

P.S. 103
Math Family Letter

Grade 5: Unit 2
Place Value-Decimals/Fractions



Student Learning Goals:

- I can explain the relationship between digits that are the same but in different place value positions.
- I can read and write numbers with decimals to the thousandths place in standard, word, unit, and expanded form.
- I can use tools and math models to visually represent the value of digits in a given number.
- I can compare whole numbers, decimals, and fractions.
- I can use whole number exponents to denote powers of 10.
- I understand that a fraction and decimal are parts of a whole.

Website for Practice:

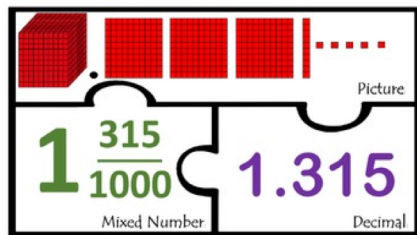
<https://www.khanacademy.org/math/cc-fifth-grade-math/imp-place-value-and-decimals>

Key Vocabulary:

- place value, greater than, less than, equal to, $<$, $>$, $=$, comparisons/compare, round, base-ten numerals (standard form), number name (written form), expanded form, inequality, expression, equivalent, reason
- partition(ed), fraction, unit fraction, multiple, denominator, numerator, benchmark fraction

Tools/Models/Strategies

Base Ten Model:



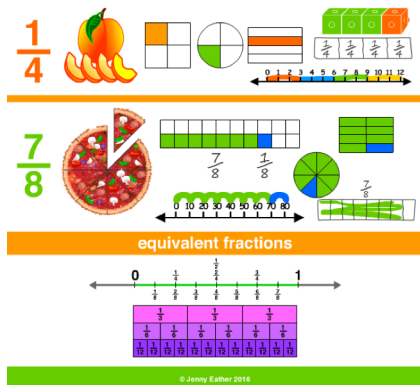
Place Value Chart:

Hundreds	Tens	Ones	Decimal point	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

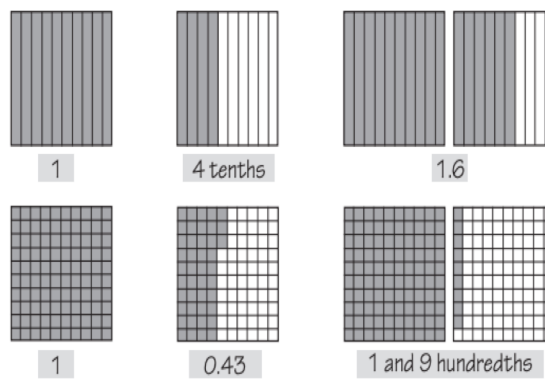
Powers of Ten:

Power	Expression	Standard Form
10^1	10	10
10^2	10×10	100
10^3	$10 \times 10 \times 10$	1,000
10^4	$10 \times 10 \times 10 \times 10$	10,000
10^5	$10 \times 10 \times 10 \times 10 \times 10$	100,000
10^6	$10 \times 10 \times 10 \times 10 \times 10 \times 10$	1,000,000
10^7	$10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$	10,000,000
10^8	$10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$	100,000,000
10^9	$10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$	1,000,000,000

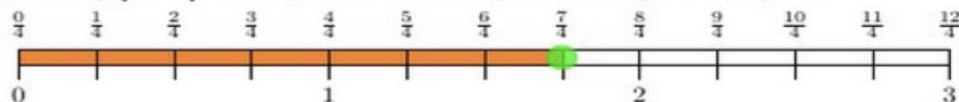
Fraction Models:



Grid Model:



Draw and label a number line from 0 to 3 with tick marks at every quarter, emphasizing $\frac{7}{4} = 1\frac{3}{4}$. Show your answer using both a length and a point.



Number line: