Math
Grades k-5

Project SUCCESS

Number Sense:

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.NS.1.a.1: Count to at least 20 by ones and tens and count on by one from any number.	**1.NS.1.a.1**: Count to at least 50 by ones, fives, and tens from 0 with tools. **1.NS.1.a.2**: From 0 - 50, read and write numerals and represent a number of objects with a written numeral.	**2.NS.1.a.1**: Count by ones, fives, and tens up to at least 100 from 0. **2.NS.1.a.2**: Count by twos to at least 100 from 0 with tools.	**MA.3.NS.1.a.1**: Read, demonstrate, and write whole numbers up to 200, in standard and word form.	**MA.4.NS.1.a.1**: Read, demonstrate, and write whole numbers up to 500.	**MA.5.NS.1.a.1**: Compare two fractions using symbols <, >, and = symbols and vocabulary. **MA.5.NS.1.a.2**: Compare two decimals to the hundredths place with a value of less than 1 using symbols <, >, and = symbols and vocabulary.
K.NS.2.a.1: Write whole numbers from 0 to 20. **K.NS.2.a.2**: Recognize number words from 0 to 10 to the numeral. **K.NS.2.a.3**: Identify a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	**1.NS.2.a.1**: Understand that 10 can be thought of as a group of ten ones – called a "ten". **1.NS.2.a.2**: Understand that when groups of tens and ones are combined, a new number is formed.	**2.NS.2.a.1**: Read and write whole numbers up to at least 100 in standard form.	**MA.3.NS.2.a.1**: Compare two whole numbers up to 200 using >, =, and < symbols and words.	**MA.4.NS.2.a.1**: Compare two whole numbers up to 500 using >, =, and < symbols and words.	**MA.5.NS.2.a.1**: Represent fractions as part of a set, whole, or division of whole numbers.
K.NS.3.a.1: Find the number that is one more than or one less than any whole number up to 20.	**1.NS.3.a.1**: Match the ordinal numbers first, second, third, etc., with an ordered set up to 5 items.	**2.NS.3.a.1**: Plot and compare whole numbers up to 100 on a number line.	**MA.3.NS.3.a.1**: Identify the numerator of a fraction. **MA.3.NS.3.a.2**: Identify the denominator of fractions to halves, thirds, fourths.	**MA.4.NS.3.a.1**: Express a whole number as a fraction.	**MA.5.NS.3.a.1**: Compare the value of a digit when it is represented in different place values of 2 three-digit numbers.

Math
Grades k-5

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.NS.4.a.1: Say the number names in standard order when counting objects, pairing each object with one and only one number name and each number name with one and only one object. Understand that the last number name said describes the number of objects counted and that the number of objects is the same regardless of their arrangement or the order in which they were counted.	**1.NS.4.a.1:** Use place value understanding to compare two two-digit numbers based on meanings of the tens and ones digits. **1.NS.4.a.2:** Choose the correct symbol >, =, and <.	**2.NS.4.a.1:** Match the ordinal numbers first, second, third, etc., with an ordered set up to 10 items.	**MA.3.NS.4.a.1:** Locate given common unit fractions (i.e., ½, ¼) on a number line that has a value between 0 and 1.	**MA.4.NS.4.a.1:** Using a model, show equivalent fractions for fractions up to tenth.	
K.NS.5.a.1: Count up to 20 objects arranged in a line. Count up to 5 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20.	**1.NS.5.a.1:** Find 10 more or 10 less than a given two-digit number.	**2.NS.5.a.1:** Determine whether a group of objects (up to 10) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).	**MA.3.NS.5.a.1:** Represent halves and fourths between 0 and 1 on a number line.	**MA.4.NS.5.a.1:** Use symbols =, <, or > and words to compare two fractions (fractions with the different denominator of 10 or less).	**MA.5.NS.5.a.1:** Round decimals to the nearest whole number.
K.NS.6.a.1: Recognize sets of 1 to 6 objects in patterned arrangements and tell how many without counting.	**1.NS.6.a.1:** Understand that the two digits of a two-digit number represent amounts of tens, and ones.	**2.NS.6.a.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.	**MA.3.NS.6.a.1:** Understand two fractions as equivalent (equal).	**MA.4.NS.6.a.1:** Write tenths in decimal and fraction notations. **MA.4.NS.6.a.2:** Know the fraction and decimal equivalent for halves and fourths up to 1.	**MA.5.NS.6.a.1:** Use a model to represent percent as part of 100.

