



Darien Public Schools  
Elementary Mathematics

## Curriculum at a Glance Kindergarten- Grade 5

Students learn to reason and communicate, be problem-solvers, value mathematics and feel confident in their ability to apply concepts and skills. Creating such a foundation necessitates a well-articulated and developmentally appropriate program for all students. Elementary mathematics emphasizes conceptual understandings, multiple representations, deliberate connections and problem solving. The mathematical practices listed below are developed throughout the year.

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively
- Construct viable arguments and critique the reasoning of others
- Model with mathematics
- Use appropriate tools strategically
- Attend to precision
- Look for and make use of structure
- Look for and express regularity in repeated reasoning

### Kindergarten

Unit Name	Content
Numbers to 5	<ul style="list-style-type: none"><li>● Count groups of 1, 2, 3, 4 and 5</li><li>● Write the numerals 1, 2, 3, 4 and 5</li><li>● Match and sort</li><li>● Look for sameness</li><li>● Understand <i>not the same</i> and <i>different</i></li><li>● Sort using a single attribute</li><li>● Understand and spot differences</li></ul>
Numbers to 10	<ul style="list-style-type: none"><li>● Count from 1 to 8</li><li>● Pair number names with numerals</li><li>● Introduce the concept of 0</li><li>● Use 0 to 9 to tell the number of objects</li><li>● Read and write the numerals 1 to 9</li><li>● Pair up sets of objects with other sets of the same quantity</li><li>● Introduce <i>one more</i>, <i>one less</i>, and <i>the same number</i></li><li>● Pair up sets of objects one-to-one with other sets of the same quantity</li></ul>
Order by Size, Length, or Weight	<ul style="list-style-type: none"><li>● Pair up sets of objects</li><li>● Order objects by size</li><li>● Use comparing words</li><li>● Order objects according to length and weight</li></ul>

<b>Counting and Numbers 0 to 10</b>	<ul style="list-style-type: none"> <li>● Composing and decomposing numbers through 5</li> <li>● Pair number names with numerals</li> <li>● Order numbers 0 to 10</li> <li>● Understand the concept of <i>one more</i></li> <li>● Know that fingers can represent a set of objects up to 5</li> <li>● Know that fingers and toes can represent a set of objects up to 20</li> <li>● Determine <i>one more</i></li> <li>● Understand and show the meaning of <i>same</i> and <i>more, less</i> and <i>fewer</i></li> <li>● Know <i>how many more</i></li> <li>● Use <i>more</i> and <i>less</i> to compare number values</li> </ul>
<b>Size and Position</b>	<ul style="list-style-type: none"> <li>● Understand the concept of same-sized objects</li> <li>● Explore the idea that only a few big objects fit into small spaces and many small objects fit into big spaces</li> <li>● Identify positions of objects in space</li> <li>● Use appropriate positional language to describe and compare</li> <li>● Use language such as <i>before</i> or <i>after</i> to describe relative position in a sequence of events</li> </ul>
<b>Numbers 0 to 20</b>	<ul style="list-style-type: none"> <li>● Rote count to 20</li> <li>● Count 10 to 20 objects</li> <li>● Read and write the numerals 10 to 20</li> <li>● Compare groups of up to 20 objects</li> <li>● Order groups of up to 20 objects</li> </ul>
<b>Solid and Flat Shapes</b>	<ul style="list-style-type: none"> <li>● Recognize and name basic 3-dimensional shapes</li> <li>● Understand that some shapes have flat faces, edges, and corners and some do not</li> <li>● Describe and name basic 3-dimensional and 2-dimensional shapes</li> <li>● Recognize the relationship between 3-dimensional shapes and 2-dimensional shapes</li> <li>● Draw 2-dimensional shapes</li> <li>● Revisit <i>big</i> and <i>small</i></li> <li>● Identify basic 2-dimensional shapes within a scene</li> <li>● Make a picture using basic 2-dimensional shapes</li> <li>● Identify and extend a shape pattern</li> </ul>
<b>Numbers to 100</b>	<ul style="list-style-type: none"> <li>● Recognize and use pairs for counting</li> <li>● Count by 2s</li> <li>● Use the counting by 2s sequence to count up to 20 objects</li> <li>● Count by 5s up to 20</li> <li>● Keep count of numbers using tallies</li> <li>● Count by 10s</li> <li>● Count by 1s to 49, 79, 100</li> <li>● Count from any given number to 49, 79, 100</li> <li>● Sequence numbers from 1 to 100</li> </ul>
<b>Comparing Sets</b>	<ul style="list-style-type: none"> <li>● Compare sets of up to 10 objects</li> <li>● Understand more, fewer and less</li> <li>● Compare sets of up to 20 objects</li> <li>● Understand most and fewest</li> <li>● Count the difference through comparing sets in one-to-one correspondence</li> <li>● Count on</li> </ul>

