

Frankfort School District 157C

Math Curricular Expectations

Grade: 2

- Skills students should know and be able to do by the end of 2nd grade

Operations & Algebraic Thinking	Measurement & Data	Number Sense & Systems	Geometry
<ul style="list-style-type: none"> • Use addition and subtraction within 100 to solve one and two step word problems. • Fluently add and subtract facts within 20 from memory. • Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. • Add up to four two-digit numbers using strategies based on place value and properties of operations. • Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. • Add and subtract within 1000, using concrete models 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 method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds • Add and write an equation for objects arranged in a rectangular array (up to 5x5) • Explain why addition and subtraction strategies work, using place value and the properties of operations. 	<ul style="list-style-type: none"> • Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, and represent whole-number sums and differences within 100 on a number line diagram. • Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. • Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? • Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. • Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. • Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph. • Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. • Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. • Estimate lengths using units of inches, feet, centimeters, and meters. • Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 	<ul style="list-style-type: none"> • Understand place value to 100 • Understand place value to 1,000; skip count by 5s, 10s, and 100s. • Understand place value to 1,000, read and write numbers to 1,000 using base ten numerals, number names, and expanded form. • Understand place value comparing 3 digit numbers using <, >, or =. 	<ul style="list-style-type: none"> • Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. • Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.