

Hillsdale
Community Schools
Schology Virtual
Curriculum
2026-27

Pre-Kindergarten Mathematics: Math-U-See

Math-U-See Primer introduces young learners to the foundations of mathematics through hands-on exploration and visual learning. In this course, students build a strong understanding of numbers by learning to count, recognize, and write numerals from zero through nine. Using manipulatives and guided practice, students explore how numbers represent real quantities and how they relate to one another. Throughout this foundational year, students develop important skills such as number recognition, fine-motor control through number writing, problem-solving, and mathematical vocabulary. The Math-U-See Pre-K course structure emphasizes mastery, confidence, and enjoyment of math, laying a solid foundation for future mathematical learning.

Semester 1	Semester 2
Topic 01: Number Recognition	Topic 08: Geometric Shapes: Triangles
Topic 02: Writing Numerals	Topic 09: Place Value: Units and Tens
Topic 03: Number Recognition and Writing Numerals	Topic 10: Place Value: Hundreds
Topic 04: Geometric Shapes: Rectangles	Topic 11: Unit Bars
Topic 05: Expanded Number Recognition and Writing Numerals	Topic 12: Addition: Introduction and Symbol
Topic 06: Geometric Shapes: Circles	Topic 13: Addition: +1
Topic 07: Expanded Number Recognition and Writing Numerals	Topic 14: Counting to 20

Math Kindergarten: Math-U-See Primer

Math-U-See Primer provides an initial entry into mathematical thinking for early learners. It introduces counting, numeral writing, place value awareness, basic shapes, simple addition concepts, and foundational problem-solving habits. Students learn to represent numbers concretely using the block manipulatives, which builds conceptual understanding long before formal operations are required. The level also encourages mathematical language development through the Build-Write-Say method and playful exploration of early numeracy skills.

Semester 1	Semester 2
Topic 01: Number Recognition	Topic 16: Shapes: Squares; Addition: $4 + 4$ and $5 + 5$
Topic 02: Writing Numerals	Topic 17: Skip Counting by Two
Topic 03: Number Recognition and Writing Numerals	Topic 18: Addition of Tens
Topic 04: Geometric Shapes: Rectangles	Topic 19: Skip Counting by 10
Topic 05: Number Recognition and Writing Numerals	Topic 20: Addition of Hundreds
Topic 06: Geometric Shapes: Circles	Topic 21: Solving for an Unknown
Topic 07: Number Recognition and Writing Numerals	Topic 22: Skip Counting by Five
Topic 08: Geometric Shapes: Triangles	Topic 23: Tally Marks
Topic 09: Place Value: Units and Tens	Topic 24: Addition: Making 10
Topic 10: Place Value: Hundreds	Topic 25: Skip Count to Find Area
Topic 11: Unit Bars	Topic 26: Telling Time with Minutes
Topic 12: Addition: Introduction and Symbol	Topic 27: Telling Time with Hours
Topic 13: Addition: $+1$	Topic 28: Telling Time with Minutes and Hours
Topic 14: Counting to 20	Topic 29: Subtraction: Introduction and Symbol
Topic 15: Addition: $2 + 2$ and $3 + 3$; Vertical Addition	Topic 30: Subtraction: -1

Math 1: Math-U-See Alpha

Alpha establishes core addition and subtraction facts through a mastery-focused progression. Students learn number families, place-value logic, and strategies such as decomposition and regrouping. The level emphasizes accurate fact recall, conceptual modeling with manipulatives, and real-world problem applications. Students also practice writing equations, explaining their reasoning, and connecting symbolic operations with concrete block representations. Mastery at this stage ensures readiness for multi-digit computation.

Semester 1	Semester 2
Topic 01: Place Value and the Manipulatives	Topic 16: Addition: Making 9
Topic 02: Counting to 20	Topic 17: Addition of the Extras: $3 + 5$, $4 + 7$, $5 + 7$
Topic 03: Unit Bars	Topic 18: Introduction to Subtraction
Topic 04: Addition: Symbols, $+0$	Topic 19: Subtraction: -1 and -0
Topic 05: Addition: $+1$, Commutative Property	Topic 20: Subtraction: -2
Topic 06: Counting to 100, Skip Counting by 10	Topic 21: Subtraction: -9
Topic 07: Addition: $+2$	Topic 22: Subtraction: -8
Topic 08: Solve for an Unknown	Topic 23: Subtraction: Doubles
Topic 09: Addition: $+9$, Mental Math	Topic 24: Subtraction: Making 10
Topic 10: Addition: $+8$	Topic 25: Subtraction: Making 9
Topic 11: Shapes: Circles and Triangles; Skip Counting by 2	Topic 26: Subtraction: Extras
Topic 12: Addition: Doubles	Topic 27: Subtraction by 7, or Adding Up by 3
Topic 13: Rectangles, Squares; Skip Counting by 5	Topic 28: Subtraction by 6, or Adding Up by 4
Topic 14: Addition: Doubles $+1$; Associative Property	Topic 29: Subtraction by 5, or Adding Up by 5
Topic 15: Addition: Making 10	Topic 30: Subtraction by 3 and 4

Math 2: Math-U-See Beta

Beta transitions students into multi-digit operations by strengthening place-value understanding and introducing regrouping algorithms. Students learn vertical addition and subtraction, estimation, solving word problems with multi-step reasoning, and interpreting operations in measurement contexts such as time and money. Lessons reinforce accuracy, the structure of the base-ten system, and the importance of strategic thinking when approaching multi-digit problems. The approach ensures students can fluently perform operations while understanding why the procedures work.

Semester 1	Semester 2
Topic 01: Place Value and the Manipulatives	Topic 16: Thousands and Place-Value Notation
Topic 02: Sequencing; Word Problem Tips	Topic 17: Rounding to Thousands; Estimation
Topic 03: Inequalities	Topic 18: Multiple-Digit Column Addition; Mental Math
Topic 04: Rounding to 10 and Estimation	Topic 19: More Multiple-Digit Column Addition
Topic 05: Multiple-Digit Addition and Place Value Notation	Topic 20: Multiple-Digit Subtraction
Topic 06: Skip Count by 2	Topic 21: Telling Time: Minutes; Mental Math
Topic 07: Addition with Regrouping (Carrying)	Topic 22: Subtraction with Regrouping (Borrowing)
Topic 08: Skip Count by 10; 1 Penny = 1¢, 1 Dime = 10¢	Topic 23: Telling Time: Hours
Topic 09: Skip Count by 5; 5¢ = 1 Nickel	Topic 24: Subtraction: Three-Digit Numbers; Mental Math
Topic 10: Money: Decimal Point and Dollars	Topic 25: Ordinal Numbers; Tally Marks; Days and Months
Topic 11: Rounding to Hundreds; Multiple-Digit Addition with Regrouping	Topic 26: Subtraction: Four-Digit Numbers
Topic 12: Adding Money; Mental Math	Topic 27: Subtraction: Money; Mental Math
Topic 13: Column Addition	Topic 28: Subtraction: Multiple-Digit Numbers
Topic 14: Measurement: 12 Inches = 1 Foot	Topic 29: Reading Gauges and Thermometers
Topic 15: Perimeter	Topic 30: Bar Graphs and Line Graphs

Math 3: Math-U-See Gamma

Gamma is focused on developing complete multiplication fluency. Students learn multiplication facts through conceptual reasoning, skip-counting as a precursor skill, and visual representations that link multiplication to area and scaling. Lessons cover multi-digit multiplication, solving for unknown factors, unit-conversion applications, and interpreting multiplication in real-world contexts such as currency and time. Students also strengthen foundational skills in data interpretation, measurement, and early fraction concepts, ensuring deep comprehension of multiplication as both repeated addition and area modeling.

Semester 1	Semester 2
Topic 01: Rectangles, Factors, and Products	Topic 16: Multiply by 4; 4 Quarters = 1 Dollar
Topic 02: Multiply by 1 and 0; Commutative Property	Topic 17: Skip Count by 7; Multiples of 10
Topic 03: Skip Count by 2, 5, and 10	Topic 18: Multiply by 7 and by Multiples of 100
Topic 04: Multiply by 2; 1 Quart = 2 Pints	Topic 19: Skip Count by 8; 8 Pints = 1 Gallon
Topic 05: Multiply by 10; 10¢ = 1 Dime	Topic 20: Multiply by 8
Topic 06: Multiply by 5; 5¢ = 1 Nickel	Topic 21: Multiple-Digit Multiplication; Place-Value Notation; Distributive Property
Topic 07: Area of a Rectangle and a Square	Topic 22: Rounding to 10, 100, and 1,000; Estimation
Topic 08: Solve for an Unknown	Topic 23: Double-Digit Times Double-Digit; Multiplication by 11
Topic 09: Skip Count by 9; Equivalent Fractions	Topic 24: Double-Digit with Regrouping; Associative Property; Mental Math
Topic 10: Multiply by 9	Topic 25: Multiple-Digit Multiplication; Regrouping
Topic 11: Skip Count by 3	Topic 26: Finding Factors; 25¢ = 1 Quarter
Topic 12: Multiply by 3; 3 Feet = 1 Yard, 1 Tablespoon = 3 Teaspoons	Topic 27: Place Value Through Millions; 16 Ounces = 1 Pound
Topic 13: Skip Count by 6; Equivalent Fractions	Topic 28: More Multiple-Digit Multiplication
Topic 14: Multiply by 6	Topic 29: Prime and Composite Numbers; Multiply by 12
Topic 15: Skip Count by 4; 4 Quarts = 1 Gallon	Topic 30: 5,280 Feet = 1 Mile; 2000 Pounds = 1 Ton

Math 4: Math-U-See Delta

Delta teaches division conceptually and procedurally, emphasizing its relationship to multiplication. Students learn single-digit and multi-digit division algorithms, remainders, interpreting quotients in context, and representing division through manipulatives. Word problems highlight division as sharing and grouping, while lessons reinforce fluency in previous arithmetic operations. Delta also introduces more complex applications, such as long-division strategies and real-world problem solving involving rates and equal partitions.

Semester 1	Semester 2
Topic 01: Rectangles, Factors, and Product; Solving for an Unknown	Topic 16: Division by a Single Digit with Remainder
Topic 02: Division by 1 and 2; Symbols for Division	Topic 17: "Upside-Down" Multiplication
Topic 03: Division by 10; Third Symbol for Division	Topic 18: Division with Double-Digit Factors
Topic 04: Division by 5 and 3	Topic 19: Division, Three Digit by One Digit
Topic 05: Parallel and Perpendicular Lines; Angles	Topic 20: Division, Three Digit by One Digit (Cont.); Using Fractions to Divide Remainders
Topic 06: Division by 9	Topic 21: Rounding to 10, 100, 1,000, and Estimation
Topic 07: Finding the Area of a Parallelogram	Topic 22: Division, Three Digit by Two Digit
Topic 08: Division by 6	Topic 23: Division, Four Digit by One Digit
Topic 09: Finding the Area of a Triangle	Topic 24: Division, Four Digit by Two Digit
Topic 10: Division by 4	Topic 25: Division, Multiple Digit by Multiple Digit
Topic 11: Finding the Average	Topic 26: Volume
Topic 12: Division by 7 and 8	Topic 27: Fraction of a Number
Topic 13: Finding the Area of a Trapezoid	Topic 28: Roman Numerals: I, V, X, L, and C
Topic 14: Thousands, Millions, and Place-Value Notation	Topic 29: Fraction of One
Topic 15: Billions, Trillions, and Expanded Notation; Multi-Step Word Problems	Topic 30: Roman Numerals: D, M, Multiples of 1,000

Math 5: Math-U-See Epsilon

Epsilon provides an extensive study of fractions using visual and tactile tools. Students learn equivalent fractions, comparing and ordering fractions, mixed numbers, improper fractions, and all fraction operations (addition, subtraction, multiplication, and division). Fraction overlays help students visualize fractional relationships and develop a reliable mental model. Application lessons include fractional measurements, scaling, and multi-step word problems that require reasoning about part-to-whole relationships. This level lays a strong conceptual foundation for ratios, proportions, and decimals in later levels.

Semester 1	Semester 2
Topic 01: Fraction of a Number; Word Problem Tips	Topic 16: Linear Measure with Mixed Numbers
Topic 02: Fraction of One	Topic 17: Addition and Subtraction of Mixed Numbers
Topic 03: Add and Subtract Fractions; Common Denominator; Mental Math	Topic 18: Addition of Mixed Numbers with Regrouping; Word Problems
Topic 04: Equivalent Fractions	Topic 19: Subtraction of Mixed Numbers with Regrouping
Topic 05: Addition and Subtraction; Unequal Denominators	Topic 20: Subtraction of Mixed Numbers Using the "Same-Difference Theorem"
Topic 06: The Rule of Four; Multi-Step Word Problems	Topic 21: Adding Mixed Numbers—Regrouping and Unequal Denominators; Mental Math
Topic 07: Comparing Fractions with the Rule of Four	Topic 22: Subtracting Mixed Numbers—Regrouping and Unequal Denominators
Topic 08: Adding Multiple Fractions	Topic 23: Dividing Fractions and Mixed Numbers Using the Reciprocal
Topic 09: Multiplying Fractions; Fraction of a Fraction; Mental Math	Topic 24: Solving for an Unknown Using the Multiplicative Inverse; Word Problems
Topic 10: Dividing Fractions with the Rule of Four; Multi-Step Word Problems	Topic 25: Multiplying Mixed Numbers; Three Fractions; Canceling
Topic 11: Finding Common Factors and Divisibility	Topic 26: Solving for an Unknown—Addition and Subtraction
Topic 12: Reducing Fractions—Common Factors; Word Problems	Topic 27: Area and Circumference of a Circle
Topic 13: Reducing Fractions—Prime Factors	Topic 28: Solving for an Unknown—Fractional Coefficients
Topic 14: Linear Measure	Topic 29: Fractions to Decimals to Percents
Topic 15: Mixed Numbers and Improper Fractions; Mental Math	Topic 30: More Solving for an Unknown

Math 6: Math-U-See Zeta

Zeta deepens students' understanding of the number system by focusing on decimals and percents. Students learn decimal place value, all decimal operations, rounding, expanding and contracting decimals, and how decimals relate to fractions and percents. Real-life applications include financial math (tax, discounts, interest concepts), measurement conversions, and interpreting percent in data contexts. This level prepares students for Pre-Algebra by solidifying proportional reasoning and strengthening connections across number forms.

