LESSON 4 | **Worktext** pp. 9–10, 25 | Correlated **Math Reviews** pp. 7–8

Objectives

- Compare numbers using strategies
- Compare numbers with 7 or fewer digits using >, <, or =
- Compare numbers written in standard form, expanded form, and word form

Teacher Materials

- Fact family flashcards: 5-6-11, 4-7-11, 3-8-11, 2-9-11, and previously memorized facts

Practice and Review

Count to 1,000,000

Lead in counting by 10s to 100; 100s to 1,000; 1,000s to 10,000; 10,000s to 100,000; and 100,000s to 1,000,000.

Fact families: 5-6-11, 4-7-11, 3-8-11, 2-9-11

Use fact family flashcards to review the addition and subtraction facts in these fact families and those from the previous lesson.

Introduce the Lesson

Today hunting for treasure has become a business. Companies sell gold coins and other valuable objects to people who collect the treasures. One company has recovered about $500 million worth of coins from a Spanish ship found in international waters!

Many people want to acquire treasure here on earth, but in Matthew 6:20 God tells Christians to "lay up for yourselves treasures in heaven."

Explain that treasures stored up in heaven are heavenly rewards that will last for all eternity. [BAT: 4a Sowing and reaping]

➤ How do you think you can store up treasures in heaven?

