

Name \_\_\_\_\_

## Read and Write Numbers

**Essential Question** How can you read and write numbers through hundred thousands?



Number and Operations in Base Ten—4.NBT.A.2

**MATHEMATICAL PRACTICES**  
MP2, MP7

### Unlock the Problem

The International Space Station uses 262,400 solar cells to change sunlight to electricity.

Write 262,400 in standard form, word form, and expanded form.



Use a place-value chart.

Each group of three digits separated by a comma is called a **period**. Each period has hundreds, tens, and ones. The greatest place-value position in the thousands period is hundred thousands.

Write 262,400 in the place-value chart below.

PERIOD			PERIOD		
THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones

The number 262,400 has two periods, thousands and ones.

**Standard Form:** 262,400

**Word Form:** two hundred sixty-two thousand, four hundred

**Expanded Form:** 200,000 + 60,000 + 2,000 + 400



**Math Talk**

**MATHEMATICAL PRACTICES 7**

**Look for Structure** How can you use a place value chart to find which digit in a number has the greatest value?

**Try This!** Use place value to read and write numbers.

**A** Standard Form: \_\_\_\_\_

**Word Form:** ninety-two thousand, one hundred seventy

**Expanded Form:**

90,000 + 2,000 + \_\_\_\_\_ + 70

**B** Standard Form: 200,007

**Word Form:** two hundred \_\_\_\_\_, \_\_\_\_\_

**Expanded Form:**

\_\_\_\_\_ + 7



1. How can you use place value and period names to read and write 324,904 in word form?

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**Read and write the number in two other forms.**

2. four hundred eight thousand, seventeen

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3. 65,058

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**Math Talk**

**MATHEMATICAL PRACTICES 2**

**Symbols and Words**

Explain how you can use the expanded form of a number to write the number in standard form.

## On Your Own

**Read and write the number in two other forms.**

4. five hundred eight thousand

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6. 570,020

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5. forty thousand, six hundred nineteen

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7.  $400,000 + 60,000 + 5,000 + 100$

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8. **THINK SMARTER** During the week of the county fair, fifteen thousand, six hundred nine entry tickets were sold. Is it correct to write the number as 15,069? Explain.

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9. **GO DEEPER** There were 94,172 people at a football game on Saturday. On Monday, 1,000 fewer people were at a football game. In word form, how many people were at the football game on Monday?

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10. Richard got 263,148 hits when he did an Internet search. What is the value of the digit 6 in this number? Explain.

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Name \_\_\_\_\_

11. **THINK SMARTER** Yvonne wrote the numbers sixteen thousand, nine hundred eighteen and 64,704 on the board. Which of the numbers has a greater value in the thousands place?
- \_\_\_\_\_
12. **GO DEEPER** Matthew found the sum of 3 thousands 4 hundreds 3 tens 1 one + 4 thousands 8 hundreds 3 tens 5 ones. Victoria found the sum of 5 thousands 7 hundreds 4 ones + 3 thousands 2 hundreds 3 tens 1 one. Who had the greater sum? What was the greater sum?
- \_\_\_\_\_

## Problem Solving • Applications

Use the table for 13–15.

13. **MATHEMATICAL PRACTICE 4** **Use Graphs** Which city has a population of two hundred fifty-five thousand, one hundred twenty-four?
- \_\_\_\_\_
14. Write the population of Raleigh in expanded form and word form.
- \_\_\_\_\_
- \_\_\_\_\_
15. **THINK SMARTER** **What's the Error?** Sophia said that the expanded form for 605,970 is  $600,000 + 50,000 + 900 + 70$ . Describe Sophia's error and give the correct answer.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### Major Cities in North Carolina

City	Population*
Durham	229,171
Greensboro	255,124
Raleigh	405,612

\*U.S. Census Bureau 2008 Estimated Population



# Unlock the Problem

16. **GO DEEPER** Mark tossed six balls while playing a number game. Three balls landed in one section, and three balls landed in another section. His score is greater than one hundred thousand. What could his score be?

a. What do you know? \_\_\_\_\_

\_\_\_\_\_

b. How can you use what you know about place value to find what Mark's score could be? \_\_\_\_\_

\_\_\_\_\_

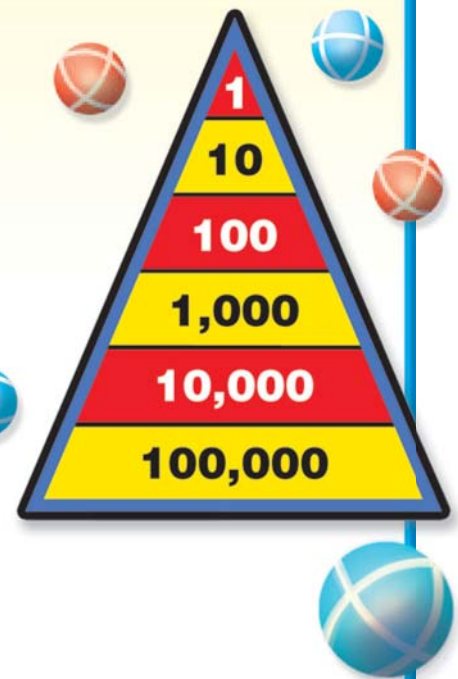
c. Draw a diagram to show one way to solve the problem.

d. Complete the sentences.

Three balls could have landed in the \_\_\_\_\_ section.

Three balls could have landed in the \_\_\_\_\_ section.

Mark's score could be \_\_\_\_\_.



17. **THINK SMARTER** What is another way to write 615,004? Mark all that apply.

**A** six hundred fifteen thousand, four

**C**  $60,000 + 10,000 + 5,000 + 4$

**B** six hundred five thousand, fourteen

**D**  $600,000 + 10,000 + 5,000 + 4$

Name \_\_\_\_\_

## Read and Write Numbers



**COMMON CORE STANDARD—4.NBT.A.2**  
Generalize place value understanding for multi-digit whole numbers.

Read and write the number in two other forms.

1. six hundred ninety-two thousand, four

2. 314,207

3. 600,000 +  
80,000 + 10

standard form: 692,004;

expanded form: 600,000 +

90,000 + 2,000 + 4

Use the number 913,256.

4. Write the name of the period that has the digits 913.

5. Write the digit in the ten thousands place.

6. Write the value of the digit 9.

## Problem Solving



Use the table for 7 and 8.

### Population in 2008

State	Population
Alaska	686,293
South Dakota	804,194
Wyoming	532,668

7. Which state had a population of eight hundred four thousand, one hundred ninety-four?

8. What is the value of the digit 8 in Alaska's population?

9. **WRITE** *Math* Is 70 thousand written in standard form or word form? Explain.

## Lesson Check (4.NBT.A.2)

1. Based on a 2008 study, children 6–11 years old spend sixty-nine thousand, one hundred eight minutes a year watching television. What is this number written in standard form?  

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2. What is the value of the digit 4 in the number 84,230?  

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## Spiral Review (Reviews 3.OA.C.7, 3.OA.D.8, 3.OA.D.9, 4.NBT.A.1)

3. An ant has 6 legs. How many legs do 8 ants have?  

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4. Latricia's vacation is in 4 weeks. There are 7 days in a week. How many days is it until Latricia's vacation?  

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5. Marta collected 363 cans. Diego collected 295 cans. How many cans did Marta and Diego collect?  

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6. The city Tim lives in has 106,534 people. What is the value of the 6 in 106,534?  

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