

# Mystic Valley Regional Charter School

## 7<sup>th</sup> Grade Curriculum Overview

*REVISED May 2003*

## **Introduction**

The seventh grade curriculum continues our school's commitment to a rigorous education based on a core curriculum. It builds upon our students' success in the sixth grade and prepares them for the challenges of eighth grade and high school. Having mastered appropriate skills and concepts through the Direct Instruction program, seventh graders are ready for a more detailed study of the precepts and structures of the academic disciplines.

Teaching a seventh grade program requires expertise in the core curriculum areas. To meet this need, the seventh grade faculty will be a team of subject area experts, each working in his or her discipline as well as working with others to create a productive climate that helps adolescents mature both academically and interpersonally. Teaching techniques will make a gradual shift to match the growing sophistication of the student body and to keep in line with the Massachusetts Common Core of Learning. Teachers will place an increased emphasis on the students' ability to "communicate effectively", and to "define, analyze, and solve complex problems." Because our program has provided our students with strong basic skills, we feel they are ready for this more complex challenge. As leaders of the school, seventh graders will also be expected to take a greater responsibility for themselves and those around them. We expect them to be contributing members to the school community and role models for other students.

---

# 7<sup>th</sup> Grade Science Curriculum

## Overview

As science students, seventh graders become more refined in determining the methods, materials and data to be used and collected for their investigations. They can listen carefully to multiple viewpoints from peers and teachers, and can be expected to design a systematic investigation with careful controls. They can appreciate the strengths and limitations of direct and indirect evidence when interpreting the results of their investigations. During the adolescent years, students begin to wonder about the connections between their school experiences and their lives outside of school.

To meet the needs of seventh graders, the science curriculum must be framed within the context of authentic problems to be investigated. Students have an aptitude for acquiring the terminology of science when the words have meaning because they are used in realistic situations. Their mathematics skills are developing to the point where they can construct tables, graph data, recognize graphical patterns and infer relationships. They can understand the use of indirect evidence from satellite photos and chemical indicators to make accurate observations of the unseen world. Using a combination of teacher directed instruction, laboratory investigation, small group and independent projects; teachers can structure a program that provides the experiences and opportunities students need to understand complex concepts.

The science program for Mystic Valley Charter School seventh graders includes topical selections from each of the major content domains. The program outlined here includes components of life science, physical science, and earth science, based on content from the Core Knowledge Sequence and Massachusetts Curriculum Frameworks. Regardless of the student's science background, this type of program will provide a starting point for future success in science.

Technology is an integral part of a science program. Use of contemporary computer tools to research, share and acquire information is built into this curriculum. The other part of technology, the design process, fits nicely into a discussion of human body systems and the generation of electrical power.

Key strands of the Massachusetts Curriculum Framework for Science and Technology are addressed throughout the curriculum. The inclusion of open-ended investigations, lab reports and lessons requiring inferences and predictions familiarize students with the skills required for the MCAS examination.

Resource recommendations: Prentice Hall Exploring Science 2000 series.

