5th Grade Math
Essential Standards and Learning Targets

***Think: Is it R.E.A.L.?**
READINESS (needed for next grade), **ENDURANCE** (expected to stay with students through multiple grades), **ASSESSED** (on NYS Test), **LEVERAGE** (used in multiple subjects)

Essential Standards	**Learning Targets for Assessment and Reflection (Uses student-friendly language)** Can put an example of an "ultimate problem" to show rigor/DOK	**Where/When is it Taught?**
NY-5.OA.1 Apply the order of operations to evaluate numerical expressions. e.g., 6 + 8 ÷ 2 (6 + 8) ÷ 2 Note: Exponents and nested grouping symbols are not included	*I can solve/evaluate an expression using the order of operations.*	• Unit 2 • Unit 4
5.NBT.1: Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	*I can recognize a digit in one place value represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.*	• Unit 1 • Unit 2
5.NBT.3b Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	*I can compare decimals to the thousandths using >, =, <.*	• Unit 1
5.NBT.5 Fluently multiply multi-digit whole numbers using a standard algorithm.	*I can fluently multiply multi-digit whole numbers using a standard algorithm.* Note about proficiency level: • Must know facts to 12 - Needed for Modules 4,5,6 - • Knowing multiples of 12 is VERY helpful for second half of fifth grade	• Unit 2
5.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	*I can divide a 4-digit number by a two digit divisor.*	• Unit 2

and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. Notes on and/or: ● Students should be taught to use strategies based on place value, the properties of operations, and the relationship between multiplication and division; however, when solving any problem, students can choose any strategy. ● Students should be taught to use equations, rectangular arrays, and area models; however, when illustrating and explaining any calculation, students can choose any strategy.		
5.NBT.7 Using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between operations: ● Add and subtract decimals to hundredths; ● Multiply and divide decimals to hundredths Relate the strategy to a written method and explain the reasoning used. Notes on and/or: students should be taught to use concrete models and drawings; as well as strategies based on place value, properties of operations, *and* the relationship between operations. When solving any problem, students can choose to use a concrete model *or* a drawing. Their strategy must be based on place value, properties of operations, or the relationship between operations. Note: Division problems are limited to those that allow for the use of concrete models or drawings, strategies based on properties of operations, and/or the relationship between operations (e.g., 0.25 ÷ 0.05). Problems should not be so complex as to require the use of an algorithm (e.g., 0.37 ÷ 0.05).	*I can add and subtract decimals to the hundredths.* *I can multiply decimals to the hundredths.* *I can divide decimals to the hundredths.*	● Unit 1 ● Unit 2 ● Unit 4
5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions	*I can add and subtract fractions and mixed numbers with unlike denominators.*	● Unit 3

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with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.		
5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. *E.g., Use a visual fraction model to show ⅔ x 4 = 8/3, and create a story context for this equation. Do the same with ⅔ x 4/5 = 8/15.*	*I can multiply fractions by fractions, whole numbers, and mixed numbers.*	• Unit 4 • Unit 5
5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	*I can divide a unit fraction by a whole number and a whole number by a unit fraction.*	• Unit 4 • Unit 6
5.MD.5.b Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	*I can find the volume of right rectangular prisms to solve real world problems.*	• Unit 5 • Unit 6
NY-5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation	*I can solve real-world problems by graphing points in the first quadrant of the coordinate plane.*	• Unit 6