2019-2020 Scope and Sequence
Mathematics – Grade 4

Cycle 1	38 Days Aug. 26 – Oct. 18, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Mathematical Process Standards Unit planning guides identify Process Standards that align to and support the development of the content standards covered in each unit. *See unit planning guides for a list of recommended process standards specific to each unit of study.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener BOY Sept. 3-20	**Mathematical Process Standards** The student uses mathematical processes to acquire and demonstrate mathematical understanding. Ⓟ **MATH.4.1A** Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓟ **MATH.4.1B** Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Ⓟ **MATH.4.1C** Select tools, including real objects, manipulatives, paper/pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓟ **MATH.4.1D** Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Ⓟ **MATH.4.1E** Create and use representations to organize, record, and communicate mathematical ideas. Ⓟ **MATH.4.1F** Analyze mathematical relationships to connect and communicate mathematical ideas. Ⓟ **MATH.4.1G** Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
Unit 1: Establish Math Routines and Whole Number Place Value Students will establish procedures and routines for daily problem solving and number sense activities. Students will interpret, represent, compare, and order whole numbers using concrete, pictorial, and abstract representations.	**6** 90-minute lessons **Suggested Pacing:** Aug. 26 – Sept. 3 *Labor Day* *Sept. 2* **Extend** **Review** **Assess** **Reteach** Sept. 4-5	**Establish Math Routines and Whole Number Place Value** (6 lessons) **Number and Operations** The student applies mathematical process standards to represent, compare, and order whole numbers and decimals, and understand relationships related to place value. Ⓢ **MATH.4.2A** Interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left. Ⓡ **MATH.4.2B** Represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals. *[Whole Numbers only]* Ⓢ **MATH.4.2C** Compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols >, <, or =.

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Cycle 1	38 Days Aug. 26 – Oct. 18, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 2: Fractions Students will use concrete and pictorial models to represent, decompose, and compare fractions, including those that are greater than one. Students will use a variety of methods including models (e.g., concrete, pictorial, and number line) to determine if two fractions are equivalent, and will use symbols (i.e., >, <, =) to represent the comparison of two fractions.	**7** 90-minute lessons **Suggested Pacing:** Sept. 6-16 **Extend** **Review** **Assess** **Reteach** Sept. 17	**Fractions** (7 lessons) **Number and Operations** The student applies mathematical process standards to represent and generate fractions to solve problems. Ⓢ **MATH.4.3A** Represent a fraction $\frac{a}{b}$ as a sum of fractions $\frac{1}{b}$, where a and b are whole numbers and b > 0, including when a > b. Ⓢ **MATH.4.3B** Decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations. Ⓢ **MATH.4.3C** Determine if two given fractions are equivalent using a variety of methods. Ⓡ **MATH.4.3D** Compare two fractions with different numerators and different denominators and represent the comparison using the symbols >, =, or <. Ⓢ **MATH.4.3G** Represent **fractions** and decimals to the tenths or hundredths **as distances from zero on a number line.**

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Cycle 1	38 Days Aug. 26 – Oct. 18, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Unit 3: Decimal Place Value Students will interpret, represent, compare, and order decimal numbers using concrete, pictorial, and abstract representations.	**6** 90-minute lessons **Suggested Pacing:** Sept. 18-25 **Extend** **Review** **Assess** **Reteach** Sept. 26-27 *Early Dismissal Sept. 27*	**Decimal Place Value** (6 lessons) **Number and Operations** The student applies mathematical process standards to represent, compare, and order whole numbers and decimals, and understand relationships related to place value. Ⓢ **MATH.4.2A** Interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left. Ⓡ **MATH.4.2B** Represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals. Ⓢ **MATH.4.2E** Represent decimals, including tenths and hundredths, using concrete and visual models and money. Ⓢ **MATH.4.2F** Compare and order decimals using concrete and visual models to the hundredths.
Unit 4: Relate Decimals to Fractions Students will use concrete and pictorials models to relate fractions to decimals and will represent fractions and decimals on a number line and metric ruler.	**5** 90-minute lessons **Suggested Pacing:** Sept. 30 – Oct. 4	**Relate Decimals to Fractions** (5 lessons) **Number and Operations** The student applies mathematical process standards to represent, compare, and order whole numbers and decimals, and understand relationships related to place value. Ⓡ **MATH.4.2G** Relate decimals to fractions that name tenths and hundredths. Ⓢ **MATH.4.2H** Determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line. **Number and Operations** The student applies mathematical process standards to represent and generate fractions to solve problems. Ⓢ **MATH.4.3G** Represent fractions and decimals to the tenths or hundredths as distances from zero on a number line.

