10th Grade LANGUAGE ARTS

Tenth grade students study Old English, Middle English, Early Modern English, and Late Modern English. They learn suffixes, prefixes, roots, changing connotations, and problems in diction. Students learn paragraph order, develop paragraphs, and create unity in paragraphs. Students demonstrate speeches including manuscript, memorized, impromptu, and extemporaneous. Students learn to write an introduction, complete the structure of an argument, and apply amplification and conclusion to their speeches. They learn to give interviews, listen actively, and note taking techniques. Tenth grade students learn the history of radio, television, motion pictures, and newspapers. They complete book reports throughout the year based on novels read in many different genres including science fiction, mystery, humor, adventure, tragedy, and drama.

E1001
Chapter 1: History of English
Section 1: Old English
Section 2: Middle English
Section 3: Early Modern English
Section 4: The Great Vowel Shift
Section 5: Late Modern English
Chapter 2: Structure and Development of Words
Section 1: Prefixes
Section 2: Suffixes
Section 3: Roots
Section 4: Words From Mythology
Section 5: Changing Connotations
Chapter 3: Word Choice
Section 1: Problems in Diction
Section 2: a Usage Glossary
E1002
Literature
E1003
Chapter 1: Writing a Speech
Section 1: Organizing the Body of a Speech
Section 2: Writing an Introduction
Section 3: Structure of an Argument
Section 4: Amplification and Conclusion
Chapter 2: Speech Presentation
Section 1: Voice
Section 2: Body
Section 3: Visual Aids
Section 4: Guidelines For Visual Aids
Chapter 3: Methods of Speaking
Section 1: Extemporaneous Speeches
Section 2: Manuscript Speeches
Section 3: Memorized Speeches
Section 4: Impromptu Speeches
E1004
Literature
E1005
Chapter 1: Researching Speeches
Section 1: Knowing the Audience
Section 2: Brainstorming Topics
Section 3: Narrowing the Topic
Section 4: Finding the Speech Purpose
Section 5: Special Occasion Speeches
Chapter 2: Speech Analysis
Section 1: Speech Language
Section 2: Analyzing a Speech
Chapter 3: Listening Abilities
Section 1: Giving Interviews
Section 2: Listening and Appreciation
Section 3: Listening Actively
Section 4: Note-Taking Techniques
E1006
Literature
E1007
Chapter 1: The Media
Section 1: A History of Radio and Television
Section 2: A History of Motion Pictures and Newspapers
Section 3: Running a Radio Station
Section 4: Making a Program
Chapter 2: Vocabulary
Section 1: Using Definitions
Section 2: Using Contexts and Examples
Section 3: Using Comparisons and Series
Section 4: Using Roots
Section 5: Memorizing Vocabulary
Chapter 3: Spelling
Section 1: Suffixes
Section 2: More On Suffixes
Section 3: Silent -E and Double Consonants
Section 4: A Glossary of Problem Words
E1008
Literature
E1009
Chapter 1: Writing Paragraphs
Section 1: Kinds of Paragraphs
Section 2: Topic Sentences
Section 3: Paragraph Order
Section 4: Developing a Paragraph
Section 5: Unity in a Paragraph
Chapter 2: Revising
Section 1: Misplaced Modifiers
Section 2: Dangling and Squinting Modifiers
Section 3: Parallel Structure
Section 4: Proofreading
Chapter 3: Forms of English
Section 1: Vocabulary
Section 2: Standard and Non-Standard English
Section 3: Informal and Formal English
Section 4: Spelling

E1010
Chapter 1: Literary Genres
Section 1: Science Fiction
Section 2: Mystery
Section 3: Humor
Section 4: Adventure
Chapter 2: Forms of Drama
Section 1: Tragedy
Section 2: Comedy
Section 3: Drama
Chapter 3: English Skills
Section 1: Vocabulary
Section 2: Spelling
Section 3: Sentence Shifts

10th Grade MATHEMATICS (Algebra II)

Tenth grade students add, subtract, multiply and divide polynomials. They work with complex fractions, ratios, and proportions. Students study the basics of quadratic equations, the square root method, and solving absolute value equations. Students learn about linear inequality, graphing linear inequalities, applying systems of linear inequalities, and addition and multiplication properties of linear inequalities. Tenth grade students study logarithms and antilogarithms and how to work these problems on a calculator. They study Pascal's Triangle and the The Binomial Theorem. Students make and interpret scatter plots, as well as parabola basics and graphing parabolas.