Math
Grades k-5

Project **SUCCESS**

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
		2.NS.7.a.1: Use place value understanding to compare two two-digit numbers. **2.NS.7.a.2:** Use >, =, and < symbols to record the results of comparisons.	**MA.3.NS.7.a.1:** Recognize simple equivalent fractions using models to show equivalence.	**MA.4.NS.7.a.1:** Compare two decimals to the tenths place with a value of less than 1.	
			MA.3.NS.8.a.1: Use =, <, or > and/or words to compare two fractions with the same denominator using a model.	**MA.4.NS.8.a.1:** Identify a factor pair for a product up to 50.	
			MA.3.NS.9.a.1: Use place value to round two-digit numbers to the nearest 10.	**MA.4.NS.9.a.1:** Use place value to round 3-digit numbers to tens or hundreds.	

Math
Grades k-5

Project SUCCESS

Computation:

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.CA.1.a.1: Use objects, drawings, mental images, sounds, etc., to represent addition and subtraction within 10.	**1.CA.1.a.1:** Demonstrate addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Understand the role of 0 in addition and subtraction.	**2.CA.1.a.1:** Add and subtract within 40 using multiple strategies.	**MA.3.C.1.a.1:** Add and subtract whole numbers with sums up to 100.	**MA.4.C.1.a.1:** Add and subtract multi-digit whole numbers with sums up to 500.	**MA.5.C.1.a.1:** Multiply two-digit numbers by two-digit numbers.
K.CA.2.a.1: Use strategies to solve real-world problems involving addition and subtraction within 6 (e.g., by using objects or drawings to represent the problem).	**1.CA.2.a.1:** Use strategy to solve real-world problems involving addition and subtraction within 10 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem.	**2.CA.2.a.1:** Use strategies to solve real-world problems involving addition and subtraction in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem.	**MA.3.C.2.a.1:** Represent the concept of multiplication with manipulatives and arrays with numbers 1, 5, and 10.	**MA.4.C.2.a.1:** Multiply two-digit numbers by one-digit numbers.	**MA.5.C.2.a.1:** Divide multi-digit whole numbers with dividends up to 100 without remainders.

Math
Grades k-5

Project SUCCESS

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.CA.3.a.1: Use objects, drawings, etc., to decompose numbers less than or equal to 10 in more than one way.	**1.CA.3.a.1:** Create a real-world problem to represent a given equation involving addition and subtraction within 10.	**2.CA.3.a.1:** Use strategies to solve real-world problems involving addition and subtraction in situations involving lengths that are given in the same units.	**MA.3.C.3.a.1:** Represent division by sorting a set number of objects into a set number of groups. Up to 20 objects into up to 5 groups.	**MA.4.C.3.a.1:** Represent division by sorting up to 50 objects into groups without remainders.	
K.CA.4.a.1: Find the number that makes 10 when added to the given number for any number from 1 to 9 (e.g., by using objects or drawings.)	**1.CA.4.a.1:** Solve real-world problems that call for addition of three whole numbers whose sum is within 10 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem).	**2.CA.4.a.1:** Add and subtract whole numbers, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	**MA.3.C.4.a.1:** Use representations of division (by sorting a set number of objects into a set number of groups) to find how many in one group. Up to 20 objects into up to 5 groups.	**MA.4.C.4.a.1:** Multiply single digit numbers fluently.	**MA.5.C.4.a.1:** Add and subtract fractions with unlike denominators, limiting denominators to halves, fourths, fifths, and tenths.
K.CA.5.a.1: Create, extend, and give an appropriate rule for simple repeating and growing patterns with numbers and shapes.	**1.CA.5.a.1:** Add within 50 including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	**2.CA.5.a.1:** Use addition to write an equation to express the total as a sum of equal groups.	**MA.3.C.5.a.1:** Apply strategies of multiplication, including zero property of multiplication and identity property multiplication.	**MA.4.C.5.a.1:** Using a model, represent the concept of adding and subtracting fractions (e.g., ¾ = ¼ + ¼ + ¼).	**MA.5.C.5.a.1:** Use models to multiply a fraction by a whole number.
	1.CA.6.a.1: Understand the meaning of the equal sign.	**2.CA.6.a.1:** Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.	**MA.3.C.6.a.1:** Solve multiplication facts up to 10	**MA.4.C.6.a.1:** Using a model, represent the concept of adding and subtracting mixed numbers with common denominators.	**MA.5.C.6.a.1:** Determine whether the product will increase or decrease based on the multiplier.

