

# Math Curriculum Guide Kindergarten - Fifth Grade

	Kindergarten	First Grade	Second Grade
September	Number recognition & Writing numbers 0 to 5 Count to 20 place value 1's and 10's patterning (ab) calendar skills estimation predicting graphing free exploration of manipulatives	Addition, subtraction facts from 0-10, vertical and horizontal form, use of various strategies Problem solving strategies Writing number sentence addition/subtraction Order of Operation Intro Math vocabulary Comparisons Count and write numbers to 30 Identify objects to 12 Calendar activities regrouping / tally, day, month, year patterns, graphing	<u>Addition strategies:</u> Order and zero properties Count on 1,2,3 Doubles/Doubles+1 Make a Ten Add 3 numbers Draw pictures to solve <u>Subtraction strategies:</u> subtract all or zero Count back Think addition to subtract Fact families Use logical reasoning <u>Add/subtract practice:</u> Memorizing facts Missing numbers Number sentences
October	Math Skills number recognition, and writing numbers 0-10 counting to 45 place value of ones and tens tallies patterning (ab) calendar skills counting by 1's, 2's 5's and 10's estimation, prediction graphing free exploration of manipulatives simple equations to six measuring with objects probability	Count and write numbers to 40 Addition & subtraction facts 0-12 Sorting objects Calendar activities regrouping / tally, day, month, year patterns Count objects Calendar Activities, regrouping/tally, day, month, year patterns, graphing	<u>Numbers to 100:</u> Tens Tens and Ones Read/write numbers Estimation <u>Number patterns - compare            and order:</u> Ordinals <, >, = Order numbers Even/odd Skip count Find patterns <u>Data and graphing:</u> Picture, bar, pictographs Using graphs Surveys, Interpret data
November	Math skills number recognition and writing numbers 0-12 1 to 1 correspondence counting to 66 place value of ones and tens tallies patterning (AB and ABC) calendar skills counting by 1's, 2's, 5's and 10's estimation prediction graphing free exploration of manipulatives simple equations to 10 shape practice	Problem solving Choosing an operation Making a list Writing a number sentence Addition & subtraction facts 0-12 reading & writing numbers Use of number line for adding & subtracting Calendar Activities regrouping / tally, day, month, year patterns, graphing Place value	<u>Counting Money:</u> Pennies, nickels, and dimes Quarters and 1/2 dollars Count collections 1 dollar <u>Using money:</u> Make the same amount Use fewest coins Compare amount to price Make change

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December	graphing patterning attributes tallies counting to 76 calendar skills counting by 1's, 2's and 10's number recognition and writing numbers 1-12 estimation prediction probability free exploration of manipulatives simple equations to 10	Addition and subtraction facts to 12 Use of various strategies for addition & subtraction less than, greater than place value Calendar Activities regrouping / tally, day, month, year patterns, graphing	<u>Telling time:</u> To 5 minutes Time after the hour Time before the hour <u>Understanding Time:</u> Daily events Using a calendar Estimate time Time relationships
January	graphing, patterning, attributes tallies counting to 100 calendar skills Counting by 1's, 2's, 5's and 10's sequencing number recognition and writing numbers 1-12 estimation probability sorting of manipulatives practice of simple equations to 10 measuring	Addition and subtraction facts to 12 fact families Vertical form Horizontal form Use of various strategies  Problem solving reading a table Choosing an operation Making a list Writing a number sentence Calendar Activities regrouping / tally, day, month, year patterns, graphing graphs	<u>Explore 2 digit addition:</u> Add tens Count on tens/ones Add 1 digit to 2 digit 2 digit addition Using models <u>2 digit addition:</u> Add 2 digit numbers Rewrite 2 digit addition Estimate sums Mental math
February	Math: graphing, patterning, attributes tallies counting to 50 calendar skills Counting by 1's, 2's, 5's and 10's sequencing number recognition and writing numbers 1-20 estimation probability sorting of manipulatives measuring with objects introduction of simple equations sequencing 1 to 1 correspondence introduction of coins	Numbers to 60 counting by 2's, 5's and 10's estimating ordinary numbers ordinal numbers problem solving w/ graphs Calendar Activities regrouping / tally, day, month, year patterns, graphing sorting money: identifying coins, coin combinations	<u>Explore 2 digit subtraction:</u> Subtract tens Regroup tens as ones <u>2 digit subtraction:</u> Subtract 2 digit numbers Rewrite 2 digit numbers Estimate differences Use addition to check subtraction Add/subtract money

