Curriculum Map
Fourth Grade Math
Westside Atlanta Charter School
2018-2019 School Year

Date	Standard	Assessment	Additional Information
8/1-8/3	Review of key third grade standards	Benchmark pre-assessment of third and fourth grade concepts	Discuss and review third grade math concepts.
8/6-8/10	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.	--	**Begin Unit One: Place Value, Rounding, and Algorithms for Addition and Subtraction** **Whole Group Topic**: Place value of multi-digit whole numbers **Independent and Small Group Work:** Throughout the unit, students will work on their Unit One standards flowcharts, which allow for each student to choose their own learning paths and learn at their own pace with guidance from the teacher.
8/13-8/17	NBT.2: Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Formative Assessments	**Unit One: Place Value, Rounding, and Algorithms for Addition and Subtraction** **Whole Group Topic:** Comparing multi-digit whole numbers **Independent and Small Group Work**: Students will continue work on their Unit One standards flowcharts. Students who indicate mastery (80%+) on the unit's formative assessments will receive enrichment via the extension activity.

			Extension: Open a donut shop! Students will engage in a Project Based Learning (PBL) scenario wherein they apply Unit One concepts to design and plan their own donut shops.
8/20-8/24	NBT.3: Use place value understanding to round multi-digit whole numbers to any place.	Formative Assessments	**Unit One: Place Value, Rounding, and Algorithms for Addition and Subtraction** **Whole Group Topic**: Rounding multi-digit whole numbers **Independent and Small Group Work:** Students will continue work on their Unit One standards flowcharts. Students who indicate mastery (80%+) on the unit's formative assessments will receive enrichment via the extension activity.
8/27-8/31 *Early Release 8/31	NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Formative Assessments	**Unit One: Place Value, Rounding, and Algorithms for Addition and Subtraction** **Whole Group Topic**: Multi-digit whole number addition **Independent and Small Group Work:** Students will continue work on their Unit One standards flowcharts. Students who indicate mastery (80%+) on the unit's formative assessments will receive enrichment via the extension activity.
9/3-9/7 *School Closed 9/3	NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Formative Assessments	**Unit One: Place Value, Rounding, and Algorithms for Addition and Subtraction** **Whole Group Topic:** Multi-digit whole number subtraction **Independent and Small Group Work:** Students will

			continue work on their Unit One standards flowcharts. Students who indicate mastery (80%+) on the unit's formative assessments will receive enrichment via the extension activity.
9/10-9/14	NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm. OA.3: Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations.	Formative Assessments	**Unit One: Place Value, Rounding, and Algorithms for Addition and Subtraction** **Whole Group Topic:** Addition and subtraction word problems **Independent and Small Group Work:** Students will review content from Unit One. They will then exhibit their learning via a summative assessment.
9/17-9/21	MD.1: Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit.	Formative Assessments	**Begin Unit Two: Unit Conversions** **Whole Group Topic:** Metric unit conversions **Independent and Small Group Work:** Students will begin work on their Unit Two standards flowcharts. Students who indicate mastery (80%+) on the unit's formative assessments will receive enrichment via the extension activity.
9/24-9/28	MD.2: Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.	Unit Two Summative Assessment	**Unit Two: Unit Conversions** **Whole Group Topic:** Applications of metric unit conversions **Independent and Small Group Work:** Unit Two personalized learning flowcharts **Extension:** Compete in the Mini Metric Olympics! Students will engage in a variety of real-world activities that will extend their understanding beyond

			simple conversions and draw connections between cross-curricular concepts. Students requiring further extension will have the opportunity to design their own games for the class to play during the Mini Metric Olympics.
10/1-10/5 *Conference Day 10/5	OA.1: Interpret a multiplication equation as a comparison. OA. 2: Multiply or divide to solve word problems involving multiplicative comparison. OA. 3: Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainers must be interpreted.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Multiplicative comparison word problems **Independent and Small Group Work:** Unit Three personalized learning flowcharts **Extension:** Numbers and Operations Enrichment Choice Board. Students will have the option to complete a selection of higher-order thinking activities from the project menu or design their own projects with the approval of their teachers by completing the project proposal.
10/8-10/12	Fall Break	--	--
10/15-10/19	OA.4: Gain familiarity with factors and multiples NBT.5: 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.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Multiplication by 10, 100, and 1,000 **Independent and Small Group Work:** Unit Three personalized learning flowcharts
10/22-10/26	NBT.5: 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.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Multiplication of up to four digits by single-digit numbers

