

Content Standards	Enduring Understanding	Student Friendly	Core Standards*	Materials Curriculum Support
*Benchmark #1 + Benchmark #2	<b>Number and Operations</b>			
<p><u>M:N&amp;O:2:1*</u> + <u>Sept. &amp; Oct.</u>                      Demonstrate understanding of the relative magnitude numbers <u>from 0 to 199</u> by ordering, comparing using models, explanations, other representations; comparing using (cubes) “1 more”, “1 less”, “10 more”, “10 less”, “100 more”, “100 less”.</p>	<p>Numbers and Operations are the cornerstone of the study of mathematics; through problem solving and accurately applied computation, students will analyze data and interpret real world phenomena</p>	<p><b>I can show different ways to build a number from 0 to 199.</b></p> <p><b>I will use hundreds, tens, and ones to explain any number from 0 to 199.</b></p> <p>(Nov./Dec.)  <b>I can show halves, thirds, and fourths of shapes and sets.</b></p> <p>.</p>	<p><b>Counting forward and backward by 1’s, 2’s, 5’s, and 10’s from any given number</b></p> <p><b>Operations on numbers using mastery of addition, subtraction facts in these operations (with and without borrowing, and application to time, money, perimeter, and measurement) ( later)</b></p> <p><b>Recognizing, describing, and drawing all the basic figures and their relationships</b></p>	<p>Place Value Box Templates                      Place Value Mats                      Tens Blocks                      Number grid                      Number line                      Place Value Games                      Cubes                      Skills Sheets</p> <p>-----</p> <p>Counters                      Number lines                      Calculators                      Graphs</p> <p>Cuisenaire Rods                      Pattern Blocks/Cut-Outs                      Pattern Games</p>

			<p><b>Collection and representation of data using shapes and numbers relevant to them</b></p> <p><b>Recognition of fractions</b> (<math>\frac{1}{2}</math>, <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{10}</math>)</p> <p><b>Developing, reinforcing, and extending prerequisite skills for mathematics learning</b></p> <p><b>Fluent use of the language of above concepts and procedures (ongoing all year)</b></p>	<p>Cuisenaire Rods</p> <p>Fraction Cut-Outs Fraction Games &amp; Puzzles</p>
<p><u>M:N&amp;O:2:2*</u> <i>(Sept. &amp; Oct.)</i></p> <p>Demonstrate understanding of mathematical operations by joining,</p>		<p><b>I can put numbers from 0 to 199 in order.</b></p> <p><b>I can compare numbers from 0 to 199, including “10 more, “10 less”, 100 more, and 100 less”.</b></p>		<p>Hundreds Number Chart Number Chart to 200 Sequence Number Cards Tens Block Models</p> <p>Number Word Flash Cards</p>

<p>separating, comparing whole numbers to each other with terms “one more’, one less”; using models connecting words to quantities; using number lines or explanations;adding multiple one-digit numbers</p>		<p><b>(Nov./Dec.) I can connect number words and numerals to the quantity they stand for.</b></p>		<p>Numeration Skills Sheets/Drills</p>
<p><b><u>M:N&amp;O:2:3*</u></b> <b><u>(Sept. &amp; Oct.)</u></b> Demonstrate understanding of mathematical operations by adding and subtracting whole numbers; adding multiple one-digit whole numbers</p>		<p><b>I can solve problems using addition and subtraction, without regrouping.</b></p> <p><b>(Nov./ Dec.) with regrouping</b> <b>Review and expand</b> <b>Jan./Feb. Mar./Apr.</b> <b>May/June</b></p>		<p>Addition Facts with sums to 10 Addition Facts with sums to 20 Number lines Counters Skills Sheets Various Math Games “War Cards”</p> <p>Place Value Mats Tens Blocks Various Math Games</p>
<p><b><u>M:N&amp;O:2:5</u></b> <b><u>(Sept. &amp; Oct.)</u></b> Demonstrates understanding of monetary value by <u>adding coins to a value of \$1.99 and</u></p>		<p><b>I can count coins up to the value of \$1.00.</b> <b>(Nov. /Dec.) values up to \$1.99</b></p>		<p>Plastic Coins/Paper Bills Coin Cut-Outs Coin puzzles Money Bingo/Money Games Money Skills Sheets</p>