## 7<sup>th</sup> Grade Science Overview

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
September-October	<p><i>Chemical Bonds and Reactions</i></p> <ul style="list-style-type: none"> <li>• Chemical reactions</li> <li>• Ionic bond</li> <li>• Metallic bond</li> <li>• Covalent bond</li> <li>• Oxidations</li> <li>• Reduction</li> <li>• Acids/bases</li> </ul>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• Explore and describe that the mass of a closed system is conserved. For example, if a wet nail is put in a jar and the lid closed, the nail will rust (oxidize) and increase in mass but the total mass in the contents of the jar will not. (LS 17)</li> <li>• Describe a particulate model for matter that accounts for the observed properties of substances. (LS 19)</li> <li>• Recognize and explain how experimental evidence supports the idea that matter can be viewed as composed of very small particles (such as atoms, molecules and ions), which are in constant motion. Illustrate understanding that particles in solids are close together and not moved about easily; particles in liquids are about as close together and move about more easily; and particles in gases are quite far apart and move about freely. (LS 20)</li> <li>• Provide evidence that shows how the conservation of mass is consistent with the particulate model that describes changes in substances as the result of the rearrangement of the component particles. (LS 21)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> </ul>
November-December	<p><i>Atomic Structure</i></p> <ul style="list-style-type: none"> <li>• Structure of atoms: protons, neutrons, electrons</li> <li>• Molecules/Compounds</li> <li>• Early theories of matter</li> <li>• Start of modern chemistry</li> </ul>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• Describe a particulate model for matter that accounts for the observed properties of substances. (LS 19)</li> <li>• Identify and classify elements and compounds with similar properties, such as metals, metalloids and non-metals; acids and bases; combustibles and non-combustibles. (LS 15)</li> <li>• Measure and predict changes in the pressure, temperature, or volume of a gas sample when changes occur in either of the other two</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
		<p>properties. (LS 18)</p> <ul style="list-style-type: none"> <li>Recognize and explain how experimental evidence supports the idea that matter can be viewed as composed of very small particles (such as atoms, molecules and ions), which are in constant motion. Illustrate understanding that particles in solids are close together and not moved about easily; particles in liquids are about as close together and move about more easily; and particles in gases are quite far apart and move about freely. (LS 20)</li> <li>Provide evidence that shows how the conservation of mass is consistent with the particulate model that describes changes in substances as the result of the rearrangement of the component particles. (LS 21)</li> </ul>	
January-February	<p><i>History of the Earth and Life Forms</i></p> <p>Paleontology</p> <ul style="list-style-type: none"> <li>Fossils as record of Earth's history</li> <li>Formation and types of fossils</li> </ul> <p>Geologic Time</p> <ul style="list-style-type: none"> <li>Precambrian Era</li> <li>Paleozoic Era</li> <li>Mesozoic Era</li> <li>Cenozoic Era</li> </ul>	<ul style="list-style-type: none"> <li><b>***Lab Report Standards***</b></li> <li>Demonstrate an understanding of the internal and external structure of the planet earth. Students might create models or diagrams that represent this structure. (LS 48)</li> <li>Explore and illustrate an understanding that heat flow and movement of material within the earth moves the continents, causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. (LS 49)</li> <li>Identify ways in which soil is formed by the weathering of rock and the decomposition of dead plants and animal debris; give examples of how soil is essential for the survival of most life on land and is the connection between many of the living and nonliving constituents of the Earth System (LS 51)</li> <li>Give evidence that water in the Earth System exists naturally in all three states and water continuously circulates through the earth's</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
		<p>crust, ocean's and air. (LS 52)</p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding that, like all planets and stars, the Earth is approximately spherical in shape. (LS 53)</li> <li>• Examine evidence and illustrate that the movement of the continents have had significant effects on the distribution of living things. (LS 61)</li> <li>• Examine and describe ways in which rocks, fossils, ice cores and tree rings record events of Earth's history, documenting plate movements, volcanic eruptions, cycles of erosion and deposition, and the evolution of life. Examine ways in which the types, number and distributions of fossils provides information about how life and environmental conditions have changed over time. (LS62)</li> </ul>	
March	<p><i>History of the Earth and Life Forms</i> Continuation from previous months</p> <p>Plate tectonics</p> <ul style="list-style-type: none"> <li>• Movement of plates</li> <li>• Distribution of organisms based on movement of plates</li> </ul>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• Demonstrate an understanding of the internal and external structure of the planet earth. Students might create models or diagrams that represent this structure. (LS 48)</li> <li>• Explore and illustrate an understanding that heat flow and movement of material within the earth moves the continents, causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. (LS 49)</li> <li>• Identify ways in which soil is formed by the weathering of rock and the decomposition of dead plants and animal debris; give examples of how soil is essential for the survival of most life on land and is the connection between many of the living and nonliving constituents of</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
		<p>the Earth System (LS 51)</p> <ul style="list-style-type: none"> <li>• Give evidence that water in the Earth System exists naturally in all three states and water continuously circulates through the earth's crust, ocean's and air. (LS 52)</li> <li>• Demonstrate an understanding that, like all planets and stars, the Earth is approximately spherical in shape. (LS 53)</li> <li>• Examine evidence and illustrate that the movement of the continents have had significant effects on the distribution of living things. (LS 61)</li> <li>• Examine and describe ways in which rocks, fossils, ice cores and tree rings record events of Earth's history, documenting plate movements, volcanic eruptions, cycles of erosion and deposition, and the evolution of life. Examine ways in which the types, number and distributions of fossils provides information about how life and environmental conditions have changed over time. (LS62)</li> </ul>	
April- May	<p><i>Cell Division and Genetics</i></p> <ul style="list-style-type: none"> <li>• Growth and reproduction</li> <li>• Mitosis/Meiosis</li> <li>• Chromosomes and genes</li> <li>• DNA</li> <li>• Gregor Mendel</li> </ul>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• Identify the cell as the basic unit of life and the smallest unit that can reproduce itself. Give examples of single and multi-cellular organisms. (LS 31)</li> <li>• Explore and describe an understanding that plants, animals, fungi, and various types of microorganisms are major categories of living organisms. Each category includes many different species. Note that these categories are subject to change. Life does not always fit into neat categories (e.g., are viruses alive?) (LS 32)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
		<ul style="list-style-type: none"> <li>• Observe and explain that in single cells there are common features that all cells have as well as differences that determine their function. Compare the features of plant and animal cells noting similarities and differences. (LS33)</li> <li>• Investigate and illustrate evidence that cell replication results not only in the multiplication of individual cells, but also in the growth and repair of multi-cellular organisms. (LS 34)</li> <li>• Present data to illustrate that all organisms, whether single or multi-cellular, exhibit the same life processes, including growth, reproduction and the exchange of materials and energy with their environments. (LS 35)</li> <li>• Describe ways that cells can differ in multi-cellular organisms, assuming different appearances and carrying out specialized functions. (LS 36)</li> <li>• Investigate and explain that complex multi-cellular organisms are interacting systems of cells, tissues and organs that fulfill life processes through mechanical, electrical, and chemical means, including procuring or manufacturing food, and breathing and respiration. (LS 37)</li> </ul>	
June	<p><i>Evolution</i></p> <ul style="list-style-type: none"> <li>• Evolution</li> <li>• Natural Selection</li> <li>• Extinction and Speciation</li> </ul> <p><b>Alternate Topic: WEATHER</b></p>	<ul style="list-style-type: none"> <li>• <i>***Lab Report Standards***</i></li> <li>• Examine evidence and illustrate that the movement of the continents have had significant effects on the distribution of living things. (LS 61)</li> <li>• Examine and describe ways in which rocks, fossils, ice cores and tree rings record events of Earth's history, documenting plate movements, volcanic eruptions, cycles of erosion and deposition, and the evolution of life. Examine ways in which the types, number and</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
		<p>distributions of fossils provides information about how life and environmental conditions have changed over time. (LS62)</p> <ul style="list-style-type: none"> <li>• Present evidence that Earth's oceans are a reservoir of nutrients, minerals, dissolved gases, and life forms which are the major source of water vapor for the atmosphere, and that the store of heat transported by ocean currents greatly affects Earth's climate. (LS 54)</li> <li>• Observe and describe evidence that local climate changes over periods of years or decades, while global climate changes much more slowly. Give examples illustrating that climate changes over Earth's history have profoundly affected the evolution of life forms, and their present distribution. (LS55)</li> <li>• Explain that clouds reflect much of the sunlight intercepted by Earth, while at the same time returning to Earth's surface a large fraction of the far infrared energy emitted from the surface. Describe ways in which these two effects are important elements in determining Earth's global climate. (LS57)</li> <li>• Examine and demonstrate evidence that the atmosphere and the oceans have a limited capacity to recycle materials naturally. (LS 58)</li> <li>• Investigate and illustrate ways in which human activities, such as reducing the amount of forest cover, increasing the amount and variety of chemicals released into the atmosphere, and intensive farming, have changed the Earth's land, oceans, and atmosphere. (LS 60)</li> <li>• Explain how the evolution of technology led the change from an agricultural to an industrial to an information based society. (LS 79)</li> </ul>	