Math
Grades k-5

Project
SUCCESS

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
	1.CA.7.a.1: Create, extend, and give an appropriate rule for number patterns using addition within 50.	**2.CA.7.a.1:** Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 100.		**MA.4.C.7.a.1:** Using models, demonstrate understanding of the commutative property using numbers less than 5.	**MA.5.C.7.a.1:** Use models to divide whole numbers by one half to solve for total number of parts.
					MA.5.C.8.a.1: Solve one-step problems using decimals.
					MA.5.C.9.a.1: Evaluate an expression with one set of parentheses.

Math
Grades k-5

Project SUCCESS

Algebraic Thinking:

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
			MA.3.AT.1.a.1: Use pictures and/or manipulatives to solve real-world addition and subtraction word problems with sums up to 100.	**MA.4.AT.1.a.1:** Solve one-or two-step word problems requiring addition and/or subtraction with sums up to 500.	**MA.5.AT.1.a.1:** Solve problems or word problems using up to 2-digit multiplication or 3-digit dividend with no remainder.
			MA.3.AT.2.a.1: Use pictures, manipulatives, and/or arrays to solve real world one step multiplication and division word problems within 100.	**MA.4.AT.2.a.1:** Recognize and apply the relationship between addition and multiplication.	**MA.5.AT.2.a.1:** Solve word problems involving the addition and subtraction of fractions with unlike denominators of halves, fourths, fifths, tenths.
			MA.3.AT.3.a.1: Use pictures, manipulatives, and/or tables to solve real-world two-step addition and subtraction word problems up to 100.	**MA.4.AT.3.a.1:** Represent verbal statements of multiplicative comparisons as multiplication equations.	**MA.5.AT.3.a.1:** Solve real-world problems involving multiplication of a fraction and a whole number.
			MA.3.AT.4.a.1: Create a model to represent a multiplication problem.	**MA.4.AT.4.a.1:** Solve a real-world problem involving multiplicative comparison with product unknown.	**MA.5.AT.4.a.1:** Solve real-world problems involving the division of a whole number by one half to find the total parts.
			MA.3.AT.5.a.1: Apply properties of operations as strategies to multiplication or division.	**MA.4.AT.5.a.1:** Solve a real-world problem using a model to represent the concept of adding and subtracting fractions (e.g., $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$).	**MA.5.AT.5.a.1:** Solve one step real-world problems involving addition, subtraction, multiplication, and division with decimals to the hundredths place.
			MA.3.AT.6.a.1: Identify number patterns using multiplication within 100.	**MA.4.AT.6.a.1:** Understand that a variable in an equation is representing a number.	**MA.5.AT.6.a.1:** Locate points on a graph and identify x and y axis.
					MA.5.AT.7.a.1: Graph ordered pairs in the first quadrant of coordinate plane.
					MA.5.AT.8.a.1: Given a real-world problem, evaluate the expressions for the specific values of up to two variables.

