



Math - Grade 2

Course Description:

The Indian Community School weaves indigenous teachings with a distinguished learning environment. The curriculum for this course is developed from the [Common Core State Standards for Mathematics](#) and the framework of the [ICS Our Ways Cultural Calendar](#). In this course, second grade students will develop four critical areas: base-ten notation, fluency with addition and subtraction, measurement, and describing/analyzing shapes. Students will practice these skills through a math workshop model utilizing mini-lessons, self-reflection, practice, and choice. Students will be able to demonstrate independence in all key mathematical practices in the domains of Operations and Algebraic Thinking, Numbers and Operations in Base Ten, Measurement and Data, and Geometry.

Enduring Understandings:

- Mathematicians persevere to solve addition and subtraction word problems within 100 with one- and two-steps, involving adding to, taking away, taking apart, and comparing, and featuring unknowns.
- Mathematicians reason abstractly about these problems to model them with drawings and equations using a symbol to represent the unknown number.
- Mathematicians will add and subtract fluently within 20 using mental math with precision and know from memory all sums of two one-digit numbers.
- The foundations for multiplication will be built on the practice of repeated addition and subtraction, working with equal groups of objects, and looking for and recognizing odd and even numbers, patterns and rectangular arrays.
- Estimating, measuring, and comparing will be used to determine the length of objects using the units of inches, feet, centimeters, and meters to the nearest whole unit.
- Measurements will be represented on number lines, picture graphs, line plots, and bar graphs while using appropriate tools.
- Mathematicians use addition and subtraction within 100 to solve word problems involving length and money to build an understanding of the standards of measurement used in the economy.
- Telling and writing time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. is needed to build an understanding of personal perspective within the day.
- The foundations of fractions and area will be built on the recognition, representation, and partitioning of shapes into equal shares with specified attributes.
- Mathematicians use place value, skip counting, comparing values, and the reading of numbers to 1,000 to understand how digits are organized to represent value.
- Utilizing models, drawings, strategies, and mental math based on place value, mathematicians add and subtract within 1000 to relate representations to a written method and explain their thinking.

OPERATIONS AND ALGEBRAIC THINKING

- I can apply strategies to solve one-step addition word problems within 100. (2.OA.A.1)
- I can apply strategies to solve two-step addition word problems within 100. (2.OA.A.1)
- I can apply strategies to solve one-step subtraction word problems within 100. (2.OA.A.1)
- I can apply strategies to solve two-step subtraction word problems within 100. (2.OA.A.1)



OPERATIONS AND ALGEBRAIC THINKING (continued)

- I can apply strategies to solve word problems with unknowns in all positions. (2.OA.A.1)
- I can fluently add using mental strategies within 20. (2.OA.B.2)
- I can fluently subtract using mental strategies within 20. (2.OA.B.2)
- I can group objects to tell if a number is odd or even. (2.OA.C.3)
- I can write a number sentence to show how adding two of the same number will equal an even number. (2.OA.C.3)
- I can use addition to help me figure out how many objects are in an array. (2.OA.C.4)
- I can write a number sentence to show the total number of objects in an array. (2.OA.C.4)

NUMBER AND OPERATIONS IN BASE TEN

- I can use hundreds, tens, and ones in a three digit number. (2.NBT.A.1)
- I can identify a bundle of ten “tens” makes a “hundred”. (2.NBT.A.1.A)
- I can count to 1,000 by 5s, 10s, and 100s. (2.NBT.A.2)
- I can skip-count by 5s, 10s, and 100s. (2.NBT.A.2)
- I can read numbers to 1,000. (2.NBT.A.3)
- I can write numbers to 1,000 in standard form, expanded form, and word form. (2.NBT.A.3)
- I can compare three-digit numbers using $<$, $=$, and $>$ using hundreds, tens, and ones. (2.NBT.A.4)
- I can fluently add within 100. (2.NBT.B.5)
- I can fluently subtract within 100. (2.NBT.B.5)
- I can add up to four 2-digit numbers. (2.NBT.B.6)
- I can apply strategies to add numbers within 1000 and relate the strategy to a written method. (2.NBT.B.7)
- I can apply strategies to subtract numbers within 1000 and relate the strategy to a written method. (2.NBT.B.7)
- I can mentally add and subtract 10 to 100 to any number from 100 to 900. (2.NBT.B.8)
- I can explain what adding and subtracting strategy I used to solve my problem. (2.NBT.B.9)
- I can explain why the addition and subtraction strategies work. (2.NBT.B.9)

MEASUREMENT AND DATA

- I can use different standardized tools to measure the length of objects. (2.MD.A.1)
- I can use two different units to measure the length of the same object. (2.MD.A.2)
- I can compare two measurements that use different units. (2.MD.A.2)
- I can estimate the lengths of objects using inches, feet, centimeters, and meters. (2.MD.A.3)



MEASUREMENT AND DATA (continued)

- I can measure to compare the lengths of two different objects. (2.MD.A.4)
- I can use addition and subtraction within 100 to solve word problems involving length. (2.MD.B.5)
- I can use equations with a symbol for the unknown number to represent the problem. (2.MD.B.5)
- I can make and use a number line. (2.MD.B.6)
- I can tell and write time to five minutes from analog and digital clocks. (2.MD.C.7)
- I can tell the difference between a.m. and p.m. (2.MD.C.7)
- I can count dollars, quarters, dimes, nickels, and pennies to help me solve word problems. (2.MD.C.8)
- I can use \$ and ¢ symbols correctly. (2.MD.C.8)
- I can show whole-unit measurements on a line plot. (2.MD.D.9)
- I can draw a bar graph to represent a data set with up to four categories. (2.MD.D.10)
- I can draw a picture graph to represent a data set with up to four categories. (2.MD.D.10)
- I can solve problems using information from a bar graph. (2.MD.D.10)

GEOMETRY

- I can name shapes including triangles, quadrilaterals, pentagons, hexagons, and cubes. (2.G.A.1)
- I can draw shapes including triangles, quadrilaterals, pentagons, hexagons, and cubes. (2.G.A.1)
- I can divide a rectangle into rows and columns of squares equal in size. (2.G.A.2)
- I can count to find the total number of same-size squares. (2.G.A.2)
- I can divide shapes into equal parts and describe the parts with words like halves or thirds. (2.G.A.3)
- I can demonstrate understanding that equal parts of a shape may look different depending on how I divide the shape. (2.G.A.3)
- I can describe the whole as two halves, three thirds and four fourths. (2.G.A.3)