# 7<sup>th</sup> Grade Language Arts Curriculum

## Overview

The seventh grade language arts curriculum will build upon the basic decoding skills, competencies, and knowledge that students acquired in earlier grades. The students will meet new challenges and opportunities as the teachers help them develop strategies to become more independent learners: responsible participants in their own education. Their reading, writing, speaking, and listening opportunities will be complemented by the writing of analytical, persuasive, and personal essays based on classroom literary discussions. They will read challenging works of literature closely and carefully, with special attention to the elements of literature. They need to become more aware of the structure of the language, usage, grammar, and mechanics and to reflect this knowledge in their writing. They will be expected to express ideas succinctly, coherently, and logically, both in their written work and in class discussion as active speakers and attentive listeners. Critical thinking and critical inquiry will be at the heart of the curriculum as the students integrate reading and writing and construct their knowledge of literature.



<b>SKILLS</b>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>• Reading literature closely and carefully</li> <li>• Reading documents and essays for oral presentations</li> <li>• Reading for understanding of historical perspective</li> <li>• Reading for understanding of point of view</li> </ul> <p><b>Literature</b></p> <ul style="list-style-type: none"> <li>• Recognizing different genres of literature and their structures</li> <li>• Understanding character development</li> <li>• Understanding writing techniques such as foreshadowing, conflict, irony, and figurative language</li> </ul>	<p><b>Writing</b></p> <ul style="list-style-type: none"> <li>• Understanding and using the writing process: planning, drafting, editing, and publishing</li> <li>• Proofreading</li> <li>• Editing through self-assessment, peer editing, and teacher-conferencing</li> <li>• Using computer technology in writing</li> </ul> <p><b>Conventions, Grammar, Usage</b></p> <ul style="list-style-type: none"> <li>• Parts of speech, clauses, sentences, punctuation</li> <li>• Studying grammar through the writing and editing process</li> <li>• Prepositional phrases; Subject-verb agreement</li> <li>• Participles, Appositives, Complements</li> <li>• Infinities and infinitive phrases</li> <li>• Gerunds and gerund phrases</li> </ul> <p><b>Speaking and Listening</b></p> <ul style="list-style-type: none"> <li>• Effective discussion skills</li> <li>• Effective presentation skills</li> <li>• Responding to the ideas of others</li> <li>• Effective expression of opinion</li> </ul>
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• Homework Assignments</li> <li>• Quizzes</li> <li>• Class group work</li> <li>• Essays</li> <li>• Reader/response journals</li> <li>• Narratives</li> <li>• Oral presentations</li> <li>• Classroom participation</li> <li>• Exams</li> <li>• Exhibitions</li> <li>• Portfolios</li> </ul>	

**Writing**— Writing is integrated into all disciplines, however the following monthly guide represents specific writing pieces specifically taught within the language arts curriculum. Specific skills from prior grades are reinforced throughout the year.

