

**Grade 1**  
**Operations and Algebraic Reasoning**

Term	Represents and Solves Story Problems 1.OA.1, 1.OA.2, MA.9
1	<p>Uses addition and subtraction within 10 to solve word problems using math tools (Ex: drawings, number line, objects).</p> <p>Represent number stories using number models that include a symbol for the unknown value.</p>
2	<p>Uses addition and subtraction within 10 to solve word problems using math tools (Ex: drawings, number line, objects).</p> <p>Add 3 whole numbers up to 20.</p>
3	<p>Uses addition and subtraction within 20 to solve word problems using math tools (drawings, number line, objects).</p> <p>Add 3 whole numbers up to 20.</p>

Term	Understands and Applies Properties of Addition and Subtraction 1.OA.3, 1.OA.4
1	NA
2	<p>Apply Commutative Property of Addition and Associative Property of Addition to add and subtract. (Students do not need to know formal terms, however teachers are encouraged to use them.)            Ex: <math>3+8=11</math> so <math>8+3=11</math>            Ex: <math>2+6+4=2+10</math></p> <p>Understand that subtraction is an unknown addend problem. Ex: Solve <math>10-8</math> by finding the number that makes 10 when added to 8.</p>
3	<p>Apply Commutative Property of Addition and Associative Property of Addition to add and subtract. (Students do not need to know formal terms, however teachers are encouraged to use them.)            Ex: <math>3+8=11</math> so <math>8+3=11</math> Ex: <math>2+6+4=2+10</math></p> <p>Understand that subtraction is an unknown addend problem. Ex: Solve <math>10-8</math> by finding the number that makes 10 when added to 8.</p> <p>Fact Triangles.</p> <p>Knows turn-around facts</p>

Term	Adds and Subtracts Within 20 1.OA.6, OA.5
1	<p><b>Fact fluency is not assessed Term 1.</b></p> <p>Add and subtract within 20 with math tools (drawings, number line, objects).</p> <p>Relate counting to addition and subtraction. Ex: by counting on 2 to add 2</p>
2	<p><b>Fluency: addition within 10.</b> (flexibility, appropriate strategy use, efficiency, and accuracy)</p> <p>Add and subtract within 20 with math tools (drawings, number line, objects).</p> <p>Relate counting to addition and subtraction. Ex: by counting on 2 to add 2</p>
3	<p><b>Fluency: addition and subtraction within 10.</b> (flexibility, appropriate strategy use, efficiency, and accuracy)</p> <p>Add and subtract within 20 with math tools (drawings, number line, objects).</p> <p>Relate counting to addition and subtraction. Example: by counting on 2 to add 2</p>

Term	Works with Addition and Subtraction Equations 1.OA.7, 1.OA.8, 1.OA.9
1	<p>Solve problem situations involving addition and subtraction up to 10 using a number line.</p>
2	<p>Understand the meaning of equal sign and determine if an equation is true or false.</p> <p>Solve problem situations involving addition and subtraction.</p>
3	<p>Understand the meaning of equal sign and determine if an equation is true or false.</p> <p>Determine the unknown whole number in an addition or subtraction equation.</p> <p>Write and solve number sentences from problem situations involving addition and subtraction within 20.</p>

**Number and Operations in Base Ten**

<b>Term</b>	<b>Reads, Writes and Compares Numbers 1.NBT.1</b>
1	Orally count to 100.  Write and compare numbers to 15  Count and represent a number of objects (<20) with a written numeral.
2	Count to 100 starting at any number less than 100.  Write and compare numbers to 20.
3	Count to 120 starting at any number less than 120.  Write and compare numbers to 120.
<b>Term</b>	<b>Demonstrates an Understanding of Place Value 1.NBT.2, 1.NBT.3</b>
1	NA
2	Compare two 2-digit numbers based on meanings of tens and ones digits using $>$ , $=$ , $<$ .  Understand that the two digits of a 2-digit number represent amounts of tens and ones.
3	Compare two 2-digit numbers based on meanings of tens and ones digits using $>$ , $=$ , $<$ .  Understand that the two digits of a 2-digit number represent amounts of tens and ones (solve number grid puzzles).

