

Essential Standards Chart Math : What is it we expect students to learn?

Grade	4	Subject:	Math	Team Members:	Danielle Proper Jacki Hess	Lindsey Jones	Lisa Rouse
Standard Description		Example Rigor	Prerequisite Skills	Common Assessment	When Taught?	Extension Standards	
What is the essential standard to be learned? Describe in student-friendly vocabulary.		What does proficient student work look like? Provide an example and/or description.	What prior knowledge, skills, and/or vocabulary is/are needed for a student to master this standard?	What assessment(s) will be used to measure student mastery?	When will this standard be taught?	What will we do when students have learned the essential standard(s)?	
4.OA.1 Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.							
4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, distinguishing multiplicative comparison from additive comparison. Use drawings and equations with a symbol for the unknown number to represent the problem.							

<p>4.OA.3 Solve multistep word problems posed with whole number answers using the 4 operations, including problems in which remainders must be interpreted</p> <p>a. Represent these problems using equations or expressions with a letter standing for the unknown quantity.</p> <p>b. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>		Place Value and basic addition and subtraction		October	
<p>4. OA.5 Generate a number or shape pattern that follows a given rule. Identify and informally explain apparent features of the pattern that were not explicit in the rule itself.</p>					
<p>4. 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.</p>					

<p>4.NBT.2</p> <p>2a. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. 2b. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>					
<p>4.NBT.3</p> <p>Use place value understanding to round multi-digit whole numbers to any place.</p>					
<p>4.NBT.4</p> <p>Fluently add and subtract multi-digit whole numbers using a standard algorithm.</p>					
<p>4.NBT.5</p> <p>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>					

<p>4.NBT.6</p> <p>Find whole-number quotients and remainders with up to four-digit dividends and one-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.</p>					
<p>4. MD. 4</p> <p>Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots</p>					

<p>4. MD. 5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.</p> <p>a. Recognize an angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a "one-degree angle," and can be used to measure angles. b. Recognize an angle that turns through n one-degree angles is said to have an angle measure of n degrees.</p>					
<p>4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p>					