	<b>Writing Skills</b> (Based on Core Knowledge Sequence)	<b>Writing Assessment Examples</b>	<b>Literature</b> (Based on Core Knowledge Sequence)
September	Grammar and Usage <ul style="list-style-type: none"> <li>• Topic sentences</li> <li>• Supporting details</li> <li>• Types of sentences</li> <li>• Nouns</li> <li>• Pronouns</li> </ul> Writing: Produce variety of types of writing <ul style="list-style-type: none"> <li>• Book Report – Biography</li> <li>• Narrative essay</li> <li>• Research Revolutionary War Hero</li> <li>• Poetry Analysis</li> </ul>	Essay modeled after Sandru Cisneros sensory details  Write diary entries from the point of view of a character.  Write about themes in the novel.	April Morning  The House on Mango Street  Poetry: Annabel Lee (Poe) Anthem for Doomed Youth (Owen) Nothing Gold Can Stay (Frost) The Charge of the Light Brigade (Tennyson) An Irish Airman Forsees his Death (Yeats) Paul Revere’s Ride (Longfellow) Because I Could not Stop for Death (Dickinson)
October - November	Grammar and Usage: <ul style="list-style-type: none"> <li>• Subject/verb agreement</li> <li>• Diagramming</li> <li>• Action and Linking Verbs/Objects</li> </ul> Writing: Produce variety of types of writing <ul style="list-style-type: none"> <li>• Compare/contrast essay</li> <li>• Research Project with Historical Subject</li> <li>• Plot line – short story</li> <li>• Narrative essay</li> <li>• Book Report – Newbery Award Winner</li> </ul>	Compare and contrast essay  Narrative essay about events leading to the gold strike Plotline-Short Story	The Tell Tale Heart (Poe)  Poetry: “The Cremation of Sam McGee” Fire and Ice – Frost The Call of the Wild - London

	<b>Writing Skills</b> (Based on Core Knowledge Sequence)	<b>Writing Assessment Examples</b>	<b>Literature</b> (Based on Core Knowledge Sequence)
December	Writing: Produce variety of types of writing <ul style="list-style-type: none"> <li>• Compare and Contrast Essay</li> <li>• Answering Open Response Questions</li> </ul>	Persuasive essay on Call of the Wild  Writing about themes in a novel	The Gift of the Magi (O Henry) “Declaration of War on Japan” - FDR  The Call of the Wild “Autobiography of Benjamin Franklin”
January	Writing: Produce variety of types of writing <ul style="list-style-type: none"> <li>• Poetry</li> <li>• Writing an essay about an arguable topic</li> <li>• Great American Novel - theme</li> </ul>	Persuasive Essay  Writing the 5 paragraph theme with 3 subtopics	The Red Pony- Steinbeck Langston Hughes, “The Negro Speaks of Rivers”, “Harlem”, “Life is Fine” WC Williams, “This is Just to Say”, “The Red Wheelbarrow” The Secret Life of Walter Mitty Thurber
February	Writing: Produce variety of types of writing <ul style="list-style-type: none"> <li>• Research essay using multiple resources</li> <li>• Poetry/Research Project</li> <li>• Prepositions</li> </ul>	Theme Research Paper	Poetry:  To Kill a Mockingbird – Harper Lee
March	Writing: Produce variety of types of writing <ul style="list-style-type: none"> <li>• Journal writing</li> <li>• Poetry</li> <li>• Research Project / topics relating to To Kill a Mockingbird</li> </ul> Literary elements: point of view Writing and studying the fairy tale  Prepositional phrases as adjectives and adverbs	Research Exposition  Students write poetry for poetry contest  Fairy Tales	To Kill A Mockingbird

	<b>Writing Skills</b> (Based on Core Knowledge Sequence)	<b>Writing Assessment Examples</b>	<b>Literature</b> (Based on Core Knowledge Sequence)
April	<p>Writing: Produce variety of types of writing</p> <ul style="list-style-type: none"> <li>• Narrative writing</li> <li>• 5 paragraph theme</li> <li>• Writing a myth</li> </ul> <p>Literary terms: theme</p> <p>Dependent and Independent clauses</p>	<p>Narrative essay regarding racism and stereotyping</p> <p>Arguable Topic-</p>	<p>To Kill a Mockingbird</p> <p>Short Stories The Necklace The Purloined Letter</p> <p>Poetry “My Father’s Shoes”</p>
May	<p>Writing: Produce variety of types of writing</p> <ul style="list-style-type: none"> <li>• Descriptive</li> <li>• Skits-drama (disappointment/courage)</li> <li>• Character Virtue</li> </ul>	<p>To Kill a Mockingbird</p> <p>Research project ( tied in to History)</p> <p>“A Special Place” description</p>	<p>“The Night the Bed Fell”</p> <p>“A Raisin in the Sun”</p> <p>“I Know why a Caged Bird Sings”</p> <p>The Prince and the Pauper – Twain</p>
June	<p>Writing: Produce variety of types of writing</p> <ul style="list-style-type: none"> <li>• Autobiography</li> </ul>	<p>Autographical paper</p>	<p>Prince and the Pauper</p>

# Classroom Vignette

## A Lesson Review from the study of To Kill a Mockingbird

### **Written homework from the previous evening:**

- A. Think about Atticus Finch's definition of courage. Who best fits that definition and why?
- B. Who do you think is the mockingbird, and why is it a sin to kill a mockingbird?

