

# Rockwall ISD

## 1st Grade Math Parent Guide

	1 <sup>st</sup> Grading Period	2 <sup>nd</sup> Grading Period	3 <sup>rd</sup> Grading Period	4 <sup>th</sup> Grading Period
<b>Process TEKS</b> <i>(How we <u>do</u> the math)</i>	<p><b>A</b> Apply mathematics to problems arising in everyday life, society, &amp; the workplace</p> <p><b>B</b> Use a problem solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, &amp; evaluating the problem-solving process &amp; the reasonableness of the solution</p> <p><b>C</b> Select tools, including real objects, manipulatives, paper &amp; pencil, &amp; technology as appropriate, &amp; techniques, including mental math, estimation, &amp; number sense as appropriate, to solve problems</p> <p><b>D</b> Communicate mathematical ideas, reasoning, &amp; their implications using multiple representations, including symbols, diagrams, graphs, &amp; language as appropriate</p> <p><b>E</b> Create &amp; use representations to organize, record, &amp; communicate mathematical ideas</p> <p><b>F</b> Analyze mathematical relationships to connect &amp; communicate mathematical ideas</p> <p><b>G</b> Display, explain, &amp; justify mathematical ideas &amp; arguments using precise mathematical language in written or oral communication</p>			
<b>Units</b>	<p><i>Routine (Embedded Throughout)</i> 1.2ACFG, 1.3CDE, 1.5DG</p> <p><b>Unit 1: Number Relationships</b> 1.2BCDEFG, 1.3A, 1.4ABC, 1.5ABC, 1.7E</p> <p><b>Unit 2: Geometry: Two-Dimensional Shapes</b> 1.6ABCDF</p>	<p><b>Unit 3: Addition &amp; Subtraction within 20</b> 1.2F, 1.3BF, 1.5DEF</p> <p><b>Unit 4: Data &amp; Financial Literacy</b> 1.8ABC, 1.9ABCD</p>	<p><b>Unit 5: Geometry &amp; Measurement-Time, Length, &amp; Fractions</b> 1.6CGH, 1.7ABCDE</p> <p><b>Unit 6: Deepening Addition, Subtraction, &amp; Place Value Understandings</b> 1.3AB, 1.4C, 1.5BCDE</p>	<p><b>Unit 6: Deepening Addition, Subtraction, &amp; Place Value Understandings (continued)</b> 1.3AB, 1.4C, 1.5BCDE</p> <p><b>Unit 7: Number Applications</b> 1.3ABF, 1.5BCDEF</p> <p><b>Unit 8: Geometry-Solids</b> 1.6BE</p>
<b>Topic Focus</b>	<p><b>Unit 1:</b> In Unit 1, students will move beyond the counting principles &amp; be introduced to our base ten system. They will compose, decompose, &amp; represent numbers up to 120 as they explore place value relationships &amp; comparisons. Students will use skip counting to determine the value of a group of coins, &amp; represent &amp; explain their strategies to add &amp; subtract within 20 using objects, pictorial models, &amp; number sentences. This unit introduces the processes, structures, &amp; materials that will be used throughout the year during Math Workshop, &amp; will establish a mathematical community.</p> <p><b>Unit 2:</b> In Unit 2, students will explore 2D shapes by classifying regular &amp; irregular shapes &amp; describing their attributes using formal geometric language. They will compose new 2D shapes by joining two or more figures together</p>	<p><b>Unit 3:</b> In Unit 3, students will build on their number sense to develop addition &amp; subtraction strategies involving joining, separating &amp; comparing sets to 20 using concrete models, pictorial models, &amp; number sentences. Students will generate, represent, &amp; solve word problems, and solve problems where the unknown may be any one of the 3 or 4 terms in the equation. They will make meaning of the equal sign representing a relationship between each side of the equation.</p> <p><b>Unit 4:</b> In Unit 4, students will collect, sort, &amp; organize data using models &amp; representations, including picture &amp; bar-type graphs. They will draw conclusions &amp; answer questions based on the data collected. Students will define money earned as income, and identify this as a means of obtaining goods &amp; services. They will discuss spending, saving, &amp; charitable giving.</p>	<p><b>Unit 5:</b> In Unit 5, students will explore attributes of 2D shapes, linear measurement, fractions including halves &amp; fourths, &amp; time using analog &amp; digital clocks. They will decompose &amp; compose 2D shapes, and build connections between whole numbers &amp; fractional parts. Linear measurement will be used to find &amp; compare lengths of objects. Students will build a connection to the analog clock as a circular number line, tell time to the hour &amp; half hour, &amp; connect analog time to the numbers on a digital clock.</p> <p><b>Unit 6:</b> In Unit 6, students will apply place value strategies to solve addition &amp; subtraction problems within contextual situations. They will use models &amp; number sentences to solve word problems involving joining, separating, &amp; comparing.</p>	<p><b>Unit 6: (continued)</b></p> <p><b>Unit 7:</b> In Unit 7, students will continue to deepen their conceptual knowledge of place value, numbers, &amp; operations. Students will build number concepts up to 120 &amp; represent, generate, &amp; solve word problems involving addition &amp; subtraction up to 20.</p> <p><b>Unit 8:</b> In Unit 8, students will identify, define, classify, &amp; sort 3D shapes based on their attributes. They will describe their attributes using formal &amp; informal language.</p>

