

Mathematics Standards

Grade 1

In Grade 1, instructional time focuses on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones, and (3) developing an understanding of the meaning and processes of measurement, including iteration and for indirect measurement. linear measurement and measuring lengths as iterating length units. There is a continued emphasis on critical thinking and problem solving, and providing students with real life applications and experiences in mathematics.

Operations and Algebraic Thinking (OA)	
1.OA.A.1	Use addition and subtraction within 20 to solve word problems with unknowns in all positions (e.g., by using objects, drawings, and/or equations with a symbol for the unknown number to represent the problem).
1.OA.A.2	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/or equations with a symbol for the unknown number to represent the problem).
1.OA.B.3	Apply properties of operations (commutative and associative properties of addition) as strategies to add and subtract through 20. (Students need not use formal terms for these properties.)
1.OA.B.4	Understand subtraction as an unknown-addend problem within 20 (e.g., subtract $10 - 8$ by finding the number that makes 10 when added to 8).
1.OA.C.5	Relate counting to addition and subtraction (e.g., by using counting on 2 to add 2).
1.OA.C.6	Fluently add and subtract within 10.
1.OA.D.7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false (e.g., Which of the following equations are true and which are false? $6 + 1 = 6 - 1$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$).
1.OA.D.8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers (e.g., determine the unknown number that makes the equation true in each of the equations $8 + \square = 11$, $5 = \square - 3$, $6 + 6 = \square$).
Number and Operations in Base Ten (NBT)	
1.NBT.A.1	Count to 120 by 1's, 2's, and 10's starting at any number less than 100. In this range, read and write numerals and represent a number of objects with a written numeral.
1.NBT.B.2	Understand that the two digits of a two-digit number represent groups of tens and ones. Understand the following as special cases: a. 10 can be thought of as a group of ten ones — called a “ten”. b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. 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).
1.NBT.B.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
1.NBT.C.4	Demonstrate understanding of addition within 100, connecting objects or drawings to strategies based on place value (including multiples of 10), properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written form. <i>See Table 1.</i>

1.NBT.C.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count.
1.NBT.C.6	Subtract multiples of 10 in the range of 10 to 90 (positive or zero differences), using objects or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Relate the strategy to a written form.
Measurement and Data (MD)	
1.MD.A.1	Order three objects by length. Compare the lengths of two objects indirectly by using a third object.
1.MD.A.2	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. (Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.)
1.MD.B.3a	Tell and write time in hours and half-hours using analog and digital clocks.
1.MD.B.3b	Identify coins by name and value (pennies, nickels, dimes and quarters).
1.MD.C.4	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.
Geometry (G)	
1.G.A.1	Distinguish between defining attributes (triangles are closed and 3 sided) versus non-defining attributes (color, orientation, overall size) for two-dimensional shapes; build and draw shapes that possess defining attributes.
1.G.A.2	Compose two-dimensional shapes or three-dimensional shapes to create a composite shape.
1.G.A.3	Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters. Describe the whole as two of, or four of the shares. Understand that decomposing into more equal shares creates smaller shares.
Standards for Mathematical Practice	
1.MP.1	Make sense of problems and persevere in solving them.
1.MP.2	Reason abstractly and quantitatively.
1.MP.3	Construct viable arguments and critique the reasoning of others.
1.MP.4	Model with mathematics.
1.MP.5	Use appropriate tools strategically.
1.MP.6	Attend to precision.
1.MP.7	Look for and make use of structure.
1.MP.8	Look for and express regularity in repeated reasoning.