



Hattiesburg Public School District

Grade 4 Mathematics Units

2015 – 2016



Unit 10: Decimals	Time Frame: 3 Weeks (April 11-29, 2015)
Content Standards	Standards for Mathematical Practice
Major Standards	<ol style="list-style-type: none">(1) Make sense of problems and persevere in solving them.(2) Reason abstractly and quantitatively.(3) Construct viable arguments and critique the reasoning of others.(4) Model with mathematics.(5) Use appropriate tools strategically.(6) Attend to precision.(7) Look for and make use of structure.(8) Look for and express regularity in repeated reasoning.
<p>4.NF.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</p> <p>4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.</p>	
Supporting Standards	
<p>4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.</p>	
Additional Standards	
<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	
Pre-requisite Standards	
<p>4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual</p>	



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fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Lesson 1	Lesson 2	Lesson 3	Performance Task	
Equivalent fractions with denominators of powers of 10 4.NF.5 Sums of 1 Equivalent Fractions with a Denominator of 100 Problems	Decimal notation of fractions 4.NF.6 Representing Decimals	Comparing decimal numbers 4.NF.7 Comparing Decimals Decimal Sort	https://www.illustrativemathematics.org/content-standards/4/NF/C/5/tasks/154	