

EM3 (Elementary Math)

Course Curriculum

FALL SESSION (SEP - DEC) - 12 Classes	
Units	Topics
Unit 1A	<p>Math (Common Core):</p> <ul style="list-style-type: none"> Fractions– Simplify, Addition, Subtraction Reciprocal, Fractions Between two Numbers, Product Mixed Numbers, Missing Addends <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> SAT/PSAT - Logical Reasoning, Math Counts Problems on Measurements, Number System Problems using Days, Months, Balance Benders
Unit 1B	<p>Math (Common Core):</p> <ul style="list-style-type: none"> Mixed Fractions, Fraction Subtraction Least Common Denominator, Equivalent Fraction Greatest Common Factor, Comparing like Fractions <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> SAT/PSAT- Logical Reasoning, Constant Integers Math Counts, Word Problems, Logical Matching Word Connections, Balance Benders
Unit 1C	<p>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</p>
Unit 1D	<p>Math (Common Core):</p> <ul style="list-style-type: none"> Numbers and Operations, Simplified Fractions Fractions Using LCD, Vocabulary Math Following a Flow Chart, Proper, Improper Fractions <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> Sets and Venn Diagrams, Math Counts Analogy Pair, Reading Passage Word problems on Measurements
Unit 1E	<p>Math (Common Core):</p> <ul style="list-style-type: none"> Quotient, Order of Operations, Absolute Value Data Analysis Problems, Riddle, Fraction Subtraction

	<ul style="list-style-type: none"> • Math Terms and Word Problems, Multiplication <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> • Sets and Venn Diagrams, Math Counts • Word Problems-Area, Triangle, Perimeter, Square • Choose Opposite Words, Word Analogy Pair
Unit 1F	Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking
Unit 2A	<p>Math (Common Core):</p> <ul style="list-style-type: none"> • Currency in Decimals • Money Exchange Problems, Decimals-Find Sum • Numbers and Operations, Cross Number Puzzle <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> • Logical Sequence, Logical Math Problems • Reading Passage, Word Problems • Data Analysis
Unit 2B	<p>Math (Common Core):</p> <ul style="list-style-type: none"> • Addition, Multiplication, Word Problems, Ratios • Proportions, Addition, Subtraction of Decimals • Multiplication of Decimal values <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> • GCM – LCM, Ratio and Proportion • Word Problems on Whole Numbers and Integers • Venn Diagrams, Balance Benders
Unit 2C	Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking
Unit 2D	<p>Math (Common Core):</p> <ul style="list-style-type: none"> • Decimals-Divide by Whole Number, Division • Comparing and Ordering Decimals, Multiplications • Terminating Decimals, Word Problems <p>Critical Thinking (Math Challenge):</p> <ul style="list-style-type: none"> • Divisibility, Addition, Multiplication • Logical Connectives, Word Problems • Complete the Analogy
Unit 2E	<p>Math (Common Core):</p> <ul style="list-style-type: none"> • Product of Primes, Factors, Multiples • Least Common Multiplication, Prime Factorization • Greatest Common Factor, Factor Trees

	<p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Divisibility, Operations with Percent • Logical Match, Word Analogy • Balance Benders, Word Problems
Unit 2F	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>
WINTER SESSIONS (JAN - MAR) - 12 Classes	
Unit 3A	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Number Line, Order of Operations • Integers-Addition, Multiplication, Division • Negative and Positive Integers <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Operations with Percent, Treasure Logic • Competitive Math, Logical Match • Word Problems
Unit 3B	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Adding and Subtracting Integers, Base and Exponent • Difference or Sum, Absolute Value, Division, Integers • Order of Operations, Integer Multiplication <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Operation with Percent • Problems using Number Systems • Balance Benders, Logical Connectives
Unit 3C	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>
Unit 3D	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Algebraic Expressions, Word Problems • Algebra Questions and Riddles, Inverse Operations • Algebraic Addition and Subtraction <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Fractions, Number System • Balance Benders, Logical Connectives • Opposites, Descriptive Analogies
Unit 3E	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Algebraic Expressions, Solving Equations • Word Problems using Formulas • Solving Equations to Find Values and Variables

