

Rockwall ISD

Kindergarten Math Parent Guide

	1 st Grading Period	2 nd Grading Period	3 rd Grading Period	4 th Grading Period
Process TEKS <i>(How we do 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>Unit 1: <i>Developing a Mathematical Environment, Numbers, & Counting</i> K.2ABCEG, K.8A</p> <p>Unit 2: <i>Developing an Understanding of Whole</i> K.2ABCEGH, K.7AB, K.8A</p>	<p>Unit 3: <i>Numerical Representations & Relationships</i> K.2ABCEGH, K.8A</p> <p>Unit 4: <i>Measurement & Contextual Operations within 10</i> K.2ABCEGH, K.3ABC, K.7AB, K.8A</p>	<p>Unit 4: <i>Measurement & Contextual Operations within 10 (continued)</i> K.2ABCEGH, K.3ABC, K.7AB, K.8A</p> <p>Unit 5: <i>Geometry: Two- & Three-Dimensional Figures</i> K.2ABC, K.6ABCDEF, K.8ABC</p> <p>Unit 6: <i>Deepening Numerical Representations, Relationships, & Contextual Operations within 10</i> K.2ABCEGH, K.3ABC, K.8A</p>	<p>Unit 6: <i>Deepening Numerical Representations, Relationships, & Contextual Operations within 10 (continued)</i> K.2ABCEGH, K.3ABC, K.8ABC</p> <p>Unit 7: <i>Constructing Graphs & Analyzed Data</i> K.2ABCEGH, K.8ABC</p> <p>Unit 8: <i>Applying Numbers & Number Relationships</i> K.2BCEGH, K.3ABC, K.8C</p>
Topic Focus	<p>Unit 1: Students will count sets of objects, collect & discuss data about the class, explore materials that will be used to model mathematical situations & solve mathematical problems. The students will have the opportunity to talk about mathematical problems & share solution strategies. The students will rely on their own thinking & learn from the thinking of others. This unit provides students with many opportunities to count & to see & hear others count, to make connections between number names, numerals, & quantities. Students will establish one-to-one correspondence between equal groups, develop strategies for accurately counting & keeping track of quantities, create equivalent sets, compare quantities, & count, create, & represent quantities. The students will begin to</p>	<p>Unit 3: Students will develop their sense of numbers & quantities, to count & compare amounts. Students will develop strategies for accurately counting & keeping track of quantities up to 12, connect number words, numerals, & quantities, develop visual images for quantities up to 6 & counting backwards.</p> <p>Unit 4: Students will use multiple nonstandard units to measure length, counting sets of objects, finding the total after a small amount is added to (or taken away from) a set of objects, & figuring out what needs to be added to (or taken away from) a set in order to make a set of a given size. Students begin making sense of the operations of addition & subtraction as they act out stories & play games that involve combining or separating small amounts. Students will also create &</p>	<p>Unit 4: (continued)</p> <p>Unit 5: Students will observe, describe, compare & sort 2D and 3D shapes. Students will develop their understanding of shapes through constructing shapes themselves with a variety of materials (Geoboards, clay, pattern blocks & Geoblocks). Students will combine shapes to make other shapes, & think about ways to decompose shapes. They will organize shapes to create real-object and picture graphs and draw conclusions.</p> <p>Unit 6: Students will count sets of up to 20 objects; decompose numbers to 10 in a variety of different ways (e.g., 7 can be seen as 5 & 2 or as 3 & 2 & 2); using numbers, & notation where appropriate, to describe arrangements of tiles & other addition situations; & finding & exploring combinations of a</p>	<p>Unit 6: (continued)</p> <p>Unit 7: Students will develop ideas about counting, representing data, carrying out data investigation, sorting, classifying, & using data to solve problems. Students build models & make representations on paper. Students will begin to develop categorization skills. Students will have opportunities to make important decisions involved in data investigation.</p> <p>Unit 8: Students will review previously learned concepts that the teacher feels needs more practice. Student's will continue to work on addition, subtraction, & word problems. This would also be a good time for project based learning opportunities.</p>

	<p>explore part-part- whole relationships. This unit introduces the processes, structures, & materials that will be used throughout the year, & will establish a mathematical community.</p> <p>Unit 2: students will be given many meaningful opportunities to develop their sense of numbers & quantities, to count & compare amounts, & to measure objects by comparing them directly. Students will develop strategies for accurately counting & keeping track of quantities up to 12, connect number words, numerals, & quantities, develop visual images for quantities up to 6 & counting backwards.</p>	<p>recreate a wide range of images for the quantities up to 10 by finding many different ways to arrange a set of square tiles.</p>	<p>number. Students continue to develop an understanding of the operations of addition & subtraction as they act out, model, & solve story problems, & play games that involve combining or separating small amounts.</p>	
<p>Suggestions for Parental Involvement / Support</p>	<p>Counting Objects - 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>Comparing - 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?"</p> <p>Writing Numbers - Stay focused on numbers 0-5. Practice counting small groups of objects and writing the number. Make sure they aren't skipping the objects while counting. Go above 20 and challenge your child to write numbers to 100, with spaces in between.</p>	<p>Counting Objects - Use individual snack bags to count how many snacks are in the bag (Goldfish, Fruit Snacks, Pretzels).</p> <p>Comparing - 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</i>, <i>greater</i>, <i>fewer</i>, <i>less</i>, and the <i>same</i>. The person with the most cards wins the game.</p> <p>Measurement - Use nonstandard units (popsicle sticks, markers, crayons, pennies) to measure the length of objects. 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>Writing Numbers- Count a set of objects (pennies, snacks, crayons). Write down how many objects are in the set. (numbers 0-10)</p> <p>Adding: 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>Shapes - 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>Solid Figures - 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. If solid shapes are too easy for your child explore other shapes: octagon, pentagon, rectangular prism, etc.</p> <p>Adding - 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>Decomposing Numbers - 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>Addition/Subtraction - 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>Measurement - Have students estimate the length of objects around the house & then see how close they get using a ruler, meter stick, or measuring tape.</p> <p>Problem Solving - 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>Sorting - sort a hand full of change, candy such as Skittles, M&M's ,colored goldfish determine what has more, fewer, how many more. Use paper and crayons to draw a representation of their data such as pictures and numbers.</p> <p>Writing Numbers- Count a set of objects (pennies, snacks, crayons). Write down how many objects are in the set. (numbers 0-20)</p>

**General
Resources**

Khan Academy: <https://www.khanacademy.org/math>

Math 4 Texas: <https://www.math4texas.org/>

Imagine Math & Imagine Math Facts: Login through Google Dashboard

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: [K Math Manipulatives Page](#)