



6th Grade Mathematics Framework Correlation

	Mathematics Curriculum Framework	Lesson Number	Lesson Title
ALGEBRAIC REASONING: PATTERNS AND FUNCTIONS			
1.1.	Understand and describe patterns and functional relationships.		
1.1.a	Identify relationships and make generalizations through the use of patterns.	MM1-020	Identifying and Finding Number Patterns Using Whole Numbers
		MPA-104	Recognizing Patterns
1.2.	Represent and analyze quantitative relationships in a variety of ways.		
1.2.a	Represent and analyze mathematical relationships with the help of tables, graphs, equations and inequalities.	MM1-015	Comparing Numbers
		MM1-110	Comparing and Ordering Fractions with Like Denominators
		MM1-135	Comparing and Ordering Fractions with Like and Unlike Denominators
		MM1-190	Finding the Fraction of a Given Number
		MM1-195	Identifying the Mathematical Question Given in a Word Problem
		MM1-390	Understanding Data in Bar Graphs, Line Graphs, and Stem-and-Leaf Plots
		MM1-400	Interpreting Double Bar Graphs
		MM1-405	Interpreting and Constructing Circle Graphs
		MM1-410	Interpreting Box-and-Whisker Plots
		MM1-415	Defining and Calculating the Range and the Mean
		MM1-420	Defining and Calculating the Median and the Mode
		MM1-425	Classifying Information from a Mathematical Story
		MM1-430	Using Graphs to Solve Story Problems
		MM1-435	Using Pictographs, Bar Graphs and Line Graphs to Solve Problems
		MM1-615	Translating Words into Algebra
		MM1-625	Solving Algebraic Equations Using the Inverse Operations of Addition and Subtraction
		MM1-630	Solving Algebraic Equations Using the Inverse Operations of Multiplication and Division
		MM1-635	Calculating Distance, Rate, or Time by Solving Equations
		MM1-640	Solving Algebraic Word Problems
		MM1-641	Graphing the Solution to an Algebraic Equation
		MM1-642	Exploring the Coordinate Plane and Graphing Ordered Pairs
		MPA-007	Solving Problems Using Logical Reasoning Skills
		MPA-109	Solving and Graphing Linear Inequalities on a Number Line
		HA1-886	Unions and Intersections of Sets Using Venn Diagrams
1.3.	Use operations, properties and algebraic symbols to determine equivalence and solve problems.		
1.3.a	Solve real-world problems using algebraic methods.	MM1-625	Solving Algebraic Equations Using the Inverse Operations of Addition and Subtraction
		MM1-630	Solving Algebraic Equations Using the Inverse Operations of Multiplication and Division
		MM1-635	Calculating Distance, Rate, or Time by Solving Equations
		MM1-640	Solving Algebraic Word Problems
		MPA-009	Solving One-Step Equations Using a Box
		MPA-010	Solving One-Step Equations of Whole Numbers Using Addition and Subtraction

