-ten blocks shown?

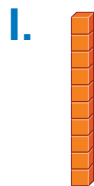


\_\_\_\_\_ tens = \_\_\_\_\_ hundreds = \_\_\_\_\_

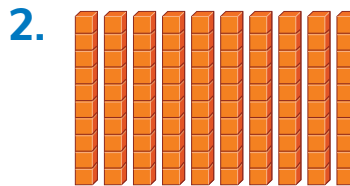
# On My Own

Name \_\_\_\_\_

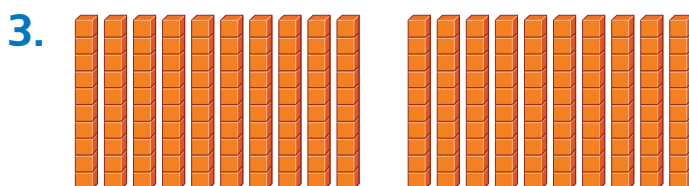
What is the value of the base-ten blocks?



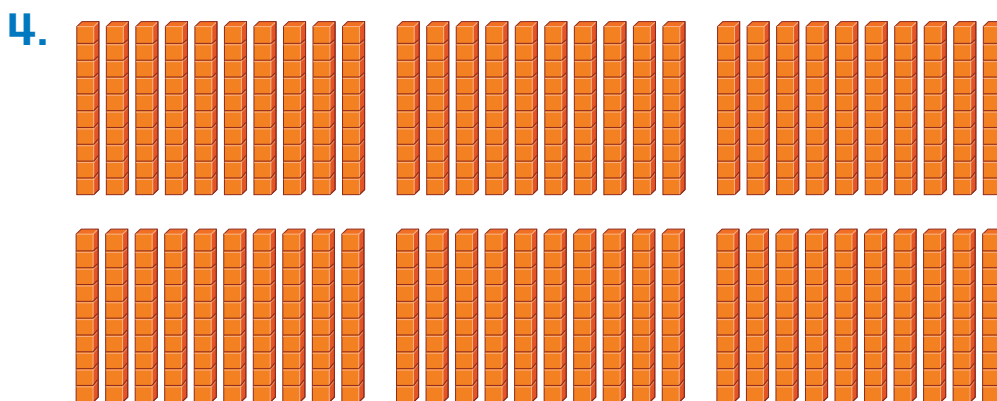
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

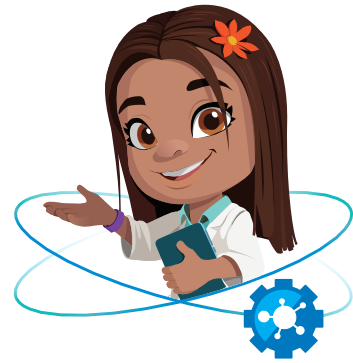
How can you use tens rods to show the problem? Fill in the answer.

5. Josh does 10 push-ups every day. How many push-ups does Josh do in 10 days?

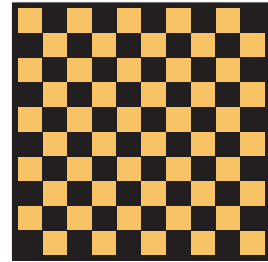
\_\_\_\_\_ push-ups

6. **STEM Connection** Sienna is helping her teacher pack first aid kits. Each kit has 10 groups of 10 bandages. She packs 8 kits. How many bandages does Sienna pack?

\_\_\_\_\_ bandages



7. Dhruvi says there are 100 squares on a chessboard. How can you show the number of squares using base-ten blocks?



8. **Extend Your Thinking** Anya has room for 995 sport cards in her binder. A pack has 10 cards, and a set has 100 cards. How many packs and sets can she put in her binder?

## Reflect

Why is it helpful to group 10 tens as 100?

**Math is...** **Mindset**

How have you shown respect to others?

# Understand 3-Digit Numbers



## Be Curious

**How are they the same?  
How are they different?**



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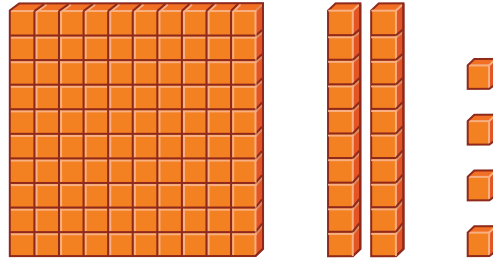
### Math is... Mindset

When might you use math outside of class?

