

TX MS Pre–Algebra 8

Prerequisite Requirements:

Course completion or grade placement.

Course of Instruction/Lesson Description:

In the Grade 8 Math program, students take a broader look at computational and problem-solving skills while learning the language of algebra. Students translate word phrases and sentences into mathematical expressions; analyze geometric figures; solve problems involving percentages, ratios, and proportions; graph different kinds of equations and inequalities; calculate statistical measures and probabilities; apply the Pythagorean Theorem; calculate, analyze, and solve problems involving personal and financial literacy; and explain strategies for solving real-world problems. Online lessons provide demonstrations of key concepts, as well as interactive problems with contextual feedback. A textbook supplements the online material. Students who take Pre-Algebra are expected to have mastered the skills and concepts presented in the K¹² Fundamentals of Geometry and Algebra course (or equivalent).

Unit and Lesson Detail:

Unit 1: The Basics

Let's start at the very beginning; it's a very good place to start. Just as you need to know basic grammar and vocabulary as you begin to learn any language, you need to know some basic building blocks as you begin to learn algebra.

- Order of Operations
- Variable Expressions
- Writing Expressions for Word Phrases
- Sets of Real Numbers
- Comparing Expressions
- Replacement Sets
- Related Equations
- Solving Problems

Unit 2: Addition and Subtraction

If you have two oranges and a friend gives you three oranges, how many do you have? If you then give four oranges to your friend, how many are you left with? This sort of addition and subtraction problem with passing fruit back and forth is the type of simple math you have done since you were very young. When you expand your addition and subtraction skills to negative numbers and decimals, you can solve many more complicated problems.

- Integers on a Number Line
- Adding Integers
- Subtracting Integers
- Decimals on a Number Line
- Adding Decimals

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- Subtracting Decimals
- Addition and Subtraction Properties
- Equations Involving Addition and Subtraction
- Addition and Subtraction Applications

Unit 3: Multiplication and Division

Isaac Newton's third law of motion is often paraphrased as “for every action, there is an equal and opposite reaction.” Just as forces come in pairs, so can mathematical operations. Multiplication and division are inverse operations. They undo each other and can both be used to solve many types of problems.

- Multiplying Integers and Decimals
- Dividing Integers and Decimals
- Multiplication and Division Properties
- Rounding and Estimation
- Equations Involving Multiplication and Division
- Multiplication and Division Applications

Unit 4: Fractions

Every fraction can be written as a decimal and every decimal can be written as a fraction. As a result, you could do just about all math with only fractions or only decimals, but decimals are used for certain applications just as fractions are used for others. For example, carpenters use fractions and mixed numbers quite a bit; anybody building a house or a deck deals with lots of fractions.

- Equivalent Fractions
- Multiplying Fractions
- Dividing Fractions
- Common Denominators
- Adding and Subtracting Fractions
- Working with Improper Fractions and Mixed Numbers
- Multiplying and Dividing Mixed Numbers
- Equations with Fractions and Mixed Numbers

Unit 5: Combined Operations

Many yachts can be powered by the wind, by a gas engine, or both. A hybrid automobile can run on gasoline or electric power. These combinations are very powerful. Combining addition or subtraction with multiplication or division is powerful as well. You can use equations and expressions with mixed operations to solve many complex problems.

- The Distributive Property
- Like Terms
- Expressions with Mixed Operations
- Equations with Mixed Operations
- Error Analysis
- Inequalities

Unit 6: Number Properties

Astronomers study things that are very, very far away. For example, the Horsehead Nebula is about 14,000 trillion kilometers away. On the other extreme, molecular geneticists study things that are very, very small. A double helix of DNA has a diameter of about one nanometer (a billionth of a meter.) With exponents, you can describe very great or very small distances.

- Positive Exponents
- Factors and Primes
- GCF and Relative Primes
- Negative Exponents
- Powers of Ten
- Scientific Notation

Unit 7: Semester Review and Test

- Semester Review
- Semester Test

Unit 8: Ratio, Proportion and Percent

Model builders use ratios and percents to describe how their models compare to real objects. They can use proportions to figure out the length of every item in the model.

- Ratio
- Direct Variation
- Proportion
- Percents, Fractions and Decimals
- Similarity and Scale
- Working with Percent
- Percent of Increase or Decrease
- Simple Interest

Unit 9: Perimeter and Area

You can find geometric shapes in art. Whether determining the amount of leading or the amount of glass for a piece of stained glass art, stained-glass artists need to understand perimeter and area to solve many practical problems.

- Types of Polygons
- Perimeter
- Areas of Rectangles and Triangles
- Special Quadrilaterals
- Areas of Special Quadrilaterals
- Circumference

- Areas of Circles

Unit 10: Square Roots and Right Triangles

Since ancient times, people have used right triangles to survey land and build structures. Even before Pythagoras was born, the relationship between the side lengths of a right triangle has been essential to anyone building just about any structure, including pyramids, houses, skyscrapers, and bridges.

- Rational Square Roots
- Irrational Square Roots
- The Pythagorean Theorem
- The Distance Formula
- Special Types of Triangles
- Trigonometric Ratios

Unit 11: Solid Figures

Gas-powered engines are driven by little explosions that move pistons up and down in cylinders. When you add up the volume of all the cylinders, you get the displacement of the engine. For instance, each cylinder in a four-cylinder, 1000 cc engine has a volume of 250 cubic centimeters. Engineers and mechanics must accurately compute volume when they build or maintain engines.

- Volume and Capacity
- Volumes of Prisms and Cylinders
- Volumes of Pyramids and Cones
- Surface Area
- Surface Areas of Prisms and Cylinders

Unit 12: Counting and Probability

How many apples have mass between 100 and 200 grams? How many are bruised? How many are not yet ripe? Checking every single apple would probably be pretty impractical, but if you understand probability and sampling, you could make a good estimate.

- Counting Principles
- Permutations
- Combinations
- Probability
- Mutually Exclusive Events
- Samples and Prediction

Unit 13: Statistics

Data are everywhere. When you look at a group of people, you could use many numbers to describe them. How tall are they? How long is their hair? How old are they? What is their gender? What color are their eyes? Statistics helps you make sense of data.

- Graphs
- Measures of Center
- Scatter Plots
- Stem-and-Leaf Plots
- Box-and-Whisker Plots
- Frequency Tables and Histograms

Unit 14: Geometry Basics

Shapes such as polygons and circles provide us with shelter, art, and transportation. Some artists use geometric shapes in their art, but most painters and photographers use rectangular frames to surround their art. Look at any art museum, and you will see triangles, rectangles, and other polygons in the structure of the building and in the artwork inside.

- Points, Lines and Planes
- Rays and Angles
- Parallel Lines and Transversals
- Triangles
- Polygons
- Circles
- Transformations
- Congruence

Unit 15: Analytic Geometry

A pilot uses numbers to locate the airport she is flying to. An air traffic controller uses numbers on a radar screen to locate each airplane approaching the airport. Without a system of locating points, airplanes would have a hard time getting anywhere safely.

- Points on the Plane
- Translations and Dilations
- Two-Variable Equations

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- Linear Equations and Intercepts
- Slope
- Problem Solving
- Relations and Functions
- Systems of Linear Equations

Unit 16: Personal Financial Literacy

How do you estimate cost? How do you plan on paying for college? In this unit you will compare how interest rate and loan term affect the cost of credit, calculating the total cost of repaying a loan, explain how small amounts of money grow over time, calculate and compare simple and compound interest earnings, identifying and explain the advantages and disadvantages of different payment methods, determine financially responsible decisions and their benefits, identifying financially irresponsible decisions and their costs, estimating the cost of college, and devising a savings plan to pay for the first year of college.