<b>Counting On and Counting Back</b>	<ul style="list-style-type: none"> <li>● Count on and back</li> <li>● Revisit <i>more</i> and <i>fewer</i></li> <li>● Count on and back to find the difference between two sets</li> </ul>
<b>Number Facts</b>	<ul style="list-style-type: none"> <li>● Compose numbers through 10</li> <li>● Decompose numbers through 10</li> <li>● Combine sets to make 5, 6, 7, 8, 9, and 10</li> <li>● Compose and decompose numbers to 20 with five-frames and ten-frames</li> <li>● Count on using a number line</li> <li>● Count on to find the difference</li> <li>● Combine two sets to find how many more for sums through 15</li> </ul>
<b>Length and Height</b>	<ul style="list-style-type: none"> <li>● Compare lengths</li> <li>● Use nonstandard units to measure and compare lengths</li> <li>● Understand that more units are needed to measure a longer object than a shorter object</li> <li>● Find differences in lengths using nonstandard units</li> <li>● Understand tallest and shortest in terms of height</li> <li>● Use nonstandard units to measure and compare heights</li> <li>● Understand that more units are needed to measure a taller object than a shorter object</li> </ul>
<b>Classifying and Sorting</b>	<ul style="list-style-type: none"> <li>● Classify objects using one attribute (color, size, shape, special features)</li> <li>● Identify objects that do not belong to a set</li> <li>● Classify objects according to two attributes and three attributes</li> <li>● Sort objects by one or two attributes (color, size, shape, and special feature)</li> </ul>
<b>Addition Stories</b>	<ul style="list-style-type: none"> <li>● Understand addition as the joining of two sets</li> <li>● Understand symbols + and = and an equation</li> <li>● Use symbols and numerals to write equations</li> <li>● Represent addition stories with addition equations</li> <li>● Fluency with addition facts to 5</li> </ul>
<b>Subtraction Stories</b>	<ul style="list-style-type: none"> <li>● Understand simple subtraction</li> <li>● Understand the minus - symbol</li> <li>● Use symbols and numerals to write equations</li> <li>● Represent subtraction stories with subtraction equations</li> <li>● Compare two sets and show the equation to answer <i>how many more</i></li> <li>● Fluency with subtraction facts to 5</li> </ul>

### First Grade

Unit Name	Content
<b>Numbers to 10</b>	<ul style="list-style-type: none"> <li>● Count and compare numbers to 10</li> <li>● Count from 0 to 10 objects</li> <li>● Read and write 0 to 10 in numbers and words</li> <li>● Compare two sets of objects by using one-to-one correspondence</li> <li>● Identify the set that has more, fewer, or the same number of objects</li> <li>● Identify the number that is greater than or less than another number</li> </ul>