2019-2020 Scope and Sequence
Mathematics – Grade 4

Cycle 1	38 Days Aug. 26 – Oct. 18, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 5: Addition and Subtraction Problems with Whole Numbers and Decimals Students will establish procedures and routines for daily problem solving and number sense activities. Students will add and subtract whole numbers and decimals using the standard algorithm to solve problems involving money, including calculating profit in real world contexts.	**8** 90-minute lessons **Suggested Pacing:** Oct. 7-17 *Fall Holiday October 9 (students only)* **Extend Review Assess Reteach** Oct. 18 *Early Dismissal Oct. 18*	**Addition and Subtraction Problems with Whole Numbers and Decimals** (8 lessons) **Number and Operations** The student applies mathematical process standards to represent, compare, and order whole numbers and decimals, and understand relationships related to place value. Ⓢ **MATH.4.2D** Round whole numbers to a given place value through the hundred thousands place. **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓡ **MATH.4.4A** Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm. Ⓢ **MATH.4.4G** Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions involving whole numbers. **Algebraic Reasoning** The student applies mathematical process standards to develop concepts of expressions and equations. Ⓡ **MATH.4.5A** Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity. *[Addition and Subtraction only]* **Geometry and Measurement** The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. Ⓡ **MATH.4.8C** Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and **money** using **addition**, **subtraction**, multiplication, or division as appropriate.

2019-2020 Scope and Sequence
Mathematics – Grade 4

Cycle 2	34 Days Oct. 21 – Dec. 19, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Mathematical Process Standards Unit planning guides identify Process Standards that align to and support the development of the content standards covered in each unit. *See unit planning guides for a list of recommended process standards specific to each unit of study.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener Progress Monitoring Oct. 14 – Nov. 1	**Mathematical Process Standards** The student uses mathematical processes to acquire and demonstrate mathematical understanding. (PS) **MATH.4.1A** Apply mathematics to problems arising in everyday life, society, and the workplace. (PS) **MATH.4.1B** Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. (PS) **MATH.4.1C** Select tools, including real objects, manipulatives, paper/pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. (PS) **MATH.4.1D** Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. (PS) **MATH.4.1E** Create and use representations to organize, record, and communicate mathematical ideas. (PS) **MATH.4.1F** Analyze mathematical relationships to connect and communicate mathematical ideas. (PS) **MATH.4.1G** Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
Unit 6: Add and Subtract Fractions Students will use concrete objects, pictorial models, and properties of operations to represent and solve addition and subtraction of fractions with equal denominators.	**5** 90-minute lessons **Suggested Pacing:** Oct. 21-25 **Extend** **Review** **Assess** **Reteach** Oct. 28-29	**Add and Subtract Fractions** (5 lessons) **Number and Operations** The student applies mathematical process standards to represent and generate fractions to solve problems. (R) **MATH.4.3E** Represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations. (S) **MATH.4.3F** Evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and 1, referring to the same whole.