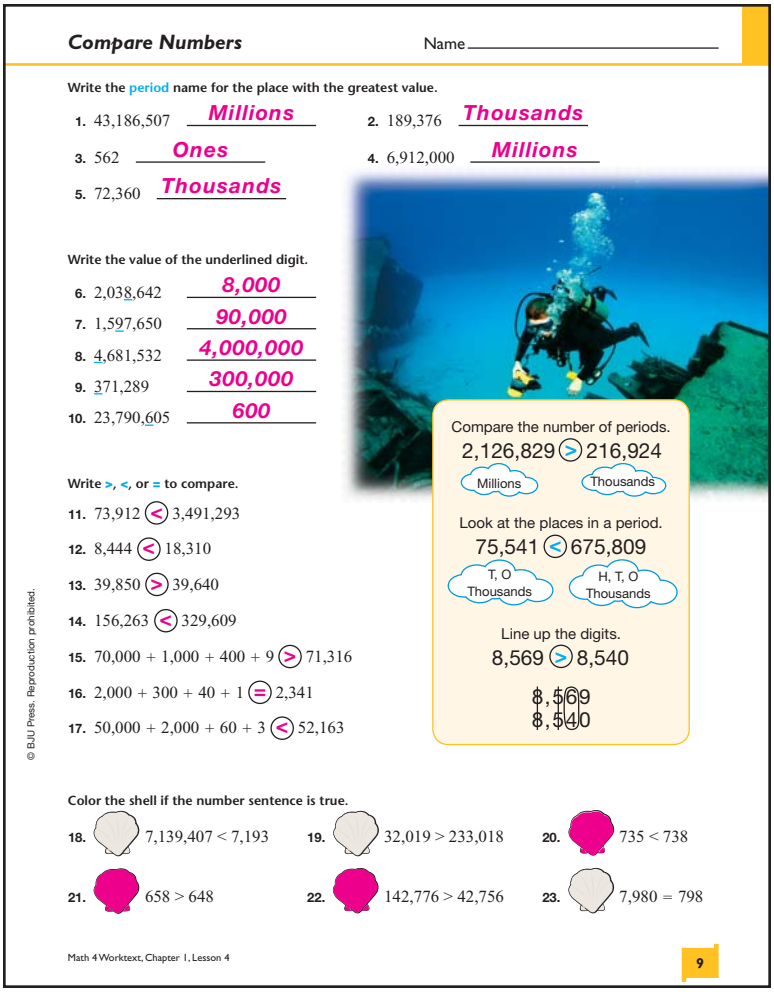
Teach for Understanding

Compare numbers using strategies

1. Write 782 and 17,243 for display.
   ➤ Which number has the greater value? *17,243* How do you know? *Answers will vary.*
   ➤ What do you notice about the number of periods in each of these numbers and the value of each number? *Elicit that 782 has the Ones period only and has a lesser value than 17,243 which has 2 periods—the Ones period and the Thousands period.*
   Explain that a number with more periods has a greater value than a number with fewer periods; looking at the number of periods in numbers can help us to determine which number has the greater value.
2. Write 286,459 and 94,520 for display.
   ➤ What do you notice about the number of periods in each of these numbers? *Each number has 2 periods.*
3. Explain that since both numbers have the same number of periods you need to compare the digits within the period that has the greater value.
   ➤ Which period has the greater value? *Thousands*
   Underline the Thousands period in 286,459.
   ➤ How many places are in the Thousands period of this number? *3* Name the 3 places. *One Thousands, Ten Thousands, Hundred Thousands*
   Underline the Thousands period in 94,520.
   ➤ How many places are in the Thousands period of this number? *2* Name the places. *One Thousands, Ten Thousands*
   ➤ Which number has the greater value? *286,459* How do you know? *Answers will vary, but elicit that 286,000 is greater than 94,000.*
   ➤ Is it necessary to look at the digits in the Ones period also? Why? *No; answers will vary, but elicit that looking at the value of the Thousands period, the period with the greater value, allows you to see which number is greater.*
4. Write 96,924 in a Place Value frame drawn for display; write 96,294 in the frame below 96,924.
   ➤ What do you notice about the number of periods in each of these numbers? *Each number has 2 periods.*
   ➤ What do you notice about the number of digits in each of these numbers? *Each number has 5 digits.*
5. Explain that when you compare numbers with the same number of digits, it helps to re-write the numbers aligning the digits; then compare the numbers, beginning with the place that has the greatest value.
   ➤ How many ten thousands are in each of these numbers? *9* What is the value of 9 ten thousands? *90,000*
   ➤ How many one thousands are in each of these numbers? *6* What is the value of 6 one thousands? *6,000*
   ➤ Are the digits in the Hundreds places the same? *no*
   ➤ How many hundreds are in 96,924? *9* 96,294? *2*
   Underline the 9 and the 2 in the Hundreds places.
   ➤ Which number is greater? *96,924* How do you know? *It has more hundreds than 96,294.*
   ➤ Is it necessary to compare the Tens and Ones places? How do you know? *No; answers will vary.*

Compare numbers using >, <, or =

1. Write for display the symbols >, <, and =.
   ➤ What are the names for these math symbols? *greater than, less than, equal*
2. Write for display 5,946,488 __ 5,961,818.
   ➤ How many periods do you see in each of these numbers? *3* Which period has the greatest value? *Millions*
   ➤ Which *place* has the greatest value in each of these numbers? *One Millions*
   ➤ How could you easily compare these numbers? *Answers will vary, but elicit by writing the numbers, aligning their digits, and then comparing the numbers, beginning with the place that has the greatest value.*
3. Write 5,946,488 in a Place Value frame drawn for display; write 5,961,818 in the frame below 5,946,488.
   ➤ How many one millions are there in each of these numbers? *5* What is the value of 5 one millions? *5,000,000*
   ➤ How many hundred thousands are there in each of these numbers? *9* What is the value of 9 hundred thousands? *900,000*
   ➤ How do the Ten Thousands places compare? *5,946,488 has 4 ten thousands, and 5,961,818 has 6 ten thousands*
4. Direct attention to the number sentence written for display.
   ➤ How can you compare these numbers without rewriting them and lining up the digits? *Elicit that since these numbers have the same number of digits, you can compare the value of each*



Compare Numbers Name _____

Write the period name for the place with the greatest value.

1. 43,186,507 *Millions*
2. 189,376 *Thousands*
3. 562 *Ones*
4. 6,912,000 *Millions*
5. 72,360 *Thousands*

Write the value of the underlined digit.

6. 2,038,642 *8,000*
7. 1,597,650 *90,000*
8. 4,681,532 *4,000,000*
9. 371,289 *300,000*
10. 23,790,605 *600*

Write >, <, or = to compare.

11. 73,912 < 3,491,293
12. 8,444 < 18,310
13. 39,850 > 39,640
14. 156,263 < 329,609
15. 70,000 + 1,000 + 400 + 9 > 71,316
16. 2,000 + 300 + 40 + 1 = 2,341
17. 50,000 + 2,000 + 60 + 3 < 52,163

Compare the number of periods.
2,126,829 > 216,924
Millions Thousands

Look at the places in a period.
75,541 < 675,809
T, O Thousands H, T, O Thousands

Line up the digits.
8,569 > 8,540
8,569
8,540

Color the shell if the number sentence is true.

18. 7,139,407 < 7,193
19. 32,019 > 233,018
20. 735 < 738
21. 658 > 648
22. 142,776 > 42,756
23. 7,980 = 798

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Write >, <, or = to compare.

