### **HISD** Elementary Curriculum and Development INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 1	27 Days	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.
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.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener BOY Aug. 30 – Sept. 24	<ul> <li>Mathematical Process Standards The student uses mathematical processes to acquire and demonstrate mathematical understanding. Imathematical understanding. </li> <li>Imathematical understanding.</li> <li>Imathematical apply mathematics to problems arising in everyday life, society, and the workplace. Imathematical apply mathematics to problems arising in everyday life, society, and the workplace. Imathematical apply mathematics to problems arising in everyday life, society, and the workplace. Imathematical apply mathematics to problems arising in everyday life, society, and the workplace. Imathematical apply mathematics to problems arising in everyday life, society, and the workplace. Imathematical application of the solution, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. Imathematical application of the solution. Imathematical application of the solution. Imathematical appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems. Imathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Imathematical ideas. Imathematical ideas and arguments using precise mathematical language in written or oral communication.</li></ul>
Unit 1: Establish Math Routines and Understand Place Value to 100,000 Students will compose, decompose, decompose, compare, and order numbers to 100,000 and describe the mathematical relationships in the base-10 place value system.	11 90-minute lessons Learning Recovery Day Aug. 23 Suggested Pacing: Aug. 24 – Sept. 8 Labor Day Sept. 6 Extend Review Assess Reteach Sept. 9	Establish Math Routines and Understand Place Value to 100,000 (11 lessons) Number and Operations The student applies mathematical process standards to represent and compare whole numbers and understand relationships related to place value. (a) MATH.3.2A Compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate. (a) MATH.3.2B Describe the mathematical relationships found in the base-10 place value system through the hundred thousands place. (b) MATH.3.2D Compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 1	<b>27 Days</b> Aug. 23 - Oct. 1,	2021 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: Solve One-Step Addition and Subtraction Problems Students will use a variety of strategies, including number lines, to round and estimate solutions to and represent and solve one- step addition and subtraction word problems.	10 90-minute lessons Suggested Pacing: Sept. 10-27 Fall Holiday Sept. 16 Teacher Service Day (no students) Sept. 17 Extend Review Assess Reteach Sept. 28	<ul> <li>Unit 2: Solve One-Step Addition and Subtraction Problems (10 lessons)</li> <li>Number and Operations         The student applies mathematical process standards to represent and compare whole numbers and understand relationships related to place value.         (©) MATH.3.2C Represent a number on a number line as being between two consecutive multiples of 10, 100, 1000, or 10,000 and use words to describe relative size of numbers in order to round whole numbers.     </li> <li>Number and Operations         The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy.         (©) MATH.3.4A Solve with fluency <u>one-step</u> and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.         (©) MATH.3.4B Round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems.     </li> <li>Algebraic Reasoning         The student applies mathematical process standards to analyze and create patterns and relationships.         (©) MATH.3.5A Represent <u>one</u>- and two-<u>step</u> problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations.     </li> </ul>
Unit 3: Data Students apply mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data.	6 90-minute lessons <u>Part 1</u> Suggested Pacing: Sept. 29 – Oct. 1	<ul> <li>Part 1: Pictographs and Bar Graphs (3 lessons)</li> <li>Data Analysis The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. (® MATH.3.8A Summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals. (® MATH.3.8B Solve <u>one</u>- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph, or bar graph with scaled intervals.</li></ul>



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 2	<b>29 Days</b> Oct. 5 - Nov. 12,	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.           2021         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.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency.	<ul> <li>Mathematical Process Standards The student uses mathematical processes to acquire and demonstrate mathematical understanding.</li> <li>MATH.3.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</li> <li>MATH.3.1B 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.</li> <li>MATH.3.1C 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.</li> <li>MATH.3.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.</li> <li>MATH.3.1F Create and use representations to organize, record, and communicate mathematical ideas.</li> <li>MATH.3.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</li> </ul>
Unit 3: Data Students apply mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data.	6 90-minute lessons <i>Teacher</i> <i>Service Day</i> ( <i>no students</i> ) <i>Oct. 4</i> <u>Part 2</u> Suggested Pacing: Oct. 5-7 Extend Review Assess Reteach Oct. 8	<ul> <li>Part 2: Dot Plots (3 lessons)</li> <li>Data Analysis The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. (*) MATH.3.8A Summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals. (*) MATH.3.8B Solve <u>one</u>- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals. </li> </ul>



