

GRADE 8 CURRICULUM GUIDE



COLCHESTER SCHOOLS

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Dear Parents:

We hope you find this Curriculum Guide helpful. Over the past two years, members of the Strategic Planning Committee and Community Involvement Forums have expressed a desire for a curriculum guide for parents. The teacher teams working on these guides gathered information from the Colchester Curriculum Documents, which are based on state standards, and put them into an overview for each grade level. We will continue to refine the document and add a comprehensive parent support piece in future years.

We hope that this overview will assist you when you have conversations about classroom work with your child's teacher, and as you reinforce learning concepts at home. We welcome your feedback as you use these Parent Curriculum Guides throughout the year. The Colchester faculty and administration appreciate your working with us to ensure that your children's education is an effective and positive experience.

Best wishes for a successful school year.

Yours truly,

Colchester Faculty and Administrators

LANGUAGE ARTS

Reading

The basis of the WJJMS reading program is **student choice**. Students are expected to read a variety of genres throughout the school year, and at any given time, can be engaged in up to three texts. These include a read-aloud text, an in-school independently read text and an at-home independently read text. A strong focus of the reading program is on the explicit instruction of the four reading comprehension strands assessed by the Connecticut Mastery Test. Skill development is typically done through mini-lessons using the read-aloud text and is reinforced through the in-school and at-home independently read texts. An important component of the program is regular student to teacher and student to student conferences. These conferences focus on goal setting and response to text.

By the end of eighth grade, we expect students to be able to:

- Use context clues to determine the how to interpret figurative language.
- Demonstrate an awareness of an author's or character's customs and beliefs included in a text.
- Identify or infer the author's use of structure/organizational patterns in fiction and non-fiction texts, such as chapters, prologues and epilogues, italicized excerpts, flashbacks, compare/contrast, sequence of events, cause and effect, and problem-solution.
- Draw conclusions about the author's purpose for choosing a genre, theme, or topic.
- Make connections between text to self, text to world and text to text.
- Select, synthesize, and/or use relevant information within texts to extend or evaluate literary works.
- Compare and contrast the structure among different fictional and non-fictional texts, such as memoirs, letters/diaries, and points of view.
- Select and use relevant information from a text in order to support various stances on a text.

Writing

Through the writing process (plan, draft, revise, edit, publish and reflect) students have the opportunity to write in a variety of genres. Direct instruction of strategies used in writing is done through mini-lessons using authentic sources as examples of quality writing. Students receive ongoing feedback through both teacher and peer conferencing. Writing goals are established quarterly and agreed upon by both student and teacher as part of the self-assessment process. Each student builds a writing portfolio throughout their middle school years to demonstrate growth in written communication.

By the end of eighth grade, we expect students to be able to:

- Use the writing process to compose a persuasive essay that analyzes and synthesizes information from multiple resources to establish and support a position, and examine opposing perspectives.
- Analyze and evaluate the author's craft, including the use of literary devices and textural elements to develop writing skills.
- Consistently use capital letters, end marks, commas, quotation marks, apostrophes, colons and semi-colons correctly.
- Apply grammar usage rules for subject-verb agreement, verb tense and pronoun reference correctly.
- Complete a research paper citing multiple texts, the internet, periodicals and primary documents.
- Employ correct spelling in published writing using the *Puma No Excuses Spelling List*.
- Deliver focused, coherent oral presentations which clearly convey ideas and use appropriate intonation, enunciation, pace, word choice and grammar.
- Provide feedback to speakers based on agreed upon criteria.

SOCIAL STUDIES

Social Studies helps students see the United States in its historical setting. It also allows students to research, gather data from maps, graphs, charts and other media. Students will learn to distinguish between fact and opinion, answer questions based on information and see the relationship between history, other subjects they study, and their lives.

By the end of eighth grade, we expect students to be able to:

Content (U.S. History Part II):

- Identify the 50 states and major cities in the United States.
- Analyze the Constitution to set a point of reference for the study of the second half of U.S. History.
- Identify how conflict produces change within American and European historical contexts.
- Explore migration, the collision of cultures, and the role of power and government through the study of:
 - the West,
 - the Second Industrial Revolution,
 - Immigration,
 - Reform & Progressive Eras,
 - American Imperialism,
 - World War I
 - Roaring 20s/Depression
 - World War II/Holocaust

Skills:

- Utilize reading strategies, such as venn diagrams, dual entry notes, seed discussions, etc., to comprehend and analyze content reading material.
- Analyze primary resource materials to research and understand content material.
- Cooperatively work with classmates to debate issues and create products.
- Utilize current events to bridge historical concepts (ie. migration, cultures, change) from the past to the present.
- Respond both formally and informally to persuasive prompts on topical issue.
- Use research skills to write an in-depth paper on ...
- Use technology to research and produce work .