- Cost of Credit
- Interest on Savings
- Financially Responsible Decisions
- Paying for College

Unit 17: Semester Review and Test

- Semester Review
- Semester Test

Online Importance:

Most lesson content is delivered online. Specialized online instructional components support the math content. Photo galleries and animations help students understand difficult or abstract ideas. Interactive online activities give students opportunities to review important concepts and receive immediate feedback. These activities may feature pop-up images, interactive pictures, vocabulary cards, and interesting math facts.

Monitoring Student Progress:

Each math lesson concludes with an online or offline assessment. The assessment generally includes four to eight questions or problems based on the lesson objectives. Questions include short answers, multiple choice, demonstrations, interpretation of results, as well as observational questions answered by an adult. Each unit includes a unit review and assessment delivered either online or offline. Each semester concludes with a comprehensive semester review and assessment. Students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced

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teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

Each teacher will establish a daily contact schedule for their assigned students at a time of day that is reasonably convenient for both parties. Contacts may be asynchronous/synchronous or one-on-one/groups. The avenues of teacher initiated contact will be adjusted as determined by the progress a student makes through their learning plan. Parent- and student-initiated contact with teachers can happen at any time. The Acting Director, or their designee, will monitor the communication logs to ensure that parents are being routinely supported and informed regarding the student's ongoing progress and participation. In addition, teachers will monitor progress in mastery of objectives and lesson completion on a weekly basis. Continuous progress monitoring by the assigned teacher ensures that parents are informed on a regular basis regarding progress and participation.

Required Instructional Materials:

Materials K¹² provides:

Pre-Algebra: Reference Guide and Problem Sets

Standardized Assessment Instruments:

K12 end of lesson assessments, Study Island Benchmarks, Scantron Performance Series Adaptive tests, and STAAR.

State of Texas Assessments of Academic Readiness (STAAR) Compliancy:

Side-by-side comparisons of STAAR TEKS and the content of each course have been developed and reviewed to ensure that the online curriculum meets or exceed the STAAR.

Grading/Credit Award Criteria:

The course grade will be determined by the Percentage of Lessons Completed and Mastered, Testing, Work Samples, Study Island Blue Ribbon Completion, and Class Connect attendance. A student will be promoted to the next grade level by meeting the 70% passing expectation. 5th and 8th graders are subject to Student Success initiative requirements, or SSI.

TX MS Algebra 1

Prerequisite Requirements:

Course completion or grade placement.

Course of Instruction/Lesson Description:

In the Grade 8 Math program, students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible. Students learn to use number properties to simplify expressions or justify statements; describe sets with set notation and find the union and intersection of sets; simplify and evaluate expressions involving variables, fractions, exponents, and radicals; work with integers, rational numbers, and irrational numbers; and graph and solve equations, inequalities, and systems of equations. They learn to determine whether a relation is a function and how to describe its domain and range; use factoring, formulas, and other techniques to solve quadratic and other polynomial equations; formulate and evaluate valid mathematical arguments using various types of reasoning; and translate word problems into mathematical equations and then use the equations to solve the original problems.

Unit 1: Algebra Basics

The English word *algebra* and the Spanish word *algebrista* both come from the Arabic word *al-jabr*, which means "restoration." A barber in medieval times often called himself an algebrista. The algebrista also was a bonesetter who restored or fixed bones. Mathematicians today use algebra to solve problems. Algebra can find solutions and "fix" certain problems that you encounter.

- Semester Introduction
- Expressions
- Variables
- Translating Words into Variable Expressions
- Equations
- Translating Words into Equations
- Replacement Sets
- Problem Solving

Unit 2: Properties of Real Numbers

There are many different kinds of numbers. Negative numbers, positive numbers, integers, fractions, and decimals are just a few of the many groups of numbers. What do these varieties of numbers have in common? They all obey the rules of arithmetic. They can be added, subtracted, multiplied, and divided.

- Number Lines

- Sets
- Comparing Expressions
- Number Properties
- Measurement, Precision, and Estimation
- Distributive Property
- Algebraic Proof
- Opposites and Absolute Value

Unit 3: Operations with Real Numbers

There are many different kinds of numbers. Negative numbers, positive numbers, integers, fractions, and decimals are just a few of the many groups of numbers. What do these varieties of numbers have in common? They all obey the rules of arithmetic. They can be added, subtracted, multiplied, and divided.

- Addition
- Subtraction
- Multiplication
- Reciprocals and Division
- Applications: Number Problems

Unit 4: Solving Equations

The Greek mathematician Diophantus is often called "the father of algebra." His book *Arithmetica* described the solutions to 130 problems. He did not discover all of these solutions himself, but he did collect many solutions that had been found by Greeks, Egyptians, and Babylonians before him. Some people of long ago obviously enjoyed doing algebra. It also helped them—and can help you—solve many real-world problems.

- Addition and Subtraction Equations
- Multiplication and Division Equations
- Patterns
- Multiple Transformations
- Variables on Both Sides of an Equation
- Rational Number Coefficients and Constants
- Transforming Formulas
- Estimating Solutions
- Cost Problems

Unit 5: Linear Equations and Inequalities

You've probably heard the phrase, "That's where I draw the line!" In algebra, you can take this expression literally. Linear functions and their graphs play an important role in the never-ending quest to model the real world.

- Equations in Two Variables
- Graphs

- Lines and Intercepts
- Slope
- Using Slope as a Rate
- Slope-Intercept Form
- Point-Slope Form
- Parallel and Perpendicular Lines
- Equations from Graphs
- Applications: Linear Models
- Graphing Linear Inequalities
- Inequalities from Graphs
- Applications: Mixture Problems

Unit 6: Semester Review and Test

- Semester Review
- Semester Test

Unit 7: Relations and Functions

A solar cell is a little machine that takes in solar energy and puts out electricity. A mathematical function is a machine that takes in a number as an input and produces another number as an output. There are many kinds of functions. Some have graphs that look like lines, while others have graphs that curve like a parabola. Functions can take other forms as well. Not every function has a graph that looks like a line or a parabola. Not every function has an equation. The important thing to remember is that if you put any valid input into a function, you will get a single result out of it.

- Semester Introduction
- Relations
- Functions
- Function Equations
- Order of Operations
- Absolute Value Functions
- Direct Linear Variation
- Quadratic Variation
- Inverse Variation
- Translating Functions

Unit 8: Rationals, Irrationals, and Radicals

Are rational numbers very levelheaded? Are irrational numbers hard to reason with? Not really, but rational and irrational numbers have things in common and things that make them different.

- Rational Numbers
- Terminating and Repeating Numbers
- Square Roots

- Dimensional Analysis
- Irrational Numbers
- Estimating Square Roots
- Radicals with Variables
- Using Square Roots to Solve Equations
- The Pythagorean Theorem
- Higher Roots

Unit 9: Measurement and Geometry

- Points, Lines, and Angles
- Pairs of Angles
- Triangles
- Polygons
- Congruence and Similarity
- Area
- Volume
- Scale
- Measurement and Geometry Review

Unit 10: Counting, Probability, and Statistics

- Counting
- Permutations and Combinations
- Probability
- Combined Probability
- Graphs
- Summary Statistics
- Frequency Distributions
- Samples and Prediction

Unit 11: Logic and Reasoning

Professionals use logical reasoning in a variety of ways. Just as lawyers use logical reasoning to formulate convincing arguments, mathematicians use logical reasoning to formulate and prove theorems. Once you have mastered the uses of inductive and deductive reasoning, you will be able to make and understand arguments in many areas.

- Reasoning and Arguments
- Hypothesis and Conclusion
- Forms of Conditional Statements
- Using Data to Make Arguments
- Inductive and Deductive Reasoning
- Algebraic Proof
- Counter Example
- Applying Math to Everyday Life

Unit 12: Working with Polynomials

Just as a train is built from linking railcars together, a polynomial is built by bringing terms together and linking them with plus or minus signs. You can perform basic operations on polynomials in the same way that you add, subtract, multiply, and divide numbers.

