CORE@TCA SIDE BY SIDE STANDARDS
2nd / 3rd / 4th Grade
Essential Standards
Mathematics
Based on State Key Content Standards compiled by the Pulliam Group

Strand	Standard 2nd Grade	Standard 3rd Grade	Standard 4th Grade
Number Sense	1.1 Count, read, write, and identify place value of numbers to 1000 1.2 Compare and order whole numbers to 1000 using (<,=,>) 2.1 Understand the inverse relationship between addition and subtraction 2.2 Find the sum and difference of whole numbers up to 3 digits 3.1 Use repeated addition, arrays, and counting by multiples to do multiplication 3.2 Use repeated subtraction, equal sharing, and forming equal groups with remainders to do division 4.1 Recognize, name, and unit fractions from 1/12 to ½ 4.2 Recognize fractions of a whole and parts of a group (1/4 of a pie) 4.3 Know that when all fractional parts are included, such as 4/4, the result is one 5.1 Solve problems using combinations of coins and bills 5.2 Use the decimal notation and dollar and cent symbols for money	1.1 Count, read and write whole numbers to 10,000 1.2 Compare and order whole numbers to 10,000 using (<=>) 1.3 Identify the place value for each digit in numbers to 10,000 1.5 Use expanded notation to represent numbers 2.1 Find the sum or difference of two whole numbers between 0 and 10,000 2.2 Memorize multiplication table for numbers between 1 and 10 2.3 Use the inverse relationship of multiplication and division to solve problems 2.4 Multiply and divide one-digit numbers by multi-digit numbers. 3.2 Compare, add, and subtract simple fractions 3.3 Solve problems involving addition, subtraction, multiplication, and division of money amounts in decimal notation	1.1 Read and write whole numbers to the millions 1.2 Order and compare whole numbers to 9,999 and decimals to two places 1.3 Round whole numbers through the millions (up to 1,000,000) 1.4 Decide when a rounded solution is called for and explain why 1.8 Use concepts of negative numbers (number line, temperature, etc.) 1.9 Identify on a number line the relative position of a positive fraction, mixed numbers, and decimals to two decimal places 3.1 Use standard algorithms for the addition and subtraction of multi-digit numbers 3.2 Use an algorithm for multiplying multi-digit numbers by two digit numbers 3.3 Solve problems involving multiplication of multi-digit numbers by two digit 3.4 Solve problems involving division of multi-digit numbers by two digit numbers 4.0 Know how to factor small whole numbers 5.0 Know that numbers such as 2,3,5,7 and 11 do not have any factors except 1 and themselves and that such numbers are prime numbers
Algebra and functions	1.1 Use the commutative and associative properties of addition 1.2 Relate problem situations to number sentences	1.1 Represent relationships of quantities in the form of mathematical expressions, equations, or inequalities 2.1 Solve simple problems involving the relationship between two quantities (e.g., find the total cost of multiple items given the cost per unit)	1.2 Interpret and evaluate mathematical expressions with parentheses 1.3 Use parentheses to indicate which operation to perform first 1.5 Understand that an equation such as ***y=3x+5*** is a prescription for determining a second number when a first number is given 2.1 Know that equals added to equals are equal 2.2 Know that equals multiplied by equals are equal
Measurement and Geometry	1.1 Measure length by repeating a nonstandard or standard unit of measure 1.1 Measure the length of an object to its nearest inch/centimeter 2.1 Describe and classify geometric shapes according to the number and shape of faces, edges, and vertices 2.1 Put shapes together and take them apart to form other shapes	1.2 Estimate the area and volume of solid figures by covering them with squares or by counting the number of cubes that would fill them 1.3 Find the perimeter of a polygon 2.1 Identify, describe, and classify polygons (pentagons, hexagons, and octagons) 2.2 Identify the attributes of triangles 2.3 Identify the attributes of quadrilaterals	2.1 Draw the point corresponding to linear relationship on graph paper 2.2 Understand that the length of a horizontal line segment equals the difference of the ***x***-coordinates 2.3 Understand that the length of a vertical line segment equals the difference of the ***y***-coordinates
Statistics, Data Analysis, and Probability	1.0 Collect, organize and display data on bar graphs and charts 2.1 Describe and extend patterns and determine a next term in number patterns	1.6 Record the possible outcomes for a simple random event 1.7 Summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot)	1.0 Organize, represent, and interpret data
Mathematical Reasoning	1.0 Make decisions about how to set up a problem 2.0 Solve problems and justify their reasoning	1.0 Make decisions about how to set up a problem 2.0 Use strategies, skills and concepts in finding solutions	1.0 Make decisions about how to approach problems 2.0 Use strategies, skill, and concepts in finding solutions