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March	graphing, patterning, attributes tallies counting to 50 calendar skills Counting by 1's, 2's, 5's and 10's sequencing number recognition and writing numbers 1-12 estimation probability sorting of manipulatives measuring with objects simple equations to 6 sequencing identification of coins introduction of time 1 to 1 correspondence	place value estimating comparing two-digit numbers ordering numbers to 100 problem solving using a venn diagram money: counting coins Calendar Activities regrouping / tally, day, month, year patterns, graphing telling time to hour and half hour geometry: solid figures	<u>Plane shapes:</u> Identify plane shapes Sides and corners Congruence and symmetry Moving shapes <u>Solid figures:</u> Identify solid figures Make plane shapes Sort solid figures
April	graphing, patterning, attributes tallies counting to 50 calendar skills Counting by 1's, 2's, 5's and 10's sequencing number recognition and writing numbers 1-12 estimation probability sorting of manipulatives measuring with objects simple equations to 10 sequencing identification of coins telling time (to the hour) 1 to 1 correspondence	telling time to the hour and half hour sequence of events estimating time estimate measure and compare lengths - use standard and nonstandard measurements Calendar Activities regrouping / tally, day, month, year patterns, graphing	<u>Length:</u> Nonstandard units Measure to nearest inch Inches and feet Centimeters and meters Perimeter Estimations <u>Capacity, weight,</u> <u>temperature:</u> Cups, pints, quarts Liters Ounces and pounds Grams and kilograms Temperature
May	graphing, patterning, attributes tallies counting to 50 calendar skills Counting by 1's, 2's, 5's and 10's sequencing number recognition and writing numbers 1-12 estimation probability sorting of manipulatives measuring with objects simple equations to 10 sequencing identification of coins telling time (to the hour) 1 to 1 correspondence	explore & compare weights compare liquid measurements adding two digit numbers without regrouping subtracting two digit numbers without regrouping facts and strategies to 20 Calendar Activities regrouping / tally, day, month, year patterns, graphing	<u>Numbers to 1000:</u> Hundreds Hundreds, tens, ones Place value Read and write numbers Use a table <u>Comparing and</u> <u>ordering numbers to</u> <u>1000:</u> 100 less, 100 more <,>, = Order numbers Use a number line Find a pattern <u>Parts of a whole/group:</u> Explore fractions Unit, other fractions Fractions equal to one

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	Third Grade	Fourth Grade
September	Place Value through Hundred Thousands Rounding Comparing/Ordering Writing in Math Choosing an Operation in Word Problems Choosing from Strategies to Solve Problems  * <i>Place Value</i>	Basic Facts benchmarks place value through millions standard, expanded word form pictographs/bar graphs comparing, ordering numbers rounding 10's, 100's, 1000's, up to millions estimate sum and difference mental math addition and subtraction of large numbers subtracting across zeros making charts and tables word problems-exact- estimate
October	Addition with regrouping/subtraction with regrouping to 4 digits Word Problems Estimation column addition Money: value of, addition of, making change writing in math	expressions equations variables input/output tables: finding rules frequency tables median/mode
November	Problem solving with strategies Writing in math (problem solving) Time A.M./P.M. to the minute elapsed schedule calendar	line plot stem and leaves graphs: bar, double bar, line time: analog, digital, a.m./p.m., elapse time,calendar

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December	Introduce the concept of Multiplication, basic facts Study Island writing in math	Multiplication and division through 12 Multiplying 3 factors Finding the rule Expressions and equations with multiplication and division facts
January	Continue basic facts algebra Grouping Properties Understanding division, division facts Study Island writing in math	Expressions and equations with variables with multiplication and division Multiply by 1 digit numbers Estimating products Multiplication patterns Writing equations Patterns with multiples Multiplying by multiples of 10 Problem solving strategies
February	Division facts small units on new concepts; probability, measurement, fractions, and geometry, graphing, metric, customary, area, perimeter, volume. Study Island writing in math	Properties Multiplying by 1 digit x 2, 3, 4 digits Multiplying 2 digit x 2 digit Multiplying 3 and 4 digits by 2 digits Multistep problems Division w/remainers Division patterns Estimating quotients problem solving strategies
March	writing in math measurement 2 step problem solving Study Island	<u>Division</u> patterns estimation remainders 2x3 digit quotients w/1 digit divisors finding the mean 2 and 3 digit quotients w/2 digit divisors problem solving strategies

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April/ May	writing in math measurement problem solving division with remainders 2 and 3 digit multiplication decimals multiplication of money extending fraction concept	Factors and multiples Prime and composite Line & line relationships angles and measurements Symmetry & congruence Circles, triangles and quadrilaterals
		Polygons Perimeter and area Solids Volume <u>Fractions</u> Identification Mixed numbers Equivalent/simplest form Adding and subtracting
September	Fifth Grade problem solving place value written explanation rounding estimating with words, decimals, and fractions	
October	decimals problem - solving written explanation multiplication expressions and variables	
November	multiplication: whole numbers and decimals division problem solving written explanation expressions & variables	
December	estimation problem solving writing multiplication cont'd division: whole numbers & decimals decimals expressions & variables	
January	division problem solving written explanation fractions	

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	decimals estimation
February	Written explanation Estimating fraction renaming and borrowing with mixed numbers Problem solving Geometry Measuring angles Polygons Classify Similar/congruent Symmetry ISAT review
March	Measurement metrics conversion meters liters grams perimeter area rectangle triangle parallelogram circles calculating radius diameter circumference ratios problem solving written explanation
April	Fractions, mixed numbers whole divide fractions whole numbers Problem solving Solids identifications graphing, integers percentages circles
May	continue integers, graphing solids surface area volume temperature weight Standard system capacity measurement converting time probability