- Overview of Polynomials
- Adding and Subtracting Polynomials
- Multiplying Monomials
- Multiplying Polynomials by Monomials
- Multiplying Polynomials
- The FOIL Method

Unit 13: Factoring Polynomials

A polynomial is an expression that has variables that represent numbers. A number can be factored, so you should be able to factor a polynomial, right? Sometimes you can and sometimes you can't. Finding ways to write a polynomial as a product of factors can be quite useful.

- Factoring Integers
- Dividing Monomials
- Common Factors of Polynomials
- Dividing Polynomials by Monomials
- Factoring Perfect Squares
- Factoring Differences of Squares
- Factoring Quadratic Trinomials
- Factoring Completely
- Finding Roots of a Polynomial

Unit 14: Quadratic Equations

Solving equations can help you find answers to many kinds of problems in your daily life. Linear equations usually have one solution, but what about quadratic equations? How can you solve them and what do the solutions look like?

- Solving Perfect Square Equations
- Completing the Square
- The Quadratic Formula
- Scientific Notation
- Solving Quadratic Equations
- Equations and Graphs: Roots and Intercepts
- Applications: Area Problems
- Applications: Projectile Motion

Unit 15: Rational Expressions

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A fraction always has a number in the numerator and in the denominator. However, those numbers can actually be expressions that represent numbers, which means you can do all sorts of interesting things with fractions. Fractions with variable expressions in the numerator and denominator can help you solve many kinds of problems.

- Simplifying Rational Expressions
- Multiplying Rational Expressions
- Dividing Rational Expressions
- Like Denominators
- Adding and Subtracting Rational Expressions

Unit 16: Solving Inequalities

Every mathematician knows that 5 is less than 7, but when is $y < x$? An inequality symbol can be used to describe how one number compares to another. It can also indicate a relationship between values.

- Inequalities
- Solving Inequalities
- Combined Inequalities
- Absolute Value Equations and Inequalities
- Applications: Inequalities

Unit 17: Systems of Equations

When two people meet, they often shake hands or say "hello" to each other. Once they start talking to each other, they can find out what they have in common. What happens when two lines meet? Do they say anything? Probably not, but whenever two lines meet, you know they have at least one point in common. Finding the point at which they meet can help you solve problems in the real world.

- Systems of Equations
- Substitution Method
- Linear Combination
- Linear Combination with Multiplication
- Applications: Systems of Linear Equations
- Systems of Linear Inequalities

Unit 18: Personal Financial Literacy

How do you estimate cost? How do you plan on paying for college? In this unit you will compare how interest rate and loan term affect the cost of credit, calculating the total cost of repaying a loan, explain how small amounts of money grow over time, calculate and compare simple and compound interest earnings, identifying and explain the advantages and disadvantages of different payment methods, determine financially responsible decisions and their benefits, identifying financially irresponsible decisions and their costs, estimating the cost of college, and devising a savings plan to pay for the first year of college.

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- Cost of Credit
- Interest on Savings
- Financially Responsible Decisions
- Paying for College

Unit 19: Semester Review and Test

- Semester Review
- Semester Test

Online Importance:

Most lesson content is delivered online. Specialized online instructional components support the math content. Photo galleries and animations help students understand difficult or abstract ideas. Interactive online activities give students opportunities to review important concepts and receive immediate feedback. These activities may feature pop-up images, interactive pictures, vocabulary cards, and interesting math facts.

Monitoring Student Progress:

Each math lesson concludes with an online or offline assessment. The assessment generally includes four to eight questions or problems based on the lesson objectives. Questions include short answers, multiple choice, demonstrations, interpretation of results, as well as observational questions answered by an adult. Each unit includes a unit review and assessment delivered either online or offline. Each semester concludes with a comprehensive semester review and assessment. Students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

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Required Instructional Materials:

Algebra I: Reference Guide and Problem Sets

Standardized Assessment Instruments:

K12 end of lesson assessments, Study Island Benchmarks, Scantron Performance Series Adaptive tests, and STAAR.

State of Texas Assessments of Academic Readiness (STAAR) Compliancy:

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Grading/Credit Award Criteria:

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8th Grade Language Arts and Reading

Course Title: English Language Arts and Reading: Literary Analysis and Composition

Prerequisite Requirements:

Course completion or grade placement.

Course of Instruction/Lesson Description:

Throughout this course, students will engage in literary analysis of short stories, poetry, drama, novels, and nonfiction. The course focuses on the interpretation of literary works and the development of oral and written communication skills in standard (formal) English. The program is organized in four strands: Literature, Composition; Grammar, Usage and Mechanics (GUM); and Vocabulary.

Literature

Designed to encourage the appreciation of classic literature, this strand exposes students to both canonical works and less familiar texts and offers a variety of literature to suit diverse tastes. Whether they are reading poetry, drama, autobiography, short stories, or novels, students will be guided through close readings so that they can analyze the formal features of literary texts. Lessons also provide rich background and information to encourage contextual exploration. In this literature program, students read “what’s between the lines” to interpret literature and they go beyond the book to discover how the culture in which a work of literature was created contributes to the themes and ideas it conveys. Students will consider how the struggles, subjects, and ideas they find within these works are relevant to everyday living.

Readings include:

- “A Cub Pilot” from *Life on the Mississippi* by Mark Twain
- Selections from “Barrio Boy” by Ernest Galarza
- “No Gumption” by Russell Baker
- Selections from *I Know Why the Caged Bird Sings* by Maya Angelou

Poetry: Stories in Verse

- “Lochinvar” by Sir Walter Scott
- “The Raven” by Edgar Allan Poe
- “Annabel Lee” by Edgar Allan Poe
- “The Song of the Wandering Aengus” by William Butler Yeats
- “The Wreck of the Hesperus” by Henry Wadsworth Longfellow
- “The Creation” by James Weldon Johnson

Short Stories

- “The Glass of Milk” by Manuel Rojas
- “To Build a Fire” by Jack London
- “The Secret Life of Walter Mitty” by James Thurber
- “The Piece of String” by Guy de Maupassant
- “The Tell-Tale Heart” by Edgar Allan Poe

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- “The Lottery” by Shirley Jackson
- “The Lady or the Tiger” by Frank Stockton

Poetry: To Everything There Is a Season

- “Spring and Fall” by Gerard Manley Hopkins
- “In Just” by E.E. Cummings
- “July” by Susan H. Sweet
- “To Autumn” by John Keats
- “The Snowstorm” by Ralph Waldo Emerson
- “The Snow” by Emily Dickinson

The Bible as Literature

- Selections from Genesis: The Creation and the Fall; Cain and Abel
- Selected Psalms
- Parables: The Great Sheep, The Last Supper, The Prodigal Son
- Faith, Hope, and Charity

Poetry: Voices and Viewpoints

- “All” (Chinese poem) by Bei Dao
- “Also All” (an answer to “All”) by Shu Ting
- “Rainy Day” by Henry Wadsworth Longfellow
- “Invictus” by W. E. Henley
- “We Real Cool” by Gwendolyn Brooks
- “The Negro Speaks Rivers” by Langston Hughes
- “Mending Wall” by Robert Frost
- Sonnets 18 and 29 by William Shakespeare

Poetry of Ideas

- “I Dwell in Possibility” by Emily Dickinson
- “Will There Really Be a Morning” by Emily Dickinson
- “Ozymandias” by Percy Bysshe Shelley
- “Do Not Go Gentle Into That Good Night” by Dylan Thomas
- “The Charge of the Light Brigade” by Alfred Lord Tennyson
- “The Battle of Blenheim” by Robert Southey

Drama

- *Antigone* by Sophocles
- *Romeo and Juliet* by William Shakespeare

Autobiography (choose 1)

