P.S. 103 Math Family Letter

Grade 4: Unit 3 Place Value



Student Learning Goals:

- I can identify patterns in place value, such as 10 times more and 10 times less.
- I can write large numbers up to the millions place in expanded, word, standard, and unit form.
- I can compare whole numbers and fractions using visual as well as numerical representations.
- I can round numbers to the nearest place value position.

Key Vocabulary:

- Place value, whole number, greater than, less than, equal to
- (,), =, comparisons/compare, inequality, expression, equation
- · base-ten numerals (standard form), number name (word form), expanded form
- round, vertical number line, estimate
- fraction, numerator, denominator, decompose, unit fraction

Website for Practice:

https://www.khanacademy.org/math/cc-fourth-grade-math/imp-place-value-and-rounding-2

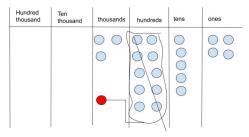
Tools/Models/Strategies

Place Value Chart:

Place Value Discs:

In 3 thousands + 10 hundreds + 5 tens + 4 ones, we can regroup the 10 hundreds into 1 thousand.

Millions Period			Thousands Period			Ones Period		
Hundred Hillions	Ten Hillions	Millions,	Hundred Thousands	Ten Thousands	Thousands,	Hundreds	Tires	Ones



Different Forms of Numbers: (let's take the number 45,038)

Expanded Form: 40,000 + 5,000 + 30 + 8 (there is a zero in the hundreds place)

Standard Form: 45,038

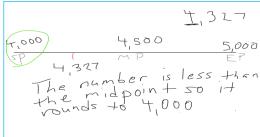
Word Form: Forty-five thousand thirty-eight

Unit Form: 4 ten thousands + 5 thousand + 3 tens + 4 ones

How many tens are there in 45,038? – Believe it or not the answer is 4,503 tens in this number. Ask your children why?

How many hundreds are in 45,038? – 450 hundreds. Ask your children why?

Rounding Numbers: use the range and midpoint between the value being rounded to



Comparing Numbers: use the number forms and charts above to compare the largest place value first

> greater than



equal to

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Grade 4: Unit 3 Place Value



New York State Test Questions from Previous Exams

4.NBT.1 — Understanding Place Value in Large Numbers Andrew worte the number 184.25 at the bard in which number is the value of the digit 6 is sacity 10 times the value of the digit 6 in the number Andrew wrote? A 681,452 B 462.017 C 246,412 D 125,655 4.NBT.2 — Comparing Large Numbers during any form Which number sentence correctly compares two numbers? A forty-six thousand three hundred fifteen < 46,350 B 29,073 = 20,000 + 9,000 + 700 + 3 C 10,000 + 6,000 + 400 > sixteen thousand four hundred ten D 86,502 = 80,000 + 6,000 + 500 + 20 4.NBT.3 — Rounding numbers from any place value Which two numbers both round to 1,500 when rounded to the nearest hundred? A 1,399 and 1,599 B 1,449 and 1,549 C 1457 and 3,547 D 1,489 and 1,589 Knowing that the value of re digit is 10 times more than the value of the digit to its right is very important for questions like these. They need to understand that even though the digit is 10 times more than the value of the digit to its right is very important for questions like these. They need to understand that even though the digit is 10 times more than the value of the digit to its right is very important for questions like these. They need to understand that even though the digit is 10 times more than the value of the digit to its right is very important for questions like these. They need to understand that even though the digit is 10 times more than the value of the digit to its right is very important for questions like these. They need to understand that even though the digit is 10 times more than the value of the digit of the very incord to understand that even though the digit is 10 to 180,425 is 6,000 and to find 10 times its value is to go from 6,000 to 60,000. Answer choice B is the correct choice because it has a 6 in the ten thousands position, which is 10 times more than 6,000 in 186,425. A 4,0315 < 46,350 B) 26,073 = 29,703 C) 16,400 > 16,400 > 16,400 D) 86,502 = 80,500 D) 86,502	New	New York State Test Questions from Previous Exams					
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