	<ul style="list-style-type: none"> <li>● Make number patterns</li> </ul>
<b>Number Bonds</b>	<ul style="list-style-type: none"> <li>● Use connecting cubes or math balance to find number bonds</li> <li>● Find different number bonds for numbers to 10</li> </ul>
<b>Addition Facts to 10</b>	<ul style="list-style-type: none"> <li>● Count on to add</li> <li>● Use number bonds to add in any order (commutative property of addition)</li> <li>● Write and solve addition equations</li> <li>● Tell addition stories about pictures</li> </ul>
<b>Subtraction Facts to 10</b>	<ul style="list-style-type: none"> <li>● Subtraction strategies: take-away to subtract, count on to subtract, count back to subtract</li> <li>● Use number bonds to subtract</li> <li>● Write and solve subtraction equations</li> <li>● Tell subtraction stories about pictures</li> <li>● Recognize related addition and subtraction equations</li> <li>● Write fact families</li> <li>● Determine if equations involving addition and subtraction are true or false</li> </ul>
<b>Shapes and Patterns</b>	<ul style="list-style-type: none"> <li>● Identify, classify, and describe 2-dimensional shapes</li> <li>● Divide shapes into two and four equal parts</li> <li>● Describe the whole as the sum of its parts</li> <li>● Identify, classify, and sort 3-dimensional shapes</li> <li>● Combine and separate 2-dimensional and 3-dimensional shapes</li> </ul>
<b>Numbers to 20</b>	<ul style="list-style-type: none"> <li>● Count on from 10 to 20</li> <li>● Read and write 11 to 20 in numbers and words</li> <li>● Show objects up to 20 as tens and ones</li> <li>● Compare numbers to 20</li> <li>● Order numbers by making number patterns</li> </ul>
<b>Addition and Subtraction Facts to 20</b>	<ul style="list-style-type: none"> <li>● Use different strategies to add 1-and 2-digit numbers</li> <li>● Subtract a 1-digit number from a 2-digit number with and without grouping</li> </ul>
<b>Length</b>	<ul style="list-style-type: none"> <li>● Compare two lengths by comparing each with a third length</li> <li>● Compare more than two lengths, using the terms <i>tallest</i>, <i>longest</i>, and <i>shortest</i></li> <li>● Use a common starting point when comparing lengths</li> <li>● Measure lengths using non-standard units</li> <li>● Understand that using different non-standard units may give different measurements for the same item</li> <li>● Use the term “unit” to describe length</li> <li>● Count measurement units in groups of tens and ones</li> </ul>
<b>Picture Graphs and Bar Graphs</b>	<ul style="list-style-type: none"> <li>● Collect and organize data</li> <li>● Understand and show data as a picture graph</li> <li>● Understand and draw data shown in picture graphs using symbols</li> <li>● Make a tally chart</li> <li>● Understand and show data in a bar graph</li> </ul>
<b>Numbers to 40</b>	<ul style="list-style-type: none"> <li>● Count from 21 to 40</li> <li>● Read and write 21 to 40 in numbers and words</li> <li>● Show objects to 40 as tens and ones</li> <li>● Compare and order numbers to 40</li> </ul>

	<ul style="list-style-type: none"> <li>Find the missing numbers in a number pattern</li> </ul>
<b>Addition and Subtraction to 40</b>	<ul style="list-style-type: none"> <li>Add a 2-digit numbers to 1 and 2-digit numbers with and without regrouping</li> <li>Subtract 1 and 2-digit numbers from a 2-digit number with and without regrouping</li> <li>Add three 1-digit numbers</li> <li>Use related addition and subtraction facts to check the answers to real-world problems</li> </ul>
<b>Calendar and Time</b>	<ul style="list-style-type: none"> <li>Use the term <i>o'clock</i> to tell the time to the hour</li> <li>Read and show time to the hour on a clock (analog and digital)</li> <li>Read time to the half hour and use the term <i>half past</i></li> <li>Relate time to daily activities</li> <li>Read and show time to the half hour on a digital clock</li> </ul>
<b>Numbers to 120</b>	<ul style="list-style-type: none"> <li>Count on from 41 to 120</li> <li>Read and write 41 to 120 in numbers and words</li> <li>Show objects up to 100 as tens and ones</li> <li>Compare and order numbers to 100</li> <li>Find the missing numbers in a number pattern</li> <li>Compare numbers to 100 using the symbols <math>&gt;</math>, <math>&lt;</math>, and <math>=</math></li> </ul>
<b>Addition and Subtraction to 100</b>	<ul style="list-style-type: none"> <li>Add a 2-digit numbers to 1 and 2-digit numbers with and without regrouping</li> <li>Subtract 1 and 2-digit numbers from a 2-digit number with and without regrouping</li> </ul>
<b>Money</b>	<ul style="list-style-type: none"> <li>Recognize and name penny, nickel, dime and quarter</li> <li>Understand that ¢ stands for cents</li> <li>Skip-count to find the value of a collection of coins</li> <li>Exchange a coin of a greater value for a set of coins of equal value</li> <li>Use different combinations of coins less than 25¢ to buy things</li> <li>Exchange a quarter for a set of coins of equal value</li> <li>Count money in cents up to \$1 using the 'count on' strategy</li> <li>Choose the correct value of coins when buying items</li> <li>Use different combinations of coins to show the same value</li> <li>Add to find the cost of items</li> <li>Subtract to find the change</li> <li>Add and subtract money in cents (up to \$1)</li> </ul>