M1001
Chapter 1: Expressions: Rational/Operations
Section 1: Rational Expressions
Chapter 2: Polynomials: Proficient/Operations
Section 1: Understanding the Language of Polynomials
Section 2: Adding & Subtracting Polynomials
Section 3: Ascending and Descending Order
Section 4: Multiplying Monomials & Polynomials
Section 5: Dividing Polynomials
Chapter 3: More Rational Expressions & Polynomial Work
Section 1: Synthetic Division
Section 2: Working with Complex Fractions
Section 3: Solving Rational Equations
Section 4: Ratios and Proportions
Section 5: Direct, Inverse, and Joint Variations
M1002
Chapter 1: Exponents and Radicals
Section 1: Rational Exponents
Section 2: Radicals & Roots with Absolute Values
Section 3: Simplifying Radicals
Section 4: Adding & Subtracting Radical Expressions
Section 5: Multiplying and Dividing Radical Expressions
Chapter 2: Quadratics in One Variable
Section 1: The Basics of Quadratic Equations
Section 2: Solving Quadratics by Factoring
Section 3: Complex & Imaginary Numbers
Section 4: Quadratic Equations with Non- Real Solutions
Section 5: The Square Root Method
Section 6: Graphing/Plotting Imaginary/Complex Numbers
Chapter 3: More Quadratics
Section 1: Completing the Square
Section 2: The Quadratic Formula
Section 3: The Discriminant
Section 4: Checking Quadratic Equation Solutions
M1003
Chapter 1: Absolute Values
Section 1: Solving Absolute Value Equations
Section 2: Solving Linear Inequalities
Section 3: Compound Inequalities
Section 4: Absolute Value Inequalities
Chapter 2:
Section 1: Rectangular Coordinate System
Section 2: Distance Formula & Pythagorean Theorem
Section 3: Midpoint Formula
Section 4: Slope of a Line
Chapter 3:
Section 1: Graphing Equations of Lines
Section 2: Linear Equation Format and X&Y Intercepts
Section 3: Point-Slope Form of the Equation of a Line
Section 4: Slope-Intercept Form of the Equation of a Line
M1004
Chapter 1: Graphs of Linear Inequalities
Section 1: What is a Linear Inequality?
Section 2: Graphing Systems of Inequalities
Section 3: Applying Systems of Linear Inequalities
Section 4: Properties of Inequalities
Chapter 2: Linear Sentences in Two Variables
Section 1: Linear Equations: Solutions Using Graphing
Section 2: Dependent and Inconsistent Systems
Section 3: Solving Systems of Equations by Substitution
Section 4: Solving Linear Equations Using Eliminations
Chapter 3: Matrices
Section 1: an Introduction to Matrices
Section 2: Adding and Subtracting Matrices
Section 3: Scalar Multiplication of Matrices
Section 4: Multiplying Matrices
M1005
Chapter 1: More Work with Matrices
Section 1: Augmented, Coefficient, and Constant Matrices
Section 2: Gaussian Elimination Format
Section 3: Solving Linear Equation Systems Using Matrices
Section 4: Variables Do Not Match the Number of Equations
Chapter 2: Determinants
Section 1: A History Lesson of Matrices and Determinants
Section 2: Determinants