Semester 1	Semester 2
Topic 01: Exponents; Word Problem Tips	Topic 16: Computing Area and Circumference of a Circle
Topic 02: Place Value with Expanded and Exponential Notation	Topic 17: Dividing a Decimal by a Whole Number
Topic 03: Decimal Numbers with Expanded Notation	Topic 18: Dividing a Whole Number by a Decimal; Word Problems
Topic 04: Add Decimal Numbers	Topic 19: Solving for an Unknown
Topic 05: Subtract Decimal Numbers	Topic 20: Dividing a Decimal by a Decimal
Topic 06: Metric System Origin—Meter, Liter, Gram and Greek Prefixes; Multi-Step Word Problems	Topic 21: Decimal Remainders
Topic 07: Metric System—Latin Prefixes	Topic 22: More Solving for an Unknown
Topic 08: Metric System Conversion—Part 1	Topic 23: Convert Any Fraction to a Decimal and a Percentage
Topic 09: Multiply by $\frac{1}{10}$ or 0.1	Topic 24: Decimals as Rational Numbers; Word Problems
Topic 10: Multiply Decimals by $\frac{1}{100}$ or 0.01	Topic 25: Mean, Median, and Mode
Topic 11: Finding a Percentage	Topic 26: Probability
Topic 12: Finding a Percentage $> 100\%$; Word Problems	Topic 27: Points, Lines, Rays, and Line Segments
Topic 13: Reading Percentages in a Pie Graph	Topic 28: Planes and Symbols
Topic 14: Multiply All Decimals	Topic 29: Angles
Topic 15: Metric System Conversions—Part 2	Topic 30: Types of Angles

Pre-Algebra: Math-U-See Pre-Algebra

Pre-Algebra bridges arithmetic and algebra through an introduction to abstract reasoning. Students explore negative numbers, exponents, roots, ratios, proportions, order of operations, and algebraic properties. They also learn beginning equation solving, factoring concepts, simplifying expressions, and elementary polynomial operations using manipulatives for conceptual clarity. Geometry topics include surface area, volume, and the Pythagorean theorem. This level equips students with the foundational logic and symbolic skills needed for success in Algebra 1.

Semester 1	Semester 2
Topic 01: Negative Numbers: Addition	Topic 16: Convert Celsius to Fahrenheit
Topic 02: Negative Numbers: Subtraction	Topic 17: Convert Fahrenheit to Celsius
Topic 03: Negative Numbers: Multiplication	Topic 18: Absolute Value
Topic 04: Negative Numbers: Division	Topic 19: Ratio and Proportion
Topic 05: Exponents	Topic 20: Similar Polygons
Topic 06: Place Value with Expanded and Exponential Notation	Topic 21: Least Common Multiple and Prime Factorization
Topic 07: Negative Numbers with Exponents	Topic 22: Greatest Common Factor
Topic 08: Roots and Radicals	Topic 23: Polynomials: Addition
Topic 09: Solve for an Unknown with Additive Inverse	Topic 24: Volume of a Cylinder
Topic 10: Pythagorean Theorem	Topic 25: Polynomials: Multiplication
Topic 11: Associative and Commutative Properties	Topic 26: Adding and Subtracting Time, and the Same-Difference Theorem
Topic 12: Distributive Property	Topic 27: Volume of a Pyramid and a Cone
Topic 13: Solve for an Unknown with Multiplicative Inverse	Topic 28: Military Time: Addition and Subtraction
Topic 14: Solve for an Unknown with Order of Operations	Topic 29: Measurement: Addition and Subtraction
Topic 15: Surface Area of Solids	Topic 30: Irrational Numbers, and the Square Root Formula, Real Numbers

Algebra 1: Math-U-See Algebra 1

Algebra 1 introduces students to the language and structure of algebra. Lessons include solving linear and quadratic equations, graphing lines, systems of equations, inequalities, exponents, square roots, scientific notation, metric conversions, unit multipliers, and polynomial operations. Students also encounter introductory conic section graphing and real-world modeling problems. Manipulatives support comprehension of abstract concepts like polynomial operations and equation solving. The course builds algebraic fluency and strengthens mathematical reasoning skills.

Semester 1	Semester 2
Topic 01: Commutative and Associative Properties	Topic 19: Negative Exponents and Raising Exponents to a Power
Topic 02: Order of Operations and Absolute Value	Topic 20: Addition and Multiplication of Polynomials
Topic 03: Solving for an Unknown with One Variable	Topic 21: Factor Polynomials
Topic 04: Distributive Property	Topic 22: Factor Trinomials with Coefficients
Topic 05: Number Lines and Cartesian Coordinates	Topic 23: Factor Trinomials with Negative Numbers
Topic 06: Graphing a Line	Topic 24: Square Roots and Dividing Polynomials
Topic 07: Slope-Intercept Formula	Topic 25: Difference of Two Squares and Oriental Squares
Topic 08: Graphing a Line from the Slope-Intercept Formula	Topic 26: Repeated Factoring of Polynomials
Topic 09: Graphing Parallel Lines and the Standard Equation of a Line	Topic 27: Solving Equations with Factoring
Topic 10: Graphing Perpendicular Lines	Topic 28: Unit Multipliers
Topic 11: Finding the Slope-Intercept Formula with Different Givens	Topic 29: Square Unit Multipliers
Topic 12: Graphing Inequalities	Topic 30: Metric Conversions
Topic 13: Solving Simultaneous Equations by Graphing	Topic 31: Fractional Exponents
Topic 14: Solving Simultaneous Equations by Substitution	Topic 32: Significant Digits and Scientific Notation
Topic 15: Solving Simultaneous Equations by Elimination	Topic 33: Bases Other Than Ten
Topic 16: Coin Problems	Topic 34: Graphing a Circle and an Ellipse
Topic 17: Consecutive Integers	Topic 35: Graphing a Parabola and a Hyperbola
Topic 18: Multiplication and Division with Exponents	

Geometry: Math-U-See Geometry

Geometry emphasizes geometric vocabulary, reasoning, and proof. Students study points, lines, planes, congruence, similarity, transformations, circles, polygons, coordinate geometry, and three-dimensional measurement. Practical geometry applications, such as area, perimeter, and volume, are incorporated throughout. Logical reasoning and formal proof structure help students develop rigorous thinking skills. Introductory trigonometric functions are also included, supporting preparation for Algebra 2 and Precalculus.

Semester 1	Semester 2
Topic 01: Points, Lines, Rays, and Line Segments	Topic 16: Surface Area of Solids
Topic 02: Planes and Sets	Topic 17: Radicals
Topic 03: Angles	Topic 18: Pythagorean Theorem
Topic 04: Types of Angles	Topic 19: More on Radicals
Topic 05: Parallel and Perpendicular Lines with Midpoints and Bisectors	Topic 20: Special Triangles: (45°-45°-90°)
Topic 06: Supplementary and Complementary Angles	Topic 21: Special Triangles: (30°-60°-90°)
Topic 07: Transversals with Interior and Exterior Angles	Topic 22: Axioms, Postulates, and Theorems
Topic 08: Perimeter and Interior Angles of a Rectangle, Triangle, Parallelogram, and Trapezoid	Topic 23: Corresponding Parts of Triangles and Remote Interior Angles
Topic 09: Area of a Rectangle, Triangle, Parallelogram, and Trapezoid	Topic 24: Proving Triangles Congruent with SSS and SAS
Topic 10: Constructing and Identifying Triangles	Topic 25: Proving Triangles Congruent with ASA and AAS; Amplified Parallelogram Theorem
Topic 11: Regular Polygons	Topic 26: Proving Triangles Congruent with HL, LL, HA, and LA
Topic 12: Geometry of a Circle, Sphere and Ellipse; Inscribed and Circumscribed Figures	Topic 27: Proving Triangles Similar with AA and Proportion or Ratio
Topic 13: Area and Circle and Ellipse; Circumference of a Circle; Latitude and Longitude	Topic 28: Transformational Geometry
Topic 14: Volume of Rectangular Solid and Cylinder	Topic 29: Trigonometric Functions: Sine, Cosine, and Tangent
Topic 15: Volume of Pyramid, Cone, Prism, and Sphere	Topic 30: Inverse Trigonometric Functions: Secant, Cosecant, and Cotangent; $\sin^2 + \cos^2 = 1$

Algebra 2: Math-U-See Algebra 2

Algebra 2 expands algebraic knowledge into more advanced concepts. Students study complex numbers, advanced factoring techniques, conjugates, polynomial functions, rational expressions, logarithms (if included in their edition), quadratic functions, conic sections, vectors, and systems of equations solved both graphically and algebraically. Application problems integrate physics-style motion scenarios and other real-life models. The level develops high-level symbolic fluency and prepares students for Precalculus.

Semester 1	Semester 2
Topic 01: Exponents	Topic 17: Unit Multipliers and Metric Conversions
Topic 02: Rational Expressions	Topic 18: Distance = Rate x Time
Topic 03: Scientific Notation; Combining Like Terms	Topic 19: Motion Problems
Topic 04: Radicals: Basic Operations and Simplifying	Topic 20: Graphing Lines: Slope-Intercept Formula
Topic 05: Factoring Polynomials; Rational Expressions	Topic 21: Graphing Parallel and Perpendicular Lines; Graphing Inequalities
Topic 06: Fractional Exponents	Topic 22: Distance Formula and Midpoint Formula
Topic 07: Imaginary and Complex Numbers	Topic 23: Conic Sections: Circle and Ellipse
Topic 08: Conjugate Numbers	Topic 24: Conic Sections: Parabola
Topic 09: Squares, Cubes, and Pascal's Triangle	Topic 25: Parabola: Maxima and Minima
Topic 10: Binomial Theorem	Topic 26: Conic Sections: Hyperbola
Topic 11: Completing the Square	Topic 27: Solving Systems of Equations: Lines and Conic Sections
Topic 12: Quadratic Formula	Topic 28: Coin Problems, Consecutive Integers, and Chemical Mixtures
Topic 13: Discriminants	Topic 29: Age and Boat-in-the-Current Problems
Topic 14: Applications Using Percent	Topic 30: Solving Equations with Three Variables
Topic 15: Isolating a Variable	Topic 31: Vectors
Topic 16: Ratios	

Pre-Calculus: Math-U-See Pre-Calculus

Precalculus strengthens students' mathematical maturity by integrating algebraic, geometric, and trigonometric concepts. Lessons typically include trigonometric ratios and identities, function analysis, polynomial and rational functions, exponential and logarithmic expressions, sequences, series, and an introduction to limits. This level prepares students for the conceptual rigor of calculus by emphasizing functional modeling, problem-solving techniques, and multi-step reasoning.

Semester 1	Semester 2
Topic 01: Introduction to Trigonometry	Topic 16: Polar Coordinates and Rectangular Coordinates
Topic 02: Inverse Trigonometric Ratios	Topic 17: Polar Equations and Polar Graphs
Topic 03: Interpreting the Trigonometry Tables	Topic 18: Vectors
Topic 04: Using the Trig. Table to Solve for the Unknown	Topic 19: Functions: Relation, Domain, and Range
Topic 05: Using a Calculator and Arc Functions	Topic 20: Composite Functions
Topic 06: Angles of Elevation and Depression	Topic 21: Logarithms
Topic 07: Angles Less Than 0° , Greater Than 360° , and Reference Angles	Topic 22: Natural Exponential and Logarithm Functions
Topic 08: Cofunctions; Negative Angle Relationships	Topic 23: Graphing Sine and Cosine Functions
Topic 09: Proving Trigonometric Identities	Topic 24: Graphing the Cosecant and Secant
Topic 10: Verifying Trig. Expressions and Identities	Topic 25: Graphing the Tangent and Cotangent
Topic 11: Sum and Difference Identities: Cosine, Sine, and Tangent	Topic 26: Arithmetic Sequences and Series
Topic 12: The Double-Angle and Half-Angle Identities	Topic 27: Geometric Sequences and Series
Topic 13: Law of Sines	Topic 28: Equations with Radicals and Absolute Value
Topic 14: Law of Cosines	Topic 29: Inequalities with Absolute Value and Radicals
Topic 15: Radian Measure	Topic 30: Limits

Classical Pre-Kindergarten ELA

The Classical Pre-Kindergarten English Language Arts course introduces young learners to the foundations of language through rich oral experiences, early phonological awareness, and gentle exposure to letters and sounds. Students develop listening, speaking, and pre-reading skills through songs, stories, rhymes, and guided activities. Instruction emphasizes phonological awareness, oral language development, vocabulary building, and early print awareness. Through consistent read-alouds, memorization, and playful language activities, students begin forming the habits and skills necessary for future reading and writing success.

Curricular Materials Used:

- Memoria Press Charter
- Phonics First
- Classical Fairytales & Poetry

Semester 1 Topics	Semester 2 Topics
• Classroom routines and listening skills	• Strengthening listening and attention skills
• Fine-motor development (coloring, tracing, cutting)	• Memorization of simple poems and rhymes
• Oral language development through conversation	• Expanding oral expression and sentence use
• Rhyming, songs, and nursery rhymes	• Continued rhyming and introduction to word families
• Phonological awareness (hearing sounds in words)	• Identifying beginning and ending sounds
• Introduction to letter names (A–Z)	• Review and recognition of all letter names
• Alphabet sequencing and recognition	• Matching uppercase and lowercase letters
• Story listening and comprehension	• Retelling stories with simple narration
• Vocabulary development through read-alouds	• Vocabulary expansion through discussion and repetition
• Exposure to classical stories and fairy tales	• Introduction to print awareness (books, pages, directionality)
• Building confidence in speaking and sharing	• Guided storytelling and sequencing events
• Oral storytelling and imaginative play	• Responding to questions about stories and ideas

Classical Kindergarten ELA

The Classical Kindergarten English Language Arts course introduces young learners to the foundations of reading, writing, spelling, speaking, and listening through phonics-based instruction, rich language exposure, and guided practice. Using developmentally appropriate methods aligned with classical education, students build early literacy skills while developing a love for language. Instruction emphasizes phonemic awareness, letter recognition, sound-symbol relationships, correct letter formation, early spelling, vocabulary development, and oral expression. Through systematic phonics instruction and gentle writing practice, students gain confidence as emerging readers and communicators.

Curricular Materials Used:

- Memoria Press Charter
- Phonics First
- Wise Guide for Spelling

Semester 1 Topics	Semester 2 Topics
• Classroom routines and listening skills	• Introduction to sentence awareness
• Fine-motor development and proper pencil grip	• Strengthening sound blending and decoding skills
• Rhyming, oral language games, and phonemic awareness	• Reading phonetic words and short phrases
• Uppercase letter recognition and sounds (A–Z)	• Introduction to simple sight words
• Lowercase letter recognition and sounds (a–z)	• Spelling phonetic words using sound-letter correspondence
• Matching uppercase and lowercase letters	• Guided word and phrase dictation
• Introduction to handwriting and correct letter formation	• Introduction to simple sentences
• Beginning phonics skills	• Reading short sentences with fluency support
• Introduction to short vowel sounds	• Writing words, short phrases, and spelling patterns
• Oral blending and segmenting of sounds	• Writing simple sentences with assistance
• Introduction to consonant-vowel-consonant (CVC) word patterns	• Introduction to punctuation awareness
• Oral spelling of sounds and simple phonetic words	• Vocabulary development through read-alouds
• Early reading of simple phonetic words	• Listening comprehension and oral narration
• Listening to stories and retelling through narration	• Memorization of poems and rhymes
• Review of all letters, sounds, and phonics patterns	• Building reading confidence and fluency

Classical First Grade ELA

The Classical First Grade English Language Arts course builds upon foundational literacy skills through systematic, phonics-based instruction and guided language practice. Students develop fluency in reading, writing, spelling, speaking, and listening using structured, research-based methods combined with classical education principles. Instruction emphasizes advanced phonemic awareness, decoding and encoding skills, handwriting mastery, spelling rules, vocabulary development, grammar foundations, and oral narration. Through consistent practice and rich language exposure, students grow into confident readers, writers, and communicators.

