

RSU # 38 CURRICULUM GUIDE, MATHEMATICS, K-5

Grade 3			Grade 4			Grade 5		
Unit	Standards (Priority & Supporting)	Outcomes	Unit	Standards (Priority & Supporting)	Outcomes	Unit	Standards (Priority & Supporting)	Outcomes
Unit 1	NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100	Unit 1	NBT.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.	Unit 1	NBT.5	Fluently multiply multi-digit whole numbers using the standard algorithm.
	NBT.2	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction		NBT.2	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form		NBT.6	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division.
	NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations			Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons			Illustrate and explain the calculation by using equations, rectangular arrays, and/or area model.
				NBT.3	Use place value understanding to round multi-digit whole numbers to any place.			
			NBT.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.				
Unit II	OA.1	Use repeated addition to solve multiplication problems	Unit II	NBT.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right		NBT.1	Recognize that in a multi-digit number, a digit in one place represents 10 times as much as when in the place to its right and 1/10 of that when in the place to its left.
		Use arrays and number lines to model multiplication expressions						

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	NBT.3	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations		NBT.5	Multiply two two digit numbers, using strategies based on place value and properties of operations			
				NBT.6	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models		NBT.2	Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
							NBT.5	Fluently multiply multi-digit whole numbers using the standard algorithm.
							NBT.6	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division.
Unit III Multipli- cation & Division	OA.1	Use repeated addition to solve multiplication problems	Unit III Algebraic Multipli- cation	OA.1	Represent verbal and written statements of multiplicative comparisons as multiplication equations.	Unit III Decimals	NBT.3	Read and write decimals to the thousandths place using base ten numerals, number word names and expanded form

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		Use arrays and number lines to model multiplication expressions			Represent multiplication equations as verbal and written statements of multiplicative comparison.			Model comparisons of decimals to the thousandths place
	OA.2	Find how many equal groups can be made out of a certain number of objects and model problem with a division equation		OA.2	Identify the difference between an additive comparison word problem and a multiplicative comparison word problem.		NBT.4	Use place value understanding to round decimals to any place
		Find how many objects can be shared equally among a certain number of groups and model problem with a division equation.			Use multiplication or division to solve word problems involving multiplicative comparisons.			Place decimals along the numberline to represent the process of rounding.
	OA.3	Use repeated subtraction expressions, division expressions, and pictures to model division problems and solve.			Represent a word problem involving Multiplicative comparisons with an equation, using a symbol for the unknown		NBT.7	Perform operations with multi-digit decimals to hundredths
		Model multiplication and division problems using a symbol to represent the unknown number.		OA.3	Solve multi-step word problems, interpreting the remainder when necessary			Use estimation to decide if my answer is reasonable
	OA.4	Determine the unknown whole number in a multiplication or division equation, relating three whole numbers: Result unknown, Change unknown, Start Unknown		OA.4	Find all factor pairs for a whole number 1-100			Solve real world problems with multi-digit decimals to hundredths and explain reasoning
					Distinguish between multiples and factors and explain the relationship between them.			
Unit III (Part 2) Multiplication &	OA.5	Use arrays, sets, and equations to explain the commutative, distributive and associative properties of multiplication		NBT.5	Multiply two two digit numbers, using strategies based on place value and properties of operations			

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Division		Explain why multiplication is commutative and division is not		NBT. 6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models					
		Multiply two factors in any order or three factors by grouping using parentheses.							
		Simplify a multiplication problem into smaller problems to make solving easier							
	OA.6	Use multiplication to solve for an unknown factor in a division problem							
	OA.7	Fluently multiply and divide within 100							
	OA.8	Solve two step word problems using addition, subtraction, multiplication, and division							
		Model two step word problems with equations, using a symbol for the Unknown							
		Use mental math, rounding, and estimation to justify why an answer is reasonable							
	OA.9	Recognize arithmetic and multiplication patterns on hundreds charts, number lines, and multiplication tables							
		Use models to show why multiplication by an even number results in an even number							

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		Use models to show why multiplication of an odd number by an odd number results in an odd Number						
		Use models to show why multiplication of an odd number by an even number results in an odd number						

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Notes:

RSU #38 Priority Standards are listed in **bold** print

Currently grades K-5 are using a customized standards-based mathematics program that includes activities and materials from Georgia's Common Core-based Units (<https://www.georgiastandards.org/Common-Core/Pages/Math-K-5.aspx>) and other sources. Standards-based assessments and rubrics for monitoring students' progress are developed by teams of RSU #38 teachers under the leadership of the Math Coach and Curriculum Coordinator.