

Second Grade

Standard	Everyday Math Goal	Ohio Benchmark
Number, Number Sense, and Operations	<b>Goal 1.</b> Count on by 1s, 2s, 5s, 10s, 25s, and 100s past 1,000 and back by 1s from any number less than 1,000 with and without number grids, number lines, and calculators.	A. Use place value concepts to represent whole numbers using numerals, words and physical models F. Count, using numerals and ordinal numbers
Number, Number Sense, and Operations	<b>Goal 2.</b> Read, write, and model with manipulatives whole numbers up to 10,000; identify places in such numbers and the values of the digits in those places; read and write money amounts in dollars-and-cents notation.	A. Use place value concepts to represent whole numbers using numerals, words and physical models
Number, Number Sense, and Operations	<b>Goal 3.</b> Use manipulatives and drawings to model fractions as equal parts of a region or a collection; describe the models and name the fractions.	C. Represent commonly used fractions using words and physical models.
Number, Number Sense, and Operations	<b>Goal 4.</b> Recognize numbers as odd or even.	A. Use place value concepts to represent whole numbers using numerals, words and physical models  B. Recognize, classify, compare and order whole numbers
Number, Number Sense, and Operations	<b>Goal 5.</b> Use tally marks, arrays, and numerical expressions involving addition and subtraction to give equivalent names for whole numbers.	G. Model, represent and explain addition as combining sets and counting on.  H. Model, represent and explain subtraction as comparison, take-away and part-to-whole
Number, Number Sense, and Operations	<b>Goal 6.</b> Use manipulatives and drawings to model equivalent names for $\frac{1}{2}$ .	C. Represent commonly used fractions using words and physical models.
Number,	<b>Goal 7.</b> Compare and order whole numbers up to	B. Recognize, classify, compare and order whole

Second Grade

<p><b>Number Sense, and Operations</b></p>	<p>10,000; use area models to compare fractions.</p>	<p>numbers</p>
<p><b>Number, Number Sense, and Operations</b></p>	<p><b>Goal 1.</b> Demonstrate automaticity with +/- 0, +/- 1, doubles, and sum equals-ten facts, and proficiency with all addition and subtraction facts through 10 + 10.</p>	<p>G. Model, represent and explain addition as combining sets and counting on.</p> <p>H. Model, represent and explain subtraction as comparison, take-away and part-to-whole</p> <p>K. Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions.</p> <p>L. Demonstrate fluency in adding and subtracting multiples of 10, and recognize combinations that make 10</p>
<p><b>Number, Number Sense, and Operations</b></p>	<p><b>Goal 2.</b> Use manipulatives, number grids, tally marks, mental arithmetic, paper &amp; pencil, and calculators to solve problems involving the addition and subtraction of 2-digit whole numbers; describe the strategies used; calculate and compare values of coin and bill combinations.</p>	<p>L. Demonstrate fluency in adding and subtracting multiples of 10, and recognize combinations that make 10</p> <p>M. Add and subtract two-digit numbers with and without regrouping</p>
<p><b>Number, Number Sense, and Operations</b></p>	<p><b>Goal 3.</b> Make reasonable estimates for whole number addition and subtraction problems; explain how the estimates were obtained.</p>	<p>G. Model, represent and explain addition as combining sets and counting on.</p> <p>I. Model, represent and explain subtraction as comparison, take-away and part-to-whole</p> <p>K. Demonstrate fluency in addition facts with addends through 9 and</p>

Second Grade

		<p>corresponding subtractions.</p> <p>L Demonstrate fluency in adding and subtracting multiples of 10, and recognize combinations that make 10</p>
<p><b>Number, Number Sense, and Operations</b></p>	<p><b>Goal 4.</b> Identify and describe change, comparison, and parts-and-total situations; use repeated addition, arrays, and skip counting to model multiplication; use equal sharing and equal grouping to model division.</p>	<p>G. Model, represent and explain addition as combining sets and counting on.</p> <p>I. Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.</p> <p>J. Model, represent and explain division as sharing equally, repeated subtraction and rectangular arrays.</p> <p>H. Model, represent and explain subtraction as comparison, take-away and part-to-whole</p> <p>K. Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions.</p> <p>L Demonstrate fluency in adding and subtracting multiples of 10, and recognize combinations that make 10</p>
<p><b>Measurement</b></p>	<p><b>Goal 1.</b> Estimate length with and without tools; measure length to the nearest inch and centimeter; use standard and nonstandard tools to measure and estimate weight.</p>	<p>A. Explain the need for standard units of measure.</p> <p>D. Apply measurement techniques to measure length, weight and volume (capacity).</p> <p>E. Recognize that using different units of measurement will yield different numbers for the same measurement.</p>
<p><b>Number,</b></p>	<p><b>Goal 4.</b> Make exchanges between</p>	<p>D. Determine the value of a</p>