N.B. This assignment also would be useful as a final exam as both questions address the central themes of To Kill a Mockingbird.

### **Lesson Objectives:**

- A. To have students continue their examination of literature closely and carefully using two important ideas expressed in the specific text:
  - 1. Atticus Finch's definition of courage
  - 2. Why it is a sin to kill a mockingbird
- B. To have students continue their ongoing work in the critical skills relevant to their analysis and discussion of literary passages.
- C. To have students continue to develop their interpretation of the text and their ability to communicate that interpretation.
- D. To continue developing use of the writing process, including generation of ideas, peer review and note taking.

### **Instructional Strategies:**

- A. Dividing the class into four small discussion groups to share their thoughts and collect ample evidence from the text to verify their assertions.
- B. Taking careful, cogent notes during their small group work listening to each other and presenting their ideas to the class.

### **Assessment:**

- A. Observation of participation, attentive listening, and note taking
- B. Write an emphatic essay on the topic that you feel most strongly about (A or B). Choose the one about which you think you can write the most convincing essay.

# *Spanish*

**TEXT: BIENVENIDOS (Glencoe Spanish)**

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
<b>September</b>	<ul style="list-style-type: none"> <li>• General review: greetings, date, time, weather</li> <li>• Review of regular verbs in present tense</li> <li>• Review of adjectives (agreement)</li> <li>• Review of irregular verbs previously studied (<i>ser, estar, ir, dar, tener, e&gt;ie, o&gt;ue, hacer, poner, salir, venir</i>)</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>• Have a basic conversation in Spanish with someone</li> <li>• Conjugate and use verbs in the present tense</li> <li>• State the date, time, weather</li> <li>• Make adjectives agree with nouns</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of basic dialogues involving greetings and simple conversation</li> <li>• Dictations</li> <li>• Quizzes</li> <li>• Test on review material</li> </ul>
<b>October</b>	<ul style="list-style-type: none"> <li>• Present tense of <i>saber</i> and <i>conocer</i></li> <li>• Difference between <i>saber</i> and <i>conocer</i></li> <li>• Present tense of <i>decir</i></li> <li>• Demonstrative adjectives</li> <li>• Vocabulary for winter sports (pages 244-249)</li> <li>• Reading on skiing in Hispanic</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>• Conjugate and use the verbs <i>saber, conocer, and decir</i></li> <li>• Differentiate between <i>saber</i> and <i>conocer</i> in context</li> <li>• Use demonstrative adjectives to point out people and things</li> <li>• Read, understand and discuss reading on</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes</li> <li>• Dictations</li> <li>• Chapter Test on all material</li> <li>• Reading comprehension questions</li> <li>• Text and workbook exercises</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
	countries (pages 260-264)	Hispanic countries	
<b>November</b>	<ul style="list-style-type: none"> <li>Vocabulary for health and medical care (pages 270-274)</li> <li><i>Ser vs Estar</i></li> <li>Preterit tense of <i>-ar</i> verbs</li> <li>Reading on health (pp. 286-290)</li> <li>Review of all material</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>Use new vocabulary to talk about their health</li> <li>Differentiate between <i>ser</i> and <i>estar</i> and use them in communication</li> <li>Conjugate <i>-ar</i> verbs in the preterit and use them to discuss events of the past</li> <li>Read, understand and discuss reading on health</li> <li>Recall previously learned material and use it in conjunction with new material</li> </ul>	<ul style="list-style-type: none"> <li>Creation of skits involving health vocabulary</li> <li>Description of pictures (oral and/or written)</li> <li>Quizzes</li> <li>Reading comprehension exercises</li> <li>Text and workbook exercises on preterit tense</li> </ul>
<b>December</b>	<ul style="list-style-type: none"> <li>Vocabulary for summer activities and sports (pages 296-301)</li> <li>Direct Object pronouns</li> <li>Preterit of <i>ir</i> and <i>ser</i></li> <li>Reading on Hispanic beaches (pages 312-314)</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>Use new vocabulary to talk about activities and sports they enjoy</li> <li>Use direct objects in written and oral communication</li> <li>Talk about where they went and how they were in the past</li> <li>Read, understand and discuss reading on Hispanic beaches</li> </ul>	<ul style="list-style-type: none"> <li>Quizzes</li> <li>Oral questions for a grade</li> <li>Test on new material</li> <li>Reading comprehension questions</li> </ul>
<b>January</b>	<ul style="list-style-type: none"> <li>Vocabulary of movies, museums and theater. (p. 322-</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p>	<ul style="list-style-type: none"> <li>Quizzes</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