	<p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Fractions, Averages, Word Problems • Balance Benders, Opposites • Reading Passage, Descriptive Analogies
Unit 3F	<p><i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i></p>
Unit 4A	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Algebra Problems, Numbers and Operations • Word Problems on Fractions, Ratios • Word Problems on Pre Algebra <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Pattern, Sequence of Numbers • Arithmetic and Logic Operations • Logical Connectives, Reading Passage
Unit 4B	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Word Problems on Time and Distance, • Problems on Measurements, Ages, Ratios • Brain Teasers, Data Analysis, Multiple Step Problems <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Even and Odd, Competitive Math • Word Problems, Balance Benders • Word Analogy, Figure Out the Order
Unit 4C	<p><i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i></p>
Unit 4D	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Word Problems Patterns with Addition, Subtraction • Word Problems with Multiplication, Division, Decimal • Word Problems with Fractions, Mixed Numbers <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Even and Odd, Binary Logic • Word Problems on Calendar, Money and Coins • Balance Benders, Logical Match, Clues and Charts
Unit 4E	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Special Functions, Number Operations • Arithmetic Problems, Word Problems • Problems using Special Operations, Venn Diagrams <p><i>Critical Thinking (Math Challenge):</i></p>

	<ul style="list-style-type: none"> • Perimeter and Area, Balance Benders • Word Problems using Number System • Logical Connectives, Word Analogy, Puzzle
Unit 4F	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>
SPRING SESSION (APR - JUN) - 12 Classes	
Unit 5A	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Percentage Problems, Riddles with Percentages • Decimals, Percent and Fractions, Math Analogy • True and False Proportions, Means and Extremes <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Perimeter and Area, Binary Logic, Logical Match • Word Problems on Ages and Clock • Balance Math, Clues and Charts, Puzzles
Unit 5B	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Data Analysis on The Eatery Passage • Analyzing Data and Solving using Ratios • Ratios and Proportions, Word Problems <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Perimeter and Area, LCM and GCF • Word Problems on Calendars and Number Systems • Balance Benders, Logical Connectives
Unit 5C	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>
Unit 5D	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Clock Angles, Word Problems using Measurements • Problems on Height and Distance, Average Speed • Conversion Calculator, Proportion Pushups <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • LCM and GCF, Competitive Math • Balance Benders, Data Analysis • Logical Match
Unit 5E	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Fractions, Problems on Tim’s Savings • Mean, Median, Mode, Temperature • Data Analysis ,Probability <p><i>Critical Thinking (Math Challenge):</i></p>

	<ul style="list-style-type: none"> • LCM and GCF, Word Problems on Time Zones • Ratios, Rates and Proportions • Balance Benders, Logical Connectives
Unit 5F	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>
Unit 6A	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Probability, Mean, Median and Mode • Probability Problems using Graphs, Venn Diagrams • Combinations, Data Analysis <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Ratios, Rates and Proportions • Percentages, Balance Benders, • Data Analysis Graph, Blood Relations
Unit 6B	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Interpreting a Bar Graphs, Sum of Ordered Pairs • Data Analysis using Tables • Matching Graphs with Pairs <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Ratios, Rates and Proportions • Competitive Math, Reading Passage • Balance Benders, Rotating Cubes, Blood Relations
Unit 6C	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>
Unit 6D	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Measurements-Parallelogram, Area of Triangle • Perimeter, Area, Volume, Rectangle Measurement • Dimension Detective Problems <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Consecutive Integers • Balance Benders, Word Problems • Data Analysis using Intersection
Unit 6E	<p><i>Math (Common Core):</i></p> <ul style="list-style-type: none"> • Comparing Areas, Perimeter and Area • Problems on Computing Area, Surface Area • Finding the Dimension of a Solid <p><i>Critical Thinking (Math Challenge):</i></p> <ul style="list-style-type: none"> • Factors, Equations

	<ul style="list-style-type: none">• Balance Benders, Word Analogy• Word Problems, Logical Math
Unit 6F	<i>Homework Review, 1 on 1 with Teacher, Bi-Weekly Test of Math and Critical Thinking</i>