Curricular Materials Used:

- Memoria Press Charter
- University of Florida Literacy Institute (UFLI)
- Wise Guide for Spelling
- Universal Handwriting

Semester 1 Topics	Semester 2 Topics
• Review of letter sounds and phonemic awareness skills • Advanced phonemic awareness (segmenting, blending, manipulation) • Short vowel review and mastery • Consonant digraphs (sh, ch, th, wh, ck) • Beginning blends (bl, st, tr, etc.) • CVC and CCVC word reading and spelling • Introduction to sight words (high-frequency words) • Handwriting: proper formation of lowercase letters • Spelling: phonetic words and short vowel patterns • Dictation of sounds, words, and simple phrases • Introduction to sentence structure (capitalization, spacing) • Reading decodable texts with fluency support • Listening to stories and oral narration • Introduction to basic grammar (nouns, verbs) • Copywork: words and simple sentences • Vocabulary development through literature • Memorization of poems and short passages • Guided reading comprehension discussions • Building confidence in reading aloud	• Review and mastery of all phonics concepts taught • Multisyllable word reading (introduction) • Introduction to vowel teams (ai, ee, oa, etc.) • R-controlled vowels (ar, er, ir, or, ur) • Advanced consonant blends and clusters • Long vowel patterns (silent e) • Expanded sight word mastery and automaticity • Handwriting: uppercase letters and sentence writing • Spelling: long vowels, digraphs, and spelling rules • Sentence and short paragraph dictation • Sentence types (statement, question) • Reading fluency and expression development • Oral and written narration of stories • Expanded grammar (adjectives, simple punctuation) • Copywork: sentences and short passages • Vocabulary expansion through reading and discussion • Continued memorization and recitation • Independent comprehension and retelling • Strengthening reading fluency and comprehension

Classical 2nd Grade ELA

The Classical Second Grade English Language Arts course strengthens and expands students' literacy skills through systematic phonics instruction, structured writing, and rich engagement with quality literature. Students continue to develop fluency, comprehension, spelling accuracy, and written expression while deepening their understanding of language structure. Instruction emphasizes advanced phonics and word analysis, spelling patterns and rules, grammar foundations, handwriting fluency, vocabulary development, and both oral and written narration. Through consistent practice and meaningful reading experiences, students grow into fluent readers and thoughtful communicators.

Curricular Materials Used:

- Memoria Press Charter
- University of Florida Literacy Institute (UFLI)
- Wise Guide for Spelling
- Universal Handwriting

Semester 1 Topics	Semester 2 Topics
• Review of phonics concepts (short/long vowels, blends)	• Review and mastery of advanced phonics concepts
• Advanced phonemic awareness and word manipulation	• Multisyllabic word decoding strategies
• Long vowel patterns (silent e, vowel teams)	• Diphthongs (oi, oy, ou, ow)
• R-controlled vowels review and mastery	• Advanced vowel teams (ea, oa, ie, ue)
• Reading and spelling CVCE and vowel team words	• Complex consonant patterns (kn, wr, mb, gn)
• Introduction to multisyllable words (compound words)	• Syllable division patterns (VC/CV, V/CV)
• Sight word expansion and automatic recognition	• Mastery of high-frequency and irregular words
• Handwriting: review of letter formation and spacing	• Handwriting: fluency, legibility, and paragraph writing
• Spelling: long vowels, blends, and digraph patterns	• Spelling: multisyllabic words and spelling rules
• Introduction to spelling rules (doubling, -ck, -tch)	• Advanced spelling rules (suffixes, prefixes)
• Dictation: words, phrases, and simple sentences	• Dictation: sentences and short paragraphs
• Sentence structure review (capitalization, punctuation)	• Sentence variety and expansion
• Introduction to parts of speech (nouns, verbs)	• Expanded grammar (adjectives, adverbs, pronouns)
• Reading decodable and controlled texts fluently	• Reading texts with improved fluency and expression
• Oral narration of stories and passages	• Written narration (short paragraphs)
• Copywork: sentences and short passages	• Copywork: paragraphs and selections from literature
• Vocabulary development through literature study	• Vocabulary expansion and word meaning strategies
• Introduction to reading comprehension strategies	• Strengthening comprehension and inference skills
• Memorization of poems and passages	• Continued memorization and recitation
• Listening comprehension and discussion	• Independent comprehension and retelling
• Building reading confidence and accuracy	• Developing reading fluency and comprehension mastery

Classical 3rd Grade ELA

The Classical Third Grade English Language Arts course develops students' reading comprehension, writing structure, grammar knowledge, and spelling accuracy through systematic instruction and rich literary engagement. Students transition from learning to read toward reading to learn, while also strengthening their ability to communicate clearly in writing. Instruction emphasizes structured composition through guided writing models, continued phonics and spelling development, grammar and sentence analysis, vocabulary growth, and both oral and written narration. Students gain confidence in producing organized paragraphs and engaging thoughtfully with texts.

Curricular Materials Used:

- Memoria Press Charter
- Institute for Excellence in Writing (IEW)
- Wise Guide for Spelling
- Universal Handwriting

Semester 1 Topics	Semester 2 Topics
• Review of foundational phonics and spelling patterns	• Review and mastery of spelling rules and patterns
• Advanced decoding and multisyllabic word reading	• Continued multisyllabic word study and application
• Introduction to IEW writing structure (keyword outlines)	• Paragraph writing using multiple sources
• Identifying key words and main ideas in texts	• Summarizing longer passages using outlines
• Writing from outlines (sentences and short paragraphs)	• Writing cohesive multi-paragraph compositions
• Introduction to sentence structure and subject/predicate	• Sentence variety and expansion techniques
• Parts of speech review (nouns, verbs, adjectives)	• Expanded grammar (adverbs, pronouns, prepositions)
• Introduction to sentence "dress-ups" (IEW stylistic techniques)	• Continued use of stylistic techniques in writing
• Spelling: vowel patterns, prefixes, and suffixes	• Spelling: advanced rules, word roots, and affixes
• Dictation: sentences and short paragraphs	• Dictation: longer passages and editing practice
• Handwriting: cursive letter formation	• Handwriting: cursive fluency and legibility
• Reading comprehension: main idea and details	• Reading comprehension: inferencing
• Oral narration and discussion of readings	• Written narration and summaries
• Copywork: sentences and paragraph passages	• Copywork: longer literary selections
• Vocabulary development through literature	• Vocabulary expansion using context and word study
• Memorization of poetry and prose passages	• Continued memorization and recitation
• Introduction to basic literary elements (characters, setting)	• Literary analysis (plot, conflict, theme)
• Reading grade-level literature with support	• Independent reading and comprehension
• Listening comprehension and guided discussion	• Independent analysis and discussion skills
• Building confidence in structured writing	• Developing clarity, organization, and style in writing

Classical 4th Grade ELA

The Classical Fourth Grade English Language Arts course strengthens students' abilities in reading comprehension, structured writing, grammar, and spelling while cultivating clarity, organization, and style in written expression. Students further develop the transition from learning to read toward reading to analyze and write with purpose. Instruction emphasizes structured composition through the Institute for Excellence in Writing model, including outlining, summarizing, and multi-paragraph composition. Students refine grammar skills, expand vocabulary, improve spelling accuracy, and engage deeply with quality literature through narration, discussion, and written response.

Curricular Materials Used:

- Memoria Press Charter
- Institute for Excellence in Writing (IEW)
- Wise Guide for Spelling
- Universal Handwriting

Semester 1 Topics	Semester 2 Topics
• Grammar, sentence structure, and parts of speech	• Review and refinement of grammar and usage skills
• Sentence analysis (subjects, predicates, clauses)	• Complex sentences (dependent/independent clauses)
• IEW: keyword outlines from single sources	• IEW: outlines from multiple sources
• Summarizing paragraphs from source texts	• Writing multi-paragraph compositions
• Writing from outlines with clear topic sentences	• Developing introductions and conclusions
• Introduction to stylistic techniques ("dress-ups")	• Advanced stylistic techniques and sentence variety
• Spelling: review of phonograms and spelling rules	• Spelling: advanced rules, affixes, and word roots
• Study of prefixes, suffixes, and base words	• Greek and Latin roots and word study
• Dictation: sentences and paragraph passages	• Dictation: longer passages with editing practice
• Handwriting: cursive review and consistency	• Handwriting: fluency, neatness, and speed
• Reading comprehension: main idea, sequence, details	• Reading comprehension: inference, cause/effect, theme
• Oral narration and structured summaries	• Written narration and analytical summaries
• Vocabulary development through literature	• Vocabulary expansion through morphology and context
• Copywork: paragraphs and literary excerpts	• Copywork: extended literary passages
• Memorization of poetry and prose selections	• Continued memorization and recitation
• Introduction to literary elements (plot, setting, character)	• Literary analysis (theme, conflict, author's purpose)
• Reading grade-level literature with guidance	• Independent reading with deeper comprehension
• Listening comprehension and guided discussion	• Independent discussion and textual analysis
• Building paragraph organization and clarity	• Developing voice, coherence, and writing fluency

Classical 5th Grade ELA

The Classical Fifth Grade English Language Arts course refines students' skills in analytical reading, structured writing, grammar, and spelling while cultivating thoughtful expression and engagement with classical literature. Students develop the ability to read closely, think critically, and communicate effectively through both written and oral language. Instruction emphasizes advanced composition through the Institute for Excellence in Writing model, including summarization, note-taking, and multi-paragraph essays. Grammar is taught through editing and rewriting using Fix It! Grammar, while spelling instruction reinforces advanced patterns, morphology, and vocabulary development. Students engage deeply with classical poetry and literature through narration, recitation, and written analysis.

Curricular Materials Used:

- Institute for Excellence in Writing (IEW)
- Fix It! Grammar: Level 2
- Wise Guide for Spelling
- Classical Poetry & Literature

Semester 1 Topics	Semester 2 Topics
• Review of grammar fundamentals	• Review and mastery of grammar and usage concepts
• Fix It! Grammar: editing simple passages for capitalization and punctuation	• Fix It! Grammar: editing complex passages and sentence refinement
• Sentence diagramming (introduction and review)	• Advanced sentence diagramming and analysis
• IEW: keyword outlines from single sources	• IEW: keyword outlines from multiple sources
• Summarizing paragraphs and short texts	• Writing from multiple sources (research-based)
• Writing structured paragraphs with clear topic sentences	• Multi-paragraph compositions (reports and essays)
• Introduction to stylistic techniques (dress-ups and sentence openers)	• Advanced stylistic techniques and varied sentence structures
• Spelling: review of phonograms and spelling rules	• Spelling: advanced rules, morphology, and word study
• Study of prefixes, suffixes, and base words	• Greek and Latin roots for vocabulary development
• Dictation: sentences and paragraph passages	• Dictation: extended passages with editing and revision
• Vocabulary development through spelling and literature	• Vocabulary expansion using context and morphology
• Reading comprehension: main idea, supporting details	• Reading comprehension: inference, theme, and analysis
• Introduction to literary elements (plot, setting, character)	• Literary analysis (theme, conflict, author's purpose)
• Oral narration of readings	• Written narration and analytical responses
• Copywork: paragraphs from classical texts	• Copywork: extended passages and quotations
• Memorization of poetry and prose selections	• Continued memorization and recitation
• Introduction to classical poetry (rhythm, rhyme, form)	• Analysis of poetry (figurative language, tone, theme)
• Guided reading of classical literature	• Independent reading and discussion of literature
• Listening comprehension and discussion skills	• Analytical discussion and Socratic-style dialogue
• Building clarity and organization in writing	• Developing voice, argumentation, and coherence in writing

Classical 6th Grade ELA

The Classical Sixth Grade English Language Arts course advances students' abilities in analytical reading, structured composition, grammar, and vocabulary development while fostering thoughtful engagement with classical literature. Students refine their ability to think critically, write clearly, and express ideas with precision and depth. Instruction emphasizes advanced composition through the Institute for Excellence in Writing's Investigations in Writing, focusing on deeper structural techniques, source-based writing, and stylistic refinement. Grammar instruction through Fix It! Grammar strengthens editing and revision skills, while spelling and vocabulary study emphasizes morphology and word origins. Students engage with classical poetry and literature through close reading, discussion, memorization, and analytical writing.

Curricular Materials Used:

- Institute for Excellence in Writing (IEW)
- Fix It! Grammar: Level 3
- Wise Guide for Spelling
- Classical Poetry & Literature

Semester 1 Topics	Semester 2 Topics
• Building clarity, structure, and organization in writing	• Developing argumentation, voice, and coherence in writing
• Editing for capitalization, punctuation, and usage	• Editing complex passages with stylistic revision
• Sentence diagramming review (subjects, predicates, modifiers)	• Advanced sentence diagramming (phrases and clauses)
• IEW: advanced keyword outlines and note-taking	• IEW: synthesizing information from multiple sources
• Summarizing and retelling from source texts	• Analytical and research-based writing
• Writing structured paragraphs with clear organization	• Multi-paragraph essays (expository and analytical)
• Introduction to advanced stylistic techniques	• Refinement of style, voice, and cohesion in writing
• Spelling: review of phonograms and spelling rules	• Spelling: advanced rules, morphology, and word origins
• Study of prefixes, suffixes, and base words	• Greek and Latin roots for vocabulary expansion
• Dictation: sentences and paragraph passages	• Dictation: extended passages with editing and revision
• Vocabulary development through literature and spelling	• Vocabulary expansion through morphology and context
• Reading comprehension: main idea, structure, and details	• Reading comprehension: inference, theme, and author's purpose
• Introduction to literary analysis (plot, character, setting)	• Deeper literary analysis (theme, symbolism, tone)
• Oral narration and structured summaries	• Written narration and analytical responses
• Copywork: passages from classical texts	• Copywork: extended selections emphasizing style
• Memorization of poetry and prose selections	• Continued memorization and recitation
• Introduction to classical poetry analysis (meter, rhyme, form)	• Advanced poetry analysis (figurative language, tone, theme)
• Guided reading of classical literature	• Independent reading and Socratic discussion
• Listening comprehension and guided discussion	• Analytical discussion and textual interpretation
• Review of grammar fundamentals and sentence structure	• Review and mastery of advanced grammar concepts

Classical 7th Grade ELA

The Classical Seventh Grade English Language Arts course develops students' skills in analytical reading, structured composition, grammar, and vocabulary while integrating writing with the study of U.S. history. Students refine their ability to analyze texts, construct well-organized essays, and express ideas with clarity, precision, and depth. Instruction emphasizes source-based writing through the Institute for Excellence in Writing's *U.S. History-Based Writing Lessons*, guiding students in note-taking, summarizing, and composing structured essays from historical content. Classical grammar study strengthens students' understanding of language structure, while spelling instruction emphasizes morphology and advanced patterns. Students engage deeply with classical poetry and literature through close reading, discussion, memorization, and analytical writing.