	326) <ul style="list-style-type: none"> <li>• Preterit of <i>-er</i> and <i>-ir</i> verbs</li> <li>• Pronunciation practice (p. 335)</li> <li>• Cultural reading about social life in Hispanic countries (p. 338-341)</li> </ul>	<ul style="list-style-type: none"> <li>• Talk about going out to the movies, museum or theater</li> <li>• Use <i>-er</i> and <i>-ir</i> verbs to talk about events in the past</li> <li>• Correctly pronounce "tongue twisters" in Spanish (from text)</li> <li>• Read, understand and discuss reading on Hispanic social life</li> </ul>	<ul style="list-style-type: none"> <li>• Reading comprehension exercises</li> <li>• Conversation in pairs (personal questions)</li> <li>• Composition about an outing to the movies or theater (preterit tense, using new vocabulary)</li> <li>• Composition about Winter vacation</li> <li>• Test on new material</li> </ul>
<b>February</b>	<ul style="list-style-type: none"> <li>• Review of previous material</li> <li>• (text exercises, p. 348-351)</li> <li>• Vocabulary for clothes and colors (p. 360-366)</li> <li>• The verb <i>gustar</i></li> <li>• Affirmative and Negative expressions</li> </ul>	<i>By the end of this month, students will know how to:</i> <ul style="list-style-type: none"> <li>• Combine all the material they have learned to communicate ideas</li> <li>• Identify clothing and colors</li> <li>• Talk about what they like and do not like</li> <li>• Negate expressions</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes</li> <li>• Test on review material</li> <li>• Skit involving clothing and colors (perhaps a shopping spree?)</li> <li>• Dictation</li> <li>• Text and workbook exercises</li> </ul>
<b>March</b>	<ul style="list-style-type: none"> <li>• Reading on fashion (p. 376-379)</li> <li>• Vocabulary for train station and travel (pp. 386-391)</li> <li>• Preterit of <i>hacer, querer, venir</i></li> <li>• Spanish fashion magazines (hard copies or via the Internet)</li> </ul>	<i>By the end of this month, students will know how to:</i> <ul style="list-style-type: none"> <li>• Read, understand and discuss reading on fashion</li> <li>• Use vocabulary to get around a train station in Hispanic country</li> <li>• Talk about what they did and wanted in the past</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes</li> <li>• Dictation</li> <li>• Reading comprehension questions</li> <li>• Group skit taking place in a train station</li> <li>• Pronunciation exercises</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
		<ul style="list-style-type: none"> <li>• Talk about where they went in the past</li> <li>• Understand the main ideas of articles in Hispanic magazines</li> </ul>	
<b>April</b>	<ul style="list-style-type: none"> <li>• Preterit of other irregular verbs (<i>estar, andar, tener, poder, poner, saber</i>)</li> <li>• Reading on train trip (pp. 400-401)</li> <li>• Vocabulary for restaurant and foods (pp. 410-415)</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>• Use the preterit of irregular verbs to talk about events in the past</li> <li>• Read, understand and discuss reading on train trip</li> <li>• Use vocabulary to order and eat in a Hispanic restaurant</li> </ul>	<ul style="list-style-type: none"> <li>• Test on Preterit tense (all regular and irregular verbs) + new vocabulary</li> <li>• Composition about an event in the past (Spring break?)</li> <li>• Group skit taking place in a Hispanic restaurant</li> <li>• Oral questions for a grade</li> </ul>
<b>May</b>	<ul style="list-style-type: none"> <li>• Preterit of stem-changing verbs (<i>e &gt; i, o &gt; u</i>)</li> <li>• Reading about Hispanic restaurant (p. 424)</li> <li>• Vocabulary for daily morning routine (pp. 434-435)</li> <li>• Vocabulary for camping (pp. 438-439)</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>• Use stem-changing verbs in the preterit</li> <li>• Use new vocabulary to talk about their morning routines</li> <li>• Use new vocabulary to discuss adventures in camping</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes</li> <li>• Dictation</li> <li>• Test on new material</li> <li>• Reading comprehension questions</li> </ul>
<b>June</b>	<ul style="list-style-type: none"> <li>• Regular reflexive verbs in present and preterit</li> </ul>	<p><i>By the end of this month, students will have:</i></p>	<ul style="list-style-type: none"> <li>• Quizzes of review material</li> <li>• "Exam" on material from entire</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
	<ul style="list-style-type: none"> <li>• Irregular reflexive verbs in present and preterit</li> <li>• Cultural reading on Hispanic morning routines</li> <li>• Review material from September through June</li> </ul>	<ul style="list-style-type: none"> <li>• Used reflexive verbs to share their daily habits</li> <li>• reviewed all material introduced since September</li> <li>• used learned vocabulary, verbs and grammatical structures in written and oral communication</li> </ul>	year

**History** – Seventh graders will begin intensive study of American history, with the themes of growth and change in America as well as interactions with world powers. Geography instruction is embedded into the history curriculum. Students will build an understanding of the influence and impact location and environment has on cultures and their development. Classes will use the textbook, *Creating America: A History of the United States*, published by McDougal Little.