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		MPA-011	Solving One-Step Equations of Whole Numbers Using Multiplication and Division
		MPA-012	Solving One-Step Equations of Whole Numbers Using All Operations
		MPA-038	Solving One-Step Equations with Fractions Using Addition and Subtraction
		MPA-039	Solving One-Step Equations with Fractions Using Multiplication and Division
		MPA-040	Solving One-Step Equations with Decimals Using All Four Operations
		MPA-042	Solving Problems Using an Equation
1.3.b	Demonstrate how to maintain equivalence in equations.	MM1-080	Identifying the Order of Operations Using Multiplication, Addition, and Subtraction
		MM1-085	Identifying the Order of Operations for Multiplication, Addition, and Subtraction Using Parentheses and Exponents
		MM1-625	Solving Algebraic Equations Using the Inverse Operations of Addition and Subtraction
		MM1-630	Solving Algebraic Equations Using the Inverse Operations of Multiplication and Division
		MM1-640	Solving Algebraic Word Problems
		MPA-010	Solving One-Step Equations of Whole Numbers Using Addition and Subtraction
		MPA-011	Solving One-Step Equations of Whole Numbers Using Multiplication and Division
		MPA-012	Solving One-Step Equations of Whole Numbers Using All Operations
		MPA-038	Solving One-Step Equations with Fractions Using Addition and Subtraction
		MPA-039	Solving One-Step Equations with Fractions Using Multiplication and Division
		MPA-040	Solving One-Step Equations with Decimals Using All Four Operations
		MPA-042	Solving Problems Using an Equation
NUMERICAL AND PROPORTIONAL REASONING			
2.1.	Understand that a variety of numerical representations can be used to describe quantitative relationships.		
2.1.a	Relate whole numbers, fractions, decimals and integers to number lines, scales, the coordinate plane and problem solving situations.	MM1-035	Adding Three or More Whole Numbers and Subtracting with Regrouping
		MM1-040	Using the Inverse Operations of Addition and Subtraction to Solve Problems Related to Number Sentences
		MM1-045	Identifying and Using Properties of Multiplication to Solve Problems
		MM1-050	Identifying Special Patterns in Multiplication
		MM1-055	Multiplying Whole Numbers with Two and Three Digits
		MM1-065	Solving Division in Three Forms
		MM1-075	Dividing with Remainders and Zeros in the Quotient
		MM1-080	Identifying the Order of Operations Using Multiplication, Addition, and Subtraction
		MM1-085	Identifying the Order of Operations for Multiplication, Addition, and Subtraction Using Parentheses and Exponents
		MM1-145	Adding and Subtracting Fractions with Like and Unlike Denominators
		MM1-150	Adding Mixed Numbers with Like Denominators
		MM1-155	Subtracting Mixed Numbers with Like Denominators
		MM1-160	Adding and Subtracting Mixed Numbers with Unlike Denominators
		MM1-165	Multiplying Fractions
		MM1-170	Multiplying Fractions by Simplifying the Problem
		MM1-175	Multiplying Mixed Numbers
		MM1-180	Dividing Fractions
		MM1-185	Dividing Mixed Numbers
		MM1-190	Finding the Fraction of a Given Number
		MM1-195	Identifying the Mathematical Question Given in a Word Problem
		MM1-300	Adding and Subtracting Decimals
		MM1-310	Multiplying Decimals
		MM1-311	Using a One-Digit Divisor, Express the Remainder as a Decimal
		MM1-313	Using a Two-Digit Divisor, Express the Remainder as a Decimal
		MM1-315	Dividing Decimals by Whole Number Divisors
		MM1-320	Performing Mathematical Operations with Decimal Numbers in Application Problems
		MM1-325	Dividing with Decimal Divisors
		MM1-330	Dividing with a Decimal Divisor and Dividend