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Mathematics – Grade 4

Cycle 2	34 Days Oct. 21 – Dec. 19, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 7: Multiplication Problem Solving Students will use estimation, strategies, and algorithms, including the standard algorithm, to solve whole number multiplication problems.	**7** 90-minute lessons **Suggested Pacing:** Oct. 30 – Nov. 7 **Extend Review Assess Reteach** Nov. 8 *Early Dismissal Nov. 8* **Snapshot 1 Suggested Window:** Oct. 28 – Nov 1 See Outline for TEKS Details	**Multiplication Problem Solving** (7 lessons) **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓢ **MATH.4.4B** Determine products of a number and 10 or 100 using properties of operations and place value understandings. Ⓢ **MATH.4.4C** Represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 x 15. Ⓢ **MATH.4.4D** Use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties. Ⓢ **MATH.4.4G** Round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers. Ⓡ **MATH.4.4H** Solve with fluency one- and two-step problems involving **multiplication** and division, including interpreting remainders.
Unit 8: Division Problem Solving Students will use strategies and algorithms, including the standard algorithm, to solve whole number division problems.	**7** 90-minute lessons **Suggested Pacing:** Nov. 11-19 **Extend Review Assess Reteach** Nov. 20	**Division Problem Solving** (7 lessons) **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓢ **MATH.4.4E** Represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations. Ⓢ **MATH.4.4F** Use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor. Ⓢ **MATH.4.4G** Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions involving whole numbers. Ⓡ **MATH.4.4H** Solve with fluency one- and two-step problems involving multiplication and **division**, **including interpreting remainders**.

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Cycle 2	34 Days Oct. 21 – Dec. 19, 2019	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Unit 9: Multiplication and Division Problem Solving Students will solve with fluency one- and two-step multiplication and division problems, including interpreting remainders.	**5** 90-minute lessons **Suggested Pacing:** Nov. 21 – Dec. 4 **Extend** **Review** **Assess** **Reteach** Dec. 5-6 *Thanksgiving Holiday* *Nov. 25-29*	**Multiplication and Division Problem Solving** (5 lessons) **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓡ **MATH.4.4H** Solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders. **Algebraic Reasoning** The student applies mathematical process standards to develop concepts of expressions and equations. Ⓡ **MATH.4.5A** Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.
Unit 10: Area and Perimeter Students will use models to determine formulas and will solve problems involving perimeter and area of rectangles.	**7** 90-minute lessons **Suggested Pacing:** Dec. 9-17 **Extend** **Review** **Assess** **Reteach** Dec. 18-19 *Teacher Preparation Day* *Dec. 20* **District-Level Assessment** **Suggested Window:** Dec.9-13 See Blueprint for TEKS Details *Winter Break* *Dec. 23 – Jan. 3*	**Area and Perimeter** (7 lessons) **Algebraic Reasoning** The student applies mathematical process standards to develop concepts of expressions and equations. **MATH.4.5C** Use models to determine the formulas for the perimeter of a rectangle (l + w + l + w or 2l + 2w), including the special form for perimeter of a square (4s) and the area of a rectangle (l x w). Ⓡ **MATH.4.5D** Solve problems related to perimeter and area of rectangles where dimensions are whole numbers. **Geometry and Measurement** The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. Ⓡ **MATH.4.8C** Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.

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Mathematics – Grade 4

Cycle 3	49 Days Jan. 6 – Mar. 13, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Mathematical Process Standards Unit planning guides identify Process Standards that align to and support the development of the content standards covered in each unit. *See unit planning guides for a list of recommended process standards specific to each unit of study.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener MOY Jan. 6-24	**Mathematical Process Standards** The student uses mathematical processes to acquire and demonstrate mathematical understanding. Ⓟⓢ **MATH.4.1A** Apply mathematics to problems arising in everyday life, society, and the workplace. Ⓟⓢ **MATH.4.1B** Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Ⓟⓢ **MATH.4.1C** Select tools, including real objects, manipulatives, paper/pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Ⓟⓢ **MATH.4.1D** Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Ⓟⓢ **MATH.4.1E** Create and use representations to organize, record, and communicate mathematical ideas. Ⓟⓢ **MATH.4.1F** Analyze mathematical relationships to connect and communicate mathematical ideas. Ⓟⓢ **MATH.4.1G** Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
Unit 11: Geometry Students will analyze geometric attributes of two-dimensional figures in order to develop generalizations about their properties.	**9** 90-minute lessons **Part 1** **Suggested Pacing:** Jan. 6-7	**Part 1: Lines, Rays, and Angles** (2 lessons) **Geometry and Measurement** The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. Ⓢ **MATH.4.6A** Identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.
	Part 2 **Suggested Pacing:** Jan. 8-14	**Part 2: Classify Two-Dimensional Figures** (5 lessons) **Geometry and Measurement** The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. Ⓢ **MATH.4.6C** Apply knowledge of right angles to identify acute, right, and obtuse triangles. Ⓡ **MATH.4.6D** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.

