

WORDS TO KNOW

place value

expanded form

Lesson 7

READ AND WRITE WHOLE NUMBERS

3.NBT.A.4

INTRODUCTION

Real-World Connection

Fatima and her family are on a whale-watching outing. They see two whales right away! The guide says one is a Hector's beaked whale that weighs about two thousand, twenty pounds and the other is a strap-toothed whale that weighs about three thousand, three hundred pounds. Fatima wants to jot down the weight of the two whales using numbers instead of words. How does she write those numbers in words? Let's practice the skills in the **Guided Instruction** and **Independent Practice** and, at the end of the lesson, see how Fatima writes the numbers!



What I Am Going to Learn

- How to read and write whole numbers in different ways
- How to represent whole numbers using place value

What I May Already Know 2.NBT.A.1, 2.NBT.A.3

- I know how to read and write three-digit numbers in different ways.
- I know that a two-digit number represents tens and ones.
- I know that a three-digit number represents hundreds, tens, and ones.

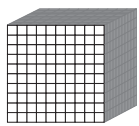
Vocabulary in Action

Place value is the value of each digit in a number. Understanding place value helps you read and write large numbers.

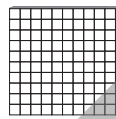
- A place-value chart shows the value of each digit in a number. The places in a six-digit number are ones, tens, hundreds, thousands, ten thousands, and hundred thousands.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

- A place-value model using base-ten blocks can be used to describe the parts of a four-digit number.



= 1,000, or thousands place



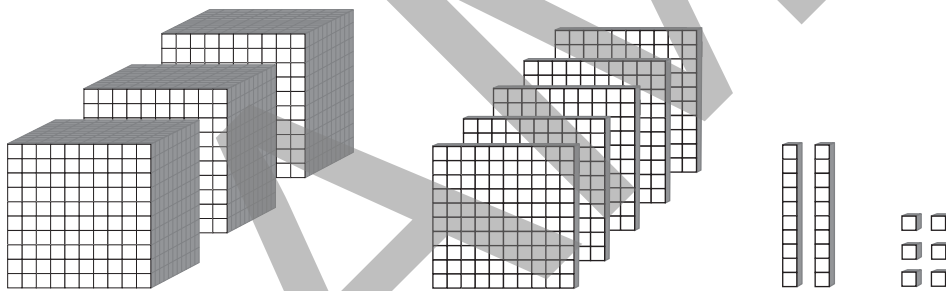
= 100, or hundreds place



= 10, or tens place

□ = 1, or ones place

If you were asked to show the number 3,526, you would use 3 thousands place cubes, 5 hundreds place flats, 2 tens place rods, and 6 ones place blocks.



◀ TIPS AND HINTS

The thousands place cubes are like 10 of the hundreds cubes stacked up.

- Place value helps you write numbers in **expanded form**. Expanded form shows the value of each digit in a large number. It is written as a sum of its parts.

Think of the number 31,251. In expanded form, it looks like this.

$$30,000 + 1,000 + 200 + 50 + 1$$

When you write it in words, it looks like this.

Thirty-one thousand, two hundred fifty-one

THINK ABOUT IT

Think about the digit 2. It can have different values.

In the number 23, the 2 has a value of 2 tens or 20.

In the number 237, the 2 has a value of 2 hundreds or 200.

In the number 2,370, the 2 has a value of 2 thousands or 2,000.

EXAMPLE

There are 69,143 seats at Nissan Stadium. What is the value of the 1 in 69,143?

Use the place-value chart below to help you understand the value of each digit.

Ten Thousands	Thousands	Hundreds	Tens	Ones
_____	_____	_____	_____	_____

There is one digit in each box.

The value of 1 is in the hundreds place.

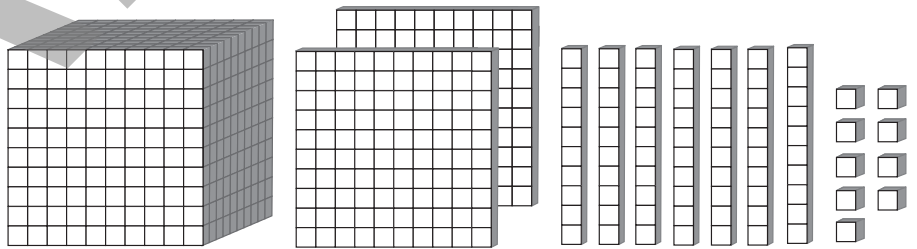
69,143 written in words is sixty-nine thousand, one hundred forty-three.