MUSIC

General Music

Students in the eighth grade further their knowledge of music and theory through the use of percussion and non-percussion instruments

Middle School Choral

Middle school choral students will be grouped by grade level. They will begin developing their ensemble skills, improve their vocal production and learn to read music faster and with more detail. These skills will begin developing self-discipline and self-expression through their participation in the WJJMS choral program.

Students at the end of eighth grade chorus are expected to:

Demonstrate skills by performing the following:

Basic musical notation

Basic soltege: do-sol in several keys

Their part, understanding their role individually, by section, and group

Respond to conductor/director's gestures in tune, articulation, and dynamics.

Middle School Instrumental

Middle school instrumentalists will begin developing their skills in self discipline, creativity and self expressions, through basic study of their instrument and participation in the WJJMS Band program

Students at the end of eighth grade band are expected to:

Demonstrate instrumental skills by performing

Major scales

Chromatic scale

Articulated

Rhythms (up to 4 sixteenth) simple and compound

Percussion students will demonstrate percussion skills by identifying proper technique on battery and pitched instruments.

Demonstrate proper breathing and posture.

Demonstrate proper rehearsal etiquette and their individual, section, and group role in the band.

Demonstrate proper responses to conductor's instruction (rhythmic, articulations, style, or dynamics).

VISUAL ART

Visual art helps students to understand and apply appropriate techniques and principals of design in the creation process. Students select a range of subjects and ideas and learn to understand visual art in relation to culture and history. In addition, students reflect on their work and make connections between art and life.

By the end of eighth grade, we expect students to be able to:

Understand, select, and apply media techniques and processes in drawing, painting, print-making, three dimensional design and collage, wire, clay and carving.

Apply techniques to create value and contour, including cross-hatching, and stippling.

Use watercolor and acrylic paints.

Understand and apply elements and principals of art such as line, shape, color, value, space, form, texture, movement and rhythm, contrast, emphasis and unity.

Select and apply a range of subjects, symbols and ideas, including imagination, still life, landscape, portrait, animals and nature.

Understand the visual arts in relation to style, history and culture, including impressionism, expressionism, realism and abstract art, innovations and industrialization.

Recognize American and European artists.

Reflect upon, describe, analyze, interpret and evaluate their own and others' work.

Make connections between visual arts, other disciplines, and daily life.

SCIENCE

In middle school, students are beginning to recognize the complex interactions between science, technology, and society. Being scientifically literate requires that students have an understanding of key science concepts and the ability to apply critical thinking skills to transfer their knowledge to the real world.

By the end of eighth grade, we expect students to be able to:

- Describe the properties of common elements such as oxygen, hydrogen, carbon, iron, and aluminum.
- Describe how the properties of compounds differ from the properties of the elements they are made of.
- Explain how mixtures can be separated by using the properties of their substances.
- Explain the relationship among force, distance and work, and be able to calculate the work done to lift objects.
- Explain how simple machines are used to help people do work.
- Describe the motion of objects and calculate the speed of a moving object.
- Illustrate the motion of objects in distance time graphs.
- Describe how changes in force or mass lead to changes in motion, including circular motion.
- Explain how the forces acting on a bridge, the cost and the environment determine the type of bridge engineers design.
- Effectively communicate science findings from research and investigations in different formats, including lab reports.

DESIGN AND ENGINEERING

In grade 8, D&E is an elective. Since students have already achieved the learning of fundamental design and engineering concepts, they are given more latitude to shape their direction in pursuing their technological interests.

By the end of eighth grade, we expect students to be able to do some of the following, depending on their choices:

Focus on computer oriented projects such as designing and building a house on computer software, webpage design and creation, Power Point projects, or digital photography and movie making.

Focus on production, concentrating on electronics and robotics, and structural design. These projects might include building continuity testers, wireless microphones, robotics kits, bridge building, and other structural oriented projects for the school or community, depending on the year.

FAMILY AND CONSUMER SCIENCES

In eighth grade, FCS is an elective. The eighth grade program builds on the seventh grade curriculum which provides a basic foundation. Recipes prepared and sewing projects constructed are more advanced.

By the end of eighth grade, we expect students to be able to:

- Understand the importance of eating a healthy breakfast.
- Demonstrate accurate measuring techniques.
- How to read and follow a recipe.
- Prepare healthy breakfasts and snacks.
- Work effectively as a team member in a safe and healthy kitchen environment.
- Know the properties of natural and synthetic fibers.
- Identify basic pattern symbols.
- Select fabric appropriate for a specific project.
- Complete a sewing project using a commercial pattern.