- *Anne Frank: The Diary of a Young Girl*
- *The Narrative of the Life of Frederick Douglass*

Novels (choose 2 during the year)

- *Animal Farm* by George Orwell
- *Jane Eyre* by Charlotte Bronte

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- *Lord of the Flies* by William Golding
- *A Separate Peace* by John Knowles
- *A Tale of Two Cities* by Charles Dickens
- *To Kill a Mockingbird* by Harper Lee
- *The Yearling* by Marjorie Kinnan Rawlings

Partial List of Skills Taught:

- Describe characters based on speech, actions, or interactions with others
- Demonstrate knowledge of authors, characters, and events of historically or culturally significant works of literature.
- Identify character traits and motivations.
- Identify and interpret allusions.
- Identify conflict and resolution.
- Identify and explain the use of irony.
- Identify and interpret figurative language.
- Identify and interpret imagery.
- Identify and interpret sensory language.
- Identify cause and effect relationships.
- Identify climax.
- Identify elements of a drama.
- Identify elements of a short story.
- Identify theme.
- Identify point of view
- Make inferences and draw conclusions.
- Recognize the effect of setting or culture on a literary work.
- Recognize use of language to convey mood
- Recognize author's attitude or tone.
- Recognize author's purpose and devices used to accomplish it, including author's language, organization, and structure.
- Recognize how point of view affects literature

COMPOSITION

This strand builds on the skills introduced in Intermediate Composition Courses. In this writing program, students continue to practice writing essays in various genres and increasingly focus on model essays from noteworthy authors. Many units use the literature lessons as a springboard and thereby reinforce the connection between reading for meaning and writing to communicate one's own ideas.

Students learn the form and structure of a variety of essays they will encounter in their academic careers including: memoirs (narrative), literary essays, compare and contrast essays, research papers, descriptive writing, and arguments.

In writing each essay, students go through a process of planning, organizing, and revising, and they learn to examine their own writing with a critical eye, paying attention to ideas, organization, structure, style, and correctness.

Throughout the course, students write in response to prompts similar to those they will encounter on standardized tests.

Memoir

- Analysis of a Memoir: Examining Mark Twain's "A Cub Pilot"
- Planning a Memoir
- Writing a Memoir I
- Writing an Memoir II
- Revising a Memoir

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- Proofreading and Publishing a Memoir

Literary Essay: Character

- What Is Literary Essay About Character?
- Planning a Literary Essay About Character
- Focusing and Organizing a Literary Essay About Character
- Writing a Literary Essay About Character
- Revising a Literary Essay About Character
- Proofreading and Publishing a Literary Essay About Character

Argument

- What Is an Argument?
- Recognizing Logical Fallacies and Emotional Appeals
- Choosing a Topic and Gathering Information
- Planning and Organizing the Argument
- Writing an Argument
- Revising an Argument
- Proofreading and Publishing an Argument

Making Us See: Description

- Seeing with the Mind's Eye I: Analysis of Excerpt from Hamlin Garland's *Boy Life on the Prairie*
- Seeing with the Mind's Eye II: Analysis of Excerpt from Henry David Thoreau's *Walden*
- Seeing with the Mind's Eye III: Analysis of an Excerpt from Annie Dillard's *Pilgrim at Tinker Creek*
- Recognizing Descriptive Language
- Planning a Descriptive Essay
- Writing a Descriptive Essay
- Polishing a Descriptive Essay

Research Paper

- What Is a Research Paper?
- Taking Notes I
- Taking Notes II
- Organizing the Information
- Writing a Research Paper I
- Writing a Research Paper II
- Creating a Works Cited Page
- Revising a Research Paper
- Proofreading and Publishing a Research Paper
- Revising
- Bibliography
- Proofreading
- Publishing

Literary Essay: Theme

- What Is a Literary Essay About Theme?
- Planning a Literary Essay About Theme
- Writing a Literary Essay About Theme
- Revising a Literary Essay About Theme
- Proofreading and Publishing a Literary Essay About Theme



Literary Essay: Compare and Contrast

- What Is a Compare and Contrast Essay About Literature?
- Planning a Compare and Contrast Essay About Literature
- Organizing a Compare and Contrast Essay About Literature
- Writing a Compare and Contrast Essay About Literature
- Polishing a Compare and Contrast Essay About Literature

Great Speeches and Oratory

- Reading, Listening to, and Analyzing a Speech I: The Gettysburg Address
- Reading, Listening to, and Analyzing a Speech I: I Have a Dream
- Planning a Speech
- Writing a Speech
- Revising a Speech
- Practicing and Delivering a Speech

GRAMMAR, USAGE, AND MECHANICS

How can a modifier be misplaced or dangling? Is there a positive to appositives? What's a gerund? The Grammar, Usage, and Mechanics (GUM) course addresses these and many other topics, with reinforcement activities in sentence analysis, sentence structure, and proper punctuation.

Students analyze syntax and diagram sentences in order to understand how words, phrases, and clauses function in relation to each other. Skills updates, frequent exercises, cumulative reviews, and regular practice help students absorb the rules so they can confidently apply them in their own writing. *The Barrett Kendall Language Handbook* provides exercises and a ready resource for grammar rules and conventions.

Sentences, Fragments, and Run-Ons

- Sentences
- Fragments
- Run-Ons

Complements

- Direct Objects and Indirect Objects
- Predicate Nominatives and Predicate Adjectives

Phrases

- Prepositional Phrases
- Misplaced Modifiers and Appositives

Verbals and Verbal Phrases

- Participles and Participial Phrases
- Gerund
- Gerund Phrases
- Infinitives and Infinitive Phrases
- Misplaced and Dangling Modifiers

Clauses

- Independent and Subordinate Clauses
- Adverb Clauses
- Adjective Clauses
- Functions of Relative Pronouns

- Noun Clauses
- Sentence Structure

Using Verbs

- Principal Parts of Verbs
- Verb Tense
- Shift in Tense
- Active and Passive Voice

Using Pronouns

- Pronoun Case
- Pronoun Problems
- Pronouns in Comparison
- Indefinite Pronoun Antecedents and Antecedent Problems

Subject and Verb Agreement

- Agreement of Subjects and Verbs
- Common Agreement Problems
- Other Agreement Problems

Using Adjectives and Adverbs

- Comparison of Adjectives and Adverbs

Capital Letters

- Capitalization
- More Capitalization

End Marks and Commas

- End Marks
- Commas That Separate
- Comma That Enclose
- More Commas That Enclose

Italics and Quotation Marks

- Uses of Italics and Quotation Marks
- Direct Quotations
- Other Uses of Quotation Marks

Other Punctuation

- Apostrophes
- Semicolons
- Colons and Hyphens
- Dashes and Parentheses

VOCABULARY

Are you implacable or placid? Are you apathetic or empathic? Though these pairs of words are nearly opposite in their meanings, they are closely related and easily defined by students who know the Latin root,—“*pacere*”—(to please) and the Greek root *pathos* (suffering). K12’s Vocabulary program uses the Vocabulary from Classical Roots program (from Educator’s Publishing Service) to build knowledge of

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Greek and Latin words that form the roots of many English words. The purpose of the program is to help students unlock the meanings of words from classical roots, not necessarily to memorize lists of difficult or obscure vocabulary words. These polysyllabic words are those that frequently cause students to stumble and often appear on standardized tests. Throughout this program, students will define and use words with Greek and Latin roots, and use word origins and derivations to determine the meaning of new words, as they increase their own vocabularies and develop valuable test-taking skills.

