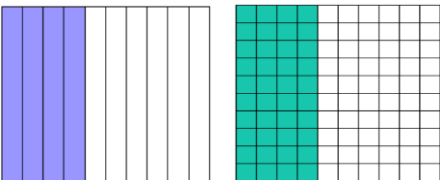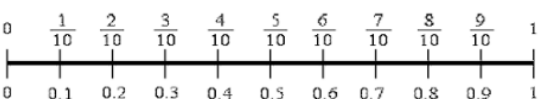Grade 4

Understand Decimal Notation of Fractions

Overarching Student Learning Goals In this unit, your child will work to build an understanding of the following:	Resources/Tasks to support your child at home.
Rewrite and add equivalent fractions with denominators of 10 and 100. Students are expected to represent fractions with denominators of 10 as their equivalent fraction with a denominator of 100. *Example:* $\frac{8}{10} = \frac{80}{100}$ Students then apply that understanding to add and subtract fractions with denominators of 10 and 100. *Example:* *Example:* $\frac{8}{10} + \frac{10}{100} = ?$ $\frac{8}{10} + \frac{}{} = \frac{97}{100}$ The sum is $\frac{90}{100}$ What is the missing fraction?	• Using the attached decimal grid paper (https://goo.gl/raSmYx), have your child model addition problems with denominators of 10 and 100. *Example:* o *Model* $\frac{5}{10} + \frac{20}{100} = \frac{70}{100}$. o *Or Model* $\frac{5}{10} + ? = \frac{70}{100}$ • Khan Academy: Visually Converting Tenths and Hundredths https://goo.gl/Nqeg5j • Khan Academy: Adding Fractions https://goo.gl/fHjpNm
Write and recognize equivalent fractions and decimals. Students will use area models, number lines and their understanding of equivalent fractions to represent fractions as decimals or decimals as fractions. *(This may include fractions greater than a whole/mixed numbers to decimals).* $\frac{4}{10} = 0.4$ *Represented with an area model: 4 tenths can be represented as a fraction or a decimal, 4 tenths is also equivalent to 40 hundredths.* *Which is also explored and represented using number lines.*	• Using a deck of cards, have your child choose a number 1-9. Have them create that number as a fraction with a denominator of 10. Have them represent the fraction using an area model or number line. Then determine what the equivalent fraction with a denominator of 100 would be, and the equivalent decimals. *(Example: I choose a 2. I can represent it as $\frac{2}{10}$, or $\frac{20}{100}$, 0.2 or 0.20).* • Khan Academy: Writing a Number as a Fraction and a Decimal https://goo.gl/jC4xEN

For more information on the learning goals and your child's progress, please contact your child's teacher.

Compare and justify the comparisons of two decimal values (to the hundredths place).

Students determine equivalence using area models and number lines, and then record it using the equal sign symbol. (This includes decimals greater than one whole and to the hundredths place).

0.6
six tenths

0.60
sixty hundredths
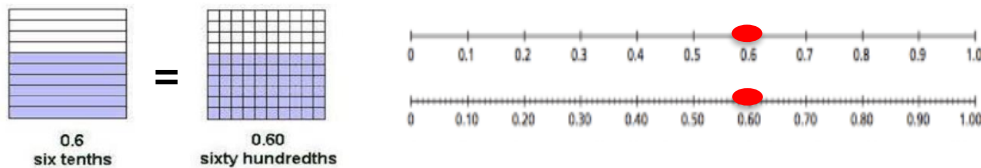
Students compare which decimal is less or greater to the other decimal using place value, area models or number lines. They then record the comparison using the symbols < or >. (This includes decimals greater than one whole and to the hundredths place).

Example: How does 1.25 compare to 1.15?

1.25 > 1.15
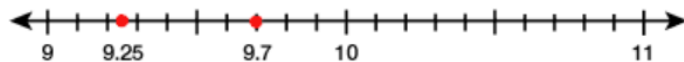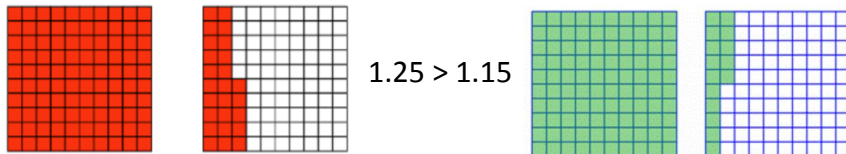
9.25 < 9.7

- Using a deck of cards, play decimal war. Have your child create a two-digit decimal (to the hundredths place) and you create a two-digit decimal (to the hundredths place). Compare the two decimals, whomever has the greatest decimal wins the round. Prove the comparison with a number line, area model or place value. *(Example: Compare using place value: "I have 0.26 and you have 0.62. You have the greatest decimal because I have a 2 in the tenths place and you have a 6 in the tenths place.")* Then record the comparisons using the symbols <, > or =. After 10 rounds, switch to go greater than a whole (using three digits: the ones, tenths and hundredths place).

- Khan Academy: Comparing Decimals Visually
  https://goo.gl/JnmmA6

For more information on the learning goals and your child's progress, please contact your child's teacher.