LESSON MAKER PRO

Decimal Place Power

Read, build, and compare decimals through thousandths.

GRADE 5 · MA.5.NSO.1

MA.5.NSO.1 "Understand the place value of multi-digit numbers with decimals to the thousandths place."

NAME _____ DATE _____

PLACES MATTER

Each place to the left of the decimal is 10 times greater than the place to its right. To the right of the decimal, the places are tenths, hundredths, and thousandths. Zeros can hold a place even when they add no value.

WORKED EXAMPLE

What is the value of the digit 8 in 63.482?

1. The 8 is the second digit to the right of the decimal.
2. The second place to the right is the hundredths place.
3. 8 hundredths = 8/100 = 0.08.

Answer: 0.08

PRACTICE 6 problems

1 What is the value of the digit 7 in 4,271.093?

ANSWER _____

2 What digit is in the tenths place in 18.506?

ANSWER _____

3 Write 905.317 in expanded form.

ANSWER _____

4 Write this number in standard form: 6,000 + 80 + 0.4 + 0.02 + 0.009

ANSWER _____

5 Write <, >, or = to compare: 72.608 ___ 72.68

ANSWER _____

6 What is the value of the digit 4 in 3.047?

ANSWER _____

APPLY IT Show your work

1 A video game records Jayden's fastest lap as 14.275 seconds. What is the value of the digit 7 in this time?

WORK SPACE

ANSWER _____

2 Two students time a coding challenge. Lina finishes in 3.582 minutes, and Omar finishes in 3.528 minutes. Who finishes first?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A number has a 6 in the thousands place, a 3 in the tens place, a 9 in the tenths place, and a 4 in the thousandths place. All other digits are 0. Write the number in standard form and expanded form.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Place Power

GRADE 5 · MA.5.NSO.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What is the value of the digit 7 in 4,271.093?	**700**
2	What digit is in the tenths place in 18.506?	**5**
3	Write 905.317 in expanded form.	**900 + 5 + 0.3 + 0.01 + 0.007**
4	Write this number in standard form: 6,000 + 80 + 0.4 + 0.02 + 0.009	**6,080.429**
5	Write <, >, or = to compare: 72.608 ___ 72.68	**<**
6	What is the value of the digit 4 in 3.047?	**0.04**

PART 2 · APPLY IT

1. **0.07 seconds** The 7 is in the hundredths place. Its value is 7 hundredths, or 0.07 seconds.
2. **Omar** Compare 3.582 and 3.528. Both have 3 ones and 5 tenths, but 2 hundredths is less than 8 hundredths, so 3.528 is less.

CHALLENGE

6,030.904; 6,000 + 30 + 0.9 + 0.004

Accept equivalent expanded forms that include zero-value terms or use fractions, such as 9/10 and 4/1000. For the comparison problem, accept the explanation that 72.68 can be written as 72.680.