The Person

- Latin roots *humanas, homo, vir, ego, genos, genus, generis*
- Greek roots *anthropos; gyne, femina, autos, gens, gentis*

Personal Relationships

- Latin roots *matrix, pater, frater, avunculus, familia, uxor, puer, morior, nascor*
- Greek roots *pais, sum, esse, fui, futurum, thanatos*

Feelings

- Latin roots *amo, amicus, odium, pax, cupio, placere, placare*
- Greek roots *philos, phileo, phobos, pathos, miso, dys*

Creature Comforts

- Latin roots *domus, dominus, dormio, somnus, lavare, vestis, coquere, vorare, melis, sal, bibere, potare, ludere*

The Head

- Latin roots *caput, cerebrum, facies, frons, oris, oratum, dens, gurges*
- Greek roots *odon*

The Body

- Latin roots *caro, collum, corpus, cor, os, dorsum, nervus, sanguis, sedeo*
- Greek roots *derm, gaster*

The Hands

- Latin roots *manus, dextra, digitus, flecto, rapio, plico, prehendo, pes, gradior, ambulo, calcitro, sto, stio, sisto*
- Greek root *podos*

Online Importance:

Most lesson content is delivered online. Specialized online instructional components support the scientific content. Photo galleries and animations help students understand difficult or abstract ideas. Interactive online activities give students opportunities to review important concepts and receive immediate feedback. These activities may feature pop-up maps, interactive pictures, biography cards, and interesting Literature facts. The online content delivery and instructional activities prepare students for hands-on field or laboratory investigations.

Monitoring Student Progress:

Each ELA lesson concludes with either an online or offline assessment. The assessment generally includes four to eight questions or problems based on the lesson objectives. Questions include short answers, multiple choice, interpretation of results, as well as observational questions answered by an adult. Each unit includes a unit review and assessment delivered either online or offline. Each semester concludes with a comprehensive semester review and

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assessment. Students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

Each teacher will establish a daily contact schedule for their assigned students at a time of day that is reasonably convenient for both parties. Contacts may be asynchronous/synchronous or one-on-one/groups. The avenues of teacher initiated contact will be adjusted as determined by the progress a student makes through their learning plan. Parent- and student-initiated contact with teachers can happen at any time. The Acting Director, or their designee, will monitor the communication logs to ensure that parents are being routinely supported and informed regarding the student's ongoing progress and participation. In addition, teachers will monitor progress in mastery of objectives and lesson completion on a weekly basis. Continuous progress monitoring by the assigned teacher ensures that parents are informed on a regular basis regarding progress and participation.

Required Instructional Materials:

Materials K¹² provides:

- Online lessons and assessments
- Printed student and teacher guides
- *Classics for Young Readers*, Vol 8: Audio
- *Classics for Young Readers*, Vol 8
- *BK English Language Handbook*, Grade 8
- *Vocabulary from Classical Roots*, Book C
- *Frederick Douglass Narrative*
- *Anne Frank: Diary of a Young Girl*
- *Romeo and Juliet - new edition*

Standardized Assessment Instruments:

K12 end of lesson assessments, Study Island Benchmarks, Scantron Performance Series Adaptive tests, and STAAR.

State of Texas Assessments of Academic Readiness (STAAR) Compliancy:

Side-by-side comparisons of STAAR TEKS and the content of each course have been developed and reviewed to ensure that the online curriculum meets or exceed the STAAR.

Grading/Credit Award Criteria:

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The course grade will be determined by the Percentage of Lessons Completed and Mastered, Testing, Work Samples, Study Island Blue Ribbon Completion, and Class Connect attendance. A student will be promoted to the next grade level by meeting the 70% passing expectation. 5th and 8th graders are subject to Student Success initiative requirements, or SSI.

8th Grade Science

Course Title: TX Science 8

Prerequisite Requirements:

Course completion or grade placement.

Course Description: The eighth grade science curriculum presents the surface of the earth, water on earth, our place in space, cells for life, how plants and animals adapt, history of life on earth, matter, chemistry, force and motion, air, weather, and climate.

Unit 1: Earth's Surface Summary

Every day you feel the ground beneath you, breathe the air around you, and drink water you need to survive. Today you are starting a trip around and into planet Earth. Your trip will include journeys from the Earth's surface deep into its hot core, through its oceans, into its atmosphere, and far beyond to distant planets, stars, and galaxies.

Unit 2: Water on Earth Summary

It's a warm sunny day, a perfect day for the beach. While walking along the beach, you find a bottle that rides in on a wave. The bottle has a note in it written by someone in another country. How did this bottle travel so far?

Unit 3: Our Place in the Universe Summary

Getting smarter means discovering more and more about what's around you. Babies are only aware of their cribs, young people are aware of their immediate surroundings and adults know more about the world. In this unit you will attempt to understand your place in the entire universe.

Unit 4: Cells Summary

They're everywhere, and they control our lives. What are they?
Alien invaders? No. They are cells. They are inside us and all around us, in every living thing on earth. They are constantly growing, reproducing, communicating, and using energy. They sense, respond, and adapt to their environment. You've probably never thought much about cells, but there's much to discover about their intriguing lives.

Unit 5: Adaptation and Change Summary

Every organism lives in a particular type of environment. In this unit, we will explore how populations change over time to survive in their environments, and what happens when the environment changes.

Unit 6: Texas Science 8, Semester One Review & Assessment Summary

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Now that you have had the opportunity to explore life science and earth science, reflect on what you learned, and find out what you remember.

Unit 7: History of Life on Earth Summary

Galaxies teeming with stars. Mysterious black holes. Exploding supernovas. The far reaches of the universe are filled with wonders. Right here on our own planet, however, is perhaps the greatest wonder of all: life. Scientists currently know of no other place in the universe where life exists. This unit explores scientists' ideas about how life originated on earth and how it has changed over its long history.

Unit 8: Matter Summary

What do you know about a melting ice cube? It is cold, hard, the water is wet, and perhaps a few other things. What scientists have learned about ice and water could fill books. The ice and water are made of very small particles, called molecules, which are made of still smaller particles, called atoms.

In this unit on Matter, you will learn about the scientific discoveries that explain the nature of the materials that make up your world. You will also learn how and why these materials change.

Unit 9: Chemistry Summary

How would you describe this piece of matter? Is it spherical? Cubical? What properties might it have? The atoms that make up matter give it certain properties. In this case, the atoms that make up this grain of salt give the salt its properties. In this unit, we will explore how different types of atoms combine to form different types of substances. When different atoms join, the substances formed are compounds. Compounds have different properties, depending on their atoms.

Unit 10: Force and Motion Summary

Have you ever experienced the thrill of an amusement park ride? A roller coaster can move you in a straight line very fast before taking you up and over a hill and through corkscrew turns. The forces acting on your body seem to pull you out of your seat, toss you from side to side, or make you feel heavier than you really are. Those forces and the motion that goes along with forces are the focus of this unit.

Unit 11: Air and Waves Summary

In this unit you will explore the atmospheric layers surrounding earth. Find out how altitude, density, pressure, and temperature interact and influence weather conditions. And, if you have ever wondered how energy is transferred in waves, you'll also learn about that in this unit.

Unit 12: Texas Science 8, Semester Two Review & Assessment Summary

Now that you have had the opportunity to dig in to life science, earth science, and physical science concepts, see what you can remember.

Unit 13: Scientific Investigation. Summary

How does an infrared telescope work? What causes sodium to explode when it's put into water? How does a space satellite orbiting Mars send information back to earth?

Just how do scientists figure out answers to all of these questions? They investigate the world around them. Scientists are never satisfied with the answer, "We'll never know." They work hard to learn all they can about our world. In this unit, you will learn how to plan, develop and conduct your own scientific investigation.

Online Importance:

Most lesson content is delivered online. Specialized online instructional components support the scientific content. Photo galleries and animations help students understand difficult or abstract ideas. Interactive online activities give students opportunities to review important concepts and receive immediate feedback. These activities may feature pop-up maps, interactive pictures, biography cards, and interesting science facts.

The online content delivery and instructional activities prepare students for hands-on field or laboratory investigations.