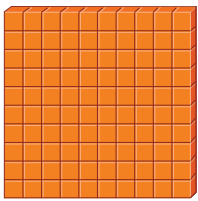


# Learn

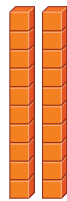
What number does this group of base-ten blocks show?



Each **base-ten block** has a different value.



1 flat  
100



2 rods  
20



4 units  
4

A **place-value chart** can help you understand the value of the blocks.

hundreds	tens	ones
1	2	4

The **digits** show the value is 124.

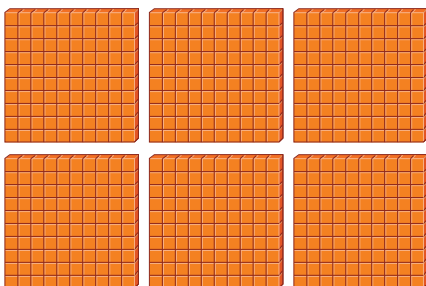
A 3-digit number has hundreds, tens, and ones.

## Math is... Connections

What relationship do you notice between the blocks and the place-value chart?

## Work Together

What number does this group of base-ten blocks show?  
Write the number in the place-value chart.

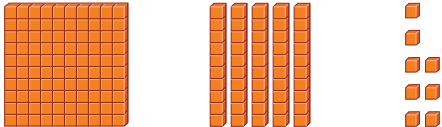


hundreds	tens	ones

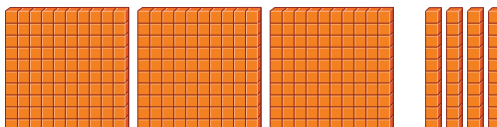
# On My Own

Name \_\_\_\_\_

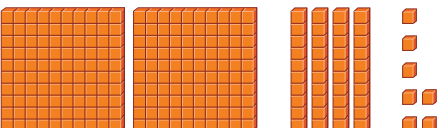
What number does the group of base-ten blocks show?  
Write the number in the place-value chart.

1. 

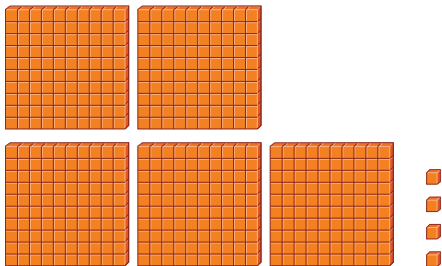
hundreds	tens	ones

2. 

hundreds	tens	ones

3. 

hundreds	tens	ones

4. 

hundreds	tens	ones

What is the value of the 5?

5. 592: \_\_\_\_\_

6. 259: \_\_\_\_\_

What is the value of the digit in the ones place?

7. 187: \_\_\_\_\_

8. 316: \_\_\_\_\_

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**9. Error Analysis** Norberto says there are no tens in the number 309. Justine says there is a ten because there is a digit in the tens place. How do you respond to them?

**10. Extend Your Thinking** Destiny set a goal to read 475 pages this year. Her science book has 400 pages. She has some 1-page poems and some short stories that are 10 pages. How can Destiny reach her goal of reading 475 pages?

## Reflect

How does knowing the value of digits help you understand 3-digit numbers?

**Math is... Mindset**

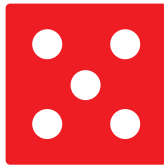
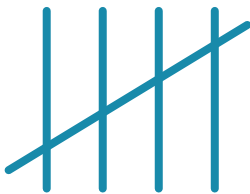
How can what you learned today help you outside of class?

# Read and Write Numbers to 1,000



## Be Curious

**What do you notice?  
What do you wonder?**



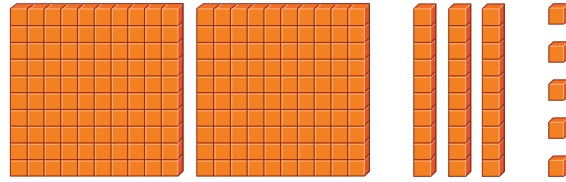
5

**Math is... Mindset**

What can you do to be  
a good listener?

# Learn

How can you write the value of the base-ten blocks?



You can write the value of the base-ten blocks in different ways.

