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## **Elementary Grade Levels - Scope and Sequence**

	1st Grade	2nd Grade	3rd Grade	4th Grade
Number Sense	Counting Numbers , Reverse Counting, Skip Counting, Identifying Numbers, Number Types, Place Value, Number Combinations, Comparing and Ordering Numbers	Counting Numbers to 1,000, Reverse Counting, Skip Counting by 2s, 5s, 10s, 25s, Identifying Numbers, Number Types, Place Value and Number Combinations up to 3- Digits, Comparing, Ordering and Arranging Numbers, Even and Odd Numbers	The Numbering System and Place Values, Number Forms, Defining and Grouping Whole Numbers, Number Combinations, Comparing and Ordering Numbers, Odd and Even Numbers, Rounding Numbers	Place Values and Expanded Form, Defining and Grouping Whole Numbers, Number Combinations, Comparing & Ordering Whole Numbers, Even and Odd Numbers , Rounding Numbers
Addition	Addition Using Objects, Addition Table, Regrouping, Addition Properties, Addition with 2-Digit Numbers and 3 Number Sets	Addition Using Objects, Addition Table, Regrouping, Addition Properties, Addition with 3-Digit Numbers and 3 Number Sets	Review of Addition, Properties of Addition, Adding up to a 5-digit Number and a 4-digit Number, Estimating Addition with Large Numbers, Adding 3 Number Sets	Review of Addition, Properties of Addition, Adding up to a 7-digit Number and a 6-digit Number, Adding 3 Number Sets
Subtraction	Subtraction Using Objects, Subtraction Table, Subtraction by Regrouping, Subtraction Properties, Subtraction with 2-Digit Numbers and with Borrowed Numbers	Subtraction Using Objects, Subtraction Table, Subtraction by Regrouping, Subtraction Properties, Subtraction with 3-Digit Numbers and with Borrowed Numbers	Review of Subtraction, Properties of Subtraction, Subtraction Involving Borrowed Numbers, Subtracting up to a 4-digit Number from a 4-digit Number, Estimating Subtraction with Large Numbers	Review of Subtraction, Properties of Subtraction, Subtracting up to a 5-digit Number from a 5-digit Number
Multiplication	NA	Multiplication in Relation to Addition, Multiplication Using Objects and Multiplication Table, Multiplication Tricks, Multiplying a 2-digit Number by a 1-digit Number	Multiplication in Relation to Addition, Properties of Multiplication, Multiplication Table , Multiplication Tricks, Multiplying up to a 3-digit Number and a 2-digit Number, Multiplication with Three Numbers	Multiplication in Relation to Addition, Properties of Multiplication, Multiplication Table , Multiplication Tricks, Multiplying up to a 3-digit Number and a 3-digit Number, Multiplication with Three Numbers
Division	NA	Division in Relation to Subtraction, Division in Relation to Multiplication, Division Using Objects, Division with a Remainder, Division with 0 and 1	Division Facts and Terms, Division in Relation to Subtraction and Multiplication, Basic Properties of Division, Dividing Using the Division Bracket, Division with a Remainder, Division of up to a 3- digit Number by a 2-digit Number	Division Facts and Terms, Division in Relation to Subtraction and Multiplication, Dividing Using the Division Bracket, Division with a Remainder, Division of up to a 5-digit Number by a 2-digit Number
Rounding and Estimating	NA	Rounding to the Nearest 10 and 100 using a Number Line, Rounding without using a Number Line, Estimating with Addition and Subtraction	Rounding and Estimating Addition and Subtraction with Large Numbers	Rounding and Estimating Addition and Subtraction with Large Numbers, Rounding with Decimal Numbers
Decimal Numbers	NA	NA	Decimals Numbers, Displaying Decimal Numbers, Counting Money with Decimals, Adding and Subtracting Decimal Numbers	Displaying Decimal Numbers, Adding and Subtracting Decimal Numbers, Multiplying Decimal Numbers, Counting Money with Decimals, Word Problems with Decimals
Fractions	Identifying and Writing Fractions, Fractions Using Objects, Equivalent Fractions	Identifying and Writing Fractions, Fractions Using Objects, Writing Equivalent Fractions	Identifying and Writing Fractions, Writing Equivalent Fractions	Fractions Review, Equivalent Fractions, The Greatest Common Factor, Least Common Multiple , Least Common Denominator , Simplifying Fractions
Operations With Fractions	NA	Comparing Fractions, Adding and Subtracting Simple Fractions	Comparing Fractions, Adding and Subtracting Simple Fractions	Adding and Subtracting Fractions with Like Denominators, Adding and Subtracting Fractions with Unlike Denominators, Multiplying Fractions