Second Grade

<p><b>Number Sense, and Operations</b></p>	<p>coins and bills.</p>	<p>collection of coins and dollar bills.</p> <p>E. Make change using coins for values up to one dollar.</p>
<p><b>Measurement</b></p>	<p><b>Goal 2.</b> Count unit squares to find the area of rectangles.</p>	<p>Grades 3-4</p>
<p><b>Measurement</b></p>	<p><b>Goal 3.</b> Describe relationships between days in a week and hours in a day.</p>	<p>B. Select appropriate units for length, weight, volume (capacity) and time, using:</p> <ul style="list-style-type: none"> <li>• objects; i.e., non-standard units;</li> <li>• U.S. customary units: inch, foot, yard, ounce, pound, cup, quart, gallon, minute, hour, day, week and year;</li> <li>• metric units: centimeter, meter, gram and liter.</li> </ul> <p>C. Develop common referents for units of measure for length, weight, volume (capacity) and time to make comparisons and estimates.</p> <p>E. Recognize that using different units of measurement will yield different numbers for the same measurement.</p>
<p><b>Measurement</b></p>	<p><b>Goal 5.</b> Read temperature on both the Fahrenheit and Celsius scales.</p>	<p>none</p>
<p><b>Measurement</b></p>	<p><b>Goal 6.</b> Tell and show time to the nearest five minutes on an analog clock; tell and write time in digital notation.</p>	<p>B. Select appropriate units for length, weight, volume (capacity) and time, using:</p> <ul style="list-style-type: none"> <li>• objects; i.e., non-standard units;</li> <li>• U.S. customary units: inch, foot, yard, ounce, pound, cup, quart, gallon, minute, hour, day, week and year;</li> </ul>

Second Grade

		<ul style="list-style-type: none"> <li>metric units: centimeter, meter, gram and liter.</li> </ul> <p>C. Develop common referents for units of measure for length, weight, volume (capacity) and time to make comparisons and estimates.</p>
<p><b>Geometry and Spatial Sense</b></p> <p><i>(Benchmarks D and F are not EM goals)</i></p>	<p><b>Goal 1.</b> Draw line segments and identify parallel line segments.</p>	<p>Grades 3-4</p>
<p><b>Geometry and Spatial Sense</b></p>	<p><b>Goal 2.</b> Identify, describe, and model plane and solid figures including circles, triangles, squares, rectangles, hexagons, trapezoids, rhombuses, spheres, cylinders, rectangular prisms, pyramids, cones, and cubes.</p>	<p>A. Describe and create plane figures: circle, rectangle, square, triangle, hexagon, trapezoid, parallelogram and rhombus, and identify them in the environment.</p> <p>B. Describe solid objects: cube, rectangular prism, sphere, cylinder, cone and pyramid, and identify them in the environment.</p> <p>C. Sort and compare two-dimensional figures and three-dimensional objects according to their characteristics and properties.</p> <p>E. Recognize two- and three-dimensional objects from different positions.</p>
<p><b>Geometry and Spatial Sense</b></p>	<p><b>Goal 3.</b> Create and complete twodimensional symmetric shapes or designs.</p>	<p>G. Identify and draw figures with line symmetry.</p>
<p><b>Patterns, Functions, and Algebra</b></p>	<p><b>Goal 1.</b> Extend, describe, and create numeric, visual, and concrete patterns; describe rules for patterns and use them to solve problems; use words and symbols to</p>	<p>A. Sort, classify and order objects by size, number and other properties, and describe the attributes used.</p> <p>B. Extend sequences of sounds</p>

Second Grade

<p><i>(Benchmark G is not an EM goal)</i></p>	<p>describe and write rules for functions involving addition and subtraction and use those rules to solve problems.</p>	<p>and shapes or simple number patterns, and create and record similar patterns.</p> <p>C. Create and extend patterns, and describe the rule in words.</p> <p>D. Model problem situations, using objects, pictures, numbers and other symbols.</p>
<p><b>Patterns, Functions, and Algebra</b></p>	<p><b>Goal 2.</b> Read, write, and explain expressions and number sentences using the symbols +, -, =, &lt;, and &gt;; solve number sentences involving addition and subtraction; write expressions and number sentences to model number stories.</p>	<p>D. Model problem situations, using objects, pictures, numbers and other symbols.</p> <p>E. Solve open sentences and explain strategies.</p> <p>F. Represent an unknown quantity as a variable using a symbol, such as □, Δ, O</p>
<p><b>Patterns, Functions, and Algebra</b></p>	<p><b>Goal 3.</b> Describe the Commutative and Associative Properties of Addition and apply them to mental arithmetic problems.</p>	<p>none</p>
<p><b>Data Analysis and Probability</b></p>	<p><b>Goal 1.</b> Collect and organize data or use given data to create tally charts, tables, bar graphs, and line plots.</p>	<p>A. Pose questions and gather data about everyday situations and familiar objects.</p> <p>B. Sort and classify objects by attributes, and organize data into categories in a simple table or chart.</p> <p>C. Represent data using objects, picture graphs and bar graphs.</p>
<p><b>Data Analysis and Probability</b></p>	<p><b>Goal 2.</b> Use graphs to ask and answer simple questions and draw conclusions; find the maximum, minimum, mode, and median of a data set.</p>	<p>A. Pose questions and gather data about everyday situations and familiar objects.</p> <p>C. Represent data using objects,</p>

Second Grade

		picture graphs and bar graphs.
<b>Data Analysis and Probability</b>	<b>Goal 3.</b> Describe events using <i>certain, likely, unlikely, impossible</i> and other basic probability terms; explain the choice of language.	<b>D.</b> Describe the probability of chance events as more, less or equally likely to occur.