PHYSICAL EDUCATION

Eighth grade students learn about how to move effectively and efficiently, be physically active and engage in individual fitness, team sports and individual sports and games.

By the end of eighth grade, we expect students to be able to:

- Analyze the results of components of health-related fitness.
- Evaluate physiological responses to exercise
- Apply knowledge or rules, safety and procedures for specific activities.
- Further their performance by using more complex skills.
- Self-reflect and use constructive feedback to make performance improvements.
- Demonstrate sportsmanship and etiquette.
- Adapt and combine skills and techniques to meet the demands of games.
- Resolve conflicts peacefully.
- Solve group tasks and explore personally challenging experiences.

WORLD LANGUAGE

World language instruction is designed to help students make connections between languages and cultures. In doing so, students become more aware of how their native language is structured, and how their own culture and history affect their day to day lives. Through comparison, they better understand the language and unique cultures of the countries and regions studied. These insights will help our students function more capably in our increasingly globalized world.

By the end of grade 8, we expect French students to be able to:

- Read and understand short texts.
- Conjugate irregular and stem-changing verbs.
- Form informal commands.
- Use direct and indirect object pronouns with verbs.
- Use the preterit (or past) tense of regular and select irregular verbs.
- Use numbers from 101-1,000.
- Talk and write about:
 - family members
 - making plans and getting ready
 - household chores
 - holidays
 - food and clothing

By the end of grade 8, we expect Spanish students to be able to:

- Conjugate irregular and stem-changing verbs.
- Form informal commands.
- Use reflexive verbs.
- Use direct and indirect object pronouns with verbs.
- Use the present progressive (or –ing form) of –ar verbs.
- Use the preterit (or past) tense of –ar verbs.
- Use numbers from 200-999,999.
- Talk and write about:
 - family members
 - household chores
 - making plans and getting ready
 - holidays and gift giving
 - talking on the phone

MATHEMATICS

Math develops students' ability to reason and solve problems. In middle school math, students apply basic mathematical skills and concepts and make connections to real world problems across all disciplines. Students learn reasoning and effective communication of solutions and methods. Students become independent thinkers and share responsibility for their learning as they build new math knowledge. Math is sequential, and students in grade 8 are placed in the course most suited to their skill level. Skills addressed only in Algebra I, are labeled with *.

By the end of eighth grade, we expect students to be able to:

ALGEBRAIC REASONING

Analyze linear relationships using tables, graphs, and equations.

Solve multi-step word problems using algebraic properties.

*In algebra class, students solve and relate quadratic equations to real-world situations.

*In algebra class, students solve and compare simultaneous linear equations and relate them to real-world situations.

NUMERICAL AND PROPORTIONAL REASONING

Compare and order integers, exponents and roots using number lines and grids.

Use estimation to decide if answers are reasonable.

Compare, locate and order rational numbers on number lines, scales and coordinate grids.

Use powers of ten and positive and negative exponents to express and compare the magnitude of very large and very small numbers.

GEOMETRY AND MEASUREMENT

Explore relationships among sides, angles, perimeters, areas and volumes.

Use the Pythagorean Theorem to solve problems of length and perimeter.

Use coordinate geometry to test geometric relationships of parallel and perpendicular lines.

DATA AND STATISTICS

Construct a variety of data displays, including scatter plots, and identify mean, median and mode.

Identify outliers in data sets.

Use graphing calculators, interactive white boards and Excel to demonstrate and practice data analysis skills.

*In algebra class, there is an emphasis on the use of graphing calculators

COMPUTER SKILLS

“What’s Your Business?” This course allows students to create their own business and use computer and technology applications to manage and promote this business.

By the end of eighth grade, we expect students to be able to:

Use advanced features of Word, Excel, PowerPoint and Publisher to create a complete business plan related to their business.
Create a wiki page for the purpose of posting their business online.
Participate in online/forum discussions related to entrepreneurship.
Create an audio file using Audacity in the form of a radio commercial.
Use video equipment to create a TV commercial for their product.

LIBRARY MEDIA

In the middle school, the library media curriculum is integrated with other content areas. Students work on research projects and come to the library to select books of their choice.

By the end of eighth grade, we expect students to be able to:

Select literature appropriate to their reading level and interest.
Consider themselves part of the community of readers at WJJMS.
Find and acquire information from the library print resources.
Recognize the importance of citing sources.
Use the WJJMS note-taking sheet.
Evaluate information for reliability and accuracy.
Effectively integrate sources into their reports using their own words.
With guidelines from their content area teachers, create a bibliography for their research paper using MLA documentation.