## Second Grade

Unit Name	Content
<b>Numbers to 1,000</b>	<ul style="list-style-type: none"> <li>Read and write numbers to 1,000</li> <li>Count on by 1s, 10s, 100s, from any given number to 1,000</li> <li>Read and write numbers to 1,000 in standard form, expanded form, and word form</li> <li>Compare numbers using the terms greater than and less than and the symbols <math>&gt;</math> and <math>&lt;</math></li> <li>Order three-digit numbers</li> </ul>

	<ul style="list-style-type: none"> <li>● Identify the greatest number and the least number</li> <li>● Identify number patterns</li> </ul>
<b>Addition up to 1,000</b>	<ul style="list-style-type: none"> <li>● Use mental math to add and subtract within 20</li> <li>● Know basic addition and subtraction facts to 20</li> <li>● Add up to three-digit numbers without and with regrouping</li> </ul>
<b>Subtraction up to 1,000</b>	<ul style="list-style-type: none"> <li>● Subtract from three-digit numbers without regrouping</li> <li>● Apply the inverse operations of addition and subtraction</li> <li>● Subtract from three-digit numbers with regrouping</li> <li>● Subtract across zero</li> </ul>
<b>Using Bar Models: Addition and Subtraction</b>	<ul style="list-style-type: none"> <li>● Use bar models to solve addition and subtraction problems</li> <li>● Model addition as joining sets</li> <li>● Model subtraction as taking away</li> <li>● Model addition and subtraction as comparing sets</li> <li>● Use bar models to solve two-step addition and subtraction problems</li> </ul>
<b>Multiplication</b>	<ul style="list-style-type: none"> <li>● Use equal groups and repeated addition to multiply</li> <li>● Make multiplication stories about pictures</li> <li>● Solve multiplication equations</li> </ul>
<b>Multiplication Tables of 2, 5, and 10</b>	<ul style="list-style-type: none"> <li>● Skip-count by 2s, 5s and 10s</li> <li>● Use known multiplication facts to solve new multiplication facts</li> <li>● Identify related multiplication facts</li> <li>● Make groups of 2 to understand odd and even numbers</li> <li>● Understand that an even number is the sum of two equal numbers</li> </ul>
<b>Metric Measurement of Length</b>	<ul style="list-style-type: none"> <li>● Use a meterstick to estimate and measure length</li> <li>● Use a centimeter ruler to measure and compare lengths of objects</li> <li>● Compare and find the difference in lengths of objects</li> <li>● Draw a line of given length in centimeters</li> </ul>
<b>Mental Math and Estimation</b>	<ul style="list-style-type: none"> <li>● Learn the mathematical terms: <i>sum</i> and <i>difference</i></li> <li>● Add numbers with up to 3 digits mentally with and without regrouping</li> <li>● Subtract up to 3-digit numbers mentally with and without regrouping</li> </ul>
<b>Money</b>	<ul style="list-style-type: none"> <li>● Recognize \$1, \$5, \$10, and \$20 bills</li> <li>● Show and count money using coins and bills to \$20</li> <li>● Write money amounts using \$ and ¢</li> <li>● Write dollars as cents, and cents as dollars</li> <li>● Compare amounts of money using tables</li> </ul>
<b>Fractions</b>	<ul style="list-style-type: none"> <li>● Identify whether a shape is divided into equal fractional parts</li> <li>● Read, write, and identify unit fractions for halves, thirds, and fourths</li> <li>● Show fractions and a whole using model drawings</li> </ul>
<b>Customary Measurement of Length</b>	<ul style="list-style-type: none"> <li>● Use a ruler to estimate and measure length to the nearest inch</li> <li>● Compare lengths</li> <li>● Find the difference in lengths of objects</li> <li>● Draw parts of lines of given lengths in inches</li> <li>● Use an inch ruler to measure and compare lengths</li> <li>● Find the difference in lengths of objects in inches</li> <li>● Compare how lengths relate to the size of the unit</li> </ul>