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Cycle 3	49 Days Jan. 6 – Mar. 13, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Unit 11: Geometry Students will analyze geometric attributes of two-dimensional figures in order to develop generalizations about their properties.	**Part 3** **Suggested Pacing:** Jan. 15-16 **Extend** **Review** **Assess** **Reteach** Jan. 17 *Early Dismissal* *Jan. 17* *MLK Jr. Day* *Jan. 20*	**Part 3: Symmetry** (2 lessons) **Geometry and Measurement** The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. Ⓢ **MATH.4.6B** Identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure.
Unit 12: Angle Problem Solving Students will solve problems involving measuring and constructing angles with a given measure less than or equal to 180°.	**7** 90-minute lessons **Suggested Pacing:** Jan. 21-29 **Extend** **Review** **Assess** **Reteach** Jan. 30-31 **Snapshot 2** **Suggested Window:** Jan. 27-31 See Outline for TEKS Details	**Angles** (7 lessons) **Geometry and Measurement** The student applies mathematical process standards to solve problems involving angles less than or equal to 180 degrees. **MATH.4.7A** Illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle. Angle measures are limited to whole numbers. **MATH.4.7B** Illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree and an angle that "cuts" n/360 out of any circle whose center is at the angle's vertex has a measure of n degrees. Angle measures are limited to whole numbers. Ⓡ **MATH.4.7C** Determine the approximate measures of angles in degrees to the nearest whole number using a protractor. Ⓢ **MATH.4.7D** Draw an angle with a given measure. Ⓢ **MATH.4.7E** Determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures.

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Cycle 3	49 Days Jan. 6 – Mar. 13, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Unit 13: Patterns in a Table Students will represent problems and develop concepts of expressions by using an input-output table to generate a numerical pattern that follows a given rule.	**7** 90-minute lessons **Suggested Pacing:** Feb. 3-11 **Extend** **Review** **Assess** **Reteach** Feb. 12-13	**Patterns in a Table** (7 lessons) **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓢ **MATH.4.4B** Determine products of a number and 10 or 100 using properties of operations and place value understandings. **Algebraic Reasoning** The student applies mathematical process standards to develop concepts of expressions and equations. Ⓡ **MATH.4.5B** Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence.
Unit 14: Length Students will solve problems including the conversion of units of measure for a given attribute within the same system involving measurements of length in both the customary and metric measurement systems.	**5** 90-minute lessons **Suggested Pacing:** Feb. 14-20 **Extend** **Review** **Assess** **Reteach** Feb. 21 *Early Dismissal Feb. 14*	**Length** (5 lessons) **Algebraic Reasoning** The student applies mathematical process standards to develop concepts of expressions and equations. Ⓡ **MATH.4.5B** Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence. **Geometry and Measurement** The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. Ⓢ **MATH.4.8A** Identify relative sizes of measurement units within the customary and metric systems. Ⓢ **MATH.4.8B** Convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table. Ⓡ **MATH.4.8C** Solve problems that deal with **measurements of length**, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate

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Cycle 3	49 Days Jan. 6 – Mar. 13, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 15: Capacity, Liquid Volume, Weight, and Mass Students will solve problems including the conversion of units of measure for a given attribute within the same system involving measurements of capacity, liquid volume, weight, and mass in both the customary and metric measurement systems.	**6** 90-minute lessons **Suggested Pacing:** Feb. 24 – Mar. 2 **Extend** **Review** **Assess** **Reteach** Mar. 3	**Capacity, Liquid Volume, Weight, and Mass** (6 lessons) **Algebraic Reasoning** The student applies mathematical process standards to develop concepts of expressions and equations. Ⓡ **MATH.4.5B** Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence. **Geometry and Measurement** The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. Ⓢ **MATH.4.8A** Identify relative sizes of measurement units within the customary and metric systems. Ⓢ **MATH.4.8B** Convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table. Ⓡ **MATH.4.8C** Solve problems that deal with measurements of length, intervals of time, **liquid volumes**, **mass**, and money using addition, subtraction, multiplication, or division as appropriate.
Unit 16: Time Students will use strategies and tools (e.g., analog and digital clocks) to solve problems involving intervals of time.	**6** 90-minute lessons **Suggested Pacing:** Mar. 4-11 **Extend** **Review** **Assess** **Reteach** Mar. 12-13 *Spring Break* *Mar. 16-20*	**Time** (6 lessons) **Geometry and Measurement** The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. Ⓢ **MATH.4.8B** Convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table. Ⓡ **MATH.4.8C** Solve problems that deal with measurements of length, **intervals of time**, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.

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Cycle 4	47 Days Mar. 23 – May 29, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Mathematical Process Standards Unit planning guides identify Process Standards that align to and support the development of the content standards covered in each unit. *See unit planning guides for a list of recommended process standards specific to each unit of study.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener EOY Apr. 20 – May 22	**Mathematical Process Standards** The student uses mathematical processes to acquire and demonstrate mathematical understanding. (PS) **MATH.4.1A** Apply mathematics to problems arising in everyday life, society, and the workplace. (PS) **MATH.4.1B** Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. (PS) **MATH.4.1C** Select tools, including real objects, manipulatives, paper/pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. (PS) **MATH.4.1D** Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. (PS) **MATH.4.1E** Create and use representations to organize, record, and communicate mathematical ideas. (PS) **MATH.4.1F** Analyze mathematical relationships to connect and communicate mathematical ideas. (PS) **MATH.4.1G** Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
Unit 17: Data Problem Solving Students will collect, organize, display, and interpret data on a frequency table, dot plot, or stem-and-leaf plot, and solve problems using the data.	**9** 90-minute lessons **Part 1 Suggested Pacing:** Mar. 23-25 **STAAR-Released Assessment Suggested Window:** Mar. 23-27 2018 Released Assessment	**Part 1: Frequency Tables** (3 lessons) **Data Analysis** The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. (R) **MATH.4.9A** Represent data on a **frequency table**, dot plot, or stem-and-leaf plot marked with whole numbers and fractions. (S) **MATH.4.9B** Solve one- and two-step problems using data in whole number, decimal, and fraction form in a **frequency table**, dot plot, or stem-and-leaf plot.

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Cycle 4	47 Days Mar. 23 – May 29, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.
Unit	**Number of Lessons**	**Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:**
Unit 17: Data Problem Solving Students will collect, organize, display, and interpret data on a frequency table, dot plot, or stem-and-leaf plot, and solve problems using the data.	**Part 2** **Suggested Pacing:** Mar. 26 – Apr. 3 **Extend** **Review** **Assess** **Reteach** Apr. 6-7	**Part 2: Dot and Stem-and-Leaf Plots** (6 lessons) **Data Analysis** The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. Ⓡ **MATH.4.9A** Represent data on a frequency table, **dot plot**, or **stem-and-leaf plot** marked with whole numbers and fractions. Ⓢ **MATH.4.9B** Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, **dot plot**, or **stem-and-leaf plot**.
Unit 18: Personal Financial Literacy Students will understand how financial information, such as taxes, income, methods of payments, financial records, and budgets, can be used to help people manage their financial resources effectively.	**5** 90-minute lessons **Suggested Pacing:** Apr. 8-15 **Extend** **Review** **Assess** **Reteach** Apr. 16-17 *Spring Holiday* *Apr. 10*	**Personal Financial Literacy** (5 lessons) **Personal Financial Literacy** The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. Ⓢ **MATH.4.10A** Distinguish between fixed and variable expenses. Ⓢ **MATH.4.10B** Calculate profit in a given situation. **MATH.4.10C** Compare the advantages and disadvantages of various savings options. **MATH.4.10D** Describe how to allocate a weekly allowance among spending, saving, including for college, and sharing. Ⓢ **MATH.4.10E** Describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending money.