<p>Use numerals.</p> <p><b>235</b></p> <p><b>standard form</b></p>	<p><b>Decompose</b> by place value.</p> <p>235</p> <p><b>200 + 30 + 5</b></p> <p><b>expanded form</b></p>	<p>Use words.</p> <p><b>200 + 30 + 5</b></p> <p><b>two hundred thirty-five</b></p> <p><b>word form</b></p>
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You can read and write 3-digit numbers using numerals, words, and place value.

## Math is... Explaining

How can you prove that each number form represents the same number?

## Work Together

How can you write 698 in different ways?

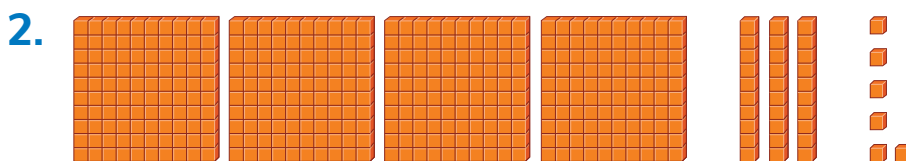
# On My Own

Name \_\_\_\_\_

What is an example of the number form? Draw a line to match.

- |                  |                      |
|------------------|----------------------|
| 1. expanded form | seven hundred eleven |
| standard form    | $700 + 10 + 1$       |
| word form        | 711                  |

What number do the base-ten blocks show? Write the number in different forms.



standard form: \_\_\_\_\_

expanded form: \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_

word form: \_\_\_\_\_

How can you write the number in standard form?

3. two hundred ten \_\_\_\_\_
4. six hundred twenty-seven \_\_\_\_\_
5. nine hundred eighty-one \_\_\_\_\_

How can you write the number in expanded form?

6. 843    \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_

7. 391    \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_

8. **STEM Connection** Sienna writes the number of calories in her lunch as 398. How can Sienna write this number in word form?



9. **Extend Your Thinking** Hiro collects action figures. He has a bag with 30 action figures and a box with 100 action figures. His friend gives him 7 action figures. How many action figures does Hiro have?

\_\_\_\_\_ action figures

## Reflect

What patterns do you notice when reading and writing 3-digit numbers?

### Math is... Mindset

What have you done to be a good listener today?

# Decompose 3-Digit Numbers



## Be Curious

**Which doesn't belong?**

3 hundreds, 25 ones	3 hundreds, 2 tens, 25 ones
3 hundreds, 2 tens, 5 ones	2 hundreds, 12 tens, 5 ones

### Math is... Mindset

How could finding more than one possible answer be helpful?



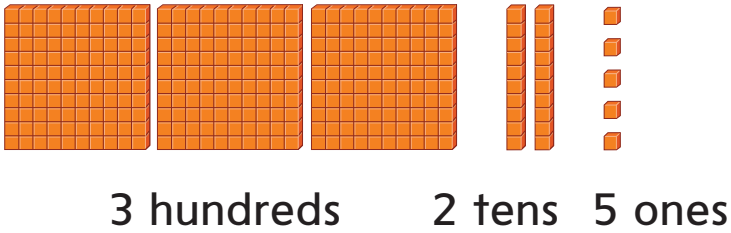
# Learn

How can you decompose this number in different ways?

# 325

You can decompose by **place value**.

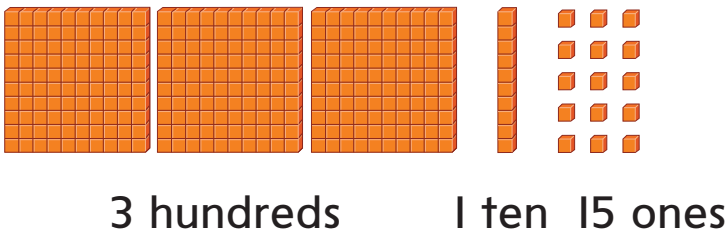
## ▶ One Way



Math is... Structure

What is different about these representations?

## ▶ Another Way



You can decompose a 3-digit number by grouping the hundreds, tens, and ones in different ways.

## Work Together

What are two ways to decompose 523?

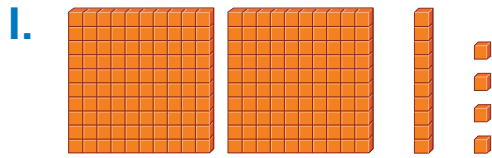
\_\_\_\_\_ = 523

\_\_\_\_\_ = 523

# On My Own

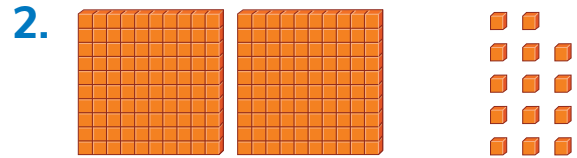
Name \_\_\_\_\_

What number does the group of base-ten blocks show?