	1st Grade	2nd Grade	3rd Grade	4th Grade
The Number Line	NA	Introduction to Number Line	Number Line	The Number Line, Plotting Numbers on the Number Line, Comparing Fractions and Decimal Numbers on the Number Line
Graphs	Picture Graphs and Bar Graphs	Creating and interpreting Tally Charts, Picture Graphs and Bar Graphs	Creating and interpreting Circle and Bar Graphs	Creating and interpreting Circle, Line and Bar Graphs
Money	Pennies, Nickels, Dimes, Quarters, Counting Money up to One Dollar, Comparing Money	Pennies, Nickels, Dimes, Quarters, Converting Money, Counting Coins up to and past One Dollar, Counting Dollars and Coins, Comparing Money	Counting Money, Converting Money into  Decimal Form, Comparing Money, Making	Counting Money, Converting Money into Decimal Form, Comparing Money, Making Change
Time	Days, Weeks, Months and Years, Seconds, Minutes and Hours, Digital and Analog Clocks, Telling Time to the Hour, Half-hour and Quarter-hour	Days, Weeks, Months and Years, Seconds, Minutes and Hours, Digital and Analog Clocks, Telling Time to the Hour, Half-hour and Quarter-hour and 5-Minute Interval, Converting Time, Duration of Time	Review of Time , Telling Time, Converting Digital and Analog Time, Converting Units of Time, Adding Different Units of Time, Finding and Adding Elapsed Time	Review of Time , Telling Time, Converting Digital and Analog Time, Converting Units of Time, Adding Different Units of Time, Finding and Adding Elapsed Time
Measurements	The US and Metric Systems of Measurements, Length, Weight and Temperature	The U.S. and Metric Systems of Measurement, Length, Perimeter and Area, Volume, Weight, and Temperature	The US and Metric Systems of Measurement, Weight, Temperature, Length, Measuring Length, Perimeter, Area, and Volume	The US and Metric Systems of Measurement, Length, Weight, Temperature, Rate and Distance, Perimeter, Area of a Square, a Rectangle and a Triangle, Volume & Liquid Volume, Volume of a Cube and a Rectangular Box
Geometry	Plane and Solid Shapes, Vertices, Edges and Faces, Polygons	Basic 2-dimensional and 3-dimensional Geometric Shapes, Polygons, Identifying Congruent 2-dimensional Shapes, Lines of Symmetry, Completing the Shape	Basic Geometry Review, Points, Lines and Line Segments, Measuring Line Segments, Parallel, Intersecting and Perpendicular Lines, Angles, Triangles, Quadrilaterals, Polygons, and Solid Figures	Points, Lines and Line Segments, Parallel, Intersecting and Perpendicular Lines, Angles, Measuring Angles, Triangles, Quadrilaterals, Polygons, Lines of Symmetry, Solid Figures
Algebra	Patterns with objects and Shapes, Number Patterns, Balancing Number Equations	Patterns, Arithmetic and Geometric Number Patterns, Numeric Expressions and Equations, Writing Expressions and Equations, Completing Equations	The Number Line, Patterns using Shapes and Symbols, Number Patterns using Addition and Subtraction, Number Patterns using Multiplication and Division, Unknown Variables in Mathematical Equations	Number Patterns using Addition, Subtraction, Multiplication and Division, Patterns with Shapes and Symbols, Variables, Expressions and Equations, Writing Expressions and Equations, Inequalities using Variables, Formulas, Order of Operations, Evaluating Expressions, Equations with One Variable
Basic Probability	NA	NA	Introduction to Probability, Probability Based on a Given Event or Data Set	Introduction to Probability, Probability Based on a Given Event or Data Set
Word Problems, Critical Thinking	Some	Some	Word Problems and Problem Solving Process, Age Word Problems, Wage Calculation Word Problems, Family Budgeting Word Problems, Word Problems involving Mathematical Statements	Word Problems and Problem Solving Process, Age Word Problems, Wage Calculation Word Problems, Family Budgeting Word Problems, Word Problems involving Mathematical Statements



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## 5<sup>th</sup> Grade and 6<sup>th</sup> Grade - Scope and Sequence

	5th Grade	6th Grade	
	Place Values, Decimal Numbers, Prime Numbers, Composite Numbers, Real		
Number Review	Numbers, Absolute Value, Rounding and Estimating	NA	
Addition	Addition with Large Numbers, Addition Equations, Addition with Decimals,	Addition with Decimals	
Addition	Addition of Whole Numbers and Decimals, Addition with Negative Numbers	Addition with Decimals	
