LESSON MAKER PRO

Place Value Power

Read, build, compare, and round large numbers.

GRADE 4 · MA.4.NSO.1

MA.4.NSO.1 "Understand place value for multi-digit numbers."

NAME _____ DATE _____

PLACES GIVE DIGITS VALUE

Each place to the left is worth 10 times as much as the place to its right. A digit's value depends on its place, and a zero can hold a place even when it has no value.

WORKED EXAMPLE

Write 735,206 in expanded form. What is the value of the digit 5?

1. The 7 is in the hundred-thousands place, so its value is 700,000.
2. The 3 is worth 30,000, the 5 is worth 5,000, and the 2 is worth 200.
3. The 0 has no value, and the 6 is worth 6.
4. Add the nonzero values to write the expanded form.

Answer: 700,000 + 30,000 + 5,000 + 200 + 6; the value of 5 is 5,000.

PRACTICE 6 problems

1 In 458,219, what place is the digit 8 in?

ANSWER _____

2 What is the value of the digit 6 in 962,540?

ANSWER _____

3 Write this number in standard form: 4,000,000 + 300,000 + 20,000 + 900 + 7.

ANSWER _____

4 Write 1,708,045 in expanded form.

ANSWER _____

5 Write <, >, or = to compare: 589,999 ___ 590,001

ANSWER _____

6 Round 273,648 to the nearest ten thousand.

ANSWER _____

APPLY IT Show your work

1 A video game scoreboard shows 6,405,218 points. What is the value of the digit 5? Write the score in expanded form.

WORK SPACE

ANSWER _____

2 Two school teams collected recycling points. Team Pine earned 348,760 points. Team River earned 348,670 points. Which team earned more points? Explain using place value.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Mia says that 507,030 and 570,030 have the same digit values because they use the same digits. Is Mia correct? Explain how the value of the digit 7 is different in the two numbers.

WORK SPACE AND ANSWER

ANSWER KEY

Place Value Power

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	In 458,219, what place is the digit 8 in?	**thousands place**
2	What is the value of the digit 6 in 962,540?	**60,000**
3	Write this number in standard form: 4,000,000 + 300,000 + 20,000 + 900 + 7.	**4,320,907**
4	Write 1,708,045 in expanded form.	**1,000,000 + 700,000 + 8,000 + 40 + 5**
5	Write <, >, or = to compare: 589,999 ___ 590,001	**589,999 < 590,001**
6	Round 273,648 to the nearest ten thousand.	**270,000**

PART 2 · APPLY IT

1. **The value of 5 is 5,000. 6,000,000 + 400,000 + 5,000 + 200 + 10 + 8.** The 5 is in the thousands place. Add the value of each nonzero digit to write the expanded form.
2. **Team Pine earned more points because both numbers have 348 thousand, but Team Pine has 7 hundreds and Team River has 6 hundreds.** Compare from left to right. The first different place is the hundreds place, where 7 hundreds is greater than 6 hundreds.

CHALLENGE

Mia is not correct. In 507,030, the 7 is worth 7,000. In 570,030, the 7 is worth 70,000.

Accept expanded forms that omit zero-value places. For explanations, accept correct place-value language that identifies the first different place or the value of the named digit.