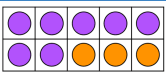


# Rockwall ISD

## Kindergarten 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 do 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> K.2DF, K.5</p> <p><b>Unit 1: Counting Principles</b> K.2ABCEGI</p> <p><b>Unit 2: Numerical Representations &amp; Relationships</b> K.2ABCEGHI, K.4</p>	<p><b>Unit 2: Numerical Representations &amp; Relationships (continued)</b> K.2ABCEGHI, K.4</p> <p><b>Unit 3: Measurement &amp; Contextual Operations within 10</b> K.2ABCEGHI, K.3ABC, K.7AB, K.9ABCD</p>	<p><b>Unit 3: Measurement &amp; Contextual Operations within 10 (continued)</b> K.2ABCEGHI, K.3ABC, K.7AB, K.9ABCD</p> <p><b>Unit 4: Geometry: Two- &amp; Three-Dimensional Figures</b> K.2ABCGI, K.3C, K.6ABCDEF</p> <p><b>Unit 5: Number &amp; Operations</b> K.2ABCEGHI, K.3ABC, K.4</p>	<p><b>Unit 5: Number &amp; Operations (continued)</b> K.2ABCEGHI, K.3ABC, K.4</p> <p><b>Unit 6: Constructing Graphs &amp; Analyzing Data</b> K.2ABCEHI, K.8ABC</p> <p><b>Unit 7: Deepening Number Relationships</b> K.2BCFHI, K.3ABC</p>
<b>Topic Focus</b>	<p><b>Unit 1:</b> In Unit 1, students will focus on counting principles (one-to-one, stable order, cardinality, abstraction, order irrelevance, &amp; subitizing). Students will have many opportunities to count &amp; to see &amp; hear others count &amp; to make connections between number names, numerals, &amp; quantities. Students will establish one-to-one correspondence between equal groups, develop strategies for accurately counting &amp; keeping track of quantities, create equivalent sets, compare quantities, &amp; count, create, &amp; represent quantities. The students will begin to explore part-part-whole relationships. 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 build on counting principles (one-to-one, stable order, cardinality, abstraction,</p>	<p><b>Unit 2: (continued)</b></p> <p><b>Unit 3:</b> In Unit 3, students will use multiple nonstandard units to measure length, count sets of objects, find the total after a small amount is added to (or taken away from) a set of objects, &amp; figure out what needs to be added to (or taken away from) a set in order to make a set of a given amount. Students begin making sense of the operations of addition &amp; subtraction as they act out stories &amp; play games that involve combining or separating small amounts. Students will also explore financial literacy concepts, such as needs &amp; wants, jobs, &amp; income &amp; gifts.</p>	<p><b>Unit 3: (continued)</b></p> <p><b>Unit 4:</b> In Unit 4, students will identify, describe, &amp; classify &amp; sort 2-dimensional &amp; 3-dimensional shapes. They will create 2-dimensional shapes using a variety of materials &amp; drawings. Students will continue to build on counting principles &amp; number sense, compose &amp; decompose numbers to 10, &amp; explain the strategies used when solving addition &amp; subtraction problems within 10.</p> <p><b>Unit 5:</b> In Unit 5, students will strengthen their number sense as they continue to develop the counting principles. This unit will focus on deepening students' understanding of addition &amp; subtraction as they act out, model, &amp; solve contextual problems &amp; play games that involve combining or separating within 10.</p>	<p><b>Unit 5: (continued)</b></p> <p><b>Unit 6:</b> In Unit 6, students will collect, sort, &amp; organize data into categories. They will use data to create real-object &amp; picture graphs &amp; draw conclusions from the graphs. Students will continue to develop strategies for accurately counting &amp; keeping track of quantities, &amp; explain the strategies used in contextual addition &amp; subtraction problems within 10.</p> <p><b>Unit 7:</b> In unit 7, students will build mastery of the essential standards for kindergarten. This unit focuses on counting, comparison, &amp; addition &amp; subtraction within ten. Students will deepen number sense as they discover relationships between numbers &amp; how to use those relationships to solve problems in math.</p>