	Subtraction with Large Numbers, Subtraction Equations, Subtraction with		
Subtraction	Decimals, Subtraction of Whole Numbers and Decimals, Subtraction with	Subtraction with Decimals	
	Negative Numbers		
Multiplication	Multiplication with large numbers, Multiplication of a Whole Number with a Decimal Number, Multiplication with 2 Decimal Numbers, Multiplication	Multiplication with Decimals	
Multiplication	Equations	Waltiplication with Decimals	
	Division with Large Numbers, Division of a Whole Number by a Decimal Number,		
Division	Division with 2 Decimal Numbers	Division with Decimals	
	Mixed Numbers, Equivalent Fractions, The Greatest Common Factor, The Least		
Operations With Fractions & Mixed	Common Multiple, The Least Common Denominator, Reducing Fractions, Adding	Adding and Subtracting Fractions, Adding & Subtracting Mixed Numbers,	
Fractions	Fractions, adding & Subtracting with Mixed Numbers, Multiplying Fractions,	Multiplying Fractions, Dividing Fractions	
	Dividing Fractions		
Number Conversions	Converting Fractions into Decimals, Decimals into Fractions, Mixed numbers into	Converting Fractions into Decimals, Decimals into Fractions, Mixed numbers into	
	Fractions, Fractions into Mixed Numbers,	Fractions, Fractions into Mixed Numbers,	
Desiring and Nameston North and	On and in an orthogonal to the Control of the Contr	Adding Positive and Negative Numbers, Subtracting Positive and Negative	
Positive and Negative Numbers	Operations with Positive & Negative Numbers	Numbers, Multiplying Positive and Negative Numbers, Dividing Positive and Negative Numbers	
		Negative Numbers	
Order of Operations	NA	Properties of Real Numbers, Order of Operations	
	Understanding Percents, Converting a Decimal to a Percent, a Percent to a	Understanding Percents, Converting a Decimal to a Percent, a Percent to a Decimal,	
Percentages	Decimal, a Percent to a Fraction, a Fraction to a Percent, Finding a Percent of a	a Percent to a Fraction, a Fraction to a Percent, Finding a Percent of a Number,	
	Number, Determining Percentage Given the Two Numbers	Working with Percents in Everyday Life	
	The Number Line, Comparing & Ordering Whole Numbers, Comparing &	Representing Numbers on a Number Line, Comparing & Ordering Numbers on a	
Number Comparison	Ordering Decimals, Comparing & Ordering Fractions, Comparing Mixed Numbers,	Number Line, Positive & Negative Integers on a Number Line, Fractions & Decin on a Number Line, Decimals on a Number Line, Absolute Value Using the Num	
	Comparing Whole Numbers with Fractions	Line, Distance between two Numbers on a Number Line	
c	Line Graph, Bar Graph, Double Bar Graph, Pie Chart (or Circle Graph), Collecting	Circle (Pie) Graphs, Bar Graphs, Line Graphs, Stem-and-Leaf Plots, Selecting Graph	
Graphs	Data thru Surveys and Experiments	for the Given Data Set	
Ratios and Proportions	NA	Introduction to Ratios, Equivalent Ratios, Ratios in Simplest Form, Finding Ratios,	
Natios and Proportions	IVA	Introduction to Proportions, Finding the Missing Number in Proportions	
Exponents, Roots and Scientific	NA	Understanding Exponents & Scientific Notation, Operations with Exponents &	
Notation	IVA	Scientific Notation	
Basic Statistics	NA	Mean, Median and Mode, Statistical Range, Basic Counting Principle	
	Time The US and Metric Systems of Measurements Length Weight Volume	Time, The US and Metric Systems of Measurements, Length, Weight, Volume,	
Measurements	Time, The US and Metric Systems of Measurements, Length, Weight, Volume, Temperature, The Rate, Time of Travel and Distance	Temperature, The Rate, Time of Travel and Distance, Rates Conversion, Commonly	
	remperature, menate, fille of flaverand distance	Used Rates and Measurements	

	5th Grade	6th Grade
Geometry - Angles and Polygons	Angles, Measuring Angles, Types of Angles	Complementary, Supplementary, and Vertical Angles, Triangles and Properties of Triangles, Quadrilaterals and Properties of Quadrilaterals, Finding Missing Angles
Geometry - Shapes and Solids	Triangles, Squares, Parallelograms, Trapezoids, Rectangles, Rhombus, Other Polygons, Circles, Cubes, Square Pyramids, Cylinders, Rectangular Prism, Area and Perimeter of Triangles, Squares and Rectangles, Parallelograms and Trapezoids, Circles, Surface Area and Volume of a Cube and a Rectangular Box	Area & Circumference of a Circle, Surface Area & Volume of a Sphere, Surface Area & Volume of a Cylinder