2019-2020 Scope and Sequence
Mathematics – Grade 4

Cycle 4	47 Days Mar. 23 – May 29, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 19: Cumulative Review Students will receive differentiated instruction based on areas of need according to assessment data.	**15** 90-minute lessons **Suggested Pacing:** Apr. 20 – May 8 **Extend** **Review** **Assess** **Reteach** May 11-15 **STAAR Math** May 12	**Cumulative Review** (15 lessons) **MATH.4.1A–MATH.4.10E** During this unit, teachers will gather individual student data from various campus and district-level assessments administered during the academic year. Teachers will review student progress tracking records to determine individual student areas of need to be addressed during the cumulative review. Students should be placed in small groups according to student expectations and receive immediate feedback during the re-teaching of lessons. Teachers will model various problem-solving strategies to allow students to choose the strategy they are most comfortable with and, thereafter, replicate independently.
Unit 20: Multiplication and Division Review Students will develop and use strategies and algorithms to solve whole number multiplication and division problems.	**3** 90-minute lessons **Suggested Pacing:** May 18-20	**Multiplication and Division Review** (3 lessons) **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓢ **MATH.4.4D** Use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties. Ⓢ **MATH.4.4F** Use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor. Ⓢ **MATH.4.4G** Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions involving whole numbers. Ⓡ **MATH.4.4H** Solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders.

2019-2020 Scope and Sequence
Mathematics – Grade 4

Cycle 4	47 Days Mar. 23 – May 29, 2020	The recommended number of lessons is less than the number of days in the grading cycle to accommodate differentiated instruction, extended learning time, and assessment days. Complete instructional planning information and support are in the HISD Curriculum documents.

Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 21: Decimal Place Value Review Students will interpret, represent, compare, and order decimals using concrete, pictorial, and abstract representations and will extend their place value understanding to the thousandths.	**3** 90-minute lessons **Suggested Pacing:** May 21-26 *Memorial Day* *May 25*	**Decimal Place Value Review** (3 lessons) **Number and Operations** The student applies mathematical process standards to represent, compare, and order whole numbers and decimals, and understand relationships related to place value. Ⓡ **MATH.4.2B** Represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals. Ⓢ **MATH.4.2E** Represent decimals, including tenths and hundredths, using concrete and visual models and money. Ⓢ **MATH.4.2F** Compare and order decimals using concrete and visual models to the hundredths.
Unit 22: Add and Subtract Whole Numbers and Decimal Review Students will add and subtract whole numbers and decimals using the standard algorithm to solve problems in real world contexts involving money and perimeter. Students will interpret data on a frequency table, dot plot, or stem-and-leaf plot, and solve problems using the data.	**3** 90-minute lessons **Suggested Pacing:** May 27-29	**Add and Subtract Whole Numbers and Decimals Review** (3 lessons) **Number and Operations** The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. Ⓡ **MATH.4.4A** Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm. **Data Analysis** The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. Ⓢ **MATH.4.9B** Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot. **Geometry and Measurement** The student applies mathematical process standards to select appropriate customary and metric units, strategies, and tools to solve problems involving measurement. Ⓡ **MATH.4.5D** Solve problems related to **perimeter** and area of rectangles where dimensions are whole numbers.