\_\_\_\_\_ hundreds  
 \_\_\_\_\_ ten  
 \_\_\_\_\_ ones

The number is \_\_\_\_\_.



\_\_\_\_\_ hundreds  
 \_\_\_\_\_ tens  
 \_\_\_\_\_ ones

The number is \_\_\_\_\_.

How can you decompose the number? Choose all the correct answers.

3.                    364
- A.  $300 + 64 + 4$
  - B.  $300 + 60 + 4$
  - C.  $300 + 50 + 14$
  - D.  $400 + 60 + 4$

4.                    521
- A.  $400 + 20 + 1$
  - B.  $500 + 2 + 1$
  - C.  $500 + 10 + 11$
  - D.  $500 + 20 + 1$

5. **Error Analysis** Bryn says she can write the number 482 as 3 hundreds, 18 tens, and 2 ones. Felix says he can write the number 482 as 4 hundreds, 6 tens, and 22 ones. How do you respond to them?

How can you decompose each number in two different ways?

6. \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = 648  
\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = 648

7. \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = 930  
\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = 930

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8. **Extend Your Thinking** Meg decomposes 142 into 1 hundred, 4 tens, and 2 ones. Myles decomposes 142 into 1 hundred and 42 ones. How can you decompose 142 in a different way?

 **Reflect**

How can you use place value to decompose 3-digit numbers in different ways?

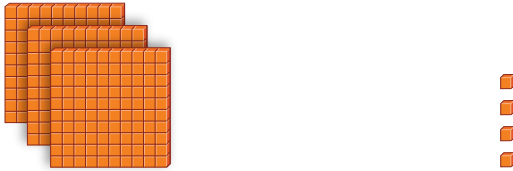
**Math is... Mindset**

How did you decide on the different ways you decomposed a number?

# Building Numbers

Name \_\_\_\_\_

1. 324 is shown with base-ten blocks:



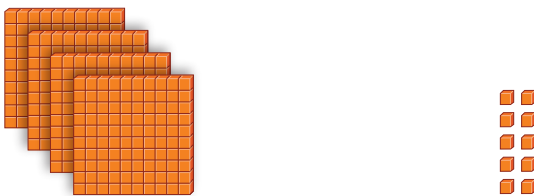
$$324 = 3 \text{ hundreds} + ? \text{ tens} + 4 \text{ ones}$$

How many tens?

- a. 2                      b. 3  
 c. 24                     d. 32

Explain your choice.

2. 420 is shown with base-ten blocks:



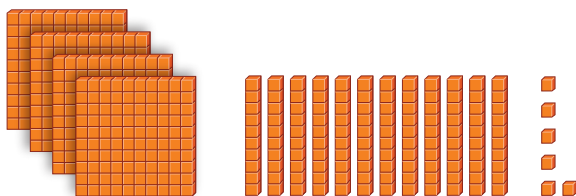
$$420 = 4 \text{ hundreds} + ? \text{ tens} + 10 \text{ ones}$$

How many tens?

- a. 0                      b. 1  
 c. 2                     d. 4

Explain your choice.

3. A number is shown with these base-ten blocks:



? = 4 hundreds + 12 tens + 6 ones

What is the number?

- a. 417
- b. 426
- c. 526
- d. 4,126

Explain your choice.

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## Reflect On Your Learning



# Compare 3-Digit Numbers



## Be Curious

**What do you notice?  
What do you wonder?**



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**Math is... Mindset**

What can you do to work on your own?

## Learn

How can you compare the number of beads in the jars?



Compare the hundreds first.

hundreds	tens	ones
3	1	1
2	7	3

300 is **greater than** 200.

$$311 > 273$$

If the hundreds have the same value, compare the tens.

hundreds	tens	ones
2	7	3
2	9	5

70 is **less than** 90.

$$273 < 295$$

You can use place value to compare 3-digit numbers.

### Math is... Explaining

How can you use what you know about comparing 2-digit numbers to help you compare 3-digit numbers?