Curricular Materials Used:

- Institute for Excellence in Writing (IEW)
- HC Grammar 7 - Comma Rules for Middle School
- Wise Guide for Spelling
- Classical Poetry, Composition, & Literature

Semester 1 Topics	Semester 2 Topics
• Advanced sentence analysis (phrases and clauses)	• Complex sentence structures and varied syntax
• Sentence diagramming (phrases, clauses, modifiers)	• Advanced diagramming and syntactic analysis
• IEW: keyword outlines from historical texts	• IEW: outlines from multiple historical sources
• Note-taking and summarizing U.S. history content	• Synthesizing multiple sources into cohesive compositions
• Writing structured paragraphs from outlines	• Multi-paragraph essays (expository and analytical)
• Introduction to stylistic techniques (sentence variety, strong verbs)	• Advanced stylistic techniques and rhetorical elements
• Spelling: review of phonograms and spelling rules	• Spelling: advanced morphology and word study
• Study of prefixes, suffixes, and base words	• Greek and Latin roots for vocabulary expansion
• Dictation: sentences and historical passages	• Dictation: extended passages with editing and revision
• Vocabulary development through history and literature	• Vocabulary expansion through context and etymology
• Reading comprehension: main idea and supporting details	• Reading comprehension: inference, analysis, and evaluation
• Introduction to literary analysis (plot, character, setting)	• Deeper literary analysis (theme, tone, symbolism)
• Oral narration and structured summaries	• Written narration and analytical essays
• Copywork: passages from historical and literary texts	• Copywork: extended selections emphasizing style and structure
• Memorization of poetry and historical speeches	• Continued memorization and recitation
• Introduction to classical poetry (form, rhythm, rhyme)	• Analysis of poetry (figurative language, tone, theme)
• Guided reading of classical literature	• Independent reading and Socratic discussion
• Listening comprehension and guided discussion	• Analytical discussion and textual interpretation
• Building clarity and organization in writing	• Developing argumentation, voice, and coherence in writing
• Review of grammar fundamentals	• Review and mastery of advanced grammar concepts

Classical 8th Grade ELA

The Classical Eighth Grade English Language Arts course culminates students' development in analytical reading, structured writing, grammar, and rhetoric. Students refine their ability to think critically, write persuasively, and engage deeply with complex texts while preparing for the transition to high school-level work. Instruction emphasizes advanced composition through the Institute for Excellence in Writing's *Rhetoric Through Structure and Style*, focusing on argumentation, stylistic refinement, and the effective use of rhetorical techniques. Classical grammar study strengthens syntactic awareness and precision in writing, while spelling instruction emphasizes advanced morphology and etymology. Students engage with classical poetry and literature through close reading, discussion, memorization, and analytical writing.

Curricular Materials Used:

- Institute for Excellence in Writing (IEW)
- HC Grammar 8 - Comma Rules for Middle School
- Wise Guide for Spelling
- Classical Poetry, Composition, & Literature

Semester 1 Topics	Semester 2 Topics
• IEW: advanced keyword outlines and note-taking	• Syntactic analysis and rhetorical sentence variety
• Sentence analysis (phrases, clauses, and syntax)	• Refinement of diagramming and sentence manipulation
• Sentence diagramming (compound-complex sentences)	• IEW: synthesizing multiple sources and perspectives
• Summarizing and analyzing source texts	• Analytical and argumentative essay writing
• Writing structured paragraphs with clear organization	• Argumentative, analytical, expository writing practice
• Introduction to rhetorical techniques (ethos, pathos, logos)	• Application of rhetorical strategies in writing
• Stylistic techniques (sentence openers, varied structure, strong verbs)	• Refinement of style, tone, and voice
• Spelling: advanced phonograms and spelling rules	• Spelling: advanced morphology and etymology
• Study of prefixes, suffixes, and base words	• Greek and Latin roots for vocabulary precision
• Dictation: sentences and paragraph passages	• Dictation: extended passages with editing and revision
• Vocabulary development through literature and rhetoric	• Vocabulary expansion through context and word study
• Reading for analysis of structure and meaning	• Reading for evaluation, argument, and interpretation
• Literary analysis (plot, character, setting, conflict)	• Literary analysis (theme, symbolism, tone, purpose)
• Oral narration and structured summaries	• Written analysis and argumentative responses
• Copywork: passages from classical texts and speeches	• Copywork: emphasizing rhetorical style
• Memorization of poetry and classical speeches	• Continued memorization and recitation
• Study of classical poetry (form, meter, rhyme)	• Poetry analysis (figurative language, tone, theme)
• Guided reading of classical literature	• Independent reading and Socratic seminar discussions
• Listening comprehension and rhetorical discussion	• Analytical discussion and persuasive dialogue
• Building clarity, organization, and structure in writing	• Developing argumentation, voice, and rhetorical effectiveness
• Review of grammar concepts and sentence structure	• Mastery of grammar, usage, and stylistic precision

Classical Kindergarten Science

The Classical Kindergarten Science course introduces young learners to the wonders of the natural world through observation, hands-on exploration, and guided discovery. Using the *Elemental Science - Science Chunks* curriculum for a gentle, curiosity-driven approach, students explore foundational concepts in earth science, life science, and physical science. Instruction emphasizes observation skills, classification, asking questions, and describing the world around them. Through experiments, nature study, crafts, and simple investigations, students begin to think like scientists while developing vocabulary and an appreciation for nature and the world around them.

Classical Kindergarten Science Topics	
• Introduction to science and observation skills	• Asking questions and making predictions
• Using the five senses to explore the world	• Solar System: planets and the sun
• Plants: basic parts (roots, stems, leaves, flowers)	• Earth's place in space (day and night)
• What plants need to grow (sunlight, water, soil)	• Introduction to space observation (sky, stars)
• How plants grow and change over time	• Understanding materials (solids and simple matter concepts)
• Different environments (biomes)	• Light: sources of light (sun, lamps)
• Exploring forests, deserts, oceans, and grasslands	• How light helps us see
• Animals and plants in different habitats	• Shadows and basic light exploration
• How living things depend on their environment	• Sound: what makes sound
• Weather and how it affects living things	• Exploring loud/soft and high/low sounds
• Simple classification (living vs. nonliving)	• How we hear and use sound
• Nature walks and observing living things	• Simple experiments with light and sound
• Introduction to simple science vocabulary	• Simple study of Gregor Mendel and observations of patterns)
• Drawing and recording observations	• Sharing observations and explaining ideas

Classical Elementary Earth Science

Elementary Earth Science & Astronomy for the Grammar Stage provides a first-look at the planet and our solar system in a classical approach. This course is an age-appropriate thirty-six-week study of the planet Earth, weather, rocks and fossils, our solar system, and stars using visually appealing literature and hands-on materials. It includes weekly scientific demonstrations, reading assignments, notebook assignments, additional activities, and memory work.

Semester 1	Semester 2
Topic 1: Inside Earth	Topic 19: The Solar System
Topic 2: Earthquakes	Topic 20: The Sun
Topic 3: Volcanoes & Mountains	Topic 21: Mercury
Topic 4: Islands	Topic 22: Venus
Topic 5: Erosion & Caves	Topic 23: Earth's Moon
Topic 6: Rocks & The Rock Cycle	Topic 24: Mars
Topic 7: Fossils & Soil	Topic 25: Asteroids & Meteors
Topic 8: Geography	Topic 26: Jupiter
Topic 9: Types of Maps	Topic 27: Saturn
Topic 10: Ecosystems	Topic 28: Uranus & Neptune
Topic 11: Polar Biome	Topic 29: Dwarf Planets
Topic 12: Forest Biome	Topic 30: Black Holes & Comets
Topic 13: Dry Biomes	Topic 31: Stars
Topic 14: Aquatic Biomes	Topic 32: Constellations, Part 1
Topic 15: The Water Cycle	Topic 33: Constellations, Part 2
Topic 16: Atmosphere & Weather	Topic 34: Telescopes & Satellites
Topic 17: Climate & Seasons	Topic 35: Trips to Space
Topic 18: Caring for Earth	Topic 36: Scientist Biography

Classical Elementary Biology

Elementary Biology for the Grammar Stage provides a first look at the living world, animals, the human body, and plants in a classical approach. This course lays out a twenty-week study of animals, a ten-week study of the human body, and a six-week study of plants using visually appealing literature and hands-on materials. It includes weekly scientific demonstrations, reading assignments, notebook assignments, additional activities, and memory work.

Semester 1	Semester 2
Topic 1: Living or Nonliving	Topic 19: Life Cycles
Topic 2: Single-celled Organisms	Topic 20: Flying Insects
Topic 3: Fungi and Mold	Topic 21: Basic Building Blocks
Topic 4: Plants and Animals	Topic 22: Skin, Hair, Nails
Topic 5: Mammals	Topic 23: Skeletal System
Topic 6: Animal Defense	Topic 24: Muscular System
Topic 7: Furry Mammals	Topic 25: Nervous System
Topic 8: Marine Mammals	Topic 26: Five Senses
Topic 9: Birds	Topic 27: Circulatory System
Topic 10: Animal Communication	Topic 28: Respiratory System
Topic 11: Baby Animals	Topic 29: Digestive System
Topic 12: Reptiles	Topic 30: Urinary & Immune Systems
Topic 13: Camouflaged Animals	Topic 31: Plants
Topic 14: Amphibians	Topic 32: Leaves
Topic 15: Fish	Topic 33: Stems & Roots
Topic 16: Invertebrates	Topic 34: Flowers
Topic 17: Shellfish	Topic 35: Fruit
Topic 18: Spiders & Insects	Topic 36: Scientist Biography

Classical Elementary Chemistry

Elementary Chemistry for the Grammar Stage provides a first look at atoms, the periodic table, and chemical reactions in a classical approach. This course is an age-appropriate study of matter, the periodic table, physical and chemical changes, solutions, acids and bases, plus a bit of organic chemistry. It includes weekly scientific demonstrations, reading assignments, notebook assignments, additional activities, and memory work.

Semester 1	Semester 2
Topic 1: Atoms	Topic 19: Liquid Behavior
Topic 2: Molecules	Topic 20: Gas Behavior
Topic 3: Air	Topic 21: Bonding
Topic 4: Water	Topic 22: Chemical Reactions
Topic 5: Elements and the Periodic Table	Topic 23: Types of Reactions
Topic 6: Alkali Metals	Topic 24: Oxidation and Reduction
Topic 7: Alkaline Earth Metals	Topic 25: Mixtures
Topic 8: Transition Metals	Topic 26: Separating Mixtures
Topic 9: Boron Elements	Topic 27: Crystals
Topic 10: Carbon Elements	Topic 28: Scientist Biography
Topic 11: Nitrogen Elements	Topic 29: Acids and Bases
Topic 12: Oxygen Elements	Topic 30: pH
Topic 13: Halogens	Topic 31: Neutralization
Topic 14: Noble Gases	Topic 32: Scientist Biography
Topic 15: Lanthanides	Topic 33: Organic Compounds
Topic 16: Actinides	Topic 34: Alcohols and Detergents
Topic 17: States of Matter	Topic 35: Hydrocarbons
Topic 18: Changes in State	Topic 36: Polymers and Plastics

Classical Elementary Physics

Elementary Physics for the Grammar Stage provides a first look at motion, forces, and energy in a classical approach. This course provides a great foundation of physics and lays out a thirty-six-week study of energy, light, sound, electricity, forces, and motion, plus a full unit on engineering. It includes weekly scientific demonstrations, reading assignments, notebook assignments, additional activities, and memory work.

Semester 1	Semester 2
Topic 1: Energy Basics	Topic 19: Electricity
Topic 2: Energy Resources	Topic 20: Circuits and Batteries
Topic 3: Nuclear Energy	Topic 21: Magnets
Topic 4: Heat Energy	Topic 22: Electronics
Topic 5: Heat Transfer	Topic 23: Computers and Coding
Topic 6: Light	Topic 24: Forces
Topic 7: Colors	Topic 25: Balance
Topic 8: Light Behavior	Topic 26: Gravity
Topic 9: Lenses and Mirrors	Topic 27: Friction
Topic 10: Scientist Biography	Topic 28: Floating
Topic 11: Sound	Topic 29: Dynamics (Three Laws of Motion)
Topic 12: Waves	Topic 30: Speed (Velocity and Acceleration)
Topic 13: Wave Behavior	Topic 31: Circular Motion
Topic 14: Musical Instruments	Topic 32: Scientist Biography
Topic 15: Electricity	Topic 33: Ramps, Levers, and Screws
Topic 16: Circuits and Batteries	Topic 34: Wheels, Gears, and Pulleys
Topic 17: Magnets	Topic 35: Turbines, Pumps, and Hydraulics
Topic 18: Electronics	Topic 36: Engineering Design

Classical Middle School Earth Science

Middle School Earth Science & Astronomy for the Logic Stage leads the middle school student through a study of the key facts of earth science and astronomy by digging deeper into what was studied during the elementary years including space, the solar system, our planet, rocks, and weather. Earth Science includes all student assignment sheets, sketches, experiment sheets, and blank report pages that they will need to complete the year. Each of the student assignment sheets contains the weekly topic, sketch assignment, experiment directions, dates to enter, memory work, and report options.

Semester 1	Semester 2
Topic 1: Universe	Topic 19: Oceans
Topic 2: Galaxies	Topic 20: Glaciers
Topic 3: Stars	Topic 21: Natural Cycles
Topic 4: Big & Little Dipper	Topic 22: Biomes & Habitats
Topic 5: Constellations	Topic 23: Continents
Topic 6: The Sun	Topic 24: Volcanoes
Topic 7: Inner Planets	Topic 25: Earthquakes
Topic 8: Earth & Moon	Topic 26: Mountains
Topic 9: Outer Planets (Jupiter & Saturn)	Topic 27: Rocks
Topic 10: Outer Planets (Uranus, Neptune)	Topic 28: Ores & Gems
Topic 11: Comets & Meteorites	Topic 29: Erosion & Weathering
Topic 12: Astronomers	Topic 30: Atmosphere
Topic 13: Looking Into Space	Topic 31: Climates
Topic 14: Exploring Space	Topic 32: Weather
Topic 15: Satellites	Topic 33: Clouds
Topic 16: Inside the Earth	Topic 34: Extreme Weather
Topic 17: Maps & Mapping	Topic 35: Forecasting
Topic 18: Rivers	Topic 36: Year-End Assessment

Classical Middle School Biology

Middle School Biology for the Logic Stage leads the middle school student through a study of plants, animal life, and the human body by digging deeper into what was studied during the elementary years. Biology for the Logic Stage includes student assignment sheets, sketches, experiment sheets and blank report pages that they will need to complete the year. Each of the student assignment sheets contains the weekly topic, sketch assignment, experiment directions, dates to enter, memory work, and report options.

Semester 1	Semester 2
Topic 1: Cells	Topic 19: Reptiles
Topic 2: DNA & Genetics	Topic 20: Birds
Topic 3: Classification	Topic 21: Mammals
Topic 4: Nutrient Cycles	Topic 22: Animal Research Project
Topic 5: Basic Ecology	Topic 23: Migration
Topic 6: Fungi	Topic 24: Animal Defenses
Topic 7: Simple Plants	Topic 25: Feeding & Nutrition
Topic 8: Flowerless Plants	Topic 26: Integumentary System
Topic 9: Flowering Plants	Topic 27: Skeletal System
Topic 10: Seeds & Fruits	Topic 28: Muscular System
Topic 11: Trees	Topic 29: Nervous System
Topic 12: Annelids, Platyhelminthes, Nematodes	Topic 30: Endocrine System
Topic 13: Cnidarians & Echinoderms	Topic 31: Circulatory System
Topic 14: Mollusks	Topic 32: Respiratory System
Topic 15: Crustaceans (Arthropods)	Topic 33: Digestive System
Topic 16: Insects (Arthropods)	Topic 34: Urinary System
Topic 17: Fish	Topic 35: Immune System
Topic 18: Amphibians	Topic 36: Year-End Review

Classical Middle School Chemistry

Middle School Chemistry for the Logic Stage leads the middle school student through a study of the key facts of chemistry by digging deeper into what was studied during the elementary years including the Periodic Table, matter, solutions, reactions, acids, bases, chemistry of life, and chemistry of industry. Middle School Chemistry includes all student assignment sheets, sketches, experiment sheets and blank report pages that they will need to complete the year. Each of the student assignment sheets contains the weekly topic, sketch assignment, experiment directions, dates to enter, memory work, and report options.