69,143 written in expanded form is
 $60,000 + 9,000 + 100 + 40 + 3$.

EXAMPLE

Carmen's family drove from Memphis, TN to Burlington, VT. Then they drove back to Memphis.

They travelled 1,279 miles. How can you write the number in expanded form?



Write the number in expanded form as a sum of its parts.

$$1,000 + 200 + 70 + 9$$

Write the number in word form.

One thousand, two hundred seventy-nine.

GUIDED INSTRUCTION

1. Mr. Harper has some paper in his office. He has a box of 1,000 sheets, another box of 500 sheets, a stack of 30 sheets, and 2 sheets on his desk. How many sheets of paper does Mr. Harper have?

Step One Write this number in expanded form.

+ + +

Step Two Write the number in the place-value chart.

Thousands	Hundreds	Tens	Ones
_____	_____	_____	_____

Step Three Solve.

Mr. Harper has sheets of paper.

Now, write this number in word form.

2. Pramod is travelling 8,395 miles from Nashville to Mumbai, India to visit his family. Which shows this number written as words?

- (A) eight hundred ninety-five
- (B) eight thousand three hundred ninety
- (C) eight thousand, three hundred ninety-five
- (D) eight hundred thirty-nine

3. Maria used a place-value chart to write a number. Which shows the same number?

- (A) $2,000 + 800 + 30 + 6$
- (B) $2,000 + 800 + 300 + 6$
- (C) $20,000 + 8,000 + 30 + 6$
- (D) $20,000 + 8,000 + 300 + 6$

Ten Thousands	Thousands	Hundreds	Tens	Ones
2	8	3	0	6

TIPS AND HINTS

When you are writing numbers larger than one thousand, using a comma to separate the thousands from the hundreds makes it easier to quickly read a number.

THINK ABOUT IT

When you write a number in words, you should write it the same way you would say the number when looking at the number itself.

TURN AND TALK

Solve the following with help from a partner: Bria told her mom she had 1,792 pennies. When asked how she counted so many, she said she made a group of one thousand pennies, seven groups of one hundred pennies, 9 groups of 10 pennies, and had two pennies left over. Did Bria find the correct total of pennies? Explain your answer.

Color in the traffic signal that shows how you are doing with the skill.



How Am I Doing?

What questions do you have?

Name a city that, in miles, is a four-digit number away from where you live.

Use the clues to find this four-digit number. The thousands digit and the ones digit are the same. The hundreds digit and the tens digit are the same. The tens digit is 8 more than the ones digit. What is the number?

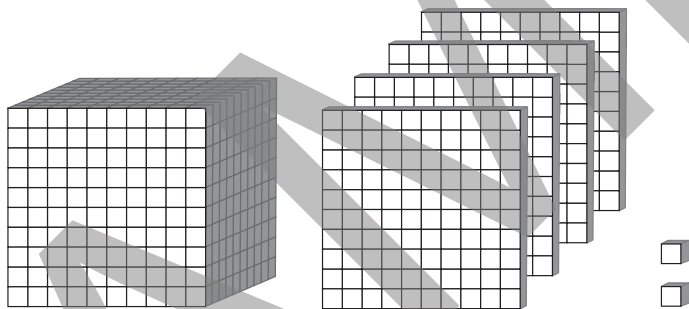
INDEPENDENT PRACTICE

Answer the questions.

1. Arturo lives in Elizabethton, TN and his grandfather lives in Austin, TX. Arturo travels 1,148 miles to visit his grandfather. Which shows 1,148?

- (A) $1,000 + 400 + 10 + 8$
 (B) $1,000 + 100 + 40 + 8$
 (C) $1,000 + 100 + 4 + 8$
 (D) $1,000 + 100 + 80 + 8$

2. Flora made a model below to show how many students go to her school.



How many students are in her school? Choose the two correct answers..