### Work Together

What symbols can you use to show each comparison?

a.  $600 \bigcirc 599$

b.  $86 \bigcirc 124$

c.  $523 \bigcirc 523$

# On My Own

Name \_\_\_\_\_

**What is the meaning of the term? Draw a line to match.**

- |                 |       |
|-----------------|-------|
| 1. greater than | fewer |
| less than       | same  |
| equal to        | more  |

2. In what order do you compare the digits in a 3-digit number? Circle the correct answer.

- A. ones first, then tens, and hundreds last
- B. tens first, then ones, and hundreds last
- C. hundreds first, then tens, and ones last
- D. hundreds first, then ones, and tens last

**How can you compare the numbers? Use  $>$ ,  $<$ , or  $=$ .**

3.

hundreds	tens	ones
1	0	3
	9	0

103 ○ 90

4.

hundreds	tens	ones
3	3	0
3	3	0

330 ○ 330



How can you compare the numbers? Use  $>$ ,  $<$ , or  $=$ .

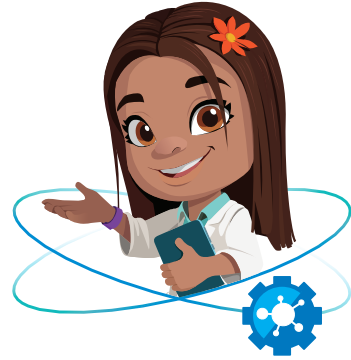
5.  $100 \bigcirc 99$

6.  $604 \bigcirc 489$

7.  $953 \bigcirc 981$

8.  $271 \bigcirc 278$

**9. STEM Connection** Sienna has a carton of 346 blueberries and a carton of 348 raspberries. Does Sienna have a greater number of blueberries or raspberries? Explain how you know.



**10. Extend Your Thinking** Xi says 219 is greater than 437. How do you respond to Xi?

## Reflect

How do you use place value to compare 3-digit numbers?

**Math is... Mindset**

What helped you work on your own?

# Unit Review

Name \_\_\_\_\_

## Vocabulary Review

Choose the correct word(s) to complete each sentence.

decompose

expanded form

hundreds

standard form

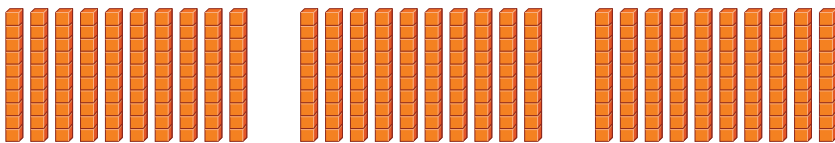
word form

1. When you write a number decomposed by place value, it is written in \_\_\_\_\_. (Lesson 2-3)
2. When you write a number using only words, it is written in \_\_\_\_\_. (Lesson 2-3)
3. You \_\_\_\_\_ a number when you break it apart. (Lesson 2-3)
4. When you write a number using only digits, it is written in \_\_\_\_\_. (Lesson 2-3)
5. In the number 476, 4 is in the \_\_\_\_\_ place. (Lesson 2-1)

# Review

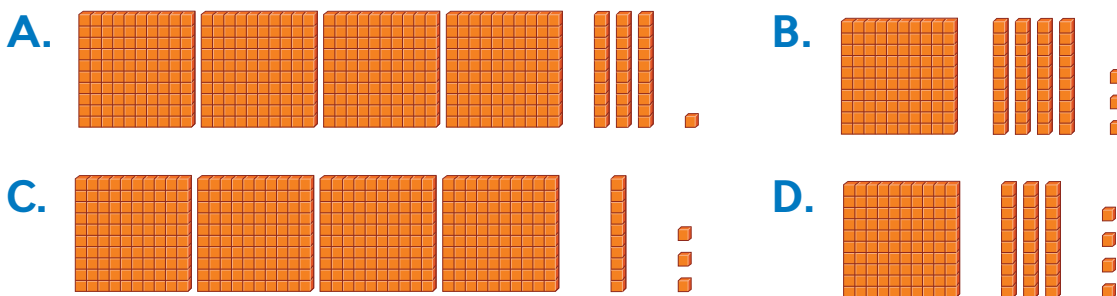
6. What is the value of the base-ten blocks shown?

