

Rockwall ISD

3rd Grade Math Parent Guide

	1 st Grading Period	2 nd Grading Period	3 rd Grading Period	4 th Grading Period
Process TEKS <i>(How we <u>do</u> the math)</i>	<p>A Apply mathematics to problems arising in everyday life, society, & the workplace</p> <p>B Use a problem solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, & evaluating the problem-solving process & the reasonableness of the solution</p> <p>C Select tools, including real objects, manipulatives, paper & pencil, & technology as appropriate, & techniques, including mental math, estimation, & number sense as appropriate, to solve problems</p> <p>D Communicate mathematical ideas, reasoning, & their implications using multiple representations, including symbols, diagrams, graphs, & language as appropriate</p> <p>E Create & use representations to organize, record, & communicate mathematical ideas</p> <p>F Analyze mathematical relationships to connect & communicate mathematical ideas</p> <p>G Display, explain, & justify mathematical ideas & arguments using precise mathematical language in written or oral communication</p>			
Units	<p><u>Unit 1:</u> <i>Place Value Relationships to 100,000 & Addition & Subtraction within 1,000</i> 3.2ABD, 3.4A, 3.5A, 3.9ABCDE</p> <p><u>Unit 2:</u> <i>Data Analysis</i> 3.8AB</p> <p><u>Unit 3:</u> <i>Fluency with Multi-Digit Addition & Subtraction within 1,000</i> 3.2AC, 3.4AC, 3.5AE, 3.7C, 3.9AB</p>	<p><u>Unit 3:</u> <i>Fluency with Multi-Digit Addition & Subtraction within 1,000 (continued)</i> 3.2AC, 3.4AC, 3.5AE, 3.7C, 3.9AB</p> <p><u>Unit 4:</u> <i>Foundations for Multiplication & Division</i> 3.2A, 3.4DEHJK, 3.5BCDE</p> <p><u>Unit 5:</u> <i>Fraction Foundations</i> 3.3ABCDE, 3.7A</p>	<p><u>Unit 6:</u> <i>Linear Measurement, Area & Two Dimensional Geometry Connections</i> 3.6BCDE, 3.7B</p> <p><u>Unit 7:</u> <i>Deepening Multiplication/Division Operations & Algebraic Relationships</i> 3.4EFGJK, 3.5BDE, 3.6C, 3.9E</p> <p><u>Unit 8:</u> <i>Fraction Equivalency & Comparisons</i> 3.3EFGH, 3.7A</p>	<p><u>Unit 8:</u> <i>Fraction Equivalency & Comparisons (continued)</i> 3.3EFGH, 3.7A</p> <p><u>Unit 9:</u> <i>Classifying Shapes & Solids, Measuring Liquid Volume & Weight</i> 3.6AB, 3.7DE</p> <p><u>Unit 10:</u> <i>Deepening & Spiraling Readiness Standards</i> 3.2AD, 3.3FH, 3.4AK, 3.5ABE, 3.6AC, 3.7B, 3.8AB, 3.9ABDE</p> <p><u>Unit 11:</u> <i>Applications of Mathematical Concepts</i> Apply all 3rd grade standards to ensure mastery of grade level content</p>
Topic Focus	<p><u>Unit 1:</u> Students will compose, decompose, represent, compare & order whole numbers to 100,000. Students will represent one & two step word problems involving addition & subtraction to 1000 using pictorial models, number lines, & equations.</p> <p><u>Unit 2:</u> Students will summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals. Students will solve one & two step problems using categorical data represented with frequency table, dot plot, pictograph or bar graph.</p> <p><u>Unit 3:</u> Students will represent a</p>	<p><u>Unit 3:</u> (continued)</p> <p><u>Unit 4:</u> Students will develop strategies (repeated addition, equal groups, area models, arrays, number lines, skip counting) in order to solve one step word problems involving multiplication within 100. Students will represent multiplication facts using a variety of approaches to determine the unknown whole number in a multiplication or division equation using 3 whole numbers. Students will determine a quotient using the relationship between multiplication & division. Students will represent real world relationships using number pairs in a table & verbal relationships. Students will explain how credit is used & must</p>	<p><u>Unit 6:</u> Students will use attributes to recognize & draw examples of quadrilaterals. Students will determine the area of rectangles using multiplication & decomposing composite figures. Students will determine the perimeter of a polygon or a missing length when given the perimeter in a problem.</p> <p><u>Unit 7:</u> Students will recall facts to multiply up to 10 by 10 & determine a quotient using the relationship between multiplication & division. Students will determine if a number is even or odd & use strategies & algorithms to multiply a two digit number by a 1 digit number. Students will list reasons to save & explain benefits of a savings plan.</p>	<p><u>Unit 8:</u> (continued)</p> <p><u>Unit 9:</u> Students will classify & sort 2D & 3D figures based on attributes using formal geometric language. Students will determine when it is appropriate to use measurements of liquid volume (capacity) or weight. Students will determine liquid volume & weight using appropriate units & tools.</p> <p><u>Unit 10:</u> Students will review & deepen their understanding of all 3rd grade standards in preparation for the STAAR test.</p>

