

1 st Grade Mathematics				
Mathematical Practices	Numbers and Operations in Base Ten	Operations and Algebraic Thinking	Measurement and Data	Geometry
<p>Make sense of problems and persevere in solving them.</p> <p>Reason abstractly and quantitatively.</p> <p>Construct viable arguments and critique the reasoning of others.</p> <p>Model with mathematics.</p> <p>Use appropriate tools strategically.</p> <p>Attend to precision.</p> <p>Look for and make use of structure.</p> <p>Look for and express regularity in repeated reasoning.</p>	<p>Extend the counting sequence:</p> <p>Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.</p> <p>Understand place value:</p> <p>Understand that the two digits of a two-digit number represent amounts of tens and ones.</p> <p>Understand 10 can be thought of as a bundle of ten ones — called a “ten.”</p> <p>Understand the numbers from 11 to 19</p>	<p>Represent and solve problems involving addition and subtraction:</p> <p>Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a</p>	<p>Measure lengths indirectly and by iterating length units:</p> <p>Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p>Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.</p> <p>Tell and write time:</p>	<p>Reason with shapes and their attributes:</p> <p>Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p> <p>Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes</p>

	<p>are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</p> <p>The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> <p>Use place value understanding and properties of operations to add and subtract:</p> <p>Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings</p>	<p>symbol for the unknown number to represent the problem.</p> <p>Understand and apply properties of operations and the relationship between addition and subtraction:</p> <p>Apply commutative and associate properties of operations as strategies to add and subtract.</p> <p>Understand subtraction as an unknown-addend problem.</p> <p>Add and subtract within 20:</p> <p>Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>Add and subtract within 20, demonstrating fluency</p>	<p>Tell and write time in hours and half-hours using analog and digital clocks.</p> <p>Represent and interpret data:</p> <p>Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p>	<p>from the composite shape.</p> <p>Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>.</p>
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	<p>and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on</p>	<p>for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; using the relationship between addition and subtraction; and creating equivalent but easier or known sums.</p> <p>Work with addition and subtraction equations:</p> <p>Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.</p> <p>Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. (Missing piece problems)</p>		
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1st Grade Math Vocabulary:

Operations & Algebraic Thinking: alike, similar, object, match, size, sort, different

Number & Operations Graphing/Units: horizontal, vertical, standard unit, graph, estimate, symbol, sort, group

Number & Operations in Base Ten - Counting: skip-counting, count, numeral, even, odd, whole number, pattern,

Number & Operations in Base Ten - Comparison: compare, less, equal, near, less than, more than, half, opposite, before, after

Number & Operations Sequence: order, number line, pattern, number, more, rule, less, sequence, sort

Number & Operations: solve, addition, total, add, numeral, subtraction, equals, minus, less, more, number sentence, sum, subtract, plus, difference

Number & Operations :count, zero, ten, one, hundred, thousand

Calendar: measure, length, foot, ruler, long, inch, foot, shorter, thermometer, temperature

Graphing: chart, picture graph, bar graph, measurement, table, data

Length/Temperature: month, calendar, day, week, year, leap year, season

Money: money, dollar, coin, cent, half-dollar, quarter, nickel, penny, dime, currency

Statistics: less likely, impossible, equally likely, tally, certain, equal parts, estimate, even, chance

Time: time, second, hour hand, minute, second hand, half-hour, clock, first, hour, minute hand

Weight/Volume: measure, scales, cup, pint, quart, pound, size, balance

Description: size, longer, small, longest, smallest, intersect, characteristics, side, parallel, describe

Direction: corner, slide, curves, turn, right, above, below, left, direction, line

Location: location, in front of, between, under, inside, outside, behind, middle, over

Prisms: geometry, line of symmetry, sphere, cylinder, cube, fourths, halves, cone

Shapes: geometry, rectangular, line of symmetry, circle, square, triangle, shape, rectangle, two dimensional, sides