Algebra - Variables, Equations and Expressions	The Variables, Expressions and Equations, Writing Expressions and Equations, Word Problems	Evaluating Expressions and Equations
Algebra - Operations with Variables	Basic Operations with Variable- Additions, Subtractions, Multiplication, Division, Canceling with Variable, Simplifying and Evaluating Expressions	The Variables, Combining Like Terms, Canceling with Variables, Operations with Variables
Algebra - Linear Equations and Formulas	NA	Introduction to Linear Equations, Writing Equations and Formulas, Problem Solving using Formulas, Linear Equations with One Variable, Writing and Solving One Step Linear Equations, Linear Inequalities, Writing and Solving Linear Inequalities
Algebra - Coordinate Plane	Introducing the Coordinate Plane, Working with the First Quadrant, Connecting Points in the First Quadrant	The Coordinate Plane, Graphing Points in the Coordinate Plane, Graphing Linear Relations, The t-Table, Making Predictions from Linear Patterns
Basic Probability	Basic Probability, Making Predictions Based On Given Data Set	Probability as a Measure of Chance, Representing Probability, Factorial, Permutations and Combinations.
Word Problems, Critical Thinking	Wage Calculation, Number Games, Money Games, Family Budgeting, Age Comparisons, Commission, % Off the regular Price, Interest rates	Percents in Everyday Life, Fractions in Everyday Life, Decimals in Everyday Life



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### Pre-Algebra and Algebra 1 - Scope and Sequence

	Pre-Algebra	Algebra 1
Numbers Review	Positive and Negative Numbers, Integers, Decimals, Real Numbers, Prime Numbers, Rational & Irrational Numbers, Percents	Positive and Negative Numbers, Integers, Decimals, Real Numbers, Prime Numbers, Rational & Irrational Numbers, Percents
Fractions and Operations with Fractions	Reducing Fractions, Adding Fractions, Adding Fractions and whole numbers, Multiplying fractions, Multiplying fractions and whole numbers, Subtracting Fractions, Subtracting Fractions and whole numbers, Dividing Fractions, Dividing Fractions and whole numbers, Mixed Fractions Operations	Reducing Fractions, Adding Fractions, Adding Fractions and whole numbers, Multiplying fractions, Multiplying fractions and whole numbers, Subtracting Fractions, Subtracting Fractions and whole numbers, Dividing Fractions, Dividing Fractions and whole numbers, Mixed Fractions Operations
Real Numbers and Operations with Real Numbers	Number Comparisons, Properties of Real Numbers, Additions, Subtractions, Multiplication, Division, Order of Operation, Mixed Operations	Number Comparisons, Properties of Real Numbers, Additions, Subtractions, Multiplication, Division, Order of Operation, Mixed Operations
Powers and Roots	Square, Cube, Power of 4 and Higher, Square Roots, Cube Roots	Square Roots, Cube Roots
Exponents	Understanding Exponents, Multiplying Exponents with the Same Base, Multiplying Fractional Exponents with the Same Base, Multiplying Exponents Raised to an Exponent, Expressions Raised to a Power, Fractions Raised to a Power, More Multiplying Exponents, Negative Exponents, Multiplying with Negative Exponents, Dividing with Exponents	Understanding Exponents, Multiplying Exponents with the Same Base, Multiplying Fractional Exponents with the Same Base, Multiplying Exponents Raised to an Exponent, Expressions Raised to a Power, Fractions Raised to a Power, More Multiplying Exponents, Negative Exponents, Multiplying with Negative Exponents, Dividing with Exponents
Rates and Dimensional Analysis	NA	Rates and Dimensional Analysis
Variables and Operations with the Variables	Basic Operations with Variable, Fractions with Variables, Canceling with Variable, Simplifying and Evaluating Expressions, Combining Like Terms, Word Problems	Basic Operations with Variable, Fractions with Variables, Canceling with Variable, Simplifying and Evaluating Expressions, Combining Like Terms, Word Problems
Expressions, Equations and Formulas	Expressions and Equations, Writing Expressions and Equations, Formulas and Problem Solving Using Formulas, Comparing Real Number Expressions, Simplifying and Evaluating Expressions, Simplifying Radical Expressions, Word Problems	NA
The Coordinate Plane and Graphs	The Coordinate Plane, Graphing Points in the Coordinate Plane, Graphing Linear Relations, The t-Table, Making Predictions from Linear Patterns	Transformations on the Coordinate Plane, Graphing Linear Equations, Writing Equations from Patterns, Interpreting a Graph Representing a Given Situation,  Sketching a Graph Representing a Given Situation