			I**ndependent and Small Group Work:** Unit Three personalized learning flowcharts
10/29-11/2	NBT.5: 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. OA. 3: Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainers must be interpreted.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Multiplication word problems **Independent and Small Group Work:** Unit Three personalized learning flowcharts
11/5-11/9	NBT.6: 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.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Division of tens and ones with successive numbers **Independent and Small Group Work:** Unit Three personalized learning flowcharts
11/12-11/16 *Early Release 11/16	NBT.6: 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.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Reasoning with divisibility **Independent and Small Group Work:** Unit Three personalized learning flowcharts
11/19-11/23	Thanksgiving Break	--	--
11/26-11/30	NBT.6: 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	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Division of thousands, hundreds, tens, and ones

	between multiplication and division.		**Independent and Small Group Work:** Unit Three personalized learning flowcharts
12/3-12/7	NBT.5: 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.	Formative Assessments	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Multiplication of two-digit by two-digit numbers **Independent and Small Group Work:** Unit Three personalized learning flowcharts
12/10-12/14	OA.1-OA.3: Use the four operations with whole numbers to solve problems. OA.4: Gain familiarity with factors and multiples NBT.5-NBT.6: Use place value understanding and properties of operations to perform multi-digit arithmetic.	Unit Three Summative Assessment	**Unit Three: Multi-Digit Multiplication and Division** **Whole Group Topic:** Unit review **Independent and Small Group Work:** Students will review content from Unit Three. They will then exhibit their learning via a summative assessment.
12/17-12/21 *Early Release 12/21	G.1: Draw points, lines, line segments, rays, angles, and perpendicular and parallel lines. Identify these in two-dimensional figures. G.2: Classify two-dimensional figures based on the presence or absence of angles of a specified size.	Exit Tickets for each lesson	**Unit Four: Angle Measures and Plane Figures** **Whole Group Topic:** Lines and angles **Independent and Small Group Work:** Geometry exploration centers
12/24-12/28	Winter Break	--	--
12/31-1/1	Winter Break	--	--
1/7-1/11	MD.5: Recognize angles as geometric shapes that are formed wherever two rays	Exit Tickets for each lesson	**Unit Four: Angle Measures and Plane Figures**

	share a common endpoint, and understand concepts of angle measurement. MD.6: Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.		**Whole Group Topic:** Angle measurement **Independent and Small Group Work:** Students will begin work on a Project Based Learning activity wherein they will create a city using concepts of angle measurement, two-dimensional figures, and symmetry.
1/14-1/18	MD.7: Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.	Exit Tickets for each lesson	**Unit Four: Angle Measures and Plane Figures** **Whole Group Topic:** Problem solving with the addition of angle measures **Independent and Small Group Work:** Students will continue to work on the Geometrocity PBL activity.
1/21-1/25 * School Closed 1/21	G.3: Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Performance Assessment - Geometrocity	**Unit Four: Angle Measures and Plane Figures** **Whole Group Topic:** Two-dimensional figures and symmetry **Independent and Small Group Work:** Students will complete work on their Geometrocity PBL activities. They will review Unit Four concepts and exhibit their learning in a summative assessment. **Extension:** Students will have the opportunity to incorporate three dimensional figures in their Geometrocity projects and explore the concept of volume in three-dimensional figures.
1/28-2/1	NF.1: Explain fraction equivalence by using visual fraction models, with attention to how the number and size of the parts differ even though the two	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic**: Decomposition and fraction

	fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. NF.3.B: Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation.		equivalence **Independent and Small Group Work**: Unit Five personalized learning flowcharts **Extension:** Fractions Choice Board. Students will have the option to complete a selection of higher-order thinking activities from the project menu or design their own projects with the approval of their teachers by completing the project proposal.
2/4-2/8	NF.4: Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Fraction equivalence using multiplication and division **Independent and Small Group Work**: Unit Five personalized learning flowcharts
2/11-2/15 * No Class 2/15	NF.2: Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2.	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Fraction comparison **Independent and Small Group Work**: Unit Five personalized learning flowcharts
2/18-2/22 *School Closed 2/18	NF.3.A: Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. NF.3.D: Solve word problems involving addition and subtraction of fractions referring to the same whole and having	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Fraction addition and subtraction **Independent and Small Group Work**: Unit Five personalized learning flowcharts

	like denominators.		
2/25-3/1	NF.3.C: Add and subtract mixed numbers with like denominators	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Extending fraction equivalence to fractions greater than one **Independent and Small Group Work**: Unit Five personalized learning flowcharts
3 /4 - 3/8	NF.3.B: Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation.	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Addition and subtraction of fractions by decomposition **Independent and Small Group Work**: Unit Five personalized learning flowcharts
3/11-3/15 *Conference Day 3/15	NF.4: Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Repeated addition of fractions as multiplication **Independent and Small Group Work**: Unit Five personalized learning flowcharts
3/18-3/22	NF.4: Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	Formative Assessments	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Exploration of fractions **Independent and Small Group Work**: Unit Five personalized learning flowcharts

3/25-3/29	NF.1-2: Extend understanding of fraction equivalence and ordering. NF.3-4: Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Unit Five Summative Assessment	**Unit Five: Fraction Equivalence, Ordering, and Operations** **Whole Group Topic:** Unit review **Independent and Small Group Work:** Students will review Unit Five concepts and demonstrate their learning in a summative assessment.
4/1-4/5	Spring Break	--	--
4/8-4/12	MD.2: NF.5: Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.	Formative Assessments	**Unit Six: Decimal Fractions** **Whole Group Topic:** Exploration of tenths and hundredths **Independent and Small Group Work**: Unit Six personalized learning flowcharts **Extension:** Plan a School Carnival! Students will apply their understanding of decimal fractions to plan an imaginary school carnival. Students will have the opportunity to extend their understanding of fractions while reviewing multiple concepts from the school year.
4/15-4/19	NF.7: Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions.	Formative Assessments	**Unit Six: Decimal Fractions** **Whole Group Topic:** Decimal comparison **Independent and Small Group Work**: Unit Six personalized learning flowcharts
4/22-4/26	NF.5: Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique	Formative Assessments	**Unit Six: Decimal Fractions** **Whole Group Topic:** Addition with tenths and hundredths

	to add two fractions with respective denominators 10 and 100.		**Independent and Small Group Work**: Unit Six personalized learning flowcharts
4/29-5/3 *Professional Learning Day 5/3	NF.6: Use decimal notation for fractions with denominators 10 or 100.	Unit Six Summative Assessment	**Unit Six: Decimal Fractions** **Whole Group Topic:** Money amounts as decimal numbers **Independent and Small Group Work**: Students will review, apply, and extend Unit Six concepts. They will demonstrate their learning in a summative assessment.
5/6-5/10	MD.1: Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. MD.2: Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.	Exit Tickets for each lesson	**Unit Seven: Exploring Measurement with Multiplication** **Whole Group Topic:** Problem solving with measurement **Independent and Small Group Work**: Skill building centers **Extension:** Measurement Choice Board. Students will have the option to complete a selection of higher-order thinking activities from the project menu or design their own projects with the approval of their teachers by completing the project proposal.
5/13-5/17	MD.2: Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing	Unit Seven Summative Assessment	**Unit Seven: Exploring Measurement with Multiplication** **Whole Group Topic:** Investigation of measurement expressed as mixed numbers

	measurements given in a larger unit in terms of a smaller unit.		**Independent and Small Group Work**: Skill building centers
5/20-5/24 *Early Release 5/23 *School Closed 5/24	All Standards		**Mini-Unit: Looking Ahead, Looking Behind** **Whole Group Topic:** Students will reflect on and celebrate the concepts that they have learned throughout the year. **Independent and Small Group Work:** Students will participate in a variety of review games and activities that will solidify fourth grade skills and provide an introduction to fifth grade skills.