1. 38,018 = 30,000 + 8,000 + 10 + 8
2. 156,263 > 152,187
3. 420,609 < 400,000 + 30,000 + 600 + 9
4. 6,000,000 > 69,794

Complete the table.

5.	Standard form	*5,320,781*
	Expanded form	5,000,000 + 300,000 + 20,000 + 700 + 80 + 1
6.	Word form	*five million, three hundred twenty thousand, seven hundred eighty-one*

Circle the digit in the place listed.
Write the value of the circled digit.

7.	Ten Millions place	689,562,317	*80,000,000*
8.	Hundred Thousands place	712,460,283	*400,000*
9.	Tens place	3,895,627	*20*
10.	One Millions place	17,580,312	*7,000,000*
11.	One Thousands place	896,347	*6,000*

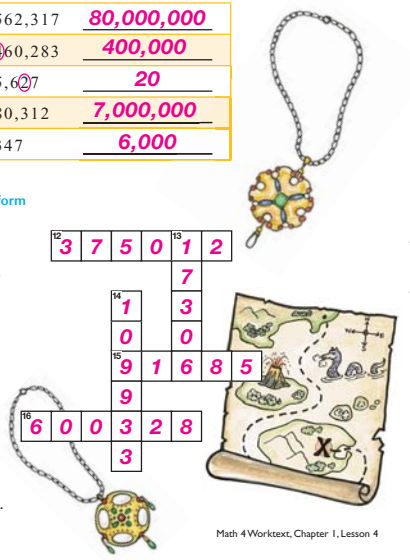
Write in the crossword puzzle the standard form for each number.

Across

12. 300,000 + 70,000 + 5,000 + 10 + 2
15. 90,000 + 1,000 + 600 + 80 + 5
16. 600,000 + 300 + 20 + 8

Down

13. 10,000 + 7,000 + 300 + 6
14. 100,000 + 9,000 + 900 + 30 + 3



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corresponding place, beginning with the place that has the greatest value, until you come to corresponding places that have different values.

Point to the corresponding digits as you guide the students in comparing the One Millions and the Hundred Thousands places. Underline the 4 and the 6 in the Ten Thousands places.

➤ **What symbol can you write to complete this number sentence? How do you know?** *<, less than; 5,946,488 has fewer ten thousands than 5,961,818 or 5,961,818 has more ten thousands than 5,946,488*

Complete the number sentence and lead in reading it: *five million, nine hundred forty-six thousand, four hundred eighty-eight is less than five million, nine hundred sixty-one thousand, eight hundred eighteen.*

5. Follow a similar procedure for 725,676 __ 725,642. *>, greater than*
6. Write 1,170,813 __ 34,203 for display.

➤ **Is it necessary to compare the value of each place to complete this number sentence? Why?** *No; answers will vary, but elicit that you can compare the number of periods in each number to determine which is greater.*

➤ **What symbol can you write to complete this number sentence? How do you know?** *>, greater than; answers will vary, but elicit that 1,170,813 has more periods than 34,203.*

Complete the number sentence and lead in reading it: *one million, one hundred seventy thousand, eight hundred thirteen is greater than thirty-four thousand, two hundred three.*

7. Guide the students in completing and reading aloud these number sentences.

9,632,705 < 9,731,750 7,302,144 = 7,302,144
7,645,836 > 7,645,831 9,632,705 < 9,731,750

Compare numbers written in standard form, expanded form, and word form

1. Write 3,000,000 + 400,000 + 30,000 + 9,000 + 800 + 90 + 2 __ 3,439,508 for display.

➤ **What is the form of the number on the left called?** *expanded form*

➤ **How can you compare these numbers?** *Answers will vary, but elicit that when comparing numbers written in standard form to numbers written in expanded form or word form, you can compare the values in the expanded form or word form with the digits in the standard form, or you can first write the expanded form or word form in standard form and then compare the digits.*

➤ **What is the standard form for 3,000,000 + 400,000 + 30,000 + 9,000 + 800 + 90 + 2?** *3,439,892*

2. Write 3,439,892 below the expanded form and guide the students in comparing the 2 numbers in standard form. Complete the number sentence. *3,439,892 > 3,439,508*
3. Guide in comparing 7,654,480 > 700,000 + 50,000 + 4,000 + 200 + 20 + 1.
4. Follow a similar procedure for 89,452 < *eight million, nine hundred seventy-four thousand, four hundred twenty-five.*

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