Graphing Relations and Functions	NA	Relations, Equations as Relations, Functions, Arithmetic Sequences
Linear Equations	Introduction to Linear Equations, Linear Equations with One Variable, Writing and Solving One Step Linear Equations	Writing Equations, Solving Equations by Using Addition and Subtraction, Solving Equations by Using Multiplication and Division, Solving Multi-step Equations, Solving Equations with the variable on each side, Ratios and Proportions, Solving Equations and Formulas
Linear Equations and Slope	Slope of a Linear Equation , Slope-Intercept Form, Writing Equations in a Slope- Intercept Form, Writing Equations using a Point and a Slope, Parallel Lines	Slope, Slope-Intercept Form, Writing equations in slope intercept form, Writing equations Using Point and Slope, Writing equations in point-slope form, Graphing Linear Equations Using Slope/Intercept Method, Writing Parallel Equations, Writing Perpendicular Equations
Quadratic Equations, Parabola and Functions	Quadratic Equations, Graphing Quadratic Equations, Introduction to Parabola, Identifying Equations with Graph that is Parabola, Identifying Non-Linear Equations	Solve quadratic equations by the square root method, Solving Quadratic Equations by Completing the Square, Solving Quadratic Equations by using the Quadratic Formula, Graphing Quadratic Equations, Solving Quadratic Equations by graphing, The Discriminant, The sum and the product of the solutions, Solving Quadratic Equations with Perfect Squares, Solving Quadratic Equations That Contain Radical Expressions, Word Problems Using Quadratic Formula

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	Pre-Algebra	Algebra 1
Linear Inequalities	Linear Inequalities, Writing and Solving Linear Inequalities, Solving Linear Inequalities by Addition and Subtraction, Solving Linear Inequalities by Multiplication and Division, Solving Multi-Step Inequalities	Solving linear inequalities by addition and subtraction, Solving linear inequalities by multiplication and division, Solving Multi-step inequalities, Solving Compound Inequalities, Solving Open Sentences Involving Absolute Value, Graphing Inequalities in Two Variables, Solving Linear Inequalities Using Solutions Sets
Monomials and Polynomials	Monomials and Degree of Monomials, Multiplying Monomials, Polynomials and Degree of Polynomials, Adding and Subtracting Polynomials, Multiplying a Polynomial by a Monomial, Multiplying Polynomials, Special Products of Polynomials	Monomials and Degree of Monomials, Multiplying Monomials, Dividing Monomials, Polynomials and Degree of Polynomials, Adding and Subtracting Polynomials, Multiplying a polynomial by monomial, Multiplying Polynomials, Special Products of Polynomials, Difference of Squares, Monomial Roots and Powers, Dividing a Polynomial by Monomial
Factoring	Factors and the Greatest Common Factor, Factoring Using the Distributive Property, Factoring Trinomials: x² + bx + c, Factoring Trinomials: ax² + bx + c, Factoring Difference of Squares, Simplifying Algebraic Ratios, Solving Algebraic Proportions	Factors and Greatest Common Factor, Factoring Using the Distributive Property,  Factoring Trinomials: x² + bx + c, Factoring Trinomials: ax² + bx + c, Factoring  Difference of squares, Perfect Squares and Factoring, Solving Quadratic Equations  by factoring, Simplifying Algebraic Ratios, Solve Algebraic Proportions
Pythagorean Theorem and Triangles	Triangles and Properties of Triangles, Pythagorean Theorem, The Distance Formula	Pythagorean's Theorem, The Distance Formula, Similar Triangles
Solving Systems of Linear Equations and Inequalities	NA	Graphing Systems of Equations, Substitution, Elimination using Addition and Subtraction, Elimination using Multiplication, Graphing Systems of Inequalities
Radical Expressions	NA	Simplifying Radical Expressions, Adding and Subtracting Radical Expressions, Multiplying Radical Expressions, Dividing Radial Expressions, Rational Exponents, Comparing Real Number Expressions
Introduction to Trigonometric Functions	Trigonometric Functions, Reciprocal Functions, Degrees and Radian Measures, Finding Trigonometric Values, Coordinate Plane and Trigonometric Functions, Trigonometric Identity and Pythagorean Theorem	NA