Section 3: Cramer's Rule
Section 4: Third-Order Determinants
Chapter 3: More On Matrices
Section 1: Identity Matrices
Section 2: Inverse Matrices
Section 3: Inverses For 3 X 3 Matrices
Section 4: Practice, Practice, Practice
M1006
Chapter 1: Logarithms and Exponential Functions & Equations
Section 1: A History of Logarithms
Section 2: What is a Logarithm?
Section 3: Exponential Functions
Section 4: Logarithmic Functions
Chapter 2: Logarithmic & Exponential Functions and Equations
Section 1: The Nuts and Bolts of Logarithms
Section 2: The Logarithm Table
Section 3: Antilogarithms
Section 4: Logarithm and Antilogarithm Problems
Chapter 3: Natural Logarithms
Section 1: Solving Natural Logarithms
Section 2: Solving Exponential and Logarithmic Equations
Section 3: Changing Bases and Simplifying Natural Logarithms
Section 4: Proving the Laws of Logarithms
Section 5: Some Logarithm Problems
M1007
Chapter 1: Factoring – Part 1
Section 1: Factoring Natural Numbers
Section 2: Finding the Greatest Common Factors
Section 3: Factoring Monomials
Section 4: Factoring the Difference of Two Squares
Chapter 2: Factoring – Part 2
Section 1: Factoring Out a Polynomial
Section 2: Factoring by Grouping
Section 3: Factoring the Sum Or Difference of Cubes
Section 4: Factoring Trinomials with Lead Coefficients of 1
Chapter 3: Factoring Higher Level Expressions
Section 1: Factoring Trinomials of the Form $ax^2 + bx + c$
Section 2: Factoring Square Trinomials
Section 3: Solving Equations by Factoring
Section 4: Review For You Before Your Test
M1008
Chapter 1: Even More Factoring
Section 1: Pascal's Triangle
Section 2: Factorials
Section 3: The Binomial Theorem
Section 4: Binomial Coefficients and Combinations
Chapter 2: Arithmetic Sequences and Series
Section 1: Sequences
Section 2: Arithmetic Sequences
Section 3: Arithmetic Means
Section 4: Arithmetic Series and Summation
Chapter 3: Geometric Sequences and Series
Section 1: Geometric Sequences
Section 2: Geometric Means
Section 3: Finite Geometric Series
Section 4: Infinite Geometric Series
M1009
Chapter 1: Functions
Section 1: Function Notation and Operations
Section 2: Relations and Functions
Section 3: Discrete and Continuous Functions
Section 4: Composite Functions
Chapter 2: More On Functions
Section 1: Inverse and Identity Functions
Section 2: Graphing Linear Polynomial Functions
Section 3: Graphing Rational Functions
Section 4: Practice Exercises to Help You
Chapter 3 : More Functions
Section 1: Quadratic Functions
Section 2: Exponential Functions
Section 3: Translations of Graphs of Functions
Section 4: Logarithmic Functions
M1010
Chapter 1: Basic Statistics
Section 1: Ways to Measures Central Tendency
Section 2: Graphs of Central Tendency
Section 3: Making Scatter Plots
Section 4: Interpreting Scatter Plots
Chapter 2: More Statistics
Section 1: Ways to Measure Variation in Data
Section 2: Standard Deviations
Section 3: The Normal Distribution
Section 4: Direct, Inverse, Joint and Combined Variation
Chapter 3: Permutations, Combinations & Probabilities
Section 1: Permutations
Section 2: Combinations
Section 3: Probability Or Odds
Section 4: Adding and Multiplying Probabilities

10th Grade SCIENCE (Biology)

Tenth grade students study the beginning of biology, the attributes of life, and the meaning of science. They study matter, acids, bases, buffers, energy, lipids and proteins. They study differentiation of cells, sexual reproduction, linked genes and traits, incomplete and multiple gene inheritance, and sex linked genes. Students learn about DNA and DNA structure, protein construction, mutations, pedigrees, and the Human Genome Project. Tenth grade students study the foundation of body systems including the nervous system, endocrine system, reproductive system, digestive system, excretory system, and muscular system. They record and analyze observations, conduct calculation, use tables and graphs, apply concepts, formulate hypothesis, and design experiments.

S1001
Chapter 1: Foundations of Biology
Section 1: Is Truth Public Opinion? Or Faith?
Section 2: Is Truth Procedures and Methods That Work?
Section 3: Is Truth Repeated Observations? Or Logic?
Chapter 2: Scientific Approach of Biology
Section 1: What is Science?
Section 2: Procedure of the Scientific Method
Section 3: The Limitations of Science.
Chapter 3: History of Biology
Section 1: The Beginning of Biology
Section 2: Modern Science
Section 3: Advances in Biology
S1002
Chapter 1: Nature of Living Things
Section 1: Divisions of Science
Section 2: The Attributes of Life
Section 3: Biological Research Technology and Measurement
Chapter 2: The Chemistry of Life
Section 1 Matter
Section 2: Acids, Bases and Buffers
Section 3: Energy
Chapter 3: Molecules of Life
Section 1: Carbon and Carbohydrates
Section 2: Lipids and Proteins
Section 3: Nucleic Acids
S1003
Chapter 1: Life Science
Section 1: Life Science: One Branch of Science
Section 2: The Scientific Method
Section 3: Tools of the Scientist
Chapter 2: Cells: Design and Function
Section 1: Discovering Variety
Section 2: Cell's Complex Design
Section 3: Designed to Work
Chapter 3: Life Processes in Cells
Section 1: Maintenance and Survival
Section 2: Active Transport and Movement
Section 3: Reproduction and Death
S1004
Chapter 1: Continuity of Life
Section 1: Asexual Reproduction
Section 2: Differentiation of Cells
Section 3: Sexual Reproduction
Chapter 2: Patterns of Inheritance
Section 1: Mendel's Rules
Section 2: Exceptions to the Law of Dominance
Section 3: Linked Genes and Traits
Chapter 3: Human Genetics
Section 1: Genotype-Phenotype and Dominance
Section 2: Incomplete and Multiple Gene Inheritance
Section 3: Sex-Linked Genes and Other Exceptions
S1005
Chapter 1: DNA Genetic Controller
Section 1: Discovering DNA
Section 2: Cell – Nucleus – DNA
Section 3: DNA'S Structure
Chapter 2: DNA At Work
Section 1: Replication, Transcription & Translation
Section 2: Protein Construction
Section 3: Mutations and Pedigrees
Chapter 3: Genetic Engineering – Mapping Genes – Diversity
Section 1 Genetic Engineering
Section 2: The Human Genome Project
Section 3: Environmental Influences
S1006
Chapter 1: Theories
Section 1: Theories and the Scientific Method
Section 2: Historical View
Section 3: Charles Darwin
Chapter 2: Evolution and Special Creation
Section 1: Origin of Life
Section 2: Origin of Man
Section 3: Fossils and the Geologic Column

