# Mathematics Scope and Sequence: Kindergarten - Grade 6 

2016-2017

| Grade | September | October | November | December | January | February | March | April | May | June |
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| Kindergarten | Getting started with mathematics | Continue exploring 2dimensional shapes/sorting and classifying | Continue patterns | Exploring numbers 0-10 | Continue exploring numbers 0-20 | Continue addition within 10 | Continue subtraction within 10 | Continue decomposing numbers less than or equal to 10 | Continue exploring numbers beyond 10 (focus on 1120) | Continue measurement: length, \& width |
|  | Exploring 2dimensional shapes/Sorting and classifying | Patterns | Counting to 10 |  | Addition within 10 | Subtraction within 10 | Decomposing numbers less than or equal to 10 | Exploring numbers beyond 10 (focus on 1120) | Measurement: length, \& vidth | 3-dimensional shapes |
| Grade 1 | Reviewing number concepts to 20: -Count, order, compare, decompose -Sort, classify | Extending number concepts to 120: <br> -Read, write numerals -Compare using greater than, less than, equal | Continue understanding addition and subtraction | Continue addition strategies | Continue addition strategies | Continue understanding place value: -Add a 2-digit and 1-digit number -Add a 2-digit number and multiples of 10 . | Continue subtraction strategies: | Continue time and money | Continue geometry concepts | Continue measurement |
|  |  | Understanding addition and subtraction: -Model and solve problems using concrete objects | Addition strategies: -Understand and use different strategies to solve addition problems |  | Understanding place value: <br> -Represent numbers as tens/ones -Make exchanges with ones/tens | Subtraction strategies: -Understand and use different strategies to solve subtraction problems | Time and money: <br> -Recognize and identify pennies, nickels, dimes -Solve money problems <br> -Tell and write times in hours/half-hours using analog/digital clocks | Geometry concepts: -Recognize, name 2dimensional \& 3-dimensional shapes -Describe \& compare attributes | Measurement: -Collect, record, analyze, and interpret data in graphs/charts. |  |
| Grade 2 | Number sense: <br> -Apply a variety of strategies for adding numbers. -Recall addition/subtraction facts to 20. | Continue number sense | Continue number sense | Continue addition | Continue addition | Continue subtraction | Continue data analysis and measurement | Continue data analysis and measurement | Continue fractions | Continue geometry |
|  |  |  | Addition: <br> -Construct and model numerals up to 4 digits. -Model addition using partial |  | Subtraction: <br> -Model the <br> subtraction of 2- <br> digit numbers <br> with and without regrouping. | Data analysis and measurement: -Read, interpret, and analyze |  | Fractions: <br> -Demonstrate an <br> understanding of commonly used fractions. | Geometry: <br> -Identify, classify, and describe standard 2-and 3-dimensional | Introduction to Multiplication (optional, if time) |