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		MM1-335	Using Zeros as Placeholders when Dividing with Decimal Numbers in the Dividend
		MM1-355	Solving Multiple-Step Problems
		MM1-570	Identifying Integers and Absolute Value
		MM1-580	Adding Integers with Like and Unlike Signs
		MM1-585	Subtracting Integers with Like and Unlike Signs
		MM1-590	Multiplying Integers with Like and Unlike Signs
		MM1-595	Dividing Integers with Like and Unlike Signs
		MM1-641	Graphing the Solution to an Algebraic Equation
		MM1-642	Exploring the Coordinate Plane and Graphing Ordered Pairs
		MPA-031	Comparing and Ordering Fractions and Decimals
		MPA-045	Comparing and Ordering Integers
2.1.b	Express place value patterns using exponents to write powers of ten.	MM1-001	Identifying Place Value to the Billions
		MM1-270	Identifying Place Value in Decimal Numbers
		MM1-280	Identifying and Writing Decimals to the Hundredths and Thousandths
		MM1-350	Identifying and Using Scientific Notation to Express Large Numbers
		MPA-020	Multiplying Decimals by Powers of Ten
2.1.c	Interpret and connect fraction notation to division.	MM1-065	Solving Division in Three Forms
		MM1-358	Converting Fractions and Mixed Numbers with Denominators of Powers of Ten to Decimals
		MM1-365	Converting Decimals to Fractions and Fractions to Decimals
		MM1-380	Converting Fractions to Decimals and Percents
2.1.d	Compare quantities and solve problems using ratios, rates and percents.	MM1-205	Writing a Ratio to Compare Two Objects
		MM1-210	Identifying and Writing Equal Ratios
		MM1-215	Identifying a Rate to Solve Problems
		MM1-220	Writing and Forming Proportions
		MM1-225	Solving Proportions
		MM1-360	Expressing Percent as a Ratio
		MM1-365	Converting Decimals to Fractions and Fractions to Decimals
		MM1-370	Converting Decimals to Percents and Percents to Decimals
		MM1-375	Converting Fractions to Percents and Percents to Fractions
		MM1-380	Converting Fractions to Decimals and Percents
		MPA-078	Expressing Ratios as Fractions and Determining Equivalency
		MPA-081	Converting Fractions, Decimals, and Percents I
		MPA-082	Converting Fractions, Decimals, and Percents II
		MPA-083	Finding Number Given Percent and Total
		MPA-084	Finding Percent Given Number and Total
		MPA-085	Finding Total Given Number and Percent
2.2.	Use numbers and their properties to compute flexibly and fluently, and to reasonably estimate measures and quantities.		
2.2.a	Solve problems using a variety of computational strategies, including the use of calculators.	MM1-010	Rounding Whole Numbers to the Nearest Million, 10 Million, 100 Million and Billion
		MM1-030	Estimating Sums and Differences
		MM1-060	Estimating Products
		MM1-070	Estimating Quotients
		MM1-290	Rounding Decimals to the Nearest Whole Number
		MM1-295	Rounding Decimals to the Nearest Tenth, Hundredth and Thousandth
		MM1-305	Estimating Products by Rounding to the Nearest Whole Number
		MM1-340	Rounding Quotients
		MPA-003	Using Four-Step Plan for Problem Solving
		MPA-116	Solving Real-Life Problems by Using Guess-and-Check and Working Backwards
		MPA-004	Using Rounding to Estimate
		MPA-005	Estimating Products and Quotients Using Patterns
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation

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		MPA-007	Solving Problems Using Logical Reasoning Skills
		MPA-017	Rounding Decimals and Estimating Computations Using Decimals
		MPA-023	Rounding Quotients Involving Decimals
		MPA-033	Estimating Computations with Fractions and Mixed Numbers
2.2.b	Describe when products or quotients with fractions and decimals can yield a larger or smaller result than either factor.	MM1-165	Multiplying Fractions
		MM1-170	Multiplying Fractions by Simplifying the Problem
		MM1-175	Multiplying Mixed Numbers
		MM1-180	Dividing Fractions
		MM1-185	Dividing Mixed Numbers
		MM1-310	Multiplying Decimals
		MM1-315	Dividing Decimals by Whole Number Divisors
		MM1-320	Performing Mathematical Operations with Decimal Numbers in Application Problems
		MM1-325	Dividing with Decimal Divisors
		MM1-330	Dividing with a Decimal Divisor and Dividend
GEOMETRY AND MEASUREMENT			
3.1.	Use properties and characteristics of two- and three-dimensional shapes and geometric theorems to describe relationships, communicate ideas and solve problems.		
3.1.a	Classify polygons according to their properties.	MM1-465	Naming and Classifying Polygons by Characteristics
		MM1-480	Identifying and Labeling Triangles According to Their Sides and Angles
		MPA-058	Identifying Polygons
		MPA-059	Classifying Triangles and Quadrilaterals
3.1.b	Examine the relationships between the measures of area of 2-dimensional objects and volumes of 3-dimensional objects.	MM1-510	Determining the Area of Parallelograms and Triangles
		MM1-525	Finding the Volume of Rectangular and Triangular Prisms
		MPA-067	Finding the Area of Rectangles and Parallelograms
		MPA-069	Finding the Area of Triangles and Trapezoids
		MPA-075	Finding the Volume of Rectangular Prisms
		MPA-107	Constructing Three-Dimensional Figures and Examining Their Dimensions
		MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
3.2.	Use spatial reasoning, location and geometric relationships to solve problems.		
3.2.a	Construct similar polygons on coordinate grids.	MM1-500	Using Translations, Rotations and Reflections to Transform Shapes
		MPA-108	Graphing Translations and Reflections on the Coordinate Plane
3.3.	Develop and apply units, systems, formulas and appropriate tools to estimate and measure.		
3.3.a	Solve problems involving measurement through the use of a variety of tools, techniques and strategies.	MM1-460	Measuring and Classifying Angles
		MM1-470	Using Ratios to Identify Similar Figures
		MM1-475	Using Proportions to Solve for Unknown Lengths of Sides of Similar Figures
		MM1-510	Determining the Area of Parallelograms and Triangles
		MM1-525	Finding the Volume of Rectangular and Triangular Prisms
		MPA-067	Finding the Area of Rectangles and Parallelograms
		MPA-069	Finding the Area of Triangles and Trapezoids
		MPA-075	Finding the Volume of Rectangular Prisms
		MPA-111	Comparing Perimeters, Areas, and Volumes of Similar Geometric Figures and Solids
3.3.b	Use specific ratios to convert between measures of length, area, volume, mass and capacity in the customary and metric systems.	MM1-535	Converting Customary Units of Measurement for Length
		MM1-540	Converting Customary Unit of Measurement for Capacity and Weight
		MM1-545	Converting Metric Units of Measurement for Length
		MM1-550	Converting Metric Units of Measurement for Mass and Capacity