Semester 1	Semester 2
Topic 1: Atoms	Topic 19: Oxidation and Reduction
Topic 2: The Periodic Table	Topic 20: Acids
Topic 3: Metals	Topic 21: Bases
Topic 4: The Inbetweens	Topic 22: Measuring Acidity (pH)
Topic 5: Halogens and Noble Gases	Topic 23: Neutralization and Salts
Topic 6: States of Matter	Topic 24: Organic Chemistry
Topic 7: Solid Structures	Topic 25: Enzymes
Topic 8: Molecular Properties	Topic 26: Chemistry of Food
Topic 9: Gas Laws	Topic 27: Alcohols
Topic 10: Compounds and Mixtures	Topic 28: Soaps and Detergents
Topic 11: Solutions	Topic 29: Alkanes and Alkenes
Topic 12: Separating Mixtures	Topic 30: Homologous Groups
Topic 13: Electrolysis	Topic 31: Petrochemicals
Topic 14: Chemical Bonding	Topic 32: Polymers and Plastics
Topic 15: Chemical Reactions – Part 1	Topic 33: Iron and Alloys
Topic 16: Chemical Reactions – Part 2	Topic 34: Radioactivity
Topic 17: Chemical Reactions – Part 3	Topic 35: Pollution
Topic 18: Catalysts	Topic 36: Science Fair Project

Classical Middle School Physics

Middle School Physics for the Logic Stage leads the middle school student through a study of forces, motion, energy, thermodynamics, waves, electricity, magnetism, and engineering by digging deeper into what was studied during the elementary years. Each of the student assignment sheets contains the weekly topic, sketch assignment, experiment directions, report options, dates to enter, and memory work. Each of the student assignment sheets contains the weekly topic, sketch assignment, experiment directions, dates to enter, memory work, and report options.

Semester 1	Semester 2
Topic 1: Forces	Topic 19: Electromagnetic Waves
Topic 2: Friction and Gravity	Topic 20: Reflection and Refraction
Topic 3: Motion	Topic 21: Visible Light
Topic 4: Speed and Acceleration	Topic 22: Optics
Topic 5: Energy and Work	Topic 23: Electricity
Topic 6: Energy Sources	Topic 24: Electrical Current
Topic 7: Pressure	Topic 25: Batteries
Topic 8: Simple Machines	Topic 26: Circuits
Topic 9: Heat	Topic 27: Magnetism
Topic 10: Heat Transfer	Topic 28: Electromagnetism
Topic 11: Heat Expansion	Topic 29: Engineering
Topic 12: Engines	Topic 30: Electronics
Topic 13: Waves	Topic 31: Robotics
Topic 14: Wave Interference	Topic 32: Actuators and Effectors
Topic 15: Sound	Topic 33: Sensors and Controllers
Topic 16: Hearing	Topic 34: AI and Computers
Topic 17: Electromagnetic Waves	Topic 35: Radioactivity
Topic 18: Reflection and Refraction	Topic 36: Fission & Fusion, Nuclear Power

Classical Kindergarten Social Studies

The Classical Kindergarten Social Studies course introduces young learners to important people and stories from ancient history through interesting narratives, hands-on activities, and guided discussion by engaging in the classical *Famous Figures of Ancient Times* and *Famous Figures of the Middle Ages & Renaissance* literature. Students begin to understand the concept of history as the story of people from long ago while developing listening, speaking, and early critical thinking skills. Instruction emphasizes storytelling, narration, sequencing, and character understanding. Through exposure to famous figures from ancient civilizations and the middle ages, students learn about courage, leadership, creativity, and discovery while building a foundation for future historical study.

Classical Kindergarten Social Studies Topics	
• Sequencing events (first, next, last)	• Review of historical timeline and key ideas
• Character traits (bravery, kindness, leadership)	• Connecting past events to today
• Participation, listening, and discussion skills	• Retelling stories with sequence and detail
• Listening to stories about important people	• Middle Ages: castles, knights, and daily life
• Understanding leaders and helpers	• Important medieval figures
• Understanding communities then and now	• Renaissance: art, ideas, and exploration
• Ancient Egypt: life, culture, and leaders	• Renaissance figures (Leonardo da Vinci, Columbus, etc)
• Ancient Greece: culture, ideas, and leaders	• Map awareness: Continents and exploration
• Ancient Rome: life, government, and leaders	• Expanded vocabulary and word meanings
• Basic map awareness (land, water, locations)	• Sequencing and recalling longer stories
• Vocabulary development (historical terms)	• Comparing historical figures and their actions

Classical Elementary Social Studies - Ancient Times

Elementary Story of the World: Ancient Times (5000 B.C. - 400 A.D.) tells the story of the first nomads and farmers and then travels through the ancient world, telling stories about some of the first great civilizations. Students will learn about places like ancient Egypt, Mesopotamia, China, India, Greece, and Rome, and discover how people lived, worked, built cities, and created early governments. This reading-focused course demonstrates to students how early cultures were connected through trade and shared ideas, helping students see that history is a story of people all over the world, not just one place. As elementary students navigate the chronological history of the world, students engage in coloring pages, map work, reading comprehension questions, and fun art projects.

Semester 1	Semester 2
Topic 1: Early Nomads and Farming	Topic 22: The Roman Empire
Topic 2: Ancient Egypt	Topic 23: Roman Lands and Roads
Topic 3: The First Writing	Topic 24: The Roman Empire Splits Up
Topic 4: Egypt, Nuba, and Trade	Topic 25: Early Christianity in Rome
Topic 5: The Jewish People	Topic 26: Desert Peoples
Topic 6: The Babylonian and Mesopotamia	Topic 27: Barbarians and The Decline of Rome
Topic 7: The Assyrians	Topic 28: The Eastern Roman Empire
Topic 8: Babylon and the Hanging Gardens	Topic 29: The Fall of Rome
Topic 9: Ancient China	Topic 30: Life in the Byzantine Empire
Topic 10: Ancient Africa	Topic 31: The Great Migrations
Topic 11: The Israelites	Topic 32: Ancient India and Buddhism
Topic 12: The Phoenicians and the Alphabet	Topic 33: Han China
Topic 13: Assyria Returns	Topic 34: Ancient Civilizations of the Americas
Topic 14: The Persian Empire	Topic 35: The Celts of Britain
Topic 15: Ancient India	Topic 36: Ancient Japan
Topic 16: Confucius and His Teachings	Topic 37: Ancient Korea
Topic 17: Ancient Greece	Topic 38: Egypt Under Roman Rule
Topic 18: Government in Greece	Topic 39: Ancient Trade Routes
Topic 19: Greece and Persia	Topic 40: Ancient Thinkers
Topic 20: Greece's Golden Age	Topic 41: Lasting Ideas from Ancient Times
Topic 21: Alexander the Great	Topic 42: Review of the Ancient World

Classical Elementary Social Studies - The Middle Ages

Elementary Story of the World: The Middle Ages (400-1600) tells the story of castles, kings and queens, knights, and explorers. Students will learn about famous people like rulers, warriors, and travelers, as well as important events such as the rise and fall of kingdoms, the spread of religions, and battles for power. It includes stories about medieval Europe, but also about what was happening in places like Asia, Africa, and the Middle East at the same time. This reading-focused course demonstrates how different cultures were connected through trade, travel, and shared ideas. Instead of focusing on just one region, it moves around the world to give a bigger picture of history. As elementary students navigate the chronological history of the world, students engage in coloring pages, map work, reading comprehension questions, and fun art projects.

Semester 1	Semester 2
Topic 1: The Fall of Rome	Topic 22: East Asia and Travelers
Topic 2: Early Britain	Topic 23: Early Russia
Topic 3: Christianity in Britain	Topic 24: The Ottoman Empire
Topic 4: The Byzantine Empire	Topic 25: The Black Plague
Topic 5: Indian Kingdoms	Topic 26: The Hundred Years' War
Topic 6: The Rise of Islam	Topic 27: Wars in England
Topic 7: The Islamic Empire	Topic 28: Spain and Portugal
Topic 8: Chinese Dynasties	Topic 29: African Kingdoms
Topic 9: Japan and Korea	Topic 30: Mughal India
Topic 10: Peoples of the South Pacific	Topic 31: European Exploration
Topic 11: Frankish Kingdoms	Topic 32: American Civilizations
Topic 12: Islamic Expansion	Topic 33: Europe and the Americas
Topic 13: Kings of France	Topic 34: New Religious Ideas
Topic 14: The Vikings	Topic 35: The Renaissance
Topic 15: Early England	Topic 36: Religious Change in Europe
Topic 16: England After the Normans	Topic 37: New Science and Discoveries
Topic 17: Knights and Samurai	Topic 38: Queen Elizabeth I
Topic 18: The Crusades	Topic 39: Shakespeare and the Arts
Topic 19: English Government	Topic 40: English Colonies
Topic 20: Jewish Life in the Middle Ages	Topic 41: Exploration in the North
Topic 21: The Mongol Empire	Topic 42: Competing Empires

Classical Elementary Social Studies - Early Modern Times

Elementary Story of the World: Early Modern Times (1600-1850) tells the story of a world that is growing, exploring, and changing in big ways. Students will learn about famous explorers, powerful kings and queens, and important events like revolutions and the founding of new countries. It covers topics such as the American Revolution, the French Revolution, the growth of empires, and the movement of people across continents. This reading-focused course helps students understand how different parts of the world were connected. It jumps between continents to show what was happening in Europe, Asia, Africa, and the Americas during the same time period. As elementary students navigate the chronological history of the world, students engage in coloring pages, map work, reading comprehension questions, and fun art projects.

Semester 1	Semester 2
Topic 1: Martin Luther and The Reformation	Topic 22: King Louis XIV
Topic 2: Religious Change Spreads	Topic 23: Peter the Great
Topic 3: Wars in Europe	Topic 24: The Mughal Empire Grows
Topic 4: Queen Elizabeth I	Topic 25: Early Qing China
Topic 5: English Exploration	Topic 26: Tokugawa Japan
Topic 6: The French in North America	Topic 27: African Trade Kingdoms
Topic 7: Spanish Rule in the Americas	Topic 28: The Atlantic Slave Trade
Topic 8: Russia Grows	Topic 29: Caribbean Colonies
Topic 9: The Ottoman Empire	Topic 30: Changes in the Spanish Empire
Topic 10: The Mughal Empire Begins	Topic 31: The Enlightenment
Topic 11: Ming China	Topic 32: Northern Europe
Topic 12: Japan's Shogun Government	Topic 33: Expanding Colonies
Topic 13: African Kingdoms	Topic 34: Early American Colonies
Topic 14: The Slave Trade	Topic 35: Fighting in North America
Topic 15: English Colonies in America	Topic 36: The Seven Years' War
Topic 16: Pilgrims and Puritans	Topic 37: Enlightenment Thinkers
Topic 17: Dutch and French Colonies	Topic 38: Exploring the Pacific
Topic 18: Native Peoples of North America	Topic 39: The American Revolution
Topic 19: War in Europe	Topic 40: Global Trade
Topic 20: New Scientific Discoveries	Topic 41: Reviewing the Early Modern World
Topic 21: The English Civil War	Topic 42: Review of Early Modern Times

Classical Elementary Social Studies - The Modern Age

Elementary Story of the World: The Modern Age (1850 to current) tells the story of how our world became the way it is today—covering big events like wars, inventions, changing governments, and important people who helped shape history. This reading-focused course helps students see how different countries and cultures are connected. Instead of only focusing on one place, the curriculum moves around the world to show what was happening in many regions at the same time. As elementary students navigate the chronological history of the world, students engage in coloring pages, map work, reading comprehension questions, and fun art projects.

Semester 1	Semester 2
Topic 1: The Industrial Revolution	Topic 22: The Great Depression
Topic 2: The British Empire	Topic 23: Powerful Leaders in Europe
Topic 3: Westward Growth in the United States	Topic 24: World War II Begins
Topic 4: Japan Opens to the World	Topic 25: Discrimination and Persecution
Topic 5: Russia, the Ottomans, and Europe	Topic 26: The End of World War II
Topic 6: New Nations in Europe	Topic 27: The Cold War
Topic 7: Modern Japan	Topic 28: Communist China
Topic 8: Colonization of Africa	Topic 29: The Korean War
Topic 9: The American Civil War Begins	Topic 30: India Becomes Independent
Topic 10: The American Civil War Ends	Topic 31: The Modern Middle East
Topic 11: Rebuilding the United States	Topic 32: Communism and Conflict
Topic 12: New Inventions	Topic 33: The Civil Rights Movement
Topic 13: Life During Industrial Times	Topic 34: The Space Race
Topic 14: Trouble in China	Topic 35: Independent Africa
Topic 15: The Boxer Rebellion	Topic 36: The Soviet Union Ends
Topic 16: The Spanish-American War	Topic 37: A Connected World
Topic 17: Alliances and War	Topic 38: New Technology
Topic 18: World War I	Topic 39: Global Conflicts
Topic 19: The Russian Revolution	Topic 40: Life in the 21st Century
Topic 20: The Treaty of Versailles	Topic 41: The World Today
Topic 21: The Roaring Twenties	Topic 42: Review of the Modern Age

Classical Middle School Social Studies - Ancient Times

Middle School Story of the World: The Ancient Times (5000 B.C. - 400 A.D.) introduces middle school students to the story of the ancient world which includes a comprehensive overview of early civilizations, beginning with the first nomads and extending to the fall of the Roman Empire, including Egyptian pharaohs, Greek civilization, and ancient China. As middle school students navigate the chronological history of the world, students engage in reading passages, mapwork, quizzes, tests, visual timelines, and research projects.