	<p>in more than 1 way, &amp; distinguish between 2D &amp; 3D figures based on their attributes.</p>			
<p><b>Suggestions for Parental Involvement / Support</b></p>	<p><b>Counting</b> - Roll a die or flip over a playing card to have a 1 digit number. Count out that number of objects (beans, puff balls, skittles, etc.) Continue this process and add on to your previous number until you get to 20.</p> <p><b>Place Value</b> - Practice writing numbers in standard form (28), expanded form (20 + 8) and picture form using base ten blocks (  ) with numbers to 30. Click here for <a href="#">Virtual Manipulatives</a>.</p> <p><b>l</b> = 10 <b>■</b> = 1</p> <p><b>Decomposing &amp; Composing Numbers</b> - Practice building numbers in different ways with different groups of 10s &amp; 1s.</p> <p><i>Ex. 19 = 10 + 9 or 24 = 20 + 4</i></p> <p><b>2D Shapes</b> - Have students identify different shapes within the house or when driving around town. Ask your child what two or more shapes can be put together to create the shape they see.</p> <p><i>Ex. Your student sees a rhombus. Ask them what shapes can make a rhombus?-two triangles</i></p>	<p><b>Number Fluency</b> - Make up games using dice &amp; playing cards. Try rolling dice &amp; 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> <p><b>Word Problems</b> - Have students represent addition or subtraction scenarios using different tools such as pictures or manipulatives.</p> <p><i>Ex. Mary had 4 dolls in her toy box. She got 4 more. How many dolls does she have now?</i></p> <p style="text-align: center;"><math>4 + 4 = 8</math></p> <p style="text-align: center;"></p> <p><b>Graphing</b> - Using a collection of items, sort and tally totals for each group of items. Then make a bar type or picture graph.</p> <p><i>Ex: change jar, package of skittles or m&amp;ms, rolling a die</i></p>	<p><b>Measurement</b> - Find items around the house that can be measured using the same non-standard unit, such as paper clips, straws, popsicle sticks, etc.</p> <p><b>Fractions</b> - Practice decomposing (breaking apart) circles, rectangles &amp; squares into 2 or 4 equal parts. In first grade, we do not use the fraction bar.</p> <p><i>Ex. 1 out of 4, 1 out of 2</i></p> <p><b>Time</b> - On the hour and half hour, do a time check with your child using both digital and analog clocks.</p> <p><b>Word Problems</b> - Have students represent addition or subtraction word problems using models and number sentences where there are missing parts within the problem.</p> <p><i>Ex. (Start unknown)</i> <i>Bob had some cars. His friend gave him 6 more cars. Now Bob has 13 cars. How many cars did Bob start with?</i></p> <p><i>Ex. (Change unknown)</i> <i>Jill baked 18 cookies. Her brother ate some. There are 9 cookies left. How many cookies did her brother eat?</i></p> <p><i>Ex. (Result unknown)</i> <i>Kevin has 13 baseball cards. His friend gave him 6 more. How many baseball cards does Kevin have now?</i></p>	<p><b>Place Value</b> - Practice writing numbers in standard form (115), expanded form (100+ 10 + 5) and picture form using base ten blocks (  ) with numbers to 120. Click here for <a href="#">Virtual Manipulatives</a>.</p> <p> = 100  = 10  = 1</p> <p><b>Addition/Subtraction</b> - Roll dice or flip playing cards to create 2 3-digit numbers. Practice adding or subtracting these numbers using the traditional algorithm. Create stories with your child that could model the problems.</p> <p><b>3D Shapes</b> - Have students identify different three-dimensional shapes within the house or when driving around town. Then ask if they can identify attributes such as how many faces, edges and vertices they have.</p>
<p><b>General Resources</b></p>	<p><b>Khan Academy:</b> <a href="https://www.khanacademy.org/math">https://www.khanacademy.org/math</a></p> <p><b>Math 4 Texas:</b> <a href="https://www.math4texas.org/">https://www.math4texas.org/</a></p> <p><b>Imagine Math &amp; Imagine Math Facts:</b> Login through Google Dashboard</p> <p><b>Graham Fletcher Progression Videos:</b> <a href="https://gfletchy.com/progression-videos/">https://gfletchy.com/progression-videos/</a></p> <p><b>Bedtime Math :</b> <a href="http://bedtimemath.org/">http://bedtimemath.org/</a></p> <p><b>Interactive Math Glossary:</b> <a href="https://www.texasgateway.org/resource/interactive-math-glossary">https://www.texasgateway.org/resource/interactive-math-glossary</a></p> <p><b>Virtual Manipulatives &amp; Strategy Charts:</b> <a href="#">1 Math Manipulatives Page</a></p>			