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2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 2	<b>29 Days</b>	2021	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.
Unit	Number of Lessons	Texa The s	s Essential Knowledge and Skills/Student Expectations (TEKS/SEs) student will:
Unit 4: Multiplication and Division Fluency Students will use a variety of strategies to develop fluency and automaticity with multiplication and division facts. Students will determine a quotient using the relationship between multiplication and division and will use divisibility rules to determine whether a number is even or odd.	7 90-minute lessons Learning Recovery Days Oct. 11-12 Suggested Pacing: Oct. 13-21 Extend Review Assess Reteach Oct. 22	Multi Num The s strate probl © M, group © M, such jump: © M, objec © M, objec © M, objec © M, divisi multip Algel The s patte © M,	<ul> <li>Indication and Division Fluency (7 lessons)</li> <li>Iber and Operations</li> <li>Student applies mathematical process standards to develop and use agies and methods for whole number computations in order to solve ems with efficiency and accuracy.</li> <li>ATH.3.4D Determine the total number of objects when equally-sized as of objects are combined or arranged in arrays up to 10 by 10.</li> <li>ATH.3.4E Represent multiplication facts by using a variety of approaches as repeated addition, equal-sized groups, arrays, area models, equal s on a number line, and skip counting.</li> <li>ATH.3.4F Recall facts to multiply up to 10 by 10 with automaticity and the corresponding division facts.</li> <li>ATH.3.4H Determine the number of objects in each group when a set of the sparitioned into equal shares or a set of objects is shared equally.</li> <li>ATH.3.4J Determine a quotient using the relationship between plication and division.</li> <li>braic Reasoning</li> <li>student applies mathematical process standards to analyze and create rns and relationships.</li> <li>ATH.3.5D Determine the unknown whole number in a multiplication or on equation relating three whole numbers when the unknown is either a ng factor or product.</li> </ul>



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### **HISD** Elementary Curriculum and Development INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 2	29 Days	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
Cycle 2	Oct. 5 - Nov. 12,	2021 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: Two-Step Addition and Subtraction Problems Students will use a variety of strategies, including number lines, to round and estimate solutions to and represent and solve one- and two-step addition and subtraction word problems, including problems that involve data.	9 90-minute lessons Suggested Pacing: Oct. 25 – Nov. 4 Snapshot 1 Suggested Window: Oct. 25-29 See Outline for TEKS Details Extend Review Assess Reteach Nov. 5	<ul> <li>Two-Step Addition and Subtraction Problems (9 lessons)</li> <li>Number and Operations The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. (© MATH.3.4A Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction. (© MATH.3.4B Round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems. Algebraic Reasoning The student applies mathematical process standards to analyze and create patterns and relationships. (© MATH.3.5A Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations. Data Analysis The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. (© MATH.3.8B Solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals.</li></ul>

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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cyclo 2	29 Days	The recommended number of lessons is less than the number of days in the grading cycle to
Cycle Z	Oct. 5 - Nov. 12,	2021 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 6: One-Step Multiplication and Division Problems Students will apply mathematical process standards to develop and use strategies for representing and solving one-step multiplication and division problems.	10 90-minute lessons Suggested Pacing: <u>Part 1</u> Nov. 8-12	<ul> <li>Part 1: Multiplication and Division Within 100 (5 lessons)</li> <li>Number and Operations The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. (® MATH.3.4K Solve <u>one-step</u> and two-step problems involving <u>multiplication</u> and <u>division</u> within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts. Algebraic Reasoning The student applies mathematical process standards to analyze and create patterns and relationships. (® MATH.3.5B Represent and solve <u>one</u>- and two-<u>step multiplication</u> and <u>division</u> problems within 100 using arrays, strip diagrams, and equations. (§ MATH.3.5C Describe a multiplication expression as a <u>comparison</u> such as 3 x 24 represents 3 times as much as 24. (§ MATH.3.5D Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.</li></ul>