Section 4: Missing Links/Transitional Forms
Chapter 3: More Evidence
Section 1: Human Evolution
Section 2: Cells, Genetics and Mutations
Section 3: Scientific Principles and Practices
S1007
Chapter 1: Our Body Systems
Section 1: Activity of Body Systems
Section 2: Principles of Human Physiology
Section 3: Foundation of Body Systems
Chapter 2: Neurons and Hormones
Section 1: Nervous System
Section 2: Endocrine System
Section 3: Reproductive System
Chapter 3: Enzymes At Work
Section 1: Digestive System
Section 2: Excretory System
Section 3: Muscular System
S1008
Chapter 1: Whole Body Systems
Section 1: Skeletal System
Section 2: Circulatory System
Section 3: Respiratory System
Chapter 2: Body Defense Systems
Section 1: Lymphatic System
Section 2: Immune System
Section 3: Integumentary System
Chapter 3: Germ War
Section 1: Bacteria and Virus
Section 2: Bubble Boy
Section 3: Gene Therapy
S1009
Chapter 1: Scope of Ecology
Section 1: Definition of Ecology
Section 2: Ecosystem Factors
Section 3: Major Biomes
Chapter 2: Ecosystems At Work
Section 1: Energy Flow of Ecosystems
Section 2: Water, Carbon, and Nitrogen Cycles
Section 3: Energy Pyramid
Chapter 3: Predicting Problems
Section 1: Biodiversity
Section 2: Fluctuations in Population Size
Section 3: Signs of Stress
S1010
Chapter 1: Observations
Section 1: Recording Observations
Section 2: Analyzing Observations
Section 3: Conducting Calculations
Chapter 2: Making Judgments
Section 1: Comparing and Contrasting
Section 2: Using Tables and Graphs
Section 3: Making an Inference
Chapter 3: Designing an Experiment
Section 1: Applying Concepts
Section 2: Formulating a Hypothesis
Section 3: Designing and Experiment

10th SOCIAL STUDIES (World History)

Tenth grade students study ancient empires including Egypt, India, Greece, and Rome. They study Judaism and Christianity, and Greek and Roman philosophy and religion. Students study the making of nations including England, France, Spain, and Russia. They learn about the American and French Revolution, the English Bill of Rights, and The French Declaration of Rights of Man and the Citizen. Tenth grade students study The Russian Revolution, the Nazis of Germany, and allied leaders. Students learn the ten steps to writing a term paper, from selecting a topic, to conducting research and recording the location of your sources, to writing your final draft paper.

SS1001
Chapter 1: Beginning of Civilization
Section 1: Introduction
Section 2: The Fertile Crescent: Sumer
Section 3: Empires
Section 4: Israel
Chapter 2: Ancient Civilizations
Section 1: Ancient Egypt and Other African Cultures
Section 2: Ancient India, China and Other Asian Cultures
Section 3: Ancient Greece
Section 4: Ancient Rome and the Roman Empire
Chapter 3: Ancient Philosophy and Religion
Section 1: Greek Philosophy and Religion
Section 2: Roman Philosophy and Religion
Section 3: Judaism
Section 4: Christianity

SS1002
Chapter 1: Early Middle Ages
Section 1: The Roman Empire Divided
Section 2: The Rise of Religions in the Middle Ages
Section 3: The Byzantine Empire
Section 4: The Road to Feudalism
Chapter 2: High Middle Ages
Section 1: Medieval Life and the Age of Chivalry
Section 2: Crusades: The March Against Islam
Section 3: The Making of Nations: England and France
Section 4: The Making of Nations: Spain and Russia
Chapter 3: The Birth of New Ideas
Section 1: Renaissance
Section 2: Reformation
Section 3: Exploration
Section 4: Science