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
August-September	<p><b>Early English Settlements; daily life in Massachusetts</b></p> <ul style="list-style-type: none"> <li>◆ Jamestown colony</li> <li>◆ Mayflower Compact; Plymouth Plantation</li> <li>◆ Massachusetts Bay Colony</li> <li>◆ Centrality of work, family and religious observance</li> </ul> <p><b>Political, religious and economic motives of European colonizers</b></p> <ul style="list-style-type: none"> <li>◆ Spanish; traders, ranchers missionaries</li> <li>◆ French; fur traders, farmers, merchants, missionaries</li> <li>◆ English; merchants, investors, landlords, refugees from civil war and political upheaval</li> <li>◆ Religious freedom</li> </ul> <p><b>Coexistence and conflict between Europeans and Native Americans</b></p> <p><b>Massachusetts town government</b></p>	<p>1.1 Chronology and Cause 1.2 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 4.16 Authority, Responsibility and Power 4.17 The Founding Documents 4.18 Principles and Practices of American Government 4.19 Citizenship</p>	<p>Quizzes Tests  Discussion 1</p>	<p>Text chapter 3,4  <i>The Mayflower Compact</i> (American Reader)  <i>Poor Richard's Almanac</i>, Ben Franklin (American Reader)  <i>A Bill for establishing religious freedom in Virginia</i>, Thomas Jefferson (American Reader)</p>

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
	<ul style="list-style-type: none"> <li>◆ Town meetings</li> <li>◆ General School Act of 1647</li> <li>◆ Newspapers, almanacs</li> </ul> <p><b>Colonial era labor</b></p> <ul style="list-style-type: none"> <li>◆ Cash crops vs. self sufficient farming</li> <li>◆ Advent of slavery</li> </ul> <p><b>Family life across classes, races and regions</b></p> <p><b>Growing social and political divergence from England</b></p>			
October- November	<p><b>Events and interests behind the American Revolution</b></p> <ul style="list-style-type: none"> <li>◆ Taxation, Magna Carta</li> <li>◆ Boston Massacre, Boston Tea Party</li> </ul> <p><b>First Battles in Massachusetts</b></p> <ul style="list-style-type: none"> <li>◆ Lexington and Concord</li> <li>◆ Bunker Hill</li> <li>◆ Declaration of Independence</li> </ul> <p><b>Leaders, turning points and deciding factors of the Revolution</b></p> <ul style="list-style-type: none"> <li>◆ George Washington</li> <li>◆ Valley Forge; Saratoga, Yorktown</li> <li>◆ Factors of British defeat</li> </ul>	<p>1.1 Chronology and Cause 1.2 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 4.16 Authority, Responsibility and Power 4.17 The Founding Documents 4.18 Principles and Practices of American Government 4.19 Citizenship 4.20 Forms of Government</p>	<p>Quizzes Tests</p> <p>Research Paper 1</p> <p>Discussion 2</p>	<p>Text chapter 6, 7, 8, 9, 10</p> <p><i>Declaration of Independence</i>, Thomas Jefferson (American Reader)</p> <p>Thomas Paine's <i>Common Sense</i> (American Reader)</p> <p>US Constitution</p> <p>Bill of Rights</p>

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
	<p><b>The Constitution and the Early Republic:</b></p> <ul style="list-style-type: none"> <li>◆ Core Knowledge Civics Sub-topics:</li> <li>◆ Overview of U.S. Constitution</li> <li>◆ Bill of Rights</li> <li>◆ Legislative Branch</li> <li>◆ Executive Branch</li> <li>◆ Judiciary Branch</li> <li>◆ The early Republic: Washington as founding statesman; the birth of party politics</li> <li>◆ Expansion and Conflict: The Louisiana Purchase; War of 1812</li> </ul>			
December	<p><b>Expansion, Reform, and Economic Growth (1800-1861)</b></p> <ul style="list-style-type: none"> <li>◆ Evolution of the Supreme Court</li> <li>◆ Industrialization in New England</li> <li>◆ The Northern Economic System: capital, industry, labor, trade</li> <li>◆ The Southern Economic System: land, agriculture, slavery, trade</li> <li>◆ Jacksonian Democracy and pre-Civil War reformers: popular politics, abolitionism; women's rights, and schooling</li> <li>◆ Emergence of distinctly American religion, art, and literature</li> <li>◆ New immigrants; migration patterns; nativist</li> </ul>	<p>1.1 Chronology and Cause  1.2 Historical Understanding  1.3 Research, Evidence, and Point of View  1.4 Society, Diversity, Commonality, and the Individual  2.9 The Effects of Geography  3.11 Fundamental Economic Concepts  3.12 Economic Reasoning  3.13 American and Massachusetts Economic History  4.16 Authority, Responsibility, and Power  4.18 Principles and Practices of American Government</p>	<p>Quizzes  Test    Research Paper 2</p>	<p>Text chapters 11, 12,14    <i>The Raven</i>, Edgar Allen Poe (American Reader)    <i>Walden</i>, Henry David Thoreau (American Reader)    <i>The Case for Public Schools</i>, Horace Mann (American Reader)</p>