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 3	<b>30 Days</b> Nov. 15, 2021 Jan. 14, 2022	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.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency.	<ul> <li>Mathematical Process Standards The student uses mathematical processes to acquire and demonstrate mathematical understanding. </li> <li>MATH.3.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</li> <li>MATH.3.1B 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.3.1C 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.3.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. MATH.3.1E Create and use representations to organize, record, and communicate mathematical ideas. MATH.3.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</li></ul>
Unit 6: One-Step Multiplication and Division Problems Students will apply mathematical process standards to develop and use strategies for representing and solving one-step multiplication and division problems.	10 90-minute lessons Suggested Pacing: <u>Part 2</u> Nov. 15-19 <i>Thanksgiving</i> <i>Break</i> <i>Nov. 22-26</i>	<ul> <li>Part 2: Multiplication of 2-Digit by 1-Digit Numbers (5 lessons)</li> <li>Number and Operations The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. (S) MATH.3.4G Use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties. (B) MATH.3.4K Solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts. Algebraic Reasoning The student applies mathematical process standards to analyze and create patterns and relationships. (B) MATH.3.5B Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations. (S) MATH.3.5C Describe a multiplication expression as a comparison such as 3 x 24 represents 3 times as much as 24.</li></ul>



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2021-2022 Scope and Sequence

Mathematics – Grade 3

	30 Davs	
Cycle 3	Nov. 15, 2021	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: Relationships using Number Pairs Students will analyze and create number patterns and represent relationships in tables and with verbal descriptions.	5 90-minute lessons Suggested Pacing: Nov. 29 – Dec. 3 Extend Review Assess Reteach Dec. 6-9 <u>District-Level</u> <u>Assessment</u> Suggested Window: Dec. 6-17 <u>See Blueprint for</u> <u>TEKS Details</u>	Relationships Using Number Pairs (5 lessons)         Algebraic Reasoning         The student applies mathematical process standards to analyze and create patterns and relationships.         (B) MATH.3.5E Represent real-world relationships using number pairs in a table and verbal descriptions.
Unit 8: Intervals of Time Students will apply mathematical process standards to determine solutions to problems involving addition and subtraction of time intervals.	6 90-minute lessons Suggested Pacing: Dec. 10-17 Winter Break Dec. 20-31 Extend Review Assess Reteach Jan. 3	Intervals of Time (6 lessons) Geometry and Measurement The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. (s) MATH.3.7C Determine the solutions to problems involving addition and subtraction of time intervals in minutes, using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes.



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2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 3	<b>30 Days</b> Nov. 15, 2021 Jan. 14, 2022	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: Fractions Students will apply mathematical process standards to represent and explain fractional units and solve problems involving partitioning objects or sets of objects among two or more recipients.	12 90-minute lessons Suggested Pacing: <u>Part 1</u> Jan. 4-14	<ul> <li>Part 1: Area, Set and Linear Models (9 lessons)</li> <li>Number and Operations The student applies mathematical process standards to represent and explain fractional units. </li> <li>MATH.3.3A Represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines. MATH.3.3B Determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line. MATH.3.3C Explain that the unit fraction 1/b represents the quantity formed by one part of a whole that has been partitioned into b equal parts where b is a non-zero whole number. MATH.3.3D Compose and decompose a fraction a/b with a numerator greater than zero and less than or equal to b as a sum of parts 1/b. MATH.3.3E Solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8.</li></ul>



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 4	27 Days	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.
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.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener MOY Jan. 14 – Feb. 11	<ul> <li>Mathematical Process Standards The student uses mathematical processes to acquire and demonstrate mathematical understanding. Image: Imag</li></ul>
Unit 9: Fractions Students will apply mathematical process standards to represent and explain fractional units and solve problems involving partitioning objects or sets of objects among two or more recipients.	12 90-minute lessons <i>MLK Jr. Day</i> <i>Jan. 17</i> <i>Teacher Prep</i> <i>Day</i> ( <i>no students</i> ) <i>Jan. 18</i> <b>Suggested</b> <b>Pacing:</b> <u>Part 2</u> Jan. 19-21 Extend Review Assess Reteach Jan. 24-26	Part 2: Distance Models (3 lessons) Geometry and Measurement The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. (*) MATH.3.7A Represent fractions of halves, fourths, and eighths as distances from zero on a number line.