- (A) One thousand forty-two
 (B) 1,402
 (C) $1,000 + 400 + 40 + 2$
 (D) 2,402
 (E) One thousand four hundred two
 (F) 2,412

TIPS AND HINTS

In your head, picture a place-value chart with the four digits of 1,148 in order across the chart.

THINK ABOUT IT

How are thousands, hundreds, and tens blocks alike and different?

TIPS AND HINTS

Create a quick place-value chart by writing H Th, T Th, Th, H, Te, and O at the top of the first answer and drawing column lines from the first answer through the last answer.

3. Joseph's lucky number has a 5 in the thousands place and a 2 in the tens place. Which could be his lucky number?

(A) 64,574
 (B) 38,517
 (C) 95,023
 (D) 92,053

4. Yolanda used a place-value chart to write a number.

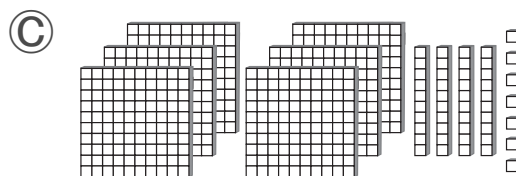
Hundred Thousand	Ten Thousand	Thousands	Hundreds	Tens	Ones
6	4	3	5	1	2

Which is another way to write this number?

(A) $60,000 + 4,000 + 300 + 50 + 10 + 2$
 (B) $600,000 + 40,000 + 3,000 + 500 + 10 + 2$
 (C) $600,000 + 40,000 + 3,000 + 500 + 2$
 (D) $600,000 + 40,000 + 3,000 + 500 + 20 + 1$

5. Which shows the same as 6 thousands, 4 tens, and 7 ones? Choose the **three** correct answers.

(A) 6,047
 (B) $4,000 + 2,000 + 40 + 7$



(D) $6,000 + 30 + 10 + 7$
 (E) 60,407
 (F) Six thousand four hundred seven

6. Emma ran 5,000 feet. Jose ran 907 feet. Emma writes the total number of feet the two ran in a place-value chart. Which shows the number Emma writes?

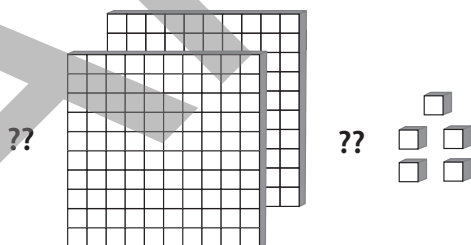
- (A) $5,000 + 90 + 7$
 (B) $5,000 + 900 + 7$
 (C) $5,000 + 900 + 70$
 (D) $9,000 + 500 + 7$

7. Li-mei tried to write the number 74,802 in expanded form.

$$70,000 + 4,000 + 80 + 2$$

Which change would make Li-mei's answer correct?

- (A) Change 4,000 to 400.
 (B) Change 80 to 8,000.
 (C) Change 80 to 800.
 (D) Change 2 to 20
8. The model below shows how many people went to a concert. The thousands and tens are missing.



Which could be the number of people?

- (A) 4,325
 (B) 6,592
 (C) 8,245
 (D) 9,260

9. In science class, Ana puts 1,000 milliliters (mL) of water in a bottle. Next, she adds 200 mL of water. Then she adds 50 mL of water. How many milliliters of water will be in the bottle if she adds 100 more milliliters?

Write your answer in the box.

	milliliters
--	-------------

10. Part A

Marcelo and his friends collect pennies. Marcelo has four thousand pennies. Viriato has one thousand, nine hundred pennies. Sabina has six pennies.

What is the total number of pennies the friends have? Write your answer in the place-value chart.

Thousands	Hundreds	Tens	Ones
_____	_____	_____	_____

Part B

Explain how you found your answer to part A.

EXIT TICKET

3.NBT.A.4

Now that you have mastered reading and writing whole numbers, let's solve the problem in the **Real-World Connection**.

Fatima and her family are on a whale-watching outing. They see two whales right away! The guide says one is a Hector's beaked whale that weighs about two-thousand twenty pounds and the other is a strap-toothed whale that weighs about three thousand three hundred pounds. How can Fatima write these weights using numbers instead of words?