Semester 1	Semester 2
Topic 1: Earliest People (Nomads, first human agriculture)	Topic 22: The Roman Empire (Augustus, Pax Romana)
Topic 2: Ancient Egypt (Nile River, pyramids, pharaohs)	Topic 23: Rome's Territory (Britain, Gaul, Roman roads)
Topic 3: The First Writing (Sumerians, cuneiform, scribes)	Topic 24: The Roman Divide (Empire split, Byzantium)
Topic 4: Ancient Egypt and Her Neighbors (Trade, Nubia, Hyksos invaders)	Topic 25: The Rise of Christianity (The spread of early Christianity)
Topic 5: The Jewish People (Abraham, Joseph, Moses, Exodus)	Topic 26: The People of the Desert (Arabia, caravans, desert tribes)
Topic 6: Hammurabi and the Babylonians (Babylon, law code, Mesopotamia)	Topic 27: Rome's Decline (Barbarian invasions, weakened empire)
Topic 7: The Assyrians (Warriors, Nineveh, empire building)	Topic 28: The Eastern Empire (Constantinople, Justinian, Eastern Rome)
Topic 8: The Chaldeans (Nebuchadnezzar, Hanging Gardens, Babylon)	Topic 29: The End of Rome (fall of Western Empire)
Topic 9: Ancient China (Yellow River, Shang kings)	Topic 30: Byzantine Empire (Greek influence & culture)
Topic 10: Ancient Africa (Kush, Nubia, desert kingdoms)	Topic 31: The Great Migrations (Germanic tribes, movement of peoples)
Topic 11: The Israelites (Passover, Red Sea, Land)	Topic 32: India (Maurya Empire, Ashoka, Buddhism)
Topic 12: The Phoenicians (Sea traders, alphabet)	Topic 33: Han China (Three Kingdoms, reunification)
Topic 13: The Return of Assyria (Conquest of Israel)	Topic 34: The Ancient Americas (Olmecs)
Topic 14: The Persians (Cyrus the Great, Persian Empire)	Topic 35: The Celts (European tribes, warriors, traditions)
Topic 15: Ancient India (Indus Valley, Aryans, caste system)	Topic 36: Ancient Japan (Early clans, Shinto beliefs)
Topic 16: Confucius (Chinese philosophy, moral order)	Topic 37: Ancient Korea (Kingdoms and Chinese influence)
Topic 17: Greece City-states (Sparta, Athens, etc.)	Topic 38: Ancient Egypt (Cleopatra, Roman conquest)
Topic 18: Greece's Governments (Democracy, oligarchy, tyrants)	Topic 39: Ancient Trade Routes (Silk Road, etc.)
Topic 19: Persia & Greece (Famous battles, Xerxes)	Topic 40: Ancient Thinkers (Archimedes, Hippocrates)
Topic 20: Greek Golden Age (Athenian Golden Age)	Topic 41: Legacy of Ancient Times (Law, language, architecture)
Topic 21: Alexander the Great (Conquests, Hellenism, spread of Greek culture)	Topic 42: Looking Back at the Ancient World (Review of civilizations and achievements)

Classical Middle School Social Studies - The Middle Ages

Middle School Story of the World: The Middle Ages (400-1600) introduces middle school students to the story of the middle ages which spans the entire globe, beginning with Celtic Britain after the fall of Rome and ending with the Age of Exploration. The content includes interesting topics from knights, Vikings, and the Crusades to the rise of the Ottoman Empire, conquests of Genghis Khan, and the Scientific Revolution. As middle school students navigate the chronological history of the world, students engage in reading passages, mapwork, quizzes, tests, visual timelines, and research projects.

Semester 1	Semester 2
Topic 1: The Fall of Rome (Corruption, Barbarians, legacy)	Topic 22: Eastern Asia (Marco Polo, Kublai Khan, Ming)
Topic 2: Early Britain (The Celts, Druids, Anglo-Saxons)	Topic 23: Early Russians (Kiev, Ivan, Orthodox faith)
Topic 3: Christianity in Britain (Saint Patrick, Augustine of Canterbury, monasteries)	Topic 24: The Ottoman Empire (Turks, Fall of Constantinople, Suleiman)
Topic 4: The Byzantine Empire (Constantinople, Justinian)	Topic 25: The Black Plague (Black Death, social upheaval)
Topic 5: Medieval Indian Empire (Guptas, Hindu kingdoms)	Topic 26: Hundred Years War (Joan of Arc)
Topic 6: The Rise of Islam (Muhammad, Mecca, Qur'an)	Topic 27: War for the English Throne (Wars of the Roses)
Topic 7: Islamic Empire (Caliphs, Baghdad, Islamic learning)	Topic 28: The Kingdoms of Spain and Portugal (Ferdinand and Isabella, Reconquista, Prince Henry)
Topic 8: Dynasties of China (Sui, Tang, inventions, civil service)	Topic 29: African Kingdoms (Ghana, Mali, Songhay, Mansa Musa)
Topic 9: East of China (Japan, Korea, Prince Shotoku)	Topic 30: India Under the Moghuls (Babur, Akbar, Mughal)
Topic 10: South Pacific (Australia, Polynesians, Maori migrations)	Topic 31: European Exploration (Columbus, Vespucci, Magellan)
Topic 11: Frankish Kingdoms (Clovis, Merovingians, France)	Topic 32: The American Kingdoms (Maya, Aztec, Inca)
Topic 12: The Islamic Invasion (Spain, North Africa)	Topic 33: Europe and Conquest (Cortés, slave trade)
Topic 13: The Great Kings of France (Charles Martel, Charlemagne, Holy Roman Empire)	Topic 34: Martin Luther's New Ideas (95 Theses, printing press, Reformation)
Topic 14: The Norsemen (Vikings, Eric the Red, Leif Erikson)	Topic 35: The Renaissance (Humanism, Leonardo, Michelangelo)
Topic 15: The First Kings of England (Alfred the Great, Danes, Battle of Hastings)	Topic 36: Reformation and Counter Reformation (Calvin, Jesuits, Council of Trent)
Topic 16: England After Norman Conquest (William the Conqueror, castles, Domesday Book)	Topic 37: Scientific Revolution (Copernicus, Galileo, heliocentric theory)
Topic 17: Knights and Samurai (Feudal Europe, chivalry, Japanese warriors)	Topic 38: Queen Elizabeth I (Elizabeth I, Spanish Armada)
Topic 18: The Crusades (Saladin, Richard the Lionheart)	Topic 39: Shakespeare (Shakespeare, Globe Theatre)
Topic 19: English Government (King John, Magna Carta)	Topic 40: English Colonization (Walter Raleigh, Roanoke)
Topic 20: The Diaspora (Jewish exile, medieval Jewish communities)	Topic 41: Explorations in the North (Newfoundland, Jacques Cartier, Canada)
Topic 21: The Mongols and the East (Mongol conquests)	Topic 42: Empires Collide (Spain vs. England, global rivalry)

Classical Middle School Social Studies - Early Modern Times

Middle School Story of the World: The Early Modern Times (1600-1850) introduces middle school students to the story of the early modern times from Queen Elizabeth I in Europe, conquest and conflict in South America, the rise of the Qing dynasty in China, early colonialism in North America, and the American Revolution. As middle school students navigate the chronological history of the world, students engage in reading passages, mapwork, quizzes, tests, visual timelines, and research projects.

Semester 1	Semester 2
Topic 1: The Reformation (Martin Luther, 95 Theses, break with Rome)	Topic 22: King Louis XIV (Sun King, Versailles, absolute monarchy)
Topic 2: Reformation Spreads (Calvin, religious conflict)	Topic 23: Peter the Great (Westernization, St. Petersburg)
Topic 3: Wars of Religion (Thirty Years War, France's wars)	Topic 24: The Mughal Empire (Akbar, religious tolerance)
Topic 4: Queen Elizabeth I (English Reformation, defeat of Spain, Golden Age)	Topic 25: Qing China Begins (Manchu conquest, early Qing rule)
Topic 5: English Exploration (Raleigh, Roanoke Colony)	Topic 26: Tokugawa Japan (Shogunate, isolation policy)
Topic 6: French in North America (Jacques Cartier)	Topic 27: African Kingdoms and Trade (Songhai, Benin)
Topic 7: Spanish Conquests in the Americas (Cortés, Pizarro, Aztec and Inca empires fall)	Topic 28: The Atlantic Slave Trade (Triangular trade, Middle Passage)
Topic 8: Russia Expands (Ivan the Terrible, early tsars)	Topic 29: European Caribbean Colonies (Sugar plantations)
Topic 9: The Ottoman Empire (Suleiman the Magnificent)	Topic 30: Spanish Empire Declines (Dutch and English)
Topic 10: Mughal India Begins (Babur, Mughal rule)	Topic 31: The Enlightenment (Science, political ideas)
Topic 11: Ming China (Forbidden City, Zheng He voyages)	Topic 32: Northern Europe (Sweden, Poland, Russia)
Topic 12: Japan's Shoguns (Rise of samurai government, Tokugawa unification)	Topic 33: Colonies Expand (Growth of English, French, Dutch colonies)
Topic 13: African Kingdoms (Benin, Songhai)	Topic 34: American Colonies (Jamestown, Plymouth)
Topic 14: The Atlantic Slave Trade Begins (European-African trade networks)	Topic 35: French and Indian Conflicts (North American rivalry between Britain and France)
Topic 15: English Colonies in America (Jamestown)	Topic 36: The Seven Years' War (Global conflict)
Topic 16: Pilgrims and Puritans (Plymouth Colony, Massachusetts Bay)	Topic 37: Enlightenment Thinkers (Locke, Voltaire, Montesquieu)
Topic 17: Dutch and French Colonies (New Netherland, New France)	Topic 38: European Exploration of the Pacific (Captain Cook, Pacific mapping)
Topic 18: Native Peoples of North America (Culture groups, early contact)	Topic 39: American Revolution (Colonial unrest, taxation, ideas of liberty)
Topic 19: The Thirty Years' War (Religious and political conflict in Europe)	Topic 40: Global Trade Expands (Mercantilism, worldwide commerce networks)
Topic 20: Scientific Revolution (Galileo, Kepler, new astronomy)	Topic 41: The Early Modern World in Review (Connecting global developments)
Topic 21: The English Civil War (Charles I, Oliver Cromwell)	Topic 42: Review of Early Modern Times (Summary of global change, 1500–1800)

Classical Middle School Social Studies - The Modern Age

Middle School Story of the World: The Modern Age (1850 to current) introduces middle school students to the fascinating story of the modern world, from the American Civil War through the end of the twentieth century – from Europe and the Middle East through India, China, the Arabian Peninsula, Australia, and both North and South America. As middle school students navigate the chronological history of the world, students engage in reading passages, mapwork, quizzes, tests, visual timelines, and research projects.

Semester 1	Semester 2
Topic 1: The Industrial Revolution (Steam engine, factories, early industrial change)	Topic 22: The Great Depression (Economic collapse, global hardship)
Topic 2: The British Empire (Colonial growth, Victorian era)	Topic 23: Rise of Dictators (Hitler, Stalin, Mussolini)
Topic 3: The United States Expands West (Manifest Destiny, frontier expansion)	Topic 24: World War II Begins (Invasion of Poland, Axis vs Allies)
Topic 4: Japan Opens to the West (Commodore Perry, Meiji Restoration begins)	Topic 25: The Holocaust (Persecution of Jews, concentration camps)
Topic 5: The Crimean War (Russia vs Ottoman/Europe)	Topic 26: The End of World War II (Atomic bombs)
Topic 6: Italy and Germany Become Nations (Unification of Italy and Germany)	Topic 27: The Cold War Begins (US vs USSR tensions)
Topic 7: Meiji Japan (Modernization and industrial growth)	Topic 28: Communist China (Mao Zedong, Revolution)
Topic 8: Africa and the Scramble for Colonies (European colonization of Africa)	Topic 29: The Korean War (North vs South Korea conflict)
Topic 9: American Civil War Begins (Slavery, Abraham Lincoln, secession)	Topic 30: Independence in India (Gandhi, British withdrawal)
Topic 10: American Civil War Ends (Union victory)	Topic 31: The Middle East (Israel created, regional conflict)
Topic 11: Reconstruction in America (Rebuilding the South, civil rights beginnings)	Topic 32: The Vietnam War (Cold War conflict in Southeast Asia)
Topic 12: Industrial Age (Telegraph, railroads, electricity)	Topic 33: Civil Rights Movement (Martin Luther King Jr.)
Topic 13: Life in the Industrial World (Urbanization, factories, labor conditions)	Topic 34: The Space Race (US vs USSR competition in space)
Topic 14: Turmoil in China (Opium Wars, Qing Dynasty)	Topic 35: Modern Africa (Decolonization and new nations)
Topic 15: The Boxer Rebellion (Anti-foreign uprising)	Topic 36: The Fall of the Soviet Union (1991 collapse)
Topic 16: The Spanish-American War (US Military)	Topic 37: Globalization (Trade and communication)
Topic 17: Causes of World War I (Alliances, nationalism, tensions)	Topic 38: The Digital Revolution (Computers, internet, technology boom)
Topic 18: World War I in Europe (Trench warfare)	Topic 39: Terrorism in the Modern World (Global security)
Topic 19: Russian Revolution (Fall of Tsar, communism)	Topic 40: The Early 21st Century (Global conflicts)
Topic 20: The Treaty of Versailles (Peace terms, consequences of WWI)	Topic 41: The Modern World Today (Technology, politics, global culture)
Topic 21: The Interwar Years (Roaring Twenties, rising tensions)	Topic 42: Looking Back at the Modern Age (Summary of global transformation since 1800)

Lower Elementary Art A & B

The Lower Elementary Art course introduces young students to foundational artistic skills through hands-on exploration, creativity, and observation. Students engage in drawing, painting, crafting, and simple fiber arts while developing fine motor skills, artistic confidence, and an appreciation for beauty in the natural world. Instruction emphasizes process over product, encouraging experimentation with a variety of materials and techniques. Students learn basic elements of art—line, shape, color, texture, and form—while creating both guided and imaginative projects. Nature study and simple handwork are integrated to foster creativity, patience, and attention to detail.

Curricular Materials Used:

- *Little Artists' Big Book of Activities*
- *Nature Crafts for Kids and Families*
- *My First Hand Sewing Book*

Lower Elementary Art Topics	
• Introduction to art materials and proper use	• Elements of art: texture and form
• Basic elements of art: line and shape	• Drawing more detailed objects and scenes
• Drawing simple shapes and objects	• Warm/cool colors and color mixing
• Exploring color: primary and secondary colors	• Painting with control and detail
• Crayon and colored pencil techniques	• Advanced collage and mixed media projects
• Introduction to watercolor painting	• Creating repeating patterns and symmetry
• Cutting, gluing, and basic collage skills	• Nature-based art: landscapes and seasonal changes
• Creating simple patterned designs	• Pressed flower art and nature collages
• Nature observation: leaves, flowers, and textures	• Building more complex 3D projects
• Leaf rubbings and nature prints	• Sculpting animals or objects from observation
• Introduction to 3D art (clay and simple sculpture)	• Sewing projects (simple shapes, small crafts)
• Modeling with clay: basic shapes and forms	• Storytelling through art and illustration
• Introduction to hand sewing (threading needle, simple stitches)	• Creative expression through imaginative drawing
• Fine motor development through crafting	• Review and refinement of art techniques

Upper Elementary Art A & B

The Upper Elementary Art course develops students' artistic skills, creativity, and appreciation for great works of art through structured practice and guided exploration. Students refine their understanding of the elements and principles of art while working with a variety of media, including drawing, painting, printmaking, and sculpture. Instruction emphasizes both technical skill development and creative expression. Students are introduced to significant artists and artistic styles, using observation and discussion to inform their own work. Through increasingly complex projects, students build confidence, precision, and the ability to plan and complete multi-step artistic compositions.