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 4	27 Days	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.
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Unit 10: Equivalence and Comparison of Fractions Students will apply math process standards to represent and explain equivalent fractions and will compare two fractions having the same numerator or denominator.	9 90-minute lessons Suggested Pacing: Jan. 27 – Feb. 8 Extend Review Assess Reteach Feb. 9-10	<ul> <li>Equivalence and Comparison of Fractions (9 lessons)</li> <li>Number and Operations The student applies mathematical process standards to represent and explain fractional units. </li> <li>MATH.3.3F Represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines. MATH.3.3G Explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model. MATH.3.3H Compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusions using symbols, words, objects, and pictorial models.</li></ul>
Unit 11: Area and Perimeter Students will select appropriate units, strategies, and tools to solve problems involving perimeter. Students will determine area of rectangles, including area of composite figures.	7 90-minute lessons Suggested Pacing: Feb. 14-23 Teacher Service Day (no students) Feb. 21 Extend Review Assess Reteach Feb. 24-25	<ul> <li>Area and Perimeter (7 lessons)</li> <li>Geometry and Measurement         The student applies mathematical process standards to analyze attributes of         two- dimensional geometric figures to develop generalizations about their         properties.         @ MATH.3.6C Determine the area of rectangles with whole number side         lengths in problems using multiplication related to the number of rows times the         number of unit squares in each row.         @ MATH.3.6D Decompose composite figures formed by rectangles into non-         overlapping rectangles to determine the area of the original figure using the         additive property of area.     </li> <li>Geometry and Measurement         The student applies mathematical process standards to select         appropriate units, strategies, and tools to solve problems involving         customary and metric measurement.         @ MATH.3.7B Determine the perimeter of a polygon or a missing length when         given perimeter and remaining side lengths in problems.     </li> </ul>



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 5	33 Days	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.
Cycle C	Feb. 28 - Apr. 22	, 2022 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.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency.	<ul> <li>Mathematical Process Standards The student uses mathematical processes to acquire and demonstrate mathematical understanding. Image: MATH.3.1A Apply mathematics to problems arising in everyday life, society, and the workplace. Image: MATH.3.1B 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. Image: MATH.3.1C 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. Image: MATH.3.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate. Image: MATH.3.1F Analyze mathematical relationships to connect and communicate mathematical ideas. Image: MATH.3.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</li></ul>
Unit 12: Two- and Three- Dimensional Figures Students will classify and sort two- and three- dimensional figures, use attributes to recognize types of quadrilaterals, and will decompose two-dimensional figures into parts with equal areas.	7 90-minute lessons Learning Recovery Day Feb. 28 <u>Snapshot 2</u> Suggested Window: Feb. 28 – Mar. 4 <u>See Outline for</u> <u>TEKS Details</u> Suggested Pacing: Mar. 1-9	<ul> <li><u>Two- and Three-Dimensional Figures</u> (7 lessons)</li> <li><u>Geometry and Measurement</u>         The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties.         <b>@ MATH.3.6A</b> Classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language.         <b>@ MATH.3.6B</b> Use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories.         <b>@ MATH.3.6E</b> Decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape.     </li> </ul>



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### **HISD** Elementary Curriculum and Development INSPIRING TEACHING, IGNITING LITERACY & LEARNING.

2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 5	<b>33 Days</b> Feb. 28 - Apr. 22	<ul> <li>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.</li> <li>2022 Complete instructional planning information and support are in the HISD Curriculum documents.</li> </ul>
Unit	Number of Lessons	Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:
Cycle 5 Unit Unit 13: One- and Two-Step Word Problems Involving Multiple Operations Students will apply mathematical process standards to develop and use strategies for solving and representing one- and two-step multiplication and/or division problems.	33 Days Feb. 28 - Apr. 22 Number of Lessons 11 90-minute lessons Suggested Pacing: Mar. 10 – Apr. 1 Spring Break Mar. 14-18 Chávez-Huerta Day Mar. 28	<ul> <li>The recommended number of lessons is less than the number of lays in the grading cycle to commodate differentiated intraction, extended learning time, and assessment days.</li> <li>2022 Complete instructional planning information and support are in the HISD Curriculum documents.</li> <li>Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs) The student will:</li> <li>One- and Two-Step Word Problems Involving Multiple Operations (11 lessons)</li> <li>Number and Operations</li> <li>The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy.</li> <li>MATH.3.4G Use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.</li> <li>MATH.3.4K Solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts.</li> <li>Algebraic Reasoning</li> <li>The student applies mathematical process standards to analyze and create patterns and relationships.</li> <li>MATH.3.5B Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations.</li> <li>MATH.3.5D Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.</li> <li>MATH.3.5E Represent real-world relationships using number pairs in a table and verbal descriptions.</li> </ul>