|  |  |  | sums and regrouping. |  |  | horizontal and vertical displays of data- <br> -Tell time using digital and analog clocks. |  | -Compare/order <br> fractions with same denominators. | shapes. |  |
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| Grade 3 | Number sense -Read, write, rename numbers -Identify place value and periods up to 6 digits -Round numbers | Continue addition | Continue subtraction | Continue multiplication | Continue division | Continue measurement unit 1 | Continue fractions | Continue geometry | Continue measurement unit 2 | Continue data analysis |
|  | Addition <br> -Add 2, 3, and 4 digit number with/without regrouping -Use and identify multiplication properties | Subtraction <br> -Subtract 2, 3, and 4 digit number with/without regrouping -Find missing numbers in input/output tables | Multiplication -Know multiplication facts to 12. -Multiply 2-digit numbers by 1digit numbers using Partial Sums | Division <br> -Understand the concept of division and as an inverse of multiplication -Know division facts up to products of 144 | Measurement <br> Unit 1 <br> -Find area and perimeter of regular and regular and composite figures | Fractions <br> -Demonstrate conceptual understanding of a fraction and commonly used fractions -Represent fractions in different ways | Geometry <br> -Identify and classify shapes according to their attributes | Measurement <br> Unit 2 <br> -Tell and wite time -Measure lengths of objects | Data analysis -Collect, generate, organize, and display data -Read, interpret and analyze data displays |  |
| Grade 4 | Number sense -Model, read, and wite numbers up to the hundredmillions. -White numbers in different forms. | Addition, subtraction, \& problem-solving -Add and subtract up to 9-digit numbers with/without regrouping | Multiplication <br> -Show mastery of multiplication facts 0-12 <br> -Use and apply multiplication properties -Multiply multidigit numbers using different strategies -Area and perimeter | Division <br> -Understand the concept of division -Show mastery of division facts up to a quotient of 144 -Apply divisibility rules for $2,3,5,6,9$, and 10. | Continue division | Continue fractions | Continue fractions \& decimals | Continue measurement and data | Patterns and Algebra <br> -Describe nonnumeric growing and repeating patterns -Identify, describe, and extend numeric patterns -Find/use rules to write input/output tables | Geometry -Classify shapes based on attributes -Recognize and measure angles |
|  |  |  |  |  | Fractions <br> - Demonstrate conceptual understanding of a fraction <br> - Add/subtract fractions with like denominators and mixed numbers with/vithout |  <br> Decimals <br> -Use place <br> value <br> charts/grids to represent decimals. <br> -Read/write decimals to the thousandths place -Add/subtract |  <br> Data <br> -Express <br> measurements in a larger unit in terms of a smaller unit -Use a ruler to measure an object's length -Convert customary and |  |  |  |


|  |  |  |  |  | regrouping | decimals to the thousandths place | metric units -Make a line plot to display data measurements |  |  |  |
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| Grade 5 | Number sense -Model, read, and wite numbers to the billions -White numbers in different forms -Work with integers and estimates | Multiplication <br> -Define and apply divisibility rules <br> -Apply and use mathematical properties -Identify prime numbers, GCF, and LCM | Division <br> -Understand the concept of division as fair sharing, creating equal groups, and repeated subtraction. -Divide numbers using traditional algorithm | Fractions -Identify and compare fractions -Add, subtract, multiply, and divide fractions with like and unlike denominators | Continue fractions | Continue decimals | Continue geometry \& measurement |  <br> Algebra <br> -Identify, <br> describe, and extend numeric patterns <br> -Use the Order <br> of Operations to solve problems -Solve equations and evaluate expressions with variables | Data analysis -Collect, organize, and display data in response to surveys -Construct, read and interpret data displays -Identify measures of central tendencies | Continue data analysis |
|  |  |  |  |  | Decimals <br> -Read and write decimals to tenthousandths place <br> - Add, subtract, multiply, and divide decimals | Geometry and Measurement <br> -Use a ruler to measure in customary and metric units -Convert customary and metric units of measurement -Identify shapes and their attributes -Use models and formulas to find the volume of a rectangular prism |  |  |  |  |
| Grade 6 | Numerical <br> Expressions and Factors <br> -Multiplication and division of multidigit numbers -Order of operations -GCF, LCM | Fractions -Estimate, order, compare, locate on a number line -Add, subtract, multiply, divide -Order of operations | Decimals <br> -Read and write numbers to millionths -Add, subtract, multiply, divide - Order of operations | Expressions <br> -Use and apply <br> multiplication properties -Evaluate algebraic expressions | Continue equations \& inequalities | Continue integers | Continue ratio, proportion, percent | Continue geometry | Statistics and Probability -Construct, organize, interpret, and display data -Calculate measures of central tendency | Continue statistics and probability |
|  |  |  |  | Equations \& Inequalities | Integers <br> -Identify and | Ratio, Proportion, | Geometry <br> -Areas of |  |  |  |