<p><u>representing the result in dollar notation;</u>  <u>making change from \$1.00 or less;</u>  <u>recognizing equivalent coin representations of the same value</u></p>		<p><b>I can show the value of a group of coins using dollar notation or different coins. Review and expand  Mar/April &amp; May/June</b></p>		<p>Skills Sheets</p>
<p><b><u>M:N&amp;O:2:6 + (Sept. &amp; Oct.)</u></b>  Mentally adds and subtracts whole number facts through 20; <u>names the number that is 10 more or less;</u>  <u>mentally adds and subtracts two-digit multiples of 10;</u>  subtracts one-digit whole numbers from two-digit whole numbers</p>		<p><b>I can use my basic facts to add and subtract numbers like 50+60 and 90-30 in my head.</b>   <b>( ongoing through out the year)</b></p>		<p>Flash Cards  “War Cards”  Addition /Subtraction Math Games  Mad Minute Drills  Minute Math</p>
<p><b><u>M:N&amp;O:2:7 (Sept.&amp; Oct.)</u></b>  Make estimates using appropriate method; estimates the number of objects in a set <u>(up to 50)</u></p>		<p><b>I can estimate the number of objects in a set up to 50.</b></p>		<p>Various Small Collections(counters, paper clips, unifix cubes etc.)</p>

<p>M:N&amp;O:2:8* ( <i>Sept. &amp; Oct.</i> ) Apply properties of numbers to solve problems and to simplify computations using the Field Properties of odd and even numbers</p> <p>Field properties (<u>associative</u> and <u>commutative</u> for addition and identity for addition.</p>		<p><b>I can explain why a number is even or odd.</b></p> <p><b>I can prove that changing the order of the addends will not change the sum.</b></p> <p><b>I can prove that adding and subtracting 0 to a number will equal the same number.</b></p> <p><b>I can prove that grouping addends different ways will not change the sum</b></p> <p><b>(Nov./Dec. Using 2 and 3 digit #)</b></p>		<p>Counters Paper &amp; pencils</p> <p>Unifix Cubes Skills Sheets</p>
	<p><b>GEOMETRY AND MEASUREMENT</b></p>			
<p>M:G&amp;M:2:1 ( <i>Sept. &amp; Oct.</i> )</p>	<p>Geometry and measurement allow</p>	<p><b>I can sort and classify shapes and objects</b></p>		<p>Pattern blocks Attribute blocks</p>

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<p>Use properties and attributes, composition, decompositions of shapes to sort or classify polygons by <u>two or more attributes</u></p>	<p>students to apply reasoning and spatial skills to represent, describe, and make sense of the real world</p>	<p><b>using two or more attributes.</b></p>		<p>Cut-Outs Skills Sheet</p>
<p>M:G&amp;M:2:4(Jan/Feb) Demonstrate understanding of congruency by <u>composing, decomposing two-dimensional objects,</u> triangular pattern blocks to construct hexagonal patterns  Using line of symmetry to demonstrate congruent parts within a shape</p>		<p><b>I can build a congruent shape using other shapes.</b>  <b>I can use a line of symmetry to divide a shape into equal parts.</b></p>		<p>Pattern Blocks  Manipulatives used to show symmetrical designs</p>
<p>M:G&amp;M:2:6 (Jan/Feb) Demonstrates conceptual understanding of perimeter and area using models to surround and cover polygons</p>	<p>Geometry and measurement allow students to apply reasoning and spatial skills to represent, describe, and make sense of the real world</p>	<p><b>I can explain and show the area and perimeter of a polygon.</b></p>		<p>Pattern blocks Attribute blocks Rulers/Centimeters Tiles</p>