	Mathematics Curriculum Framework	Lesson Number	Lesson Title
WORKING WITH DATA: PROBABILITY AND STATISTICS			
4.1.	Collect, organize and display data using appropriate statistical and graphical methods.		
4.1.a	Display and compare sets of data using various systematic or graphical representations.	MM1-390	Understanding Data in Bar Graphs, Line Graphs, and Stem-and-Leaf Plots
		MM1-400	Interpreting Double Bar Graphs
		MM1-405	Interpreting and Constructing Circle Graphs
		MM1-410	Interpreting Box-and-Whisker Plots
		MM1-415	Defining and Calculating the Range and the Mean
		MM1-420	Defining and Calculating the Median and the Mode
		MM1-425	Classifying Information from a Mathematical Story
		MM1-430	Using Graphs to Solve Story Problems
		MM1-435	Using Pictographs, Bar Graphs and Line Graphs to Solve Problems
		MM1-445	Interpreting and Making Decisions from Graphically Represented Data
		MPA-096	Constructing Stem-and-Leaf Plots
		MPA-098	Making Predictions from Graphs and Choosing the Correct Graph
4.2.	Analyze data sets to form hypotheses and make predictions.		
4.2.a	Describe the shape of data sets using the measures of spread and central tendency.	MM1-415	Defining and Calculating the Range and the Mean
		MM1-420	Defining and Calculating the Median and the Mode
4.3.	Understand and apply basic concepts of probability.		
4.3.a	Understand that probabilities are more reliable to use as predictors when there is a large number of trials.	MM1-385	Collecting Data
		MM1-230	Finding the Probability of Simple Events
		MM1-235	Finding Experimental Probability
		MPA-089	Using Tree Diagrams
		MPA-091	Finding the Number of Combinations of a Set of Objects
		MPA-090	Finding the Probability of Simple Real-Life Events
4.3.b	Express probability using various numerical representations.	MM1-230	Finding the Probability of Simple Events
		MM1-235	Finding Experimental Probability
		MPA-089	Using Tree Diagrams
		MPA-091	Finding the Number of Combinations of a Set of Objects
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		MM1-415	Defining and Calculating the Range and the Mean
		MM1-420	Defining and Calculating the Median and the Mode
		MM1-425	Classifying Information from a Mathematical Story
		MM1-430	Using Graphs to Solve Story Problems
		MM1-435	Using Pictographs, Bar Graphs and Line Graphs to Solve Problems

MM1-Fundamentals of Mathematics
MPA- Pre-Algebra
HA1-Algebra 1

Note: Standards were taken from the Connecticut Mathematics Curriculum Framework document for Mathematics Grades PreK-12 adopted by the Connecticut State Department of Education in September 2005.