Term	Uses Place Value Understanding and Properties of Operations to Add and Subtract 1.NBT.4, 1.NBT.5, 1.NBT.6
1	NA
2	<p>Add within 100 including adding a 2-digit number and a 1-digit number (<math>23 + 2</math>).</p> <p>Use a number grid to find 10 more or 10 less than a number</p>
3	<p>Add within 100 including adding a 2-digit number and a 1-digit number (<math>23 + 2</math>) and adding a 2-digit number and a multiple of 10 (<math>23 + 20</math>).</p> <p>Find 10 more or 10 less for a 2-digit number without having to count; explain reasoning used.</p> <p>Subtract multiples of 10 from multiples of 10 in the 10-90 range (Ex: <math>80 - 30 = 50</math>) using concrete models or drawings and strategies based on place value. Explain reasoning used.</p>

**Measurement and Data**

<b>Term</b>	<b>Understands Linear Measurement and Compares Lengths 1.MD.1, MD.2</b>
1	NA
2	Order up to three objects by length; compare the lengths of two objects indirectly by using a third object.  Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object 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.
3	Order up to three objects by length; compare the lengths of two objects indirectly by using a third object.  Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object 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.

<b>Term</b>	<b>Tells and writes time 1.MD.3</b>
1	NA
2	Tell and writes time to the hour using analog clocks.
3	Tell and writes time to the half hour using analog and digital clocks.

Term	Represents and Interprets Data 1.MD.4
1	<p>Organize, represent, and interpret data with up to three categories.</p> <p>Ask and answer questions about the data. (Ex: Count tallies to answer questions.)</p>
2	<p>Organize, represent, and interpret data with up to three categories.</p> <p>Ask and answer questions about the data, <b>how many more or less are in one category than in another.</b> (Ex: Count tallies and look at bar graphs to answer questions.)</p>
3	<p>Organize, represent, and interpret data with up to three categories.</p> <p>Ask and answer questions about the data, how many more or less are in one category than in another. (Ex: read bar graphs and line plots.)</p>

Term	Works with Money 1.MA.5
1	NA
2	NA
3	<p>Recognize physical appearance and identify the value of pennies, nickels, dimes and quarters and know their comparative values. Ex: a nickel is of greater value than a penny.</p> <p>Find equivalent values. Ex: 1 dime equals 10 pennies or two nickels or 5 pennies and 1 nickel.</p> <p>Use the value of coins (pennies, nickels and dimes only) in the solutions of problems. Ex. Count a collection of pennies, nickels and dimes.</p> <p><b>Use appropriate notations: 69¢, \$0.69</b></p>

**GEOMETRY**

<b>Term</b>	<b>Reason with Shapes and Their Attributes 1.G.1, 1.G.2, 1.G.3</b>
1	NA
2	NA
3	<p>Distinguish between defining attributes (Ex: triangles are closed and 3-sided) vs. non-defining attributes (color, orientation, overall size).</p> <p>Compose 2-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles), and 3-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders).</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>. Understand for these examples that decomposing into more equal shares creates smaller shares.</p>

## MATHEMATICAL PRACTICE

Listed below are examples of the use of mathematical practice. Practice and evidence are embedded in the lessons. Like the content standards, Mathematical Practices are scored by term. If a student is meeting the expectations of each lesson's mathematical practice, he/she is meeting the term expectations or benchmarks.

Term	<b>MAKES SENSE OF PROBLEMS AND PERSEVERES IN SOLVING THEM</b> <b>MPS.1, MPS.2, MPS.7, MPS.8</b>
1	Keep trying when your problem is hard. Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects Make sense of the representations you and others use
2	Keep trying when your problem is hard. Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects Make sense of the representations you and others use. Solve problems in more than one way. Compare strategies you and others use. Look for mathematical structure such as categories, patterns, and properties. Use structure to solve problems and answer questions
3	Keep trying when your problem is hard. Create mathematical representations using numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects Make sense of the representations you and others use. Solve problems in more than one way. Compare strategies you and others use. Look for mathematical structure such as categories, patterns, and properties. Use structure to solve problems and answer questions. Check whether your answer makes sense. Reflect on your thinking as you solve your problem.

Term	<b>MODELS AND EXPLAINS USING TOOLS</b> <b>MPS.3, MPS.4, MPS.5, MPS.6</b>
1	Model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations. Use tools effectively and make sense of your results. Explain your mathematical thinking clearly and precisely. Use clear labels, units, and mathematical language. Think about accuracy and efficiency when you count, measure, and calculate.
2	Model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations. Use tools effectively and make sense of your results. Explain your mathematical thinking clearly and precisely.



	<p>Use clear labels, units, and mathematical language. Think about accuracy and efficiency when you count, measure, and calculate.</p>
3	<p>Model real-world situations using graphs, drawings, tables, symbols, numbers, diagrams, and other representations. Use mathematical models to solve problems and answer questions. Choose appropriate tools and use tools effectively and make sense of your results. Explain your mathematical thinking clearly and precisely. Use clear labels, units, and mathematical language. Think about accuracy and efficiency when you count, measure, and calculate. Create and justify rules, shortcuts, and generalizations.</p>