Curricular Materials Used:

- *Art Lab for Kids*
- *42 Works of Art Everyone Should Know*

Upper Elementary Art Topics	
• Elements of art: line, shape, and color review	• Elements of art: texture, form, and space
• Principles of design: balance and pattern	• Principles of design: emphasis, movement, unity
• Observational drawing: basic objects and still life	• Advanced drawing: proportion and detail
• Color theory: primary, secondary, and mixing	• Advanced shading and value scales
• Drawing with pencils and colored media	• Color relationships: warm/cool, complementary colors
• Introduction to watercolor painting techniques	• Blending and layering techniques
• Collage and mixed media compositions	• Painting with increased control and composition
• Printmaking: stamps and simple relief prints	• Advanced printmaking and pattern design
• Introduction to sculpture (form and structure)	• Sculpting detailed 3D objects and figures
• Clay techniques: shaping, joining, and texture	• Building stable and expressive sculptural forms
• Guided creative explorations ("art lab" style)	• Reflecting on artistic growth and process
• Introduction to notable artists and artworks	• Study of artists and artistic styles
• Creating artwork inspired by famous artists	• Comparing and applying different artistic styles
• Art vocabulary: describing elements and techniques	• Art critique: describing and evaluating artwork
• Composition: arranging elements within a space	• Planning and executing complete compositions
• Storytelling through visual art	• Creating narrative and thematic artwork

Middle School Art A & B

The Middle School Art course develops students' technical skills, creative thinking, and artistic expression through structured practice and independent exploration. Students deepen their understanding of the elements and principles of art while working with a wide range of media, including drawing, painting, sculpture, and mixed media. Instruction emphasizes observation, planning, and refinement of artistic work. Students explore historical and cultural artistic styles, analyze artworks, and apply learned techniques to create original compositions. Increasing independence and critical thinking are encouraged as students plan, execute, and evaluate their own projects.

Curricular Materials Used:

- *50 Artists You Should Know*
- *How to Draw and Think Like a True Artist*

Middle School Art Topics	
• Art elements and studio practices	• Refinement of techniques and artistic craftsmanship
• Elements of art: line, shape, form, color, value, texture, space	• Principles of design: emphasis, movement, unity, contrast
• Observational drawing: still life and everyday objects	• Drawing: proportion, perspective, and detail
• Introduction to shading and value scales	• Figure drawing (basic human proportions)
• Contour and gesture drawing techniques	• Advanced color use: mood, symbolism, and composition
• Color theory: mixing, harmony, and contrast	• Layering and blending across multiple media
• Drawing with graphite, charcoal, and ink	• Painting with increased control and compositional planning
• Introduction to painting techniques (watercolor/acrylic)	• Complex composition and visual storytelling
• Composition basics: balance and focal point	• Advanced mixed media and conceptual projects
• Collage and mixed media exploration	• Advanced printmaking techniques and editions
• Introduction to printmaking (relief or stamping)	• Sculptural projects with detail and stability
• Sculpture basics: form, balance, and structure	• More advanced 3D forms and creative sculpture
• Clay techniques: hand-building and texture	• Study of art movements and influences
• Introduction to art history and cultural styles	• Developing personal style and artistic voice
• Creating artwork inspired by historical styles	• Formal critique: analysis and evaluation of artwork
• Art vocabulary and critique basics	• Portfolio development and presentation

Lower Elementary Physical Education A & B

The Lower Elementary Physical Education course introduces students to foundational movement skills, physical fitness, and body awareness through structured play and guided activity. Students develop coordination, strength, balance, and confidence while learning to move safely and effectively in a variety of settings. Instruction emphasizes whole-body development through functional movement, gymnastics, and real-world physical skills. Students are encouraged to build perseverance, teamwork, and self-discipline while participating in engaging and developmentally appropriate activities.

Lower Elementary Physical Education	
Unit 1: Athleticism - baseline movement assessment	• Encouragement of teamwork and participation
• Basic locomotor skills (running, hopping, skipping)	• Improving form and control in functional movements
• Foundational functional movements (squat, hinge, push, pull)	• Balance and agility drills
• Balance and coordination exercises	• Practicing safe movement habits
• Spatial awareness and movement control	Unit 4: Olympics - introduction to Olympic-style activities
Unit 2: Gymnastics - introduction to body awareness	• Running: short sprints and relays
• Basic gymnastics positions (tuck, pike, plank)	• Jumping: distance and height challenges
• Rolling and tumbling (forward roll, log roll)	• Throwing: distance and accuracy with light objects
• Supporting body weight (hanging, pushing, pulling)	• Partner activities focused on balance and control
• Grip strength and upper-body coordination	• Combining running, jumping, and throwing skills
• Following movement patterns and sequences	• Effort, perseverance, and sportsmanship
• Building confidence in controlled movement	• Field Fitness: obstacle courses and challenges
Unit 3: Field Fitness - introduction to real-world movement	• Carrying and moving objects with control
• Carrying light objects safely (buckets, balls)	• Complex obstacle navigation and teamwork tasks
• Navigating simple obstacle courses	• Cooperative games and group problem-solving
• Pulling and pushing objects (sleds, ropes)	• Completing multi-step physical challenges independently
• Team-based physical challenges	• Demonstrating control, safety, and confidence in movement
• Developing strength through play-based activities	• Reflection on effort, improvement, and skill development

Upper Elementary Physical Education A & B

The Upper Elementary Physical Education course builds upon foundational movement skills to develop strength, coordination, endurance, and confidence through structured physical training. Students refine functional movement patterns, improve body control, and apply skills in increasingly complex and purposeful activities. Instruction emphasizes athletic development, discipline, teamwork, and perseverance. Through gymnastics, field-based fitness, and Olympic-style activities, students gain practical physical skills while learning to challenge themselves, work cooperatively, and demonstrate good sportsmanship.

Upper Elementary Physical Education	
Unit 1: Athleticism - baseline fitness assessment • Functional movement patterns (squat, hinge, lunge, push, pull) • Running mechanics (form, pacing, endurance) • Agility, coordination, and balance drills • Mobility and flexibility routines • Tracking personal fitness progress	• Emphasis on teamwork and communication • Practicing safe and controlled movement • Refinement of movement mechanics and efficiency • Sprinting, interval training, and endurance challenges • Advanced agility and reaction drills
Unit 2: Gymnastics - body control and spatial awareness • Static positions (plank, hollow hold, bridge) • Tumbling skills (forward roll, backward roll, cartwheel) • Upper-body strength (hanging, pulling, pushing) • Grip strength and control • Introduction to movement sequences • Partner balance and support activities • Building confidence through controlled risk-taking	Unit 4: Olympics - application of athletic skills • Running events: sprints, relays, and endurance runs • Jumping events: standing long jump, vertical jump • Throwing events: distance and accuracy (varied objects) • Combining running, jumping, and throwing skills • Performance of coordinated athletic sequences • Partner drills emphasizing control and respect • Field Fitness: advanced applied challenges • Heavier carries and longer-distance challenges
Unit 3: Field Fitness - real-world strength and movement • Carrying odd objects (sandbags, buckets) • Pushing and pulling (sleds, ropes) • Obstacle course navigation • Team-based physical challenges • Building work capacity through sustained effort	• Complex push/pull tasks with teamwork • Timed obstacle courses and group competitions • Strategic team problem-solving tasks • Developing endurance and resilience • Leadership and collaboration in group activities • Planning and executing multi-step challenges

Middle School Physical Education A & B

The Middle School Physical Education course develops students' strength, endurance, coordination, and resilience through structured training and purposeful movement. Students refine functional movement patterns, build athletic capacity, and apply physical skills in both individual and team-based challenges. Instruction emphasizes discipline, goal-setting, and personal responsibility alongside physical development. Through gymnastics, field-based fitness, and Olympic-style activities, students gain practical strength and movement skills while cultivating perseverance, leadership, and sportsmanship.

Middle School Physical Education	
Unit 1: Athleticism	• Injury prevention and recovery practices
• Functional movement assessment (squat, hinge, lunge, push, pull)	• Tumbling progressions (forward/backward rolls, cartwheels, progressions to round-offs)
• Running mechanics (form, pacing, endurance)	• Development of strength, speed, and endurance
• Agility, coordination, and balance training	• Movement mechanics under increased load
• Core strength and trunk stability	• Sprints, intervals, and endurance conditioning
• Mobility and flexibility routines	• Agility, reaction time, and directional changes
• Introduction to strength training principles	• Integrated full-body strength and stabilization
• Tracking and recording personal fitness data	• Evaluating improvement and adjusting goals
Unit 2: Gymnastics	Unit 4: Olympics
• Static strength positions (plank, hollow hold, bridge)	• Running events: sprints, relays, middle-distance runs
• Progressive overload and safe training progression	• Jumping events: long jump, vertical jump, etc
• Upper-body strength (pull-ups, hanging, pushes)	• Throwing events: shot put-style, discus-style
• Grip strength and endurance	• Combining athletic skills in structured events
• Movement sequences and flow patterns	• Performance and timing of athletic events
• Partner balance, counterbalance, and support	• Introduction to basic wrestling techniques
Unit 3: Field Fitness	• Wrestling drills (control, safety, and respect)
• Carrying objects (sandbags, buckets, uneven loads)	• Field Fitness: advanced real-world challenges
• Pushing and pulling (sleds, ropes, resistance work)	• Push/pull tasks under time or distance goals
• Obstacle course navigation	• Timed and competitive obstacle courses
• Safe lifting mechanics (intro to load management)	• Encouraging perseverance and consistent effort
• Introduction to rescue carries	• Strategic teamwork and leadership challenges
• Team-based physical challenges and relays	• Developing endurance, grit, and resilience
• Building work capacity through sustained effort	• Leadership, accountability, and group coordination
• Emphasis on teamwork and communication	• Planning and executing complex physical challenges
• Practicing safe and controlled movement	• Independence and safe decision-making

Hillsdale Classical Integrated Humanities

2 Credits: ELA 9, World History

Course Description

This Integrated Humanities course will give students an opportunity to learn world history and world literature in a mutually illuminating context. Beginning with the earliest civilizations and the emergence of human cultural activity, students will explore global history with an eye to multiple factors. Our emphasis will be on the linguistic, literary, artistic, and religious productions of each culture. In Year A, students will study ancient and medieval worlds with a special focus on Mediterranean, Continental European, North African, West Asian, and Central Asian cultures. In Year B, students will study from the Renaissance and Early Modern period onward. We will still have global context in Year B but the emphasis will be on the transatlantic world and meeting the American History requirements. Students will be challenged to see how cultures are in a constant process of exchange, contact, conflict, and transmission, transforming themselves and those around them. We will reflect on how cultures begin to narrate their own self-understanding and how these narrations also undergo transformation.

The literature component of the class will play a key role in helping students reflect on various modes of cultural self-understanding throughout history as well as a way of reflecting on their own time and place. In Year A, the world literature will focus on epics, myths, ancient drama, and religious poems from several traditions. In Year B, the students will read primarily from novels, modern drama, short stories, and poetry taken from American, European, and other global contexts. Students will engage in critical discussion of the texts as well as memorization and recitation of poetry and the composition of short essays. Our classroom sessions will reflect on the formal qualities of literature (genre, characterization, narrative, plot) as well as the embodied cultural use of writing as a social artifact. In this way our study of history and literature will not simply be parallel tracks but in fact one activity. The overarching theme of both years of world literature and history would be recognition of our common humanity and the cultivation of skills, habits, and virtues that sustain the insight that nothing human can be alien to us.

*****Note on the Use of Religious Texts in the Curriculum.** The syllabus proposes the reading and discussion of many religious texts. This is for three primary reasons: **1)** understanding the historical imagination of the cultures we are studying require a familiarity with the religious imagination conveyed in these texts. **2)** a democratic society that encourages religious pluralism should help students learn how to engage with other religious traditions (and their own) in a respectful and historically informed manner. Ignorance breeds prejudice and exposure to a survey of global religious literature combats lazy stereotyping and parochialism. And **3)** these texts have inherent literary value as epic, narratives, poems, sermons, etc.

Year A (36 weeks)

Unit 1: Egypt and Mesopotamia (Week 1-6)

We will survey the six cradles of civilization from the Bronze Age with a focus on Egypt and Mesopotamia. Goals for this unit will be an understanding of the major shifts from nomadic to agricultural and urban societies, emergence of scribal culture, the development of oral storytelling and mythological literature. Literary texts for this unit will include *Mesopotamian Myths*, *Homeric Hymns*, *The Odyssey*, and selections from *Genesis* and *Exodus*.

Unit 2: Persia, Greece, and Rome (Weeks 7-12)

Our focus in Unit 2 will be the Persian, Hellenistic, and Roman world-cultures. Goals for this unit will include an understanding of the “first globalization” of Achaemenid Persia and the Alexandrian conquests and the transformations of Hellenic culture in India, North Africa, and Asia Minor. We will also trace the rise of the Roman Republic and its conflict with the Punic civilization in light of our previous work on Mesopotamian literature and culture. Literary texts for this unit will include select Greek tragedies (*The Bacchae*, *Oedipus Rex*, *The Persians*), *The Aeneid*, Plato's *Apology*, Selections from the *Avesta-Zend*. Selections from the *Gospel of John* and *Gospel of Luke*.

Unit 3: Late Antique Mediterranean (Weeks 13-18)

Unit 3 will cover late antiquity and the emergence of medieval cultures in the Mediterranean world. Goals for this unit are an understanding of the late Roman empire, its split, and its complicated collapse and transformation. We will also seek to understand the diverse religious marketplace of late antiquity, the emerging forms of Christianity, their inner conflict, as well as the later philosophical religions of Greco-Roman “paganism”. Literary texts for this unit will include selections from Boethius' *Consolations of Philosophy*, Augustine's *Confessions*, Plotinus' *Enneads*, and the *Gospel of Thomas*.

Unit 4: Medieval India and China (Weeks 19-24)

Unit 4 will focus on the medieval worlds of India and China. Goals for this unit are to be able to identify and explain fundamental characteristics of Indian and Chinese religious traditions, the exchanges and antagonisms between Hinduism and Buddhism, and the spread of Buddhism into China. Students will learn about the burgeoning trade relationships between India and China and the emerging city-states and republics in medieval Europe. Literary texts for this unit will include selections from the *Vedas*, *Upanishads*, *Ramayana*, *Lotus Sutra*, *Diamond Sutra*, *Heart Sutra*, and *The Journey to the West*.

Unit 5: Medieval Near East and Africa (Weeks 25-28)

In Unit 5 the theme will be the emergence of Islam and the medieval Islamicate cultures of Persia, North Africa, Iberia, Central Asia, and Asia Minor. We will also learn about the Eastern Roman (Byzantine) empire and independent indigenous and Christian kingdoms of Africa and Asia in this period. Time will also be spent on understanding rabbinic Judaism and the self-understanding of different Jewish communities in the diaspora. Goals for this unit will be understanding Fatimid, Abbasid, Almoravid, Umayyad, and Ottoman empires understood themselves and interacted with other cultures, including their reception and transformation of previous Mediterranean philosophy, culture, and religion. Literary texts will include selections from the *Koran*, *Midrash Rabbah*, *Talmud*, Al Ghazali's *Deliverance from Error*, and Ferdowsi's epic poem *The Shahnameh*.