	<ul style="list-style-type: none"> <li>● Solve one and two-step problems involving length</li> </ul>
<b>Time</b>	<ul style="list-style-type: none"> <li>● Use the minute hand to show and tell the number for every five minutes after the hour</li> <li>● Show and tell time in hours and minutes</li> <li>● Use A.M. and P.M. to show morning, afternoon, or night</li> <li>● Order events by time</li> </ul>
<b>Graphs and Line Plots</b>	<ul style="list-style-type: none"> <li>● Read, analyze, and interpret picture graphs</li> <li>● Read, analyze, and interpret tally charts, bar graphs, and line plots</li> <li>● Make a line plot to show data</li> </ul>
<b>Lines and Surfaces</b>	<ul style="list-style-type: none"> <li>● Recognize, identify, and describe parts of lines and curves</li> <li>● Draw parts of lines and curves</li> <li>● Identify, classify, and count flat and curved surfaces</li> <li>● Identify 3-dimensional shapes that can stack, slide, and/or roll</li> </ul>
<b>Shapes and Patterns</b>	<ul style="list-style-type: none"> <li>● Recognize and identify 2-dimensional shapes</li> <li>● Combine and separate 2-dimensional shapes in figures</li> <li>● Draw 2-dimensional shapes and figures on dot paper and square grid paper</li> <li>● Recognize and draw shapes having a given number of angles</li> <li>● Recognize and identify 3-dimensional shapes</li> <li>● Build models using 3-dimensional shapes</li> <li>● Combine and separate 3-dimensional shapes</li> <li>● Identify and count the equal faces of a cube</li> </ul>

### Third Grade

Third Grade	
Unit Name	Content
<b>Grocery Stamps and Measuring Strips</b>	<ul style="list-style-type: none"> <li>● Use repeated addition</li> <li>● Skip-count</li> <li>● Double</li> <li>● Use Partial Products</li> <li>● Use Five-Times &amp; Ten-times</li> <li>● Doubles &amp; Halves</li> </ul>
<b>Surveys and Line Plots</b>	<ul style="list-style-type: none"> <li>● Organize, describe, interpret, graph, and categorical data pictorially</li> <li>● Read and interpret a bar graph</li> <li>● Use a line, bar graph, pictures to represent data</li> <li>● Use a scale</li> <li>● Describe using almost all, very few, half, more than half</li> <li>● Describe the shape of data (spread, highest, lowest, outliers)</li> <li>● Use data to compare groups</li> </ul>
<b>Collections and Travel Stories</b>	<ul style="list-style-type: none"> <li>● Read, write, and order numbers to 1000</li> <li>● Use place value to determine the size of a number</li> <li>● Make 3 digit numbers using 100's, 10's and 1's</li> <li>● Find pairs that add to 100</li> <li>● Subtract 3 digit numbers using parts, adding up, subtracting back</li> </ul>

