## Grade 4 Math Year at a Glance 2019-2020

In grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) and understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

The purpose of this document is to give a general overview of topics, standards, time intervals and assessments for the year. Please reference the curriculum maps for details on implementation of each unit.

Work on mental math, estimation, and rounding should take place throughout the year in the form of Number Talks and estimation tasks.

Units may have been extended by several days that should be used throughout the unit for reteaching and extending as needed, as well as Number Talks and estimation tasks.

<u>Unit</u>	<u>Dates</u>	<u>Days</u>	MiF Chapter # and Title	Includes Critical Areas?	Standards: Number & Phrase	Assessment
Optional: Week of Inspiration al Math 3	9/3 - 9/10	5 days	Week of Inspirational Math 3, Grades 3-5		These activities and conversations are designed to introduce students to a positive math community, and to help students develop a positive attitude toward math and their own abilities.	
<b>Unit 1</b> Ch. 1, & 2 9/11 - 10/22	9/11 - 10/1	14 days	Ch. 1: Place Value of Whole Numbers	Yes	4.OA.B.5: Generate a pattern that follows a given rule 4.NBT.A.1: Explain the value of each digit as ten times the value to the right 4.NBT.A.2: Read and write a number in word form, standard, and expanded form. Compare numbers using place value and symbols 4.NBT.B.4: Add and sub multi-digit numbers using the standard algorithm	9/3 - 10/18 FAST Screener-aMath (All students)

## Grade 4 Math Year at a Glance 2019-2020

	10/2- 10/22	12 days	Ch. 2: Estimation and Number Theory	Yes	4.OA.A.3: Choose the correct operation to solve a multi-step word problem. 4.OA.B.4: Define factors and multiples and list the factor pairs of any number between 1 and 100. 4.NBT.A.3: Explain how to use digits to round a number. 4.NBT.B.4: Add and sub multi-digit numbers using the standard algorithm	
<b>Unit 2</b> Ch. 3 10/23 - 11/26	10/23 - 11/26	22 days	Ch. 3: Whole Number Multiplication and Division	Yes	4.OA.A.1: Explain how a multiple equation can be interpreted as a comparison such as Jason is 4 times as old as Ben. Write an equation for a situation involving multiplicative comparison.  4.OA.A.2: Determine when to multiply or divide in multiplicative comparison word problems.  4.OA.A.3: Choose the correct operation to solve a multi-step word problem.  4.NBT.A.3: Explain how to use digits to round a number.  4.NBT.B.5: Demonstrate ways to multiply a multi-digit number by a one-digit number.  MA.4.OA.A.3.a Know multiplication facts and related division facts through 12 x 12.  4.NBT.B.6: Demonstrate division of a multi-digit number using place value, rectangular arrays, and area models.	
<b>Unit 3</b> Ch 6 & 7  12/2 - 2/6	12/2 - 1/14	23 days	Ch. 6: Fractions & Mixed Numbers	Yes	4.NF.A.1: Explain why fractions are equivalent, and create equivalent fractions 4.NF.A.2: Compare 2 fractions with different numerators and different denominators. 4.NF.B.3: Understand a fraction a/b with a>1 as a sum of fractions 1/b. 4.NF.B.3a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole 4.NF.B.3b Decompose a fraction into a sum of fractions with the same denominator 4.NF.B.3c Add and subtract mixed numbers with like denominators. 4.NF.B.3d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators. 4.NF.B.4: Apply and extend previous understandings of multiplication to multiply a fraction by a whole number 4.NF.B.4a Understand a fraction a/b as a multiple of 1/b 4.NF.B.4b Understand a multiple of a/b as a multiple of 1/b	By 12/21: Common Interim Assessment  1/2 - 1/24: FAST Screener- aMath (Optional)

## Grade 4 Math Year at a Glance 2019-2020

	1/15 - 2/6	14 days	Ch. 7: Decimals	Yes	4.NF.B.4c Solve word problems involving multiplication of a fraction by a whole number.  4.MD.B.4Make a line plot to display a data set of measurements in fractions of a unit.  4.NF.B.3: Use models to add and subtract fractions and mixed numbers with like denominators.  4.NF.C.5: Write a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100. Add two fractions with denominators 10 and 100.  4.NF.C.6: Explain the relationship between a fraction and a decimal.  4.NF.C.7: Compare decimals to the hundredths place.	
	2/7 - 2/28	10 days	Ch. 9: Angles	Yes	4.MD.C.5: a, b: Understand concepts of angle measurement 4.MD.C.6: Measure angles in whole-number degrees using a protractor. 4.MD.C.7: Solve add and sub problems to find unknown angles on a diagram. 4.G.A.1: Identify angles, perpendicular and parallel lines in 2-d figures.	
Unit 4 Ch. 9, 10, 11 & 14 2/7 - 4/9	3/2 - 3/13	10 days	Ch. 10: Parallel & Perpendicular Lines	Yes	4.G.A.1: Identify angles, perpendicular and parallel lines in 2-d figures. 4.G.A.2: Classify 2d figures based on angles, parallel and perpendicular attributes.	By 3/27: Common Interim Assessment
	3/16 - 4/9	16 days	Ch. 11: Squares & Rectangles Ch. 14 Symmetry (lesson 14.1 only)	Yes	4.MD.C.7: Solve add and sub problems to find unknown angles on a diagram. 4.G.A.2: Classify 2-D figures based on angles, parallel and perpendicular attributes. 4.G.A.3: Identify line-symmetric figures and draw lines of symmetry.	
<b>Unit 5</b> Ch. 12 & 13	4/13 - 5/22	19 days	Ch. 13: Area and Perimeter	No	4.MD.A.3: Apply area and perimeter formulas for rectangles.	
4/13 - 6/16	5/26 - 6/16	12 days	Ch. 12: Conversions of Measurement	No	4.MD.A.1: Describe the relative size of units, and represent a larger unit with smaller units (36 m = 360 cm, 4 yards = 48 inches). 4.MD.A.2: Solve problems involving units of measure.	5/18 - 6/12: FAST Screener-aMath (OPTIONAL)