

Number Form Switch

Read and write whole numbers in three useful forms.

GRADE 4 • NY-4.NBT.2.a

NY-4.NBT.2.a "Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form."

NAME _____

DATE _____

THREE WAYS TO SHOW A NUMBER

A whole number can be written as a base-ten numeral, a number name, or an expanded form. Use the value of each digit to move between forms. If a place has a zero, that place has no value to add.

WORKED EXAMPLE

Write 482,706 as a number name and in expanded form.

1. Read the digits by periods: 482 thousand, 706.
2. Write the number name: four hundred eighty-two thousand, seven hundred six.
3. Break apart each nonzero place value.
4. Write $400,000 + 80,000 + 2,000 + 700 + 6$.

Answer: four hundred eighty-two thousand, seven hundred six; $400,000 + 80,000 + 2,000 + 700 + 6$

PRACTICE 6 problems

- 1** Write this number name as a base-ten numeral: six hundred five thousand, forty-two.

ANSWER _____

- 2** Write 730,918 in expanded form.

ANSWER _____

- 3** Write this expanded form as a number name: $900,000 + 20,000 + 3,000 + 400 + 5$.

ANSWER _____

- 4** Write eight hundred one thousand, seventy as a base-ten numeral and in expanded form.

ANSWER _____

- 5** Mia wrote 408,061 as $400,000 + 8,000 + 600 + 1$. Her expanded form is not correct. Write the correct expanded form.

ANSWER _____

- 6** Write 175,304 as a number name and in expanded form.

ANSWER _____

APPLY IT Show your work

- 1** The city aquarium counted two hundred eighty-six thousand, four hundred fifteen visitors last year. Write the number of visitors as a base-ten numeral and in expanded form.

WORK SPACE

ANSWER _____

- 2** A video game design contest received 540,209 votes for its finalists. Write the number of votes as a number name and in expanded form.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A mystery number has 9 in the hundred-thousands place, 6 in the ten-thousands place, 0 in the thousands place, 4 in the hundreds place, 0 in the tens place, and 6 in the ones place. Write the number as a base-ten numeral, a number name, and an expanded form. Explain why two place values are not written in the expanded form.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write this number name as a base-ten numeral: six hundred five thousand, forty-two.	605,042
2	Write 730,918 in expanded form.	700,000 + 30,000 + 900 + 10 + 8
3	Write this expanded form as a number name: 900,000 + 20,000 + 3,000 + 400 + 5.	nine hundred twenty-three thousand, four hundred five
4	Write eight hundred one thousand, seventy as a base-ten numeral and in expanded form.	801,070; 800,000 + 1,000 + 70
5	Mia wrote 408,061 as 400,000 + 8,000 + 600 + 1. Her expanded form is not correct. Write the correct expanded form.	400,000 + 8,000 + 60 + 1
6	Write 175,304 as a number name and in expanded form.	one hundred seventy-five thousand, three hundred four; 100,000 + 70,000 + 5,000 + 300 + 4

PART 2 • APPLY IT

- 286,415; 200,000 + 80,000 + 6,000 + 400 + 10 + 5** Convert each named place value into digits to get 286,415. Then add the value of each nonzero digit in expanded form.
- five hundred forty thousand, two hundred nine; 500,000 + 40,000 + 200 + 9** Read 540,209 as 540 thousand and 209. The thousands and tens places are zero, so they do not need terms in the expanded form.

CHALLENGE

960,406; nine hundred sixty thousand, four hundred six; 900,000 + 60,000 + 400 + 6. The thousands and tens digits are 0, so those place values add 0.

Accept expanded forms that include zero-value terms, such as + 0, as equivalent. Accept number names with or without hyphens in compound numbers.