MONTICELLO ACADEMY GRADE 6 OVERVIEW

English Language Arts

- I. READING
 - a. Comprehension literal and figurative
 - b. Structure of Literature
 - c. Conflict and Resolution
 - d. Protagonist/Antagonist
- II. COMPOSITION
 - a. Persuasive
 - b. Descriptive
 - c. Narrative
 - d. Expository
 - e. Poetic
- V. SPEAKING AND LISTENING
 - a. Comprehension
 - b. Summary Reports
 - c. Discussion and Debate
- VI. LANGUAGE
 - a. Spelling and Vocabulary
 - b. Grammar and Usage
 - c. Punctuation

Mathematics – Advance 1

- I. NUMBERS AND OPERATIONS
 - a. Numeration
 - b. Basic Operations
 - c. Properties of Numbers and Operations
 - d. Estimation
- II. Algebra
 - a. Ratios and Proportional Reasoning
 - b. Patterns, Relationships, and Functions
 - c. Variables
 - d. Expressions and Equations
 - e. Inequalities
- III. GEOMETRY
 - a. Basic Terminology
 - b. Properties and Relationships of Lines
 - c. Properties and Relationships of Angles
 - d. Properties and Relationships of Polygons
 - e. Pythagorean Theorem
 - f. 3D Figures
 - g. Coordinate Geometry
- IV. MEASUREMENT

V.

VI.

- a. Measuring Physical Attributes
- b. Conversion of Systems of Measurement
- c. Perimeter, Area, Surface Area, and Volume
- d. Similarity and Problem Solving
- e. Measurement Instruments
- STATISTICS AND PROBABILITY
 - a. Data Collection and Representation
 - b. Data Sets and Characteristics
 - c. Probability of Chance
 - d. Probability Model
 - PROBLEM SOLVING
 - a. 4-Step Process
 - b. Strategies

History – Ancient Civilization

Science

- I. Weather and Climate
- II. Space Systems
- III. Earth's Dynamic Systems

MONTICELLO ACADEMY GRADE 7 OVERVIEW

English

Π.

- I. Reading
 - a. Comprehension literal and figurative
 - b. Structure of Literature
 - c. Conflict and Resolution
 - d. Protagonist/Antagonist
 - COMPOSITION
 - a. Persuasive
 - b. Descriptive
 - c. Narrative
 - d. Expository
 - e. Poetic
 - III. SPEAKING AND LISTENING
 - a. Comprehension
 - b. Summary Reports
 - c. Discussion and Debate
 - IV. LANGUAGE
 - a. Spelling and Vocabulary
 - b. Grammar and Usage
 - c. Punctuation

History – Medieval Times

Science

- I. Matter and its Interactions
- II. Electricity/Waves
- III. Force and Motion

Mathematics - Advance 2

Ι.

- THE NUMBER SYSTEM
 - a. Rational and Irrational Numbers
 - b. Using Rational Numbers to Approximate Irrational Numbers
- II. EXPRESSIONS AND EQUATIONS
 - a. Integer Exponents and their Equivalents
 - b. Square and Cube Roots
 - c. Scientific Notation
 - d. Proportional Relationship Graphs
 - e. Lines and Linear Equations
- III. FUNCTIONS
 - a. Defining, Evaluating, and Comparing Functions
 - b. Graphing Functions
- IV. GEOMETRY
 - a. Rotations, Reflections, and Translations
 - b. Congruency in 2D figures
 - c. Transversals
 - d. Pythagorean Theorem
 - e. Cylinders, Cones, and Spheres
- V. STATISTICS AND PROBABILITY
 - a. Data Collection and Representation
 - b. Data Sets and Characteristics
 - c. Bivariate Data
- VI. PROBLEM SOLVING
 - a. Logical Reasoning
 - b. Strategies

MONTICELLO ACADEMY GRADE 8 OVERVIEW

English

- I. READING
 - f. Comprehension literal and figurative
 - g. Structure of Literature
 - h. Conflict and Resolution
 - i. Protagonist/Antagonist
- II. COMPOSITION
 - a. Persuasive
 - b. Descriptive
 - c. Narrative
 - d. Expository
 - e. Poetic Content & Mechanics
- III. SPEAKING AND LISTENING
 - a. Comprehension
 - b. Summary Reports
 - c. Discussion and Debate
- IV. LANGUAGE
 - a. Spelling and Vocabulary
 - b. Grammar and Usage
 - c. Punctuation
- History US Government

Science

- I. Structure and Function
- II. Genes and Molecular Machines
- III. Ecosystem and Interactions

Mathematics - Algebra 1

Ι.

- PROPERTIES OF NUMBERS, QUANTITIES, AND EQUATIONS
 - a. Quantitative reasoning
 - b. Units and Variables
 - c. Understanding, Rewriting, and Solving Equations
- II. LINEAR AND EXPONENTIAL EXPRESSIONS
 - a. Rational Exponents
 - b. Systems of Equations
 - c. Graphing Equations and Inequalities
 - d. Functions and Function Notation
 - e. Linear, Quadratic, and
 - Exponential Models
- III. STATISTICS

IV.

- a. Summarizing, Representing, and Interpreting Data
- b. Quantitative Variables
- c. Interpreting Linear Models
- EXPRESSIONS AND EQUATIONS
 - a. Understanding, Rewriting, and Solving Expressions
 - b. Operations with Polynomials
 - c. Solving Equations and Inequalities
 - d. Solving Systems of Equations
- V. QUADRATIC EQUATIONS AND FUNCTIONS
 - a. Properties of Rational and Irrational Numbers
 - b. Interpreting and Analyzing Functions
 - c. Creating Functions to Model Relationships
 - d. Constructing and Comparing Linear, Quadratic, and Exponential Models
 - e. Problem Solving