	<p>number on a number line (between 10, 100, 1000, or 10,000) in order to round. Students will solve, with fluency, one & two step problems involving addition & subtraction within 1000. Students will determine the value of collection of coins & bills & solve problems involving addition & subtraction of time intervals in minutes. Students will explain the connection between labor & income, describe the relationship between availability & scarcity & how it impacts cost.</p>	<p>be paid back with interest.</p> <p>Unit 5: Students will represent a fraction greater than 0 & less than or equal to 1 using models, strip diagrams, & number lines. Students will determine a fraction with a denominator of 2,3,4,6,8 given a point on a number line & explain that 1/b represents one part of a whole. Students will compose and decompose fractions as a sum of its parts & solve problems with partitioning a whole or set.</p>	<p>Unit 8: Students will represent equivalent fractions with denominators of 2, 3, 4, 6, 8 using objects, pictorial models & number lines. Students will explain how fractions are equivalent using number lines & area models. Students will compare two fractions having the same numerator or denominator using symbols, words, objects & pictorial models (<i>not</i> limited to denominators of 2, 3, 4, 5, 6, 8).</p>	<p>Unit 11: Students will apply all 3rd grade standards to ensure mastery of grade level content.</p>						
<p>Suggestions for Parental Involvement / Support</p>	<p>Decomposing & Composing Numbers - Practice building numbers in different ways with different groups of 10s, 100s, 1000s, & 100,000s, (ex. $8,969 = 8,000 + 900 + 60 + 9$)</p> <p>Addition/Subtraction - Have students create a number line or strip diagram to represent an addition or subtraction situation involving a story. (ex. <i>We had 24 cans of soda. This week Jan drank 12 and Sarah drank 6. How many sodas do we have left in the fridge?</i>)</p> <table border="1" data-bbox="352 852 508 906"> <tr> <td></td> <td>24</td> <td></td> </tr> <tr> <td>12</td> <td>6</td> <td>?</td> </tr> </table> <p>Number Fluency - Make up games using dice & playing cards. Try rolling dice & adding the numbers that come up. Add up the totals until you reach a target number, like 100. Play the game backwards to practice subtraction.</p>		24		12	6	?	<p>Word Problems - Have students represent addition or subtraction scenarios using different tools such as a number line, pictures, strip diagram or manipulatives. (ex. <i>Parker has 764 baseball cards. He gave 179 to his brother, Preston. How many cards does Parker have now?</i>)</p> <p>Money - Give students a set budget they can “spend” (i.e. \$100) and let them decide on items they would purchase that fits their budget. Discuss making a savings plan.</p> <p>Multiplication/Division - Let your child make different groups and add those groups together to find a total. (ex. <i>3 groups of 4 eggs will equal 12 eggs total</i>). Let your child write equations to represent the scenario. (ex. <i>Fred had 45 toy cars to place on 5 shelves. How many cars will be on each shelf?</i>)</p> <p>Generate lists of paired numbers based on real life situations such as the number of wheels on two bikes number of juice boxes in 5 packages, etc.</p>	<p>Even/Odd - Give your child a number & have them tell you whether it is even or odd. Make it look like a game.</p> <p>Multiplication/Division - Let your child make different groups and add those groups together to find a total. (ex. <i>3 groups of 4 eggs will equal 12 eggs total</i>) Let your child take a total and divide it into groups. (ex. <i>Separate 12 eggs into 4 groups of 3</i>) Let your child write equations to represent the scenario</p> <p>Multiplication- review and master multiplication facts through 12 by 12.</p> <p>Fractions - practice counting fractional parts of groups or divide whole objects into equal parts.</p>	<p>2D/3D Shapes - Have students identify different shapes within the house or when driving around town. Have them describe similarities and differences. Include different types of quadrilaterals- Types of Quadrilaterals Recognizing 3D shapes</p> <p>Liquid Volume & Weight- Have your child identify the unit of measurement for liquid items used in the home. Allow your child to measure the weight of other household items.</p> <p>Continue to review tasks from the 1st, 2nd, and 3rd grading periods.</p>
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<p>General Resources</p>	<p>Khan Academy: https://www.khanacademy.org/math</p> <p>Math 4 Texas: https://www.math4texas.org/</p> <p>Imagine Math & Imagine Math Facts: Login through Google Dashboard</p>									

Graham Fletcher Progression Videos: <https://gfletchy.com/progression-videos/>

Bedtime Math : <http://bedtimemath.org/>

Interactive Math Glossary: <https://www.texasgateway.org/resource/interactive-math-glossary>

Virtual Manipulatives & Strategy Charts: [3 Math Manipulatives Page](#)