(Lesson 2-1)



\_\_\_\_\_ tens = \_\_\_\_\_ hundreds = \_\_\_\_\_

7. Which shows 431? Circle the correct answer. (Lesson 2-2)



8. Ann is thinking of a number. It has 8 tens, 0 ones, 2 hundreds. Which shows Ann's number? Circle the correct answer. (Lesson 2-2)

- A. 28      B. 82      C. 280      D. 802

9. Which shows 392 in expanded form? Circle the correct answer. (Lesson 2-3)

- A.  $300 + 90 + 2$                       B.  $3 + 90 + 200$   
C.  $3 + 9 + 2$                               D.  $300 + 9 + 2$

Write each number in standard form. (Lesson 2-3)

10. five hundred eighty-seven \_\_\_\_\_

11. six hundred nine \_\_\_\_\_

12. two hundred twelve \_\_\_\_\_

How can you decompose 853 in different ways?

Fill in the missing numbers. (Lesson 2-4)

13. 8 hundreds, 0 tens, and \_\_\_\_\_ ones

14. 8 hundreds, 2 tens, and \_\_\_\_\_ ones

15. 8 hundreds, 4 tens, and \_\_\_\_\_ ones

16. 8 hundreds, 5 tens, and \_\_\_\_\_ ones

How can you compare the numbers? Complete with

$>$ ,  $<$ , or  $=$ . (Lesson 2-5)

17. 549  499

18. 617  617

19. 360  306

20. 445  454

21. 842  846

22. 719  719

23. **Error Analysis** Pablo says that 5 ones, 7 hundreds, and 2 tens is greater than 572. How do you respond to him? Explain your answer. (Lesson 2-5)

# Performance Task

Sienna goes to a farmer's market with her dad. They help a farmer sell 75 bananas, 3 crates of 100 apples, and 2 baskets of 10 melons.

**Part A:** How many pieces of fruit did Sienna and her dad help the farmer sell? Explain your thinking.

**Part B:** Show 2 other ways to decompose this number.

## Reflect

What are different ways you can use place value to understand and compare numbers to 1,000?

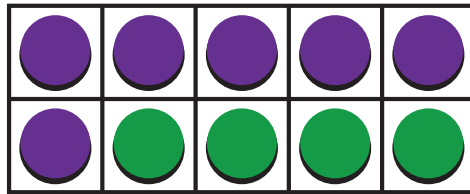
## Unit 2

# Fluency Practice

Name \_\_\_\_\_

## Fluency Strategy

You can use a ten-frame to help compose and decompose 10.



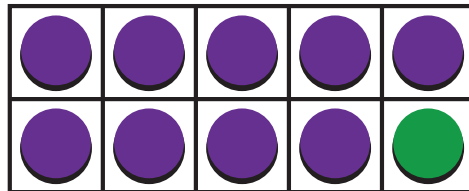
$$6 + 4 = 10$$

$$10 - 6 = 4$$

$$4 + 6 = 10$$

$$10 - 4 = 6$$

1. Use the counters in the ten-frame to write two addition equations and two subtraction equations.



\_\_\_\_\_

\_\_\_\_\_

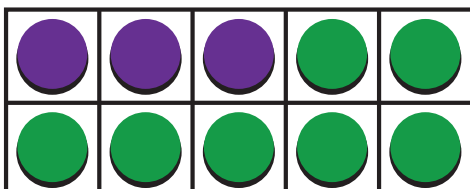
\_\_\_\_\_

\_\_\_\_\_

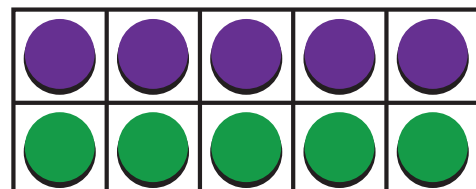
## Fluency Flash

What is the sum or difference? Use the counters in the ten-frame to help.

2.  $10 - 7 =$  \_\_\_\_\_



3.  $5 + 5 =$  \_\_\_\_\_



## Fluency Check

What is the sum or difference?

4.  $10 - 8 =$  \_\_\_\_\_

5.  $2 + 1 =$  \_\_\_\_\_

6.  $8 + 2 =$  \_\_\_\_\_

7.  $10 - 9 =$  \_\_\_\_\_

8.  $6 - 2 =$  \_\_\_\_\_

9.  $6 + 1 =$  \_\_\_\_\_

10.  $8 - 0 =$  \_\_\_\_\_

11.  $10 + 0 =$  \_\_\_\_\_

12.  $4 + 6 =$  \_\_\_\_\_

13.  $10 - 5 =$  \_\_\_\_\_

## Fluency Talk

How does a ten-frame help you decompose 10?

How can you explain to someone else how to add 0 to a number? How can you explain to someone else how to subtract 0 from a number?