

Decimal Form Switch

Read, write, and unpack decimals through thousandths.

GRADE 5 • MA.5.NSO.1.2

MA.5.NSO.1.2 "Read and write multi-digit numbers with decimals to the thousandths using standard form, word form and expanded form."

NAME _____

DATE _____

PLACE VALUE MATTERS

Digits to the right of the decimal point name tenths, hundredths, and thousandths. Read the whole-number part, say "and," then read the decimal digits as a number followed by the name of the last place value. In expanded form, write the value of each nonzero digit.

WORKED EXAMPLE

Write 6.482 in word form and expanded form.

1. The whole-number part is 6.
2. The decimal part, 482, ends in the thousandths place.
3. Read 482 as four hundred eighty-two thousandths.
4. Write the value of each nonzero digit.

Answer: Word form: six and four hundred eighty-two thousandths.

Expanded form: $6 + 0.4 + 0.08 + 0.002$

PRACTICE 6 problems

- 1** Write 8.059 in word form.

ANSWER _____

- 2** Write twelve and forty-six thousandths in standard form.

ANSWER _____

- 3** Write $7 + 0.2 + 0.08 + 0.009$ in standard form and word form.

ANSWER _____

- 4** Write 15.604 in expanded form.

ANSWER _____

- 5** Write ninety-three and eight tenths in standard form to the thousandths.

ANSWER _____

- 6** Write 20.175 in word form and expanded form.

ANSWER _____

APPLY IT Show your work

- 1** A player finishes a game level in 3.427 minutes. Write the time in word form.

WORK SPACE

ANSWER _____

- 2** A 3D printer uses $12 + 0.6 + 0.03 + 0.004$ meters of plastic for a model. Write this amount in standard form and word form.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A student writes 5.406 as "five and forty-six thousandths." Is the student correct? Explain why or why not, then write the correct word form.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write 8.059 in word form.	eight and fifty-nine thousandths
2	Write twelve and forty-six thousandths in standard form.	12.046
3	Write $7 + 0.2 + 0.08 + 0.009$ in standard form and word form.	Standard form: 7.289. Word form: seven and two hundred eighty-nine thousandths.
4	Write 15.604 in expanded form.	$15 + 0.6 + 0.004$
5	Write ninety-three and eight tenths in standard form to the thousandths.	93.800
6	Write 20.175 in word form and expanded form.	Word form: twenty and one hundred seventy-five thousandths. Expanded form: $20 + 0.1 + 0.07 + 0.005$

PART 2 • APPLY IT

- three and four hundred twenty-seven thousandths minutes** The decimal part has three digits, so it is read in thousandths. Read 427 as four hundred twenty-seven thousandths.
- Standard form: 12.634 meters. Word form: twelve and six hundred thirty-four thousandths meters.**
Combine the whole number and the tenths, hundredths, and thousandths values to make 12.634. The decimal part, 634, ends in the thousandths place.

CHALLENGE

No. Forty-six thousandths is 0.046, but the decimal part is 0.406. The correct word form is five and four hundred six thousandths.

Accept expanded forms that include zero-value terms or omit them. Accept equivalent correct word forms that name the decimal part with the correct ending place value.