Fourth Grade Compacted Mathematics Newsletter
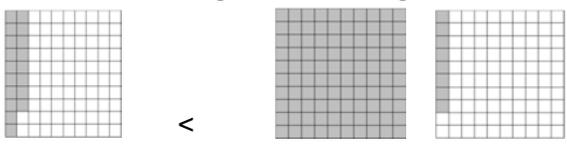
Marking Period 3, Part 1

MT	Learning Goals by Measurement Topic (MT) Students will be able to . . .
Number and Operations - Fractions	• use decimals to express fractions with denominators of10 and 100. • compare two decimals (to hundredths) by reasoning about their size. • recognize that decimal comparisons are valid only when the two decimals refer to the same whole.
Measurement and Data	• use knowledge of fractions and decimals to solve word problems involving distance, time, volume, mass, and money.
Operations and Algebraic Thinking	• solve multi-step word problems that include addition, subtraction, multiplication, and division with remainders. • determine if answers to word problems are reasonable. • generate a number or shape pattern that follows a given rule.
Number and Operations in Base Ten	• add and subtract multi-digit whole numbers using the standard algorithm. • multiply a two-digit number by a two-digit number. • illustrate and explain multiplication/division calculations by using equations, rectangular arrays, and/or area models. • divide a whole number (up to four digits) by a one-digit divisor resulting in answers with and without remainders.

Thinking and Academic Success Skills (TASS)		
	It is . . .	In mathematics, students will . . .
Evaluation	weighing evidence, examining claims, and questioning facts to make judgments based upon criteria.	• compare the value of two decimals and explain reasoning. • justify the strategy used to compare decimals. • decide which strategy is most effective and efficient in problem solving.
Metacognition	knowing and being aware of one's own thinking and having the ability to monitor and evaluate one's own thinking.	• connect prior knowledge of place value to compare decimals. • ask questions to clarify learning tasks and self-assess progress. • share and exchange strategies used to solve word problems.

Fourth Grade Compacted Mathematics Newsletter

Marking Period 3, Part 1

	Learning Experiences by Measurement Topic (MT)	
MT	🚌 <u>In school, your child will . . .</u>	🏠 <u>At home, your child can . . .</u>
Number and Operations - Fractions	• represent fractions with denominators of 10 and 100 as decimals. <u>Example:</u> $15\frac{5}{100} = 15.05$ or $1\frac{8}{10} = 1.8$ • compare two decimals using various strategies. <u>Example:</u> $\quad$ < $\quad\quad$ 0.18 $\quad\quad\quad\quad$ 1.08	• practice comparing decimals found on product labels. <u>Example:</u> The potato salad in the package has twelve and fifteen hundredths (12.15) grams of fat. A milk carton contains seven and nine tenths (7.9) grams of fat. Which one has more fat grams?
Measurement and Data	• solve real world problems involving measurement, fractions, and decimals using all four operations.	• develop real world problems and solve. <u>Example:</u> Chris biked 13.3 miles on Sunday. On Monday he only biked 3 miles. On Tuesday, he biked 5.2 miles less than the mileage of Sunday and Monday combined. How many miles did he bike on Tuesday?
Operations and Algebraic Thinking	• solve multi-step word problems using all four operations. • generate a number pattern that follows a given rule.	• create patterns using numbers or shapes and have others guess the rule and the missing numbers. <u>Example:</u> 72, 66, 60, ____ , _____, _____ "I started with 72 and subtracted 6."
Number and Operations in Base Ten	• multiply a two-digit number by another two-digit number using various strategies. <u>Example:</u> How would you solve the problem 32 x 46 using more than one strategy? • divide a four-digit number by a one-digit number.	• use real-world situations that would require multiplication or division (with and without remainders), and show the strategy used. <u>Example:</u> At a football game, there were 1,328 students who need to be grouped into 9 sections of seating. How many students will be in each section? Will all the sections be equal? Discuss why or why not.

Fourth Grade Compacted Mathematics Newsletter

Marking Period 3, Part 1