Math
Grades k-5

Project SUCCESS

Geometry:

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.G.1.a.1: Describe the positions of objects and geometric shapes in space using the terms above, below, behind, in front of, next to.	**1.G.1.a.1:** Identify objects as two-dimensional or three-dimensional. **1.G.1.a.2:** Explore attributes of two-dimensional and three-dimensional objects. **1.G.1.a.3:** Identify the two-dimensional shapes that make up the faces of three-dimensional objects.	**2.G.1.a.1:** Draw given two-dimensional or three-dimensional objects. **2.G.1.a.2:** Identify attributes of two-dimensional and three-dimensional objects.	**MA.3.G.1.a.1:** Identify the following: cube, sphere, cylinder, cone.	**MA.4.G.1.a.1:** Using models and representations, identify the following shapes: parallelograms, rhombuses, and trapezoids.	**MA.5.G.1.a.1:** Categorize angles as right, acute, or obtuse. **MA.5.G.1.a.2:** Identify the diameter and radius of a circle.
K.G.2.a.1: Compare two-dimensional shapes in different sizes using informal language to describe their sides. **K.G.2.a.2:** Compare three-dimensional shapes in different sizes using informal language to describe their sides and faces.	**1.G.2.a.1:** Name defining attributes of two- and three-dimensional shapes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size).	**2.G.2.a.1:** Create squares, rectangles, triangles, and cubes.	**MA.3.G.2.a.1:** Identify shared attributes of shapes based on the models provided.	**MA.4.G.2.a.1:** Recognize a line of symmetry in a figure.	**MA.5.G.2.a.1:** Recognize properties of simple plane figures by counting the number of sides. **MA.5.G.2.a.2:** Distinguish plane figures by the name of the shape and number of sides.
K.G.3.a.1: Compose shapes from objects.	**1.G.3.a.1:** Use geometric shapes (e.g., two-dimensional and three- dimensional) to create a composite shape.	**2.G.3.a.1:** Compose and decompose two- and three-dimensional shapes.	**MA.3.G.3.a.1:** Use points to create a straight line with a ruler, straight edge or technology.	**MA.4.G.3.a.1:** Recognize an angle in two-dimensional shape.	
K.G.4.a.1: Compose simple geometric shapes.	**1.G.4.a.1:** Divide circles and rectangles into two equal parts; name the parts of the shape using the word halves.	**2.G.4.a.1:** Divide a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.	**MA.3.G.4.a.1:** Partition shapes into equal parts (halves, thirds, fourths) with equal area.	**MA.4.G.4.a.1:** Identify parallel and perpendicular lines.	
		2.G.5.a.1: Divide circles and rectangles into two and four equal parts; name the parts of the shape using the word halves and quarters.		**MA.4.G.5.a.1:** Classify shapes based on attributes (angles, parallel and perpendicular lines).	

Math
Grades k-5

Measurement:

