



# Middle School Curriculum

## Reading and Language Arts

Class Goals - To develop analytical and interpretive skills in literature.  
To develop creative, persuasive, and expository writing skills.  
To develop linguistic competency.  
To develop listening/oral communication skills.  
To develop reasoning skills in the language arts.

Course Description - This year, we will utilize a method of Study developed by The College of William and Mary School of Education. This model is designed specifically for "High-level Learners" and dovetails nicely with the concepts we will be discussing in Social Studies this year of "Spaceship Earth". This year, we will explore Patterns of Change in American Literature and The Pursuit of Justice. These surveys utilize all genres of literature and various forms including novels, short-story, poetry and plays. Art areas other than Literature are explored as well. Included in the scope of the study will be work with vocabulary, parts of speech and written expression. All Course Goals are aligned with the Common Core State Standards for Students who are high-level learners, grades 6-8.

In addition to our explorations of literature, students will also attend to spelling and grammar patterns of English, as well vocabulary and the origins and etymology of English words.

# Mathematics

Middle School (6th, 7th - Pre Algebra 1; 7th, 8th - Pre Algebra 2; Algebra 1)

## **Pre Algebra 1 (6th/7th)**

- Ratios and Proportional Relationships
- Arithmetic Operations (Fractions/Decimals, LCM, GCF)
- Expressions and Equations
- Ratios, Rates, and Scale Drawings
- Rational Numbers
- Area, Surface Area and Volume Problems
- Percents and Proportional Relationships

## **Pre Algebra 2 (7th/8th)**

- Geometry
- Statistics and Probability
- Integer Exponents and Scientific Notation
- Congruence
- Similarity
- Linear Equations
- Examples of Functions from Geometry
- Linear Functions
- Introduction to Irrational numbers using Geometry

## **Algebra 1 (8th grade)**

- Solving Linear Equations
- Solving Linear Inequalities
- Graphing Linear Functions
- Writing Linear Functions
- Solving Systems of Linear Equations
- Exponential Functions and Sequences
- Polynomial Equations and Factoring
- Graphing Quadratic Functions
- Solving Quadratic Equations

# Science

Upon successful completion of this course, students will have an understanding of the following topics:

## **Scientific Methodology**

- Lab Safety
- Scientific Method
- Measuring and Graphing

## **Forces, Motion, Power and Energy**

- Force
- Changes in Force and Motion
- Unbalanced Forces
- Work – when is it done
- Simple machines
- Potential and Kinetic Energy
- Thermal Energy
- Energy Transformations
- Electricity and circuits
- Magnetism
- Laws of force and motion
- Speed, velocity and acceleration

## **Matter and Chemical Energy**

- Elements and Compounds
- Formation of a New Substance
- Organic Compounds
- Metals, Non-metals and Metalloids
- Density
- Cycling of Matter
- Energy Flow Through Living Systems
- Energy Sources
- Organism Energy Transfers - chemical energy transfer to heat and thermal energy in digestion.
- Photosynthesis

# Social Studies

## PHILOSOPHY OF INSTRUCTION:

### Class Goals -

To develop an understanding of the concept of cause and effect and its relationship to events and eras in history.

To develop reasoning skills with application to social studies.

To develop interpersonal and social group process skills.

To develop skills in historical analysis and primary source interpretation.

To develop an understanding of the causes of major historical events, influential individuals of the period, and the complex reasons for outcomes.

**Course Description** - Students will understand and look for patterns in culture and historical events. In the scope of history, there are events that initiate changes in how human beings relate to one another. These ways of relating take many forms and involve the most basic of human characteristics. Where we chose to live determines much about how we live our lives and in turn, how cultures and civilizations thrive or decline. Modern human beings left Africa and as nomads, spread across the globe. As human beings developed agriculture and trade, civilizations developed. Resources are limited and this influences our perceptions of ourselves as members of the larger world. What is it which inspires people to migrate, navigate, and settle in a new place? How do we handle overcrowding and limited resources? Students will develop an understanding of the relationships between person and place, and how those relationships affect changes of historical proportion. Although our perspective is through the lens of American History, we consider other points of view, understanding that we are citizens of a larger planet.

This "Spaceship Earth" year moves our studies into the history of the US after the American Civil War, into the West and into the modern age. This year, we will be pulling our study from various texts. We will utilize a method of Study developed by The College of William and Mary School of Education. This model is designed specifically for "High-level Learners" and relates well to the concepts we will be discussing in Language Arts this year of "Spaceship Earth". Texts utilized include, but are not limited to: From William and Mary, A House Divided?, A Decade of Tension, 1920's in America, Facing Depression, 1930's in America; We The People: The Citizen and the Constitution, developed by the U.S. Department of Education; A Young People's History of the United States, by Howard Zinn.

All Course Goals are aligned with the Common Core State Standards for Students who are high-level learners, grades 6-8.

# Foreign Language

- Immersive French/Spanish Language - Class Time is Predominantly Conducted in French/Spanish
- Intermediate proficiency in Listening, Speaking, Reading and Writing
- Focus on Verb Tenses and Utilizing Proper Gender with Nouns/Articles
- Respond Verbally and in Writing in French/Spanish with Basic Proficiency
- Common Expressions, Scenario Based Vocabulary
- Reading Fluency and Comprehension with Authentic, Age Appropriate Literature