	<ul style="list-style-type: none"> <li>● Add 3 digit numbers by breaking apart and combining</li> <li>● Add and subtract multiples of 10 and 100</li> <li>● Use number lines</li> <li>● Visualize comparison and removal problems</li> <li>● Telling time to the nearest 5 minutes</li> </ul>
<b>Finding Fair Shares</b>	<ul style="list-style-type: none"> <li>● Naming, ordering unit fractions</li> <li>● Identify equivalent fractional parts</li> <li>● Use mixed numbers</li> <li>● Identify halves and fourths in decimal and fraction form</li> <li>● Express fractions in terms of area</li> <li>● Combine fractions that sum to 1</li> <li>● Combine fractions into other fractions</li> <li>● Telling time to a minute</li> </ul>
<b>Solids and Boxes</b>	<ul style="list-style-type: none"> <li>● Distinguish polyhedra and non-polyhedra</li> <li>● Distinguish pyramids and prisms</li> <li>● Identify parts of polyhedra (faces, edges, vertices) and pyramids</li> <li>● Design open boxes and nets for pyramids, cubes and other polyhedra</li> <li>● Decompose 3D shapes and recombine them</li> <li>● Determine the number of cubes that will fit in a box</li> </ul>
<b>Muffles Truffles</b>	<ul style="list-style-type: none"> <li>● Use Repeated Addition</li> <li>● Skip-count</li> <li>● Use Partial Products</li> <li>● Use Ten-times</li> <li>● Double &amp; Halve</li> </ul>
<b>Perimeter Angles and Area</b>	<ul style="list-style-type: none"> <li>● Use US standard and metric units to measure length</li> <li>● Find the perimeter of 2 D figures</li> <li>● Create different shapes with the same perimeter</li> <li>● Find the area of squares, triangles, and irregular shapes</li> <li>● Use slides, flips, and turns to prove congruence between shapes</li> <li>● Identify triangles and quadrilaterals</li> <li>● Compare squares and rectangles</li> <li>● Recognize right angles</li> <li>● Compare size of angles</li> </ul>
<b>Equal Groups</b>	<ul style="list-style-type: none"> <li>● Understand multiplying as combining groups and division as splitting into equal groups</li> <li>● Use skip Counting, repeated addition, multiplication, arrays</li> <li>● Writing and solving multiplication and division problems in context</li> <li>● Finding multiples of 2,3,4,5,6, and 10 by skip counting</li> <li>● Doubling and Halving</li> </ul>
<b>Stories, Tables and Graphs</b>	<ul style="list-style-type: none"> <li>● Describe the shape of a line graph (increasing, decreasing, staying the same)</li> <li>● Plot points on a graph</li> <li>● Connect points on a graph, values in a table, and the situation it represents</li> <li>● Compare situations by describing differences in graphs, differences in tables,</li> <li>● Work with values that have a constant rate of change</li> <li>● Identify the unit of a repeating pattern</li> <li>● Extend number sequences with a constant increment</li> <li>● Identify multiples of three</li> </ul>



	<ul style="list-style-type: none"> <li>• Read and interpret positive and negative temperatures on a thermometer and on a graph</li> </ul>
<b>How Many Hundreds, How Many Miles</b>	<p>Combine hundred multiples above 1000  Subtract from multiples of 100  Solve 3 digit addition and subtraction problems  Solve addition and subtraction problems using money  Solve multi step addition and subtraction problems  Use number lines  Change numbers to create an equivalent problem that is easier to solve  Fluently solve subtraction problems related to addition combinations of 10+10  Demonstrate fluency with multiplication combinations with products up to 50</p>