Monitoring Student Progress:

Each science lesson concludes with either an online or offline assessment. The assessment generally includes four to eight questions or problems based on the lesson objectives. Questions include short answers, multiple choice, demonstrations, interpretation of results, as well as observational questions answered by an adult.

Each unit includes a unit review and assessment delivered either online or offline. Each semester concludes with a comprehensive semester review and assessment.

Students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

Each teacher will establish a daily contact schedule for their assigned students at a time of day that is reasonably convenient for both parties. Contacts may be asynchronous/synchronous or one-on-one/groups. The avenues of teacher initiated contact will be adjusted as determined by the progress a student makes through their learning plan. Parent- and student-initiated contact with teachers can happen at any time. The Acting Director (or designee) will monitor the communication logs to ensure that parents are being routinely supported and informed regarding the student's ongoing progress and participation.

In addition, teachers will monitor progress in mastery of objectives and lesson completion on a weekly basis. Continuous progress monitoring by the assigned teacher ensures that parents are informed on a regular basis regarding progress and participation.

Required Instructional Materials:

Materials K¹² provides:

Standard Curriculum Items

- Graduated Cylinder, 100 mL
- Safety Glasses
- Kingdoms of Life: Classification
- How Bodies Work: Animal Physiology
- Alum (2 tablespoons)
- Advanced Thermometer
- Litmus Paper

Additional Curriculum Materials

Some lessons require additional resources, including common household items, and books that are readily available online or in your local library:

- 30 Newton Spring Scale
- Clay, 4 colors
- Fine Sand (5 cups)
- Coarse Sand (3 cups)
- Pea Gravel (3 cups)
- Coarse Gravel (2 cups)
- Soil (6 cups)
- Plastic Shoe Box
- Test Tube
- Marble in a Bag

Standardized Assessment Instruments:

K12 end of lesson assessments, Study Island Benchmarks, and STAAR.

State of Texas Assessments of Academic Readiness (STAAR) Compliancy:

Side-by-side comparisons of STAAR TEKS and the content of each course have been developed and reviewed to ensure that the online curriculum meets or exceed the STAAR.

Grading/Credit Award Criteria:

The course grade will be determined by the percentage of lessons completed and mastered, testing, work samples, and Class Connect attendance. A student will be promoted to the next grade level by meeting the 70% passing expectation. 5th and 8th graders are subject to Student Success initiative requirements, or SSI.

American History A

Course Overview

The first half of a detailed two-year survey of the history of the United States, this course takes students from the arrival of the first people in North America through the Civil War and Reconstruction. Lessons integrate topics in geography, civics, and economics. Building on the award-winning series *A History of US*, the course guides students through critical episodes in the story of America. Students investigate Native American civilizations; follow the path of European exploration and colonization; assess the causes and consequences of the American Revolution; examine the Constitution and the growth of the new nation; and analyze what led to the Civil War and its aftermath.

Course Outline

The Earliest Americans

- History and *A History of US*
- Maps and Directions
- Grids (optional)
- North American Beginnings
- Cliff Dwellers
- Indians of the Northwest
- Touring the Continent
- The Plains Indians
- The Mound Builders
- The Eastern Woodland Indians

European Exploration

- Navigating Uncharted Waters
- Discovering New Lands
- Columbus Journeys On
- The Spanish Conquest
- Ponce de León and Coronado
- More Conquistadors
- The French Explore America

- From England to America

Thirteen Colonies, Part 1

- A Beginning in Virginia
- John Smith and Jamestown
- Tobacco and Turning Points
- Conflict
- Pilgrims and Promises
- What's a Puritan?
- Waterways or Waterwheels
- Thankful for Feasting (optional)

Thirteen Colonies, Part 2

- Breaks with Tradition: Roger Williams
- Breaks with Tradition: Anne Hutchinson and Mary Dyer
- Visiting Salem
- Elsewhere in New England
- The Middle Colonies
- Toleration Triumphs
- Benjamin Franklin: An American Renaissance Man
- Colonization Heads South
- A Visit to Williamsburg (optional)
- Colonial Life in the South
- Triangles of Trade

Road to Revolution

- Peter's Press (optional)
- The French and Indian War
- Looking West
- Boone Went Over the Mountain (optional)
- The Stamp of English Rights
- Give Us Liberty!
- The Boston Massacre
- The Shot Heard Round the World
- Map Skills
- A Continental Congress
- The Fighting Begins
- Will You Sign?

- Life, Liberty, and the Pursuit of Happiness

The American Revolution

- John and Abigail Adams
- Decisions
- Best Friends
- Challenges for the Continental Army
- Turning Points
- Sweet Surrender
- What Did It All Mean?

The Constitution

- Confederation and Constitutions
- The Northwest Ordinance
- Thomas Jefferson: A Man for All Time
- James Madison and a Philadelphia Summer
- An Important Compromise
- We the People
- Ratification!
- Mason Makes His Mark (optional)
- The Constitution: Branches and Balances
- The Constitution: What Does It Say?
- The Bill of Rights

A New Nation

- The Father of His Country and Ours
- The Well Resorted Tavern
- Parties and Change
- Capital Ideas
- Adams Takes the Helm
- Who Will Decide?
- The Louisiana Purchase and More
- An Expedition
- A Powerful Orator, and the Great Tekamthi (optional)
- Another War!
- By the Dawn's Early Light
- The Monroe Doctrine
- Andrew Jackson: An Uncommon Man

- The First Six Presidents (optional)

A New Age and New Industries

- Revolutionary Inventions
- Transportation and Travel
- Steaming
- Cities Grow All Around
- Mills and Mines
- Writing a Document-Based Essay

Americans Take New Land

- Write On, Sequoyah!
- Trails of Tears
- Movement and Migration
- Westward Ho!
- Shakers and Movers
- Don't Forget to Write (optional)
- Manifest Destinies
- Remember More Than the Alamo
- More and More States
- The Mexican War
- Rushing for Gold

Reform and Reflection

- Reforming a Nation
- Achieving Their Potential
- Writing in America
- Write Every Time (optional)
- Art in America
- Made in America (optional)

Slavery and Sectionalism

- Slavery in a Free Country
- Can a Compromise Work?
- Frederick Douglass: A Voice Against Slavery
- Clay, Calhoun, and Webster Speak Out
- Another Compromise

- Where is Justice?
- Not Really a Railroad Underground
- More on the Underground Railroad (optional)
- Is It Ever Okay? (optional)
- Against Slavery: Harriet Beecher Stowe
- Against Slavery: John Brown
- Abraham Lincoln: Larger Than Life

The Civil War

- An Uncivil War
- It Begins
- North Versus South
- Generals North and South
- The War Moves Out to Sea
- Through the Eyes of Mathew Brady (optional)
- Proclaiming Emancipation
- Fighting More Than a War
- Gettysburg and Vicksburg
- Important Words
- Almost Over
- Hope and Sorrow

Reconstruction

- Tragedy
- Now What?
- High Hopes
- Guarantees
- Write About It
- New Era, New President
- Executive Efforts
- Legislative Labors
- Single-Minded Stevens
- A President on Trial
- Turning Back

Number of Lessons and Scheduling

60 minutes

Total Lessons: 180

Materials

Standard Curriculum Items

- US/World map (3–5)
- *Map Skills and Our World* (Level 5)
- *A History of US* (Concise Edition) by Joy Hakim
Volume A: Prehistory to 1800
Volume B: 1790 to 1877
- American History A Student Guide
- American History A Learning Coach Guide

Eighth Grade Art

Course Title: Intermediate Art: World B

Prerequisite Requirements:

Course completion or grade placement.

Course of Instruction/Lesson Description:

Intermediate Art: World B is designed to complement the World History: Our Modern World, 1400 to 1917 course. Following the timeline of the K¹² History program, lessons introduce students to the artists, cultures, and great works of world art and architecture from Renaissance through modern times.

