LESSON MAKER PRO

Number Code Quest

Use place value to show numbers in different ways.

GRADE 3 · 3.N.1.2

3.N.1.2 "Use place value to describe whole numbers between 1,000 and 100,000 in terms of ten-thousands, thousands, hundreds, tens and ones, including written, standard, and expanded forms."

NAME _____ DATE _____

EACH DIGIT HAS A PLACE

A digit's place tells its value. To write a number in expanded form, add the values of its nonzero digits. To write it in word form, read the thousands part first, then the rest of the number.

WORKED EXAMPLE

Write 47,206 in expanded form and word form.

1. The 4 is worth 40,000, and the 7 is worth 7,000.
2. The 2 is worth 200, the 0 is worth 0 tens, and the 6 is worth 6.
3. Add the nonzero values: 40,000 + 7,000 + 200 + 6.

Answer: Expanded form: 40,000 + 7,000 + 200 + 6. Word form: forty-seven thousand two hundred six.

PRACTICE 6 problems

1 In 63,814, what is the value of the digit 3?

ANSWER _____

2 Write 25,409 in expanded form.

ANSWER _____

3 Write 70,000 + 6,000 + 50 + 2 in standard form.

ANSWER _____

4 Write 18,305 in word form.

ANSWER _____

5 Write sixty-two thousand forty-nine in standard form.

ANSWER _____

6 Fill in the missing place value: 94,780 = 90,000 + ___ + 700 + 80.

ANSWER _____

APPLY IT Show your work

1 Maya's game score has 5 ten-thousands, 2 thousands, 8 hundreds, 0 tens, and 4 ones. Write her score in standard form.

WORK SPACE

ANSWER _____

2 Students at a school read 38,146 pages in one month. Write the number of pages in expanded form. What is the value of the digit 8?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A player says 60,000 + 4,000 + 300 + 9 = 64,390. Is the player correct? Write the correct number in standard form and explain the mistake.

WORK SPACE AND ANSWER

ANSWER KEY

Number Code Quest

GRADE 3 · 3.N.1.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	In 63,814, what is the value of the digit 3?	**3,000**
2	Write 25,409 in expanded form.	**20,000 + 5,000 + 400 + 9**
3	Write 70,000 + 6,000 + 50 + 2 in standard form.	**76,052**
4	Write 18,305 in word form.	**eighteen thousand three hundred five**
5	Write sixty-two thousand forty-nine in standard form.	**62,049**
6	Fill in the missing place value: 94,780 = 90,000 + ___ + 700 + 80.	**4,000**

PART 2 · APPLY IT

1. **52,804** Put each digit in its place from ten-thousands to ones. The 0 holds the tens place.
2. **30,000 + 8,000 + 100 + 40 + 6; the digit 8 is worth 8,000.** Add the value of each nonzero digit to make the expanded form. The 8 is in the thousands place.

CHALLENGE

No. The correct number is 64,309. The sum has 0 tens and 9 ones, not 9 tens and 0 ones.

Accept expanded forms that include a zero-value term if all place values are correct. In the challenge, accept any explanation that identifies the tens and ones as the mistake.