

REQUIRED COURSES

058435 **English Language Arts 8**

Grade(s): 08

Prerequisite: English Language Arts 7

Students learn to build habits and develop strategies that readers use on a daily basis to strengthen literal comprehension, interpretive, and analytical comprehension within the structure of a reading workshop.

Students experience reading units of study focused on the student's textual lineage, critical nonfiction reading across texts, fantasy and dystopian book clubs, and narrative nonfiction. In our reading units of study students are engaged in the work of approaching texts as readers, writers, and researchers.

Students learn to build habits and develop strategies that proficient writers use on a daily basis to strengthen thinking and organization, development, mechanics, and conventions within the structure of a writing workshop.

Students experience writing units of study focused on literary responses, position papers, literary essays, and investigative journalism. In our writing units of study, students are engaged in the work of approaching writing as writers, readers, and researchers as participants in a fluid and recursive writing process.

118043 **Math 8**

Infinite Campus Name: MATH 8

Grade(s): 07 - 08

Prerequisite: Mathematics 7

Math 8 is designed to provide a foundation for the development of skills necessary for Algebra I. Students will: study rigid transformations and congruence; learn about similarity and dilations; explore slope with linear relationships; solve linear equations and systems of linear equations; what makes a relationship a function; volumes of cylinders, cones, and spheres; properties of exponents and scientific notation. Math 8 ends with the Pythagorean theorem as students encounter square roots, cube roots, and irrational numbers for the first time.

118023 **Algebra 1**

Infinite Campus Name: ALGEBRA 1

Grade(s): 08

Prerequisite: Math 8 or Pre-Algebra

Algebra 1 is a critical turning point in the development of mathematical thinking. Everything that is quantifiable - whether through its measurable characteristics or changes over time - can be modeled and analyzed using algebraic and logical reasoning. Prior to this course, students have largely modeled and solved problems in real-world contexts with mathematical symbols. In Algebra 1, students move beyond working simply with concrete objects and begin analyzing the abstract world of mathematical objects. This analysis requires exploration and imagination as students create, discover, and uncover unifying patterns and structures in the realm of mathematics. An improved understanding of these structures will enhance all students' ability to apply algebra to real-world contexts for predictions and inferences, thus helping them better understand and respond to the challenges of our ever-changing world. This college preparatory course emphasizes real number operations, the manipulation of algebraic expressions, and the solution of algebraic sentences. At the conclusion of this course, students take the Algebra 1 End of Course Assessment required by the state of Missouri.

138033 **Integrated Science Grade 8**

Grade(s): 08

Prerequisite: None

Eighth grade science has four units of study. The units of study include Forces & Motion, Geologic Processes, Weather & Climate, and Human Body Systems. In the Forces & Motion unit, students will understand changes in motion by forces and be able to recognize examples of work with or without simple machines. The Geologic Processes unit includes the study of plate tectonics and the rock cycle. The Weather & Climate unit will develop an understanding of the relationships of factors that affect atmospheric conditions. The Human Body Systems unit will focus on the interactions and interdependence of organ systems. Scientific inquiry is embedded into each unit by encouraging students to ask and explore their own questions. Technology is used as a tool to support learning and to give evidence of learning.

158033 **Social Studies Grade 8 - U.S. History: The Road to Revolution -- The End of the Frontier**

Grade(s): 08

Prerequisite: None

The eighth grade social studies course of study focuses on the study of the United States from Colonization through the End of the Frontier. The curriculum begins with a discussion of What is History?, continues with a review of exploration and colonialism, and leads into the study of the United States from the late 1700s through the late 1800s. The course includes an in-depth study of the Revolution and the establishment of the new nation, with an intensive study of the Constitution. The study of the Constitution includes an understanding of the original intent of the document, modern interpretations, and rights and responsibilities of citizenship. Other major units of study include Expansion and Reform, the Civil War and Reconstruction, and the End of the Frontier. The strands of social studies: --civics, economics, geography, and history --are woven through the historical events and connected to the people of the time period with a continual effort to understand the impact of the past on current issues.

088433 **Eighth Grade Physical Education and Health (8)**

Grade(s): 08

Prerequisite: None

In eighth grade, students meet daily for Physical Education and Health. Eighth grade physical education begins to place more emphasis on personalized fitness and lifetime physical activity. While movement and sport skills continue to be developed, students are introduced to more complex movement patterns and deeper discussions regarding exercise principles (i.e. progression, overload, and specificity), movement principles, and personal fitness pursuits. Students regularly participate in cardiovascular fitness activities and utilize heart rate monitors to assess their participation level and collect personal fitness data. Students are also provided more opportunities to make personal choices and personalize their workout routines. Students have approximately 135-145 days of physical education throughout the year. Health education lessons comprise approximately 30-35 days of the eighth grade Physical Education Health course. Health education continues more in-depth study of legal and illegal drugs, nutrition, human sexuality, healthy relationships, and safety/first aid. Discussions include age-specific topics such as Cyber Safety, club drugs, STIs, weight management, and dating relationships. Discussions about character traits (i.e. trustworthiness, respect, responsibility, and fairness) and influences to character also will be discussed and infused within the curriculum. Through home assignments, students are encouraged to dialogue with their parents to help identify personal and family values which may influence their choices. Also, as part of the eighth grade health education experience, students will also participate in a special Safe and Drug-free program called Packin 4 Now n L&r, which focuses on the awareness of stress in their lives and the tools they need to balance the load they carry.