### Fourth Grade

Unit Name	Content
<b>Factors, Multiples, and Arrays</b>	<ul style="list-style-type: none"> <li>• Review Multiplication if necessary</li> <li>• Deal out or count all, group, then count the groups</li> <li>• Use repeated Addition or Skip-count</li> <li>• Use Ten-times</li> <li>• Use Partial Products</li> </ul>
<b>Landmarks and Large Numbers</b>	<ul style="list-style-type: none"> <li>• Read, write and sequence numbers 1,000 to 10,000</li> <li>• Recognize place value of large numbers</li> <li>• Add and subtract multiples of 10, 100, and 1000</li> <li>• Add 3- and 4- digit numbers using mental arithmetic, number lines, estimation, understanding and the US algorithm</li> <li>• Solve subtraction by breaking numbers apart, number lines, 100 charts, story contexts</li> <li>• Solve multi-step addition and subtraction problems</li> <li>• Find numbers that add to 1000</li> </ul>
<b>Fraction Cards &amp; Decimal Squares</b>	<ul style="list-style-type: none"> <li>• Identify fractions as a part of an area</li> <li>• Identify and visualize fractions larger than 1</li> <li>• Compare size of fractions with different denominators</li> <li>• Identify equivalent fractions and decimal equivalents</li> <li>• Compare fractions to landmarks (0, <math>\frac{1}{2}</math>, 1, 2)</li> <li>• Order decimals</li> <li>• Add fractions by using visual representations (Areas, Number lines)</li> <li>• Adding decimals that are multiples of 0.1 and 0.25</li> </ul>
<b>Describing the Shape of the Data</b>	<ul style="list-style-type: none"> <li>• Organize data to describe a data set</li> <li>• Use a line plot to represent data</li> <li>• Represent two sets of data using line plot or bar graph, to compare them.</li> <li>• Describe the shape of a data set (spread, maximum, minimum, range, outliers)</li> <li>• Find the median, range</li> <li>• Compare two sets of data using shape and spread of data, medians</li> <li>• Draw conclusions based on data</li> <li>• Develop and revise a survey question</li> </ul>

	<ul style="list-style-type: none"> <li>Record and keep track of data</li> </ul>
<b>Multiple Towers and Division Stories</b>	<ul style="list-style-type: none"> <li>Multiply by breaking apart numbers, using arrays, diagrams</li> <li>Review multiplication combinations up to 12x12</li> <li>Multiply multiples of 10</li> <li>Solve division by making groups of the divisor and by using multiplication combinations.</li> <li>Find multiples of 2 digit numbers</li> <li>Find the product when the factor is doubled or halved</li> <li>Create story problems to represent a division expression</li> </ul>
<b>Size, Shape and Symmetry</b>	<ul style="list-style-type: none"> <li>Measure using US Standard and metric units</li> <li>Estimate lengths using cm, in, ft, yd, m</li> <li>Find the perimeter of objects</li> <li>Identify and classify polygons (especially quadrilaterals) using number of sides, length of sides, size of angles</li> <li>Combine polygons to make new polygons</li> <li>Identify a right angle as 90 degrees</li> <li>Measure acute angles</li> <li>Find the area of polygons by decomposing shapes</li> <li>Find the area of rectangles and triangles</li> <li>Make designs with line symmetry</li> </ul>
<b>Box Factory</b>	<ul style="list-style-type: none"> <li>Skip count</li> <li>Use partial products</li> <li>Use ten frames</li> <li>Double and halve</li> <li>Factor and group flexibly</li> </ul>
<b>Penny Jars and Plant Growth</b>	<ul style="list-style-type: none"> <li>Plot points on a coordinate grid</li> <li>Identify points on a grid with values in a table and the context it represents</li> <li>Describe steepness of a graph</li> <li>Compare rates of change in tables, graphs and situations between two quantities</li> <li>Write an arithmetic expression for finding one value in terms of another</li> </ul>
<b>How Many Packages, How Many Groups</b>	<ul style="list-style-type: none"> <li>Multiply multiples of 10</li> <li>Solve 2 digit multiplication problems by breaking apart and making an easier problem</li> <li>Solve division problems by breaking the problem into parts and using multiples of 10</li> </ul>

### Fifth Grade

Unit Name	Content
<b>Number Puzzles and Multiple Towers</b>	<ul style="list-style-type: none"> <li>Identify prime, square, even and odd numbers</li> <li>Find all the factors of a number</li> <li>Solve 2 digit by 2 digit multiplication problems by breaking up number and by multiples of 10</li> </ul>