	<p>order irrelevance, &amp; subitizing) to develop their sense of numbers &amp; quantities &amp; to count &amp; compare amounts. Students will develop strategies for accurately counting &amp; keeping track of quantities, connect number words, numerals, &amp; quantities, develop visual images for quantities, &amp; count backwards. They will also identify coins by name.</p>			
<p><b>Suggestions for Parental Involvement / Support</b></p>	<p><b>Counting Objects</b> - Sing counting songs, read number books, and work on number puzzles together. See how high your child can count, practice going beyond that. Our goal is to count to 100 by the end of the year. Play board games such as Candy Land, Hi Ho Cherry O, Chutes and Ladders to increase fine motor skills and practice one to one correspondence. Use dice or playing cards to practice counting, creating sets with small toys, candy, or snacks.</p> <p><b>Comparing</b> - Gather groups of real objects to compare, such as pennies or buttons. Line up the objects to see which group has more. Practice comparing teen numbers or even numbers to 100. Ask your child questions like, "Which number is bigger, 50 or 75?" "Would you rather eat 14 green beans or 8?"</p> <p><b>Writing Numbers</b> - Stay focused on numbers 0-5. Practice counting small groups of objects and writing the number. Make sure to count each object when counting (one to one correspondence). By the end of the year, students will read (numeral only), write, and represent numbers from 0 to at least 20.</p>	<p><b>Counting Objects</b> - Use individual snack bags to count how many snacks are in the bag (Goldfish, Fruit Snacks, Pretzels).</p> <p><b>Comparing</b> - Use a deck of cards to play <i>War</i>, removing face cards. Pull a card. The person with the greatest number keeps both cards. Use words like <i>more, greater, fewer, less, and same</i>. The person with the most cards wins the game.</p> <p><b>Measurement</b> - Use nonstandard units (popsicle sticks, markers, crayons, pennies) to measure the length of objects, placing objects end to end. Compare the length of common household objects. Make 2 towers with blocks (or legos). Count the number of blocks used in each. Which tower is taller? Which used more blocks? Which used less blocks?</p> <p><b>Writing Numbers</b>- Count a set of objects (pennies, snacks, crayons). Write down how many objects are in the set. (numbers 0-10)</p> <p><b>Adding</b>: Count a small set of objects, less than ten. (pennies, snacks, crayons). Ask how many more they need to add to make 10.</p>	<p><b>Shapes</b> - Point out shapes in everyday life. For example, show your child that your dinner plates are all circles and your table is a rectangle. Challenge your child to determine how many sides, corners, or faces a shape has.</p> <p><b>Solid Figures</b> - Focus on what the shapes look like in real life. Point out shapes throughout the day. Your cup is a cylinder, ice is a cube. Make it fun and playful.</p> <p><b>Adding</b> - Practice addition problems with toys. Learning to add with real objects first will help your child add on paper later. Tell your child a story problem and have them write the number sentence and solve it. For example, "I had 2 cookies and 4 cupcakes. How many treats did I have in all?"</p> <p><b>Decomposing Numbers</b> - Draw a large ten frame on paper. Use real objects like pennies or small legos to model these problems. Ask your child to solve the problems mentally. For example, show him or her a 10 frame with 3 objects and ask, how many more do I need to get to 10?</p> 	<p><b>Addition/Subtraction</b> - Roll dice or flip playing cards. Practice adding or subtracting these numbers using small items such as pennies for counters. Create stories with your child that could model the problems.</p> <p><b>Problem Solving</b> - Focus on simpler skills, such as adding 2 fingers plus 2 fingers. You may also want to work more on counting objects or recognizing numerals 1 - 10. Try finding all the ways to make larger numbers such as 10.</p> <p><b>Sorting</b> - Sort a handful of candy/snacks, such as Skittles, M&amp;M's, or colored goldfish to determine which has more, fewer, and how many more. Use paper and crayons to draw a representation of the data, such as pictures and numbers.</p> <p><b>Writing Numbers</b>- Count a set of objects (pennies, snacks, crayons). Write down how many objects are in the set. (numbers 0-20)</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>			

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

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

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