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.M.1.a.1: Make comparisons of the length, weight, and temperature of objects.	**1.M.1.a.1:** Use a nonstandard unit to compare and order objects according to length, weight, and temperature.	**2.M.1.a.1:** Identify inch, foot, yard, centimeter, and meter.	**MA.3.M.1.a.1:** Measure volume using gallons, quarts, liters.	**MA.4.M.1.a.1:** Measure length to nearest quarter-Inch.	**MA.5.M.1.a.1:** Convert measurements of time (days in a week, hours in a day, months in a year, minutes in an hour, seconds in a minute). **MA.5.M.1.a.2:** Solve problems involving when finding time lapse.
K.M.2.a.1: Understand the concept of time.	**1.M.2.a.1:** Tell and write time to the nearest hour.	**2.M.2.a.1:** Measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.	**MA.3.M.2.a.1:** Select appropriate tool for measuring length, weight, and temperature.	**MA.4.M.2.a.1:** Identify the appropriate units of measurement for different purposes in a real-life context (e.g., measure a wall using feet, not inches).	**MA.5.M.2.a.1:** Multiply whole numbers to find the area of a rectangle.
	1.M.3.a.1: Find the value of a collection of pennies, nickels, and dimes.	**2.M.3.a.1:** Measure the same object with two different tools.	**MA.3.M.3.a.1:** Tell and write time to the nearest quarter hour. Solve real-world word problems involving the addition and subtraction of time intervals to whole hours or within an hour (e.g., whole hours: 5:00 to 8:00, within hours: 7:15 to 7:45) using manipulatives or pictures of a clock.	**MA.4.M.3.a.1:** Solve real-world problems involving intervals of time to the half-hour. **MA.4.M.3.a.2:** Solve real-world problems involving money up to the value of five dollars.	**MA.5.M.3.a.1:** Provided the formula, students will insert the correct numbers into the correct location of the formula.
		2.M.4.a.1: Measure volume (capacity) using cups and pints.	**MA.3.M.4.a.1:** Solve real-world problems to determine whether there is enough money to make a purchase using the next dollar strategy (round up to the next whole dollar).	**MA.4.M.4.a.1:** Solve real-world problems using area.	**MA.5.M.4.a.1:** Model volume by counting the number of cubic units that fit into a rectangular prism.

Math
Grades k-5

Project **SUCCESS**

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
		2.M.5.a.1: Tell and write time to the nearest half hour.	**MA.3.M.5.a.1:** Find the area of rectangles by modeling with unit squares.	**MA.4.M.5.a.1:** Find an angle in a circle.	**MA.5.M.5.a.1:** Provided the formula, students will insert the correct numbers into the correct location of the formula.
		2.M.6.a.1: Describe relationships of time, by at least including: hours in a day; days in a week; and days, weeks, and months in a year.	**MA.3.M.6.a.1:** Use tiling and addition to determine area of a rectangle.	**MA.4.M.6.a.1:** Select an appropriate tool for measuring angles.	**MA.5.M.6.a.1:** Solve completed volume formula.
		2.M.7.a.1: Find the value of a collection of pennies, nickels, dimes, quarters, and dollars.	**MA.3.M.7.a.1:** Identify a figure as getting larger or smaller when the dimensions of the figure change. **MA.3.M.7.a.2:** Use addition to find the perimeter of a polygon.		

Data Analysis & Statistics (Grade 5 only):

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
					MA.5.DS.1.a.1: Use data (from a bar graph) to determine questions that could be answered with the graph, or answer a simple question about the graph (e.g., average height among 3 classrooms, # of boys and girls).
					MA.5.DS.2.a.1: Use a completed line plot to find mode and median.

Data Analysis (Data Analysis & Statistics – Grade 5 only):

Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
K.DA.1.a.1: Sort objects by attributes.	**1.DA.1.a.1:** Interpret data with two choices. Ask and answer questions about the total number of data points, how many in each choice, and how many more or less in one choice compared to another.	**2.DA.1.a.1:** Interpret a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to three choices.	**MA.3.DA.1.a.1:** Organize given data into a graph. **MA.3.DA.1.a.2:** Select the appropriate statement that describes the data representations based on a given bar graph or picture graph.	**MA.4.DA.1.a.1:** Interpret data from a table or bar graph.	**MA.5.DS.1.a.1:** Use data (from a bar graph) to determine questions that could be answered with the graph, or answer a simple question about the graph (e.g., average height among 3 classrooms, # of boys and girls).
			MA.3.DA.2.a.1: Organize measurement data into a line plot	**MA.4.DA.2.a.1:** Graph provided data on a line plot.	**MA.5.DS.2.a.1:** Use a completed line plot to find mode and median.
				MA.4.DA.3.a.1: Interpret data displayed in a circle graph up to halves and fourths.	