<p>M:G&amp;M:2:7 ( Sept. &amp; Oct.) Measures and uses units of measures; makes conversions; measuring and using units of measures appropriately and consistently 1 ft = 12 inches, 100 c in a meter Units: Inch, Foot, Centimeter, Meter</p>		<p><b>I can measure to the nearest inch and foot, (centimeter and meter Jan/Feb)</b></p> <p><b>I can show there are 12 inches in a foot.</b></p> <p><b>(I can show there are 100 centimeters in 1 meter Jan/Feb)</b></p> <p><b>I can show there are 60 minutes in a an hour. I can tell time on the hour and half on an analog clock. (Sept./ Oct.)</b></p> <p><b>I can tell time to the quarter hour.(Nov./Dec.)</b></p> <p><b>I can read the</b></p>		<p>Rulers inches Yard sticks Rulers cm Meter sticks Non standard measures ex. Clips, cubes Pattern Blocks Attribute blocks Thermometer</p> <p>“Judy Clocks”</p> <p>Student clocks Time puzzles matching words/digital/analog Skill Sheets Time Flash cards Time bingo</p>

		<b>temperature to the nearest degree. (March/April)</b>		
M:G&M:2:9 Demonstrates understanding of spatial relationships using location and position; <u>names location on simple grids;</u> <u>creates maps;</u> <u>interprets position, e.g., above, below</u>		<b>I will use position words to describe where an object is located.</b>		
	<b>FUNCTIONS AND ALGEBRA</b>			
M:F&A:2:1 (Sept. & Oct.) Identify and extend to specific cases a variety of patterns (linear and non numeric) represented in models, tables, sequences to the next <u>element</u> e.g., 2,4,6,_,10	Functions and Algebra are used to identify increasingly abstract patterns that apply to relations and functions in the real world.	<b>I can recognize, continue or find missing parts of a pattern.</b>		Pattern blocks
M:F&A:2:4* +		<b>I can fill in a missing</b>		

<p><i>(Sept. &amp; Oct.)</i>                  Demonstrate conceptual understanding of equality finding the value that will make an open sentence true, e.g., <math>2 + ? = 7</math> (limited to one operation)                  ( Sept.&amp; Oct.)</p>		<p><b>number to make a number sentence true.</b></p>		
	<p><b>DATA,                  STATISTICS,                  AND                  PROBABILITY</b></p>			
<p>M:DSP:2:1  <i>(Sept. &amp; Oct.)</i>                  Interpret a given representation (<u>line plots</u>, pictographs, tally charts, or tables; answering questions related to the data; analyzing the data to formulate conclusions                  (Nov./Dec.) Expand</p>	<p>DSP allow students to interpret collected data and apply theoretical research, which leads to analyzing and questioning events in the real world.</p>	<p><b>I can use charts, pictographs, line plots, and tally charts to read data and make conclusions.</b></p> <p><b>(Nov./Dec.) Expand: Given data, students will enter it appropriately on a graph, tally charts, or tables. Students will interpret keys that represent a</b></p>		<p>Graphs</p>

		<b>symbol having a value &gt;1.</b>		
M:DSP:2:2 ( Sept.& Oct.) Analyze patterns, trends, or distributions in data determining and using more, less or equal ( Nov./Dec.)Expand		<b>I can use the words more/less/ equal to explain data.</b>		Graphs Charts Pie Graphs
M:DSP:2:4 Uses counting techniques to solve problems; The Fundamental Counting Principle, organized lists, tables, tree diagrams, student diagrams		<b>I can use counting strategies to solve problems.</b>		Graphs

<p>M:DSP:2:5 (Nov./Dec.) Using probabilities to determine the likelihood of an event using “more likely,” “less likely”, “equally likely”, <u>certain or impossible</u></p>		<p><b>I can use an experiment to compare the chance that two events will happen using words like “more likely” etc.</b></p>		<p>Collections of coin, cubes, rods or chips</p>
<p>M:DSP:2:6 (Nov./Dec.) introduce In response to a teacher or student generated question or hypothesis <u>groups decide the method and appropriately collect, organize, and display data,</u>  (Later) <u>draw conclusions about a question or hypothesis being tested, make predictions</u></p>		<p><b>I can find the best way to collect data to answer questions.</b>  <b>I can use data to make a prediction.</b></p>		<p>*provided by Professor Mahesh Sharma</p>

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