	<ul style="list-style-type: none"> <li>● Solve division problems with 2 digit divisors by breaking up numbers and by multiples of 10</li> <li>● Use dot arrangements and arrays to model multiplication</li> </ul>
<b>What's the Portion Fractions and Percents Field Trips and Fundraisers</b>	<ul style="list-style-type: none"> <li>● Use landmark unit fractions or common fractions</li> <li>● Use decimal &amp;/or percentage equivalents</li> <li>● Use a ratio table as a tool to make equivalent fractions</li> <li>● Use multiplication &amp; division to make equivalent fractions</li> <li>● Use a common whole to compare fractions.</li> </ul>
<b>Thousands of Miles, Thousands of Seats -3)</b>	<ul style="list-style-type: none"> <li>● Read, write, and name the numbers and their relationships between 10,100,1,000 and 10,000</li> <li>● Add and subtract with large numbers using place value, the subtraction algorithm, and number lines</li> <li>● Solve division problems related to multiplication combinations up to 12x12</li> </ul>
<b>Decimals on Grids and Number Lines</b>	<ul style="list-style-type: none"> <li>● Place decimals on a number line</li> <li>● Identify fraction, decimal and percents that are equivalent</li> <li>● Represent fractions as a part of an area</li> <li>● Order decimals and compare to landmark numbers (0, <math>\frac{1}{2}</math>, 1)</li> <li>● Add decimals to the thousandths using place value reasoning</li> </ul>
<b>Measuring Polygons</b>	<ul style="list-style-type: none"> <li>● Describe triangles using angle measures and lengths of sides</li> <li>● Use angles to find other angle sin a polygon</li> <li>● Compare perimeters and areas of rectangles</li> <li>● Build similar figures</li> <li>● Decompose and recombine 2D shapes</li> </ul>
<b>What's the Portion Fractions and Percents Best Buys</b>	<ul style="list-style-type: none"> <li>● Use Partial Quotients</li> <li>● Use Proportional Reasoning</li> <li>● Use decimal or money sense</li> <li>● Use a ratio table as a tool to make equivalent fractions</li> <li>● Use x and <math>\div</math> to make equivalent fractions</li> <li>● Use a common whole to add fractions</li> <li>● Simplify to make a common whole</li> </ul>
<b>Prism and Pyramids</b>	<ul style="list-style-type: none"> <li>● Decompose 3 D Shapes and recombine to make a given figure.</li> <li>● Determine the volume of rectangular prisms, pyramids, cylinders, cones</li> <li>● Use cubes to find volumes of larger figures.</li> <li>● Comparing volumes as dimensions change</li> <li>● Comparing volumes of different shaped containers</li> </ul>
<b>Playgrounds</b>	<ul style="list-style-type: none"> <li>● Skip-count &amp;/or use repeated addition to find a fraction of a whole</li> <li>● Use multiplication &amp; division to make equivalent relations</li> <li>● Use landmark fractions to make partial products</li> <li>● Use decimal &amp;/or percentage equivalents</li> <li>● Use a ratio table as a tool for making equivalent fractions</li> <li>● Double &amp; halve &amp; the more generalized use of the associative property to eliminate fractions</li> <li>● Use the standard algorithm for multiplication of fractions</li> <li>● Interchange numerators (or denominators) to simplify first when multiplying</li> </ul>

<b>Growth Patterns</b>	<ul style="list-style-type: none"> <li>● Use tables to represent the relationship between two quantities</li> <li>● Plot points on a coordinate grid</li> <li>● Compare and interpret graphs and tables</li> <li>● Describe and compare steepness on graphs</li> <li>● Write an arithmetic expression for finding one quantity in terms of another when using constant rates of change.</li> <li>● Find a missing value given a constant rate of change</li> <li>● Compare and describe graphs, tables, and situations for constant and non-constant rates of change</li> </ul>
<b>How Long Can You Stand on One Foot</b>	<ul style="list-style-type: none"> <li>● Describe shape of data using spread, median, maximum, minimum, range, outliers</li> <li>● Compare two sets of data using line plots and bar graphs</li> <li>● Compare two sets of data using shape, spread, and medians</li> <li>● Develop arguments and present conclusions based on data</li> <li>● Design and carryout out an experiment to answer a question about two groups</li> <li>● Compare the actual results of an experiment with the expected probability</li> <li>● Express probability of possible outcomes</li> </ul>