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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 5	33 Days	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.
	Feb. 28 - Apr. 22 Number of	, 2022 Complete instructional planning information and support are in the HISD Curriculum documents. <b>Texas Essential Knowledge and Skills/Student Expectations (TEKS/SEs)</b>
Unit	Lessons	The student will:
Unit 14: Money and Financial Literacy Students will apply mathematical process standards to determine the value of a collection of coins and bills and will learn how to manage financial resources effectively.	6 90-minute lessons Suggested Pacing: Apr. 4-11	<ul> <li>Money and Financial Literacy (6 lessons)</li> <li>Number and Operations         The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy.         <b>MATH.3.4C</b> Determine the value of a collection of coins and bills.     </li> </ul>
	STAAR- Released Assessment Suggested Window: Apr. 4-22 2021 Released	<ul> <li>Personal Financial Literacy The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. </li> <li>MATH.3.9A Explain the connection between human capital/labor and income.</li> <li>MATH.3.9B Describe the relationship between the availability or scarcity of resources and how that impacts cost</li></ul>
	Assessment Extend Review Assess Reteach Apr. 12-14 Spring Holiday Apr. 15	<ul> <li>MATH.3.9C Identify the costs and benefits of planned and unplanned spending decisions.</li> <li>MATH.3.9D Explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest.</li> <li>MATH.3.9E List reasons to save and explain the benefit of a savings plan, including for college.</li> <li>MATH.3.9F Identify decisions involving income, spending, saving, credit, and charitable giving.</li> </ul>
Unit 15: Liquid Volume and Weight Students will determine liquid volume or weight using appropriate units and tools.	4 90-minute lessons Suggested Pacing: Apr. 18-21 Extend Review Assess Reteach Apr. 22	<ul> <li>Liquid Volume and Weight (4 lessons)</li> <li>Geometry and Measurement The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving customary and metric measurement. (© MATH.3.7D Determine when it is appropriate to use measurements of liquid volume (capacity) or weight. (© MATH.3.7E Determine liquid volume (capacity) or weight using appropriate units and tools.</li></ul>



🕑 - State Process Standard

R - State Readiness Standard

(S) - State Supporting Standard

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#### 2021-2022 Scope and Sequence

Mathematics – Grade 3

Cycle 6	<b>31 Days</b>	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.
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.	Embedding process standards throughout all units of study supports students' development of mathematical proficiency. Renaissance 360 Screener EOY Apr. 28 – June 1	<ul> <li>Mathematical Process Standards The student uses mathematical processes to acquire and demonstrate mathematical understanding. </li> <li>MATH.3.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</li> <li>MATH.3.1B 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.3.1C 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.3.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations to organize, record, and communicate mathematical ideas. MATH.3.1F Analyze mathematical relationships to connect and communicate mathematical ideas. MATH.3.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</li></ul>
Unit 16: Cumulative Review Students will receive differentiated instruction based on areas of need according to assessment data.	10 90-minute lessons Suggested Pacing: Apr. 25 – May 6 Extend Review Assess Reteach May 9-13 <u>STAAR</u> Math May 10	Cumulative Review (10 lessons) MATH.3.1A–MATH.3.9F 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.



• State Process Standard

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2021-2022 Scope and Sequence

Mathematics – Grade 3

	31 Days	The recommended number of lessons is less than the number of days in the grading cycle to
Cycle 0	Apr. 25 - June 7,	2022 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: Problem-Solving Experiences During this unit, students will engage in real- world problem- solving activities that involve applying grade- level concepts to authentic and complex questions or challenges.	14 90-minute lessons Suggested Pacing: May 16 – June 3 <i>Memorial Day May 30</i> Extend Review Assess Reteach June 6-7 <i>Teacher Prep Day</i> (no students) June 8	Problem-Solving Experiences (14 lessons) MATH.3.1A–MATH.3.9F During this unit, students will engage in real-world problem-solving activities that involve applying grade-level concepts to authentic and complex questions or challenges.



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