Unit 6: Medieval Europe (Weeks 29-34)

Unit 6 will cover the emergence of new political communities and cultural formations in Western and Southern Europe. Goals in this section will be understanding the shape and role of medieval Christianity, monasticism, as well as the emergence of vernacular literature and distinctive architectural styles. We will also cover the major economic developments and political upheavals from early feudalism to the Crusades to the Hundred Years' War. Our terminus will be the emergence of proto-modern independent city-states in Italy, Germany, and the Netherlands preparing students for the events of the Renaissance and Reformation in **Year B**. Literary texts will include *The Song of Roland*, *The Canterbury Tales*, *Beowulf*, and selections from Dante's *Divine Comedy*, and Hildegard von Bingen's *Scivias*.

Unit 7: Medieval Korea and Japan (Weeks 35-36)

For Unit 7 we will spend time in the Golden Ages of medieval Korea and Japan. Goals will include understanding the cultural and literary inheritance of Japan from China and the conflicts and exchanges between Korea and Japan. Students will learn about the Shogunate system as well as the role of the emperor

and the famous *samurai*. At this point, students will be able to compare and contrast the various medieval worlds we have seen and discuss their literary, religious, and political features. Literary texts for this section will include selections from the Korean epic *Kushnameh* and the medieval Japanese novel *The Tale of Genji*.

Book List and Excerpts:

- | | |
|--|---|
| -Mesopotamian Myths | -Lotus Sutra |
| -Homeric Hymns | -Diamond Sutra |
| -The Odyssey | -Heart Sutra |
| -Genesis and Exodus | -The Journey to the West |
| -The Bacchae | -Koran |
| -Oedipus Rex | -Midrash Rabbah |
| -The Persians | -Talmud |
| -The Aeneid | -Al Ghazali's <i>Deliverance from Error</i> |
| -Plato's <i>Apology</i> | -The <i>Shahnameh</i> |
| -Avesta-Zend | -The Song of Roland |
| -Gospel of John and Gospel of Luke | -The Canterbury Tales |
| -Boethius' <i>Consolations of Philosophy</i> | -Beowulf |
| -Augustine's <i>Confessions</i> | -Dante's <i>Divine Comedy</i> |
| -Plotinus' <i>Enneads</i> | -Hildegard von Bingen's <i>Scivias</i> |
| -Gospel of Thomas | -Kushnameh |
| -Vedas | -The Tale of Genji |
| -Upanishads | -Ramayana |

Classical High School Biology

1 Credit: Biology A & B

In this Classical High School Biology course, students will learn about the world around them, including topics such as classification, ecosystems, genetics, plants, animals and the human body. Students will be inspired by real world examples of modern day uses of this biological knowledge. Hands-on experiments as well as case studies will lead to scientific thinking and interpretation of data which will be applied to the concepts learned throughout the year.

Textbook: Miller & Levine Biology 2019

Semester 1 Topics	Semester 2 Topics
Unit 1: The Nature of Life - The Science of Biology (Scientific method, characteristics of living things, central themes of biology) - Chemistry of Life (Water, cells & pH, carbon and life's molecules, macromolecules, enzymes) - Unit 2: Ecology - Ecosystems (Energy transfer, food webs, basic cycles) - Populations (Growth and limits for plants, animals and humans) - Communities and Ecosystem Dynamics (Habitats, niches, succession, biodiversity and resilience) - Humans and Global Change (Ecological footprints, cause and effect, measuring global change, sustainability) Unit 3: Cells - Cell Structure and Function (What are cells, basic structure, transportation, homeostasis) - Photosynthesis (How energy is made and used, basic process) - Cellular Respiration (The basic process, fermentation) - Cell Growth and Division (Growth, division, reproduction, mitosis, cell cycles)	Unit 4: Genetics - Introduction (Gregor Mendel, patterns of inheritance, meiosis) - DNA (Genes, structure, replication) - RNA and Protein Synthesis (RNA, ribosomes, protein synthesis, gene regulation, mutations) - The Human Genome (Human chromosomes, genetic disorders, studying the human genome) - Biotechnology (Genetic engineering, applications, ethics and impacts) Unit 5: Evolution - Evolution of Populations (Genes and variation, genetic change, speciation, molecular evolution) - Biodiversity and Classification (Finding order in biodiversity, modern classification) Unit 6: Diversity of Life - Viruses, Prokaryotes, Protists and Fungi - Plants (Diversity, flowers, seeds and fruit) - Plant Structure and Function (Roots, stems, leaves, hormones, tropism, plants and people) - Animal Evolution, Diversity and Behavior (Diversity, primate evolution, social interactions, group behavior) - Animal Systems 1 (Feeding, respiration, circulation, excretion) - Animal Systems 2 (Response, movement, reproduction, homeostasis) - The Human Body (Organization, systems, immunity and disease)

Classical High School Art I & II

1 Credit (2 Semesters)

This yearlong course introduces students to the development of modern art through the lens of five major artistic movements: Impressionism, Expressionism, Surrealism, Abstract Expressionism, and Pop Art. Students will study masterworks, artists, and historical context while practicing classical methods of drawing, painting, composition, and visual analysis.

Curricular Materials Used:

- *Art for Everyone* by Kristine T.G. Hardeberg
- *15-minute Art Pen and Ink* by Anna Tromop

Unit 1: Foundations		Unit 2: Impressionism	
Topics	Activities	Topics	Activities
• Elements of art • Principles of design • Composition and balance • Observational drawing • Art criticism	• Contour drawing exercises • Still-life graphite studies • Sketchbook observational work • Formal artwork analysis	• Light and color • Atmosphere and perception • Brushwork techniques • Modern life in art	• Landscape painting • Light studies (time of day) • Color mixing exercises • Impressionist-style copywork
Unit 3: Expressionism		Unit 4: Midterm Portfolio	
• Emotional expression in art • Distortion and exaggeration • Symbolic color • Psychological themes	• Expressive self-portrait • Color and mood experiments • Music-inspired art • Written critique	• Portfolio development • Reflection and evaluation • Critique methods	• Portfolio selection and revision • Written artist reflection • Oral presentation • Peer critique

Unit 5: Surrealism		Unit 6: Abstract Expressionism	
Topics	Activities	Topics	Activities
• Dream imagery • Symbolism • Subconscious themes • Juxtaposition	• Dream journal sketches • Collage compositions • Symbol studies • Surrealist painting	• Nonrepresentational art • Gesture and movement • Artistic process • Emotional abstraction	• Action painting • Color field studies • Large-scale abstract work • Process reflection
Unit 7: Pop Art		Unit 8: Final Portfolio	
• Consumer culture • Media imagery • Repetition and design • Cultural commentary	• Comic-style illustration • Repetition-based design • Advertisement analysis • Cultural critique project	• Synthesis of knowledge • Personal artistic voice • Presentation skills	• Final portfolio submission • Artist statement • Comparative essay • Oral presentation

Physical Education

.5 Credit (1 Semester)

The High School Physical Education course develops advanced physical fitness, movement competency, and lifelong health habits through structured training and performance-based activities. Students refine strength, endurance, coordination, and athletic skill while applying principles of movement, fitness, and teamwork. Instruction aligns with Michigan Physical Education standards and expectations by emphasizing skill development, knowledge of movement concepts, regular participation in physical activity, achievement of health-enhancing fitness levels, and responsible personal and social behavior. Students engage in progressively challenging activities that promote independence, leadership, and lifelong fitness habits.

Unit 1: Athleticism	
• Baseline fitness testing • Functional movement patterns (squat, hinge, push, pull, carry) • Posture and body mechanics • Injury prevention	• Fitness benchmarking (run, push-ups, plank, mobility) • Movement drills and technique practice • Bodyweight strength circuits • Mobility and warm-up routines
Unit 2: Gymnastics	
• Body awareness and control • Grip, pushing, and pulling strength • Core stability and balance • Intro to tumbling	• Hanging and support holds • Push-up and pull-up progressions • Core circuits and balance work • Rolls, cartwheels, and tumbling basics
Unit 3: Field Fitness	
• Functional strength and endurance • Carrying, lifting, dragging • Agility and obstacle navigation • Team-based challenges	• Sandbag and odd-object lifting • Obstacle courses • Farmer carries and sled drags • Partner/rescue carries and team circuits
Unit 4: Olympics	
• Running (speed & endurance) • Jumping and landing mechanics • Throwing techniques • Intro wrestling and grappling • Competition and sportsmanship	• Sprint and distance drills • Long jump/vertical jump practice • Medicine ball or shot put throws • Wrestling stance, balance, basic holds • Olympic-style competitions
Unit 5: Final Physical Assessment	
• Fitness reassessment • Personal fitness planning • Reflection on growth	• Post-testing and comparison • Personal fitness plan • Written reflection and goal setting

Health Education

.5 Credit (1 Semester)

This health education course develops health literacy, decision-making skills, and lifelong wellness habits through the study of physical, mental, emotional, and social health. Students explore topics such as nutrition, mental health, relationships, substance use, and personal wellness while talking about real-world scenarios and health skills aligned with Michigan standards.

Unit 1: Personal Health & Wellness	
• Dimensions of health (physical, mental, social) • Goal setting and behavior change • Health literacy and decision-making • Influences on health (media, peers, family)	• Personal health self-assessment • SMART goal planning • Case study decision-making scenarios • Media influence analysis
Unit 2: Mental & Emotional Health	
• Stress, anxiety, and coping strategies • Emotional regulation • Mental health disorders and support systems • Suicide prevention and help-seeking	• Stress management plan • Journaling and reflection exercises • Role-playing help-seeking scenarios • Resource identification activity
Unit 3: Nutrition & Physical Health	
• Nutrients and balanced diet • Reading food labels • Energy balance and metabolism • Body image and eating behaviors	• Food diary analysis • Meal planning project • Nutrition label breakdown • Evaluate diet trends and media claims
Unit 4: Substance Use & Abuse Prevention	
• Effects of alcohol, tobacco, and drugs • Addiction and brain impact • Peer pressure and refusal skills • Legal and social consequences	• Refusal skills role-play • Substance impact research project • Decision-making scenarios • Public health campaign design
Unit 5: Relationships & Social Health	
• Healthy vs. unhealthy relationships • Communication and conflict resolution • Consent, age of consent, and personal boundaries • Bullying, harassment, and digital behavior	• Role-playing communication strategies • Conflict resolution scenarios • Boundary-setting practice • Case study analysis
Unit 6: Personal Safety & Sexual Education	
• External influences and • Sexual health education • Pregnancy • Contraceptives, abstinence, and reducing risk	• Safety scenario analysis • STIs and HIV • Decision-making and risks • Personal wellness plan

	1/2	3/4	5/6	7/8
Canon	Little Hear Series	Charlotte's Web by E.B. White	The Secret Garden by Frances Hodgson Burnett	Macbeth
	Frog and Toad	Sarah, Plain and Tall by Patricia MacLaughlin	The Magician's Nephew by C.S. Lewis	Romeo and Juliet
	Cups for Sale	The Cabin Faced West by Jean Fritz	Black Beauty by Anna Sewell	Julius Caesar
	Animal Folk Tales	Mountain Born by Elizabeth Yates	My Side of the Mountain by Jean Craighead George	Pride and Prejudice
	Keep the Lights Burning, Abbie	Homer Price by Robert McCloskey	The Cricket in Times Square by Garth Williams	The Giver
	Stone Soup	The Sign of the Beaver by Elizabeth George Speare	Heidi by Joanna Spyri	Persuasion
	The Little House	The Hundred Dresses by Eleanor Estes	Lassie Come-Home by Eric Knight	
	Miss Rumphius	On the Wings of Heroes by Richard Peck	The House of Sixty Fathers by Meindert DeJong	
	Make Way for Ducklings	Black Beauty by Anna Sewell	The Wind in the Willows by Kenneth Graham	
	Prairie School	Mr. Popper's Penguins by Richard Atwater	The Golden Goblet by Eloise Jarvis McGraw	
	My Father's Dragon	Owls in the Family by Farley Mowat		
	The Courage of Sarah Noble	Little Bear by Eleanor Frances Lattimore		
	There Are No Bears on Hemlock Mountain	A Single Grain of Rice		
	Little House in the Big Woods	The Big Wave by Pearl S. Buck		
	Henry Huggins	The Jungle Book by Rudyard Kipling		
Ancient	1/2	3/4	5/6	7/8
			The Horse and His Boy by C.S. Lewis	The Iliad
			A Single Shard by Linda Sue Park	The Hobbit
			Call it Courage by Armstrong Sperry	
			The Trojan War by Olivia Coolidge	
			King of the Wind by Marguerite Henry	
			The Golden Goblet	
			The Bronze Bow	
			Mara Daughter of the Nile	
			Eagle of the Ninth	
Medieval	1/2	3/4	5/6	7/8
		The Whipping Boy	Adam of the Road by Elizabeth Janet Gray	King Arthur and His Knights of the Round Table
		Castle Diary by Richard Platt	The Door in the Wall by Marguerite de Angeli	The Adventures of Robin Hood
		The Sword in the Tree	Catherine, Called Birdy by Karen Cushman	Beowulf
		The Viking Adventure by Clyde Robert Bulla	Beowulf by Ian Sraillier	
		The Midwife's Apprentice by Karen Cushman	The Princess and the Goblin by George MacDonald	
		The Good Master by Kate Seredy		
		Master Cornhill by Eloise Jarvis McGraw		
Early Modern	1/2	3/4	5/6	7/8
		Robert Fulton, Boy Craftsman by Marguerite Henry	Johnny Tremain by Esther Forbes	Witch of Blackbird Pond
		Toliver's Secret by Esther Wood Brady	The Secret of the Andes by Ann Nolan Clark	Johnny Tremain by Esther Forbes
		Phoebe the Spy by Judith Griffin	Carry On, Mr. Bowditch	Les Misérables
		In Her Own Words (Phyllis Wheatley)	Amos Fortune, Free Man by Elizabeth Yates	
		Little House on the Prairie	Calico Bush by Rachel Field	
		Farmer Boy by Laura Ingalls Wilder		
		The Secret of the Andes by Ann Nolan Clark	Indian Captive	
		Carry On, Mr. Bowditch	L. Juan de Pareja	
		Little House on the Prairie by Laura Ingalls Wilder		
Modern	1/2	3/4	5/6	7/8
		Winne's Great War (WWI) by Lindsay Mattick	Rifles for Watie by Harold Keith	The Boy's War
		By the Great Horn Spoon! by Sid Fleischman	Number the Stars by Lois Lowry	The Lion, The Witch, and The Wardrobe
		The Story of George Washington Carver (Scholastic)	The Twenty-One Balloons by William Pene DuBois	Call of the Wild
		The Year of Miss Agnes	Where the Red Fern Grows by Wilson Rawls	Freedom Walkers
		Number the Stars	The Singing Tree by Kate Seredy	Frankenstein
		Snow Treasure	Swift Rivers by Cornelia Meigs	Animal Farm
		On the Wings of Heroes	Moccasin Trail	All quiet on the western front
		Sing Down the Moon by Scott O'Dell	The Defenders by Eloise Jarvis McGraw	Diary of Anne Frank
		Homer Price	Roll of Thunder, Hear My Cry by Mildred Taylor	To Kill A Mockingbird
		Children of the Covered Wagon	Om-Kas-Toe	The Outsiders
		American Tall Tales (Mary Osborne)	Caddie Woodlawn	
		Blue Fairy Book	Little Britches	
			Tuck Everlasting	
			Esperanza Rising	
			Number the Stars	
			Where the Red Fern Grows	