- Study and create various works of art from the Renaissance and beyond
- Discover great works of art and see how they influenced later artists
- Compare and contrast works from many civilizations, from paintings to sculpture, architecture, book covers, prints, and more
- Analyze how artists use elements like color and shape, and principles like balance and pattern, to create pleasing designs and compositions
- Study the various techniques and processes to produce different effects in drawings, paintings, prints, and sculptures
- Learn how artists decorate objects like book covers, wallpaper, and fabrics
- Create artworks inspired by works they learn about, using many materials and techniques; for example, after studying the Tempietto by Bramante and Fallingwater by Frank Lloyd Wright, students design their own model of a building. And after studying expressive portrait paintings by Rembrandt, Judith Leyster, and Pablo Picasso, they make expressive self-portraits

Course Outline

Renaissance and Beyond

- Recognize that artworks with similar characteristics are grouped into periods or styles
- Identify characteristics of Italian Renaissance art in works by Sandro Botticelli, Leonardo da Vinci, Michelangelo, and Raphael
- Identify events in the life of Raphael and characteristics of his art
- Identify the use of one-point and atmospheric perspective in paintings
- Identify characteristics of Northern Renaissance art in works by Albrecht Dürer and Pieter Brueghel the Elder
- Identify ways Renaissance artists were inspired by the ideals of Classical art
- Compare and contrast Renaissance and Baroque sculpture by Michelangelo and Bernini
- Identify ways the arts from Africa, China, and the Islamic world influenced artists and patrons of Renaissance Europe

Eye on Design

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- Identify ways Jean-Baptiste-Siméon Chardin, Paul Gauguin, André Derain, and Mark Rothko use color in paintings
- Compare and contrast the use of color in Naturalistic and Fauve art in works by Jean-Baptiste-Siméon Chardin and André Derain
- Identify ways Edgar Degas, Utagawa Hiroshige, and Giacomo Balla show movement in artworks
- Recognize that artists use the elements of art and principles of design in artworks
- Identify ways African and Japanese artists use the elements of art and principles of design in their art
- Identify compositional characteristics in paintings by Diego Velázquez and Titian

It's All in the Technique

- Recognize that artists use various techniques to produce different effects in their drawings
- Identify techniques used in drawings by Michelangelo, Leonardo da Vinci, and Vincent van Gogh
- Identify techniques used in paintings by John James Audubon, Pierre-Auguste Renoir, and Paul Signac
- Compare and contrast techniques used in Naturalistic and Impressionist paintings in works by John James Audubon and Pierre-Auguste Renoir
- Identify techniques used in prints by Albrecht Dürer, Henri de Toulouse-Lautrec, and Andy Warhol
- Identify techniques used in sculptures by Donatello, Michelangelo, Auguste Rodin, and Marisol Escobar

Themes in Art: The Artist's Vision

- Recognize that artists have different ways of portraying the same theme or subject
- Identify characteristics of portraits by Rembrandt, Judith Leyster, and Pablo Picasso
- Identify characteristics of landscapes by Thomas Cole, Vincent van Gogh, Shen Zhou, and Ansel Adams
- Identify events in the life of Pablo Picasso or characteristics of his art
- Describe characteristics of Cubist art in works by Pablo Picasso

Function and Beauty

- Identify characteristics of book covers made by Islamic, French, and Russian artists
- Identify ways artists add beauty to functional objects
- Identify events in the life of William Morris, and characteristics of his art

Online Importance:

K¹²'s Art program provides step-by-step guidance in each lesson. Many lessons begin by presenting a concept (for example, how shapes are used in artworks) and showing artworks for the student to examine. To get the full benefit of this part of the lesson, in which the artworks appear on-screen, the student will need to be at a computer. Once the student has finished this part of the lesson and is ready to turn to a hands-on project, most of the teaching and learning takes place away from the computer.

Important activities are available only online, such as art computer animations, magnifying tools, and online galleries of artworks. The skills and concepts reinforced through online activities are key to understanding art concepts presented in the lessons.

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Each lesson provides clear, detailed instructions for each activity online. Most of the art program is delivered with the help of a Teacher Guide, which provides the teacher with an outline of the lesson as well as information about assessment and supplemental material. The Teacher Guide is available as a printed material as well as online.

Some lessons have a Student Guide that leads the student through the lesson. The Student Guide is available as printed material as well as online.

Monitoring Student Progress:

Each art lesson will be marked complete once the student finishes the online and offline lesson components. Students and parents can access student-specific screens to determine progress in the number of lessons completed. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

Each teacher will establish a daily contact schedule for their assigned students at a time of day that is reasonably convenient for both parties. Contacts may be asynchronous/synchronous or one-on-one/groups. The avenues of teacher-initiated contact will be adjusted as determined by the progress a student makes through their learning plan. Parent- and student-initiated contact with teachers can happen at any time. The Acting Director, or their designee, will monitor the communication logs to ensure that parents are being routinely supported and informed regarding the student's ongoing progress and participation.

In addition, teachers will monitor progress in mastery of objectives and lesson completion on a weekly basis. Continuous progress monitoring by the assigned teacher ensures that parents are informed on a regular basis regarding progress and participation.

Required Instructional Materials:

Standard Curriculum Items

- Art Print Kit - intermediate Art World B

Additional Curriculum Items

Some lessons require additional resources, including common household items, and books that are readily available online or in your local library:

- Acrylic Paint Set
- Paintbrush, Acrylic, Small #1
- Paintbrush, Acrylic, Medium #4
- Paintbrush, Acrylic, Large #8
- Clay, White, Self-hardening

NOTE: List subject to change.

Standardized Assessment Instruments:

K12 end of lesson assessments

State of Texas Assessment of Academic Readiness (STAAR) Compliancy:

Side-by-side comparisons of STAAR TEKS and the content of each course have been developed and reviewed to ensure that the online curriculum meets or exceed the STAAR.

Grading/Credit Award Criteria:

The course grade will be determined by the Percentage of Lessons Completed and Mastered and Work Samples. A student will be promoted to the next grade level by meeting the 70% passing expectation.

Physical Education 8

Prerequisite Requirements:

Course completion or grade placement.

Course of Instruction/Lesson Description:

In the Physical Education program students acquire the knowledge and skills for movement that provide the foundation for enjoyment, continued social development through physical activity, and access to a physically active lifestyle. The student exhibits a physically active lifestyle and understands the relationship between physical activity and health throughout the lifespan.

Major course expectations include the following:

Students will:

- Demonstrate competency in fundamental movement patterns and proficiency in a few specialized movement forms.
- Apply movement concepts and principles to the learning and development of motor skills.
- Exhibit a health-enhancing, physically active lifestyle that provides opportunities for enjoyment and challenge.
- Know the benefits from being involved in daily physical activity and factors that affect physical performance.
- Understand and apply safety practices associated with physical activities.
- Understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance, and gymnastics.
- Develop positive self-management and social skills needed to work independently and with others in physical activity settings.

Lesson Numbers/Duration:

180 total.

Online Importance:

K¹²'s Physical Education program provides step-by-step guidance in each lesson that provides detailed instructions for each online and offline activity. Activity Instructions provide an outline of the lesson as well as information about assessment and supplemental material. Activity Instructions are available to print from the Online Lesson.

Monitoring Student Progress:

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Physical education lessons end with an assessment. The assessment generally includes two or more questions or problems based on the lesson objectives.

Students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

Each teacher will establish a daily contact schedule for their assigned students at a time of day that is reasonably convenient for both parties. Contacts may be asynchronous/synchronous or one-on-one/groups. The avenues of teacher-initiated contact will be adjusted as determined by the progress a student makes through their learning plan. Parent- and student-initiated contact with teachers can happen at any time. The Acting Director, or their designee, will monitor the communication logs to ensure that parents are being routinely supported and informed regarding the student's ongoing progress and participation.

