

CURRICULUM OVERVIEW

EIGHTH GRADE



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ENGLISH LANGUAGE ARTS

Students entering eighth grade will have read literature through many different lenses. They will have explored literature from different time periods, authors' perspectives and writing styles, and evaluated different themes and literary elements. Students will have experience writing narratives, expository essays, as well as persuasive essays over varying time frames for different tasks, purposes, and audiences. Students will apply this prior knowledge as they explore the year's overarching theme of the individual and society.

Eighth grade students will study complex psychological, philosophical, and moral themes in literature and informational texts. While examining different genres, students will analyze passages, dialogue, scenes, or words that are critical to the development of a story, theme, or central idea. Through the critical evaluation of classical and contemporary literature, students will focus their writing and class discussions on how literature helps us define the tension between the needs of the individual and the greater good of society. Students will begin to understand that family, community, and society influence one's decisions and that judging morality is a complex, nuanced undertaking. Students will be encouraged to develop empathy/ compassion for the varied forces that shape one's actions. Students will read historical fiction as they explore this theme. An example of this might be reading *The Diary of Anne Frank* and accounts of World War II. They will discuss how authors' perspectives might produce accounts of historical events that differ from what we know happened. In class discussions and literary responses, students will identify figurative language, word choice, voice, and tone. Students will come to class prepared to discuss assigned texts, respond to diverse peer perspectives, ask questions of others, and work collaboratively towards deeper understandings of learned material. Speaking, listening, and language enrichment will remain focal points in the eighth grade language arts curriculum.

In addition, the year will center on three types of writing: narrative, expository, and persuasive. Students will engage in the writing process including the use of graphic organizers, drafting, and peer/self-revision to publish their work. In their literary analysis, research essays, narratives, and oral presentations, students will draw on multiple sources, including literary, informational, and multimedia texts. Furthermore, students will demonstrate the command of formal English appropriate to audience and task. Through all units, students will develop vocabulary strategies, as well as grade appropriate grammar skills, with a focus on understanding new words based on prior knowledge of prefixes, roots, and suffixes. As the year progresses, students will be expected to demonstrate increasing command of English language conventions, including grammar and vocabulary.

By the end of eighth grade, students will have a rich background in literature and literary non-fiction, with a grasp of historical context and many nuances of the works they have read. With this knowledge of the individual's role in the greater society, they will be ready for the rigors of high school.

MATHEMATICS

The Jumoke Academy Grade 8 Mathematics Curriculum incorporates the CT Common Core State Standards. The program goals focus on the following units:

- Real Numbers

- Pythagorean Theorem
- Congruence and Similarity
- Linear Relationships
- Systems of Linear Relationships
- Volume
- Patterns in Data

In all grades, the following mathematical practices are integrated throughout the program:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

SCIENCE

In grade 8, science students study and explore the physical sciences — chemistry and physics — through reading, group work, lab activities, classroom discussion, projects, and experimentation. Students engage in the design and implementation of performance tasks focused on specific questions or problems. Our curriculum is based on the National Science Education Standards and the State of Connecticut Grades 6-8 Science Frameworks. The course includes the content and skills to be assessed by the Grade Eight Science CMT including the State's curriculum embedded performance task, "Shipping and Sliding," during which students investigate the effects of different materials on frictional force and the effect of mass or surface area on frictional force. It also includes some physical science concepts that will be assessed by the Grade Ten Science CAPT.

Scientific Method and Inquiry

Students will explore the following concepts and skills:

- Science Experimentation
- Students perform lab experiments and utilize science investigational skills including predicting, observing, measuring, graphing, interpreting, analyzing, synthesizing, and evaluating.

The Human Reproductive System

Heredity and Genetics

- The principles of genetics, the structure and function of chromosomes and genes, DNA and RNA, and the inheritance of traits.

Energy

The characteristics of heat and temperature, differences between heat and temperature, energy transformations among heat, light, electricity, and motion.

Chemistry (Review)

- Atomic structure
- The periodic table
- Chemical bonding
- Chemical formulas
- Chemical equations
- Types of reactions, acids, bases, and pH.

Motion, Force, and Energy (Bridges)

•The study of velocity, forces, gravity, circular motion, friction, potential energy, kinetic energy.

Earth and the Solar System

How does the position of the Earth in the solar system affect conditions on our planet?

What is the role of energy in our world?

How do external and internal sources of energy affect the earth's systems?

SOCIAL STUDIES

The Social Studies curriculum is based in part on the National History Standards, the National Geography Standards, the Connecticut Social Studies Framework, the 21st Century Social Studies Skills and the use of essential questions to guide historical thinking and inquiry.

In social studies classes, students will:

Demonstrate an understanding of democratic values.

Cultivate the ability to work together in a multicultural environment.

Understand similarities and differences within the United States and among the major cultures of the world.

Apply research skills to the study of history and contemporary society.

Develop and use a variety of essential social studies and literacy skills.

Explore local and state history to analyze larger themes of American history.

The eighth grade social studies program introduces students to the study of American history

Students develop and apply the essential social studies skills of chronological thinking, historical analysis and interpretation, historical decision making and historical research to better understand themes and events in American history.

Reading of primary sources and supplementary historical fiction is an integral part of this course.

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