SS1003
Chapter 1: Era of Changes
Section 1: Transition to Modern Times
Section 2: Kings, Queens and Absolute Monarchs
Section 3: Age of Enlightenment
Section 4: Period of Awakenings
Chapter 2: Revolutions
Section 1: The Road to Revolutions
Section 2: The Glorious Revolution of England
Section 3: The American Revolution
Section 4: The French Revolution and Napoleon
Chapter 3: Important Documents in History
Section 1: Magna Carta
Section 2: English Bill of Rights
Section 3: American Documents

Section 4: The French Declaration of
Rights of Man and the Citizen
SS1004
Chapter 1: The Industrial Revolution
Section 1: The Beginning of the
Revolution: Great Britain
Section 2: Inventions and Discoveries
Section 3: The Revolution Spreads to Other Countries
Section 4: Men of Discovery
Chapter 2: Romanticism
Section 1: Romanticism's Characteristics
Section 2: Romanticism in Literature
Section 3: Romanticism in Art
Section 4: Romanticism in Music
Chapter 3: Expansion Beyond Native Shores
Section 1: Imperialism and Colonialism
Section 2: Nations and Their Frontiers
Section 3: Impact of Imperialism in the
World: The Colonized
SS1005
Chapter 1: World War I
Section 1: Declaring War
Section 2: The Course of the War
Section 3: The War's Impact
Section 4: The War's End
Chapter 2: The Rise of Totalitarianism
Section 1: Russian Revolution
Section 2: Italy and Fascism
Section 3: The Nazis of Germany
Section 4: Joseph Stalin
Chapter 3: World War Ii
Section 1: The Outbreak of War
Section 2: The Course of the War
Section 3: War's End
Section 4: Allied Leaders
SS1006
Chapter 1: The Modern World
Section 1: Treaties and Pacts
Section 2: The Cold War
Section 3: Uprisings
Chapter 2: Nation-Building
Section 1: The Middle East
Section 2: Africa
Section 3: Latin America
Section 4: China
Chapter 3: The Atomic Age
Section 1: a Global Economy
Section 2: The Space Race
Section 3: The Revolution in Telecommunications
SS1007
Chapter 1: World Geography—Continents of the World
Section 2: Location
Section 3: Place
Section 4: Human-Environment
Interactions
Section 5: Movement
Section 6: Regions
Section 7: Continents
Section 8: Oceans
Chapter 2—Maps and Globes
Section 1: Lines of Latitude
Section 2: Lines of Longitude
Section 3: Coordinate Locations On a Grid
Section 4: Hemispheres
Section 5: Map Projections
Section 6: Mercator Projection
Section 7: Mollweide Projection
Section 8: Robinson Projection
Section 9: Azimuthal Projection
Section 10: Sinusoidal Projection
Section 11: Other Projections
SS1008
Chapter 1: Landforms and Topographical Maps
Section 1: Landforms
Section 2: Vocabulary
Section 3: Topographical Maps
Section 4: Where Are We—Or How to Read a Map
Section 5: Map Legends
Chapter 2: Climates, Sub-Climates, Prevailing Winds
Section 1: Climates
Section 2: Sub-Climates
Section 3: Prevailing Winds
Section 4: Vocabulary
Section 5: Oceans
Section 6: Ocean Currents
Chapter 3: Calendars & International Dateline
Section 1: Introduction
Section 2: The Sun, Sundials, and Calendars
Section 3: Vocabulary
Section 4: International Dateline
SS1009
Chapter 1:
Section 1: The First Americans
Section 2: Mound Builders and Pueblos
Section 3: Native American Cultures
Section 4: The First Europeans
Chapter 2:
Section 1: Early Settlements
Section 2: Jamestown
Section 3: Massachusetts
Section 4: New Netherland and Maryland
Chapter 3:
Section 1: Colonial-Indian Relations

Section 2: Second Generation of British Colonies
Section 3: Settlers, Slaves and Servants
Section 4: The Colonial Period
SS1010
Chapter 1: Ten Steps to Writing a Term Paper
Step One: Don't Panic!
Step Two: Select Your Topic
Step Three: Figure Out What a Term Paper is So You Can Write One
Step Four: Develop a Type 3 Question For Your Term Paper
Step Five: Develop a Draft Thesis Statement From Your Type 3 Question
Step Six: Conduct Your Research and Record the Locations of Your Sources
Step Seven: Assemble Note Cards and Write Outline
Step Eight: Write Your Draft Paper
Step Nine: Read the Instructor's Comments and Write Final Draft
Step Ten: Turn in Your Final Draft to Your Teacher and Celebrate!
HI – Historical Interpretation