In addition, teachers will monitor progress in mastery of objectives and lesson completion on a weekly basis. Continuous progress monitoring by the assigned teacher ensures that parents are informed on a regular basis regarding progress and participation.

Required Instructional Materials:

Materials K¹² provides:

Spectrum 10" Ball w/ Pump

Accusplit Alliance AL 1590 Pedometer

Beaded Rope 9'

Standardized Assessment Instruments:

K12 End of Lesson Assessments

State of Texas Assessment of Academic Readiness (STAAR) Compliancy:

Side-by-side comparisons of STAAR TEKS and the content of each course have been developed and reviewed to ensure that the online curriculum meets or exceeds the STAAR.

Grading/Credit Award Criteria:

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The course grade will be determined by the Percentage of Lessons Completed and Mastered and Work Samples. A student will be promoted to the next grade level by meeting the 70% passing expectation.

Health & Fitness 8

Prerequisite Requirements:

Course completion or grade placement.

Course of Instruction/Lesson Description:

In the Health & Fitness program students acquire the health information and skills necessary to become healthy adults and learn about behaviors in which they should and should not participate.

Major course expectations include the following:

Students will:

Unit 1: Learning About Your Health

All aspects of your life play a role in your health. Healthy choices and responsible behavior are key to an overall sense of well-being.

- What is Health?
- Health Risks and Your Behavior

Unit 2: Taking Responsibility for Your Health

Take responsibility for your own health by developing health skills, making responsible decisions and learning to set goals.

- Building Health Skills
- Making Responsible Decisions
- Setting Personal Health Goals
- Your Character In Action

Unit 3: Physical Activity and Fitness

Physical activity can greatly benefit your health. Let's explore some of the systems in your body that benefit most from staying fit, and then learn how to develop your own plan for a healthy fitness regimen.

- Building Health Skills
- Making Responsible Decisions

- Setting Personal Health Goals
- Your Character in Action

Unit 4: Food and Nutrition

When it comes to our bodies, food is fuel. The food you choose to eat will have a direct effect on your level of energy and good health, so learn to choose wisely.

- Nutrients for Health
- The Food Guide Pyramid
- Healthful Meals and Snacks
- The Digestive and Excretory Systems
- Managing Your Weight

Unit 5: Personal Health and Consumer Choices

Let's explore the variety of ways to care for your personal health, including good hygiene and the choices that you make as a consumer.

- Caring for Your Teeth, Skin, Hair, and Nails
- Caring for Your Eyes and Ears
- Consumer Choices and Your Health
- Being an Informed Consumer
- Health Care Providers and Services

Unit 6: Growth and Development

The human body grows and develops throughout a lifetime. Let's explore the changes to your body during adolescence.

- Adolescence
- The Male Reproductive System
- The Female Reproductive System
- Human Development
- Making the Most of Your Teen Years

Unit 7: Mental and Emotional Health

A person who has a positive outlook on life and the ability to bounce back from difficult situations is generally thought to be in good mental and emotional health. Let's explore other factors that shape who you are, and contribute to your state of emotional well-being.

- What is Mental and Emotional Health?
- Your Emotions
- Managing Stress
- Mental and Emotional Problems

Unit 8: Social Health: Family and Friends

Good communication skills are at the root of healthy social relationships. For example, almost everyone appreciates a chance to speak her or her mind to a peer who is a good listener.

- Developing Communication Skills
- Understanding Family Relationships
- Friendships and Peer Pressure
- Abstinence and Refusal Skills

Unit 9: Resolving Conflicts and Preventing Violence

Even friends who have similar interests and beliefs experience conflict from time to time. Sometimes conflict can grow into an argument, and even violence. Let's explore common causes of conflict and ways to resolve them peacefully.

- Conflicts at Home and at School
- Preventing Violence
- Dealing with Abuse and Finding Help

Unit 10: Tobacco

Smoking has a devastating effect on the respiratory system that cannot be repaired. Learn what you can do to protect your lungs and your life.

- What Tobacco Does to the Body
- Teens and Tobacco Addiction
- Avoiding Tobacco

Unit 11: Drugs and Alcohol

Teenagers are faced with critical decisions about the use of drugs and alcohol. Let's explore the safe use of medications, as compared to drug and alcohol use and abuse.

- Using Medicines Safely
- Alcohol Use and Abuse

- Drug Use and Abuse
- The Nervous System
- Avoiding Alcohol and Other Drugs

Unit 12: Understanding Communicable Diseases

A communicable disease can spread from one person to another, and is caused by germs called pathogens.

- Causes of Communicable Diseases
- The Immune System
- Communicable Diseases
- Sexually Transmitted Diseases and HIV/AIDS

Unit 13: Noncommunicable Diseases

Noncommunicable diseases cannot spread from one person to another, and are usually caused by changes to the body. Some of these diseases, like cerebral palsy, are present at birth. Others, like certain allergies, are caused by a behavior such as smoking or exposure to a toxic chemical in the environment. Still others have causes that are yet unknown.

- Understanding Allergies and Asthma
- Understanding Cancer
- Understanding Heart Disease
- Understanding Diabetes and Arthritis

Unit 14: Personal Safety and Injury Prevention

Safety rules have always been a part of your education, from the time you were first taught to look both ways before crossing the street. Now that you're older, it's important to learn more complex safety rules and techniques, such as First Aid.

- Developing Safe Habits
- Outdoor and Recreational Safety
- Weather Emergencies and Natural Disasters
- First Aid

Unit 15: The Environment and Your Health

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Everyone and everything around you make up your environment. That means that the health of the environment has a direct relation to your own personal well-being.

- How Pollution Affects Your Health
- Protecting the Environment

Lesson Numbers/Duration:

79 OLS Lessons, 6 Blackboard Lessons

Online Importance:

K¹²'s Health and Fitness program provides step-by-step guidance in each lesson that provides detailed instructions for each online and offline activity. Activity Instructions provide an outline of the lesson as well as information about assessment and supplemental material. Most Activity Instructions are available to print from the Online Lesson.

Monitoring Student Progress:

Most health lessons end with an assessment. The assessment generally includes two or more questions or problems based on the lesson objectives.

In most cases, students and parents can access student-specific screens to determine (1) progress in the number of lessons completed, (2) the lesson assessment (percentage mastered), (3) the semester assessment (percentage mastered), and (4) the number of times the student has taken the assessment instruments. Families who enroll their children in the eCP program have the benefit of help and guidance from an experienced teacher. The teacher will contact students daily through email and phone conferences. Consistent progress monitoring by the teacher will be utilized throughout the project period.

Schedule for Monitoring Student Progress:

Each teacher will establish a daily contact schedule for their assigned students at a time of day that is reasonably convenient for both parties. Contacts may be asynchronous/synchronous or one-on-one/groups. The avenues of teacher-initiated contact will be adjusted as determined by the progress a student makes through their learning plan. Parent- and student-initiated contact with teachers can happen at any time. The Acting Director, or their designee, will monitor the communication logs to ensure that parents are being routinely supported and informed regarding the student's ongoing progress and participation.

In addition, teachers will monitor progress in mastery of objectives and lesson completion on a weekly basis. Continuous progress monitoring by the assigned teacher ensures that parents are informed on a regular basis regarding progress and participation.

Required Instructional Materials:

Materials K¹² provides:

Student Textbook

Standardized Assessment Instruments:

K12 End of Lesson Assessments

State of Texas Assessment of Academic Readiness (STAAR) Compliancy:

Side-by-side comparisons of STAAR TEKS and the content of each course have been developed and reviewed to ensure that the online curriculum meets or exceeds the STAAR.

Grading/Credit Award Criteria:

The course grade will be determined by the Percentage of Lessons Completed and Mastered and Work Samples. A student will be promoted to the next grade level by meeting the 70% passing expectation.