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
	hostility ♦ Westward migration; Indian removals; war against Mexico			
January - February	<b>The Civil War and Reconstruction (1850-1877)</b> ♦ Slave life; families, religion, and resistance in the American South ♦ A nation divided; the failed attempts at compromise over slavery ♦ Abraham Lincoln; beliefs, election; secession and war ♦ Scenes of war: battlefield, farm, factory, home, hospital, prison ♦ Massachusetts soldiers; Fort Wagner, the Wilderness ♦ Leaders, deciding factors, turning points and human toll of the Civil War ♦ Emancipation Proclamation; the 13 <sup>th</sup> , 14 <sup>th</sup> , and 15 <sup>th</sup> Amendments ♦ Lincoln's Gettysburg Address, Second Inaugural, and assassination ♦ Reconstruction: aims, obstacles and phases	1.1 Chronology and Cause 1.2 Historical Understanding 1.3 Research, Evidence, and Point of View 1.4 Society, Diversity, Commonality and the Individual 1.5 Interdisciplinary Learning: Natural Science, Mathematics and Technology in History 2.7 Physical Spaces of the Earth 2.8 Places and Regions of the World 2.9 The Effects of Geography 2.10 Human Alteration of Environments 4.16 Authority, Responsibility and Power	Quizzes Test  Discussion3	Text Chapters 15, 16, 17, 18  <i>Address to the Ohio Women's Rights Convention</i> , Sojourner Truth (American Reader)  <i>The House Divided</i> , Abe Lincoln (American Reader)  <i>Independence Day Speech at Rochester</i> , Frederick Douglas (American Reader)  <i>The Lincoln-Douglas Debate</i> , (American Reader)
March-April	<b>The Advent of Modern America (1865 to 1920)</b> ♦ Changes and constraints for African Americans;	1.1 Chronology and Cause 1.2 Historical Understanding	Quizzes Test	Text chapters 19, 20, 21, 22

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
	<p>Plessy vs. Ferguson</p> <ul style="list-style-type: none"> <li>◆ Industrial expansion; inventions; resources; government support</li> <li>◆ Modern business: corporation, banking, stock exchange; the Gospel of Wealth</li> <li>◆ Organizing 19<sup>th</sup> century labor; aims, strikes, and obstacles</li> <li>◆ New immigration and migration; life in growing American cities</li> <li>◆ Settlements and diversity; the West, Southwest, Pacific coast, Alaska</li> <li>◆ Crisis and losses on American farms; the Populist movement</li> <li>◆ Spanish-American War; the United States as World Power</li> <li>◆ Progressivism; results and limits; Theodore Roosevelt, Woodrow Wilson</li> </ul>	<p>2.9 The Effects of Geography  2.10 Human Alteration of Environments  3.11 Fundamental Economic Concepts  3.12 Economic Reasoning  3.13 American and Massachusetts Economic History  3.15 Theories of Economy  4.16 Authority, Responsibility and Power  4.19 Citizenship  4.20 Forms of Government</p>	<p>Research Paper 3   Discussion 4</p>	<p><i>Women’s Right to Vote</i>, Susan B. Anthony (American Reader)   <i>In Praise of the strenuous life</i>, Theodore Roosevelt (American Reader)   <i>The New Freedom</i>, Woodrow Wilson (American Reader)</p>
<p>May-June</p>	<p><b>America Becomes a World Power</b></p> <ul style="list-style-type: none"> <li>◆ Spanish American War</li> <li>◆ Panama Canal</li> <li>◆ Expansion of Navy</li> </ul> <p><i>The United States and Two World Wars</i>  <b>World War 1: “The Great War”</b></p> <ul style="list-style-type: none"> <li>◆ Causes and stages – Assassination of Archduke Ferdinand, sinking of Lusitania</li> </ul>	<p>1.1 Chronology and Cause  1.2 Historical Understanding  1.3 Research, Evidence, and Point of View  1.4 Society, Diversity, Commonality and the Individual  1.5 Interdisciplinary Learning: Natural Science, Mathematics and Technology in</p>	<p>Quizzes  Tests   Research Project</p>	<p>Text chapters 23, 24, 25, 26, 27   <i>War message to Congress</i>, Woodrow Wilson (American Reader)   <i>The Marine’s Hymn</i>,</p>

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
	<p>Ferdinand, sinking of Lusitania</p> <ul style="list-style-type: none"> <li>◆ British Empire, Italy becomes a nation, German nationalism and militarism, European imperialism and rivalry in Africa</li> <li>◆ American economic, military and political roles</li> <li>◆ Armistice Day</li> <li>◆ Treaty of Versailles</li> <li>◆ Woodrow Wilson's 14 Points</li> <li>◆ League of Nations</li> </ul> <p><b>Geography of Western and Central Europe</b></p> <ul style="list-style-type: none"> <li>◆ Physical features, populations</li> <li>◆ Languages, religions</li> <li>◆ Industrialization leads to urbanization</li> <li>◆ Natural resources</li> <li>◆ Scandinavia, United Kingdom, France, Belgium, Netherlands, Luxembourg, Germany, Austria, Switzerland, Italy, Iberian Peninsula</li> </ul> <p><b>America from the twenties to the New Deal</b></p> <ul style="list-style-type: none"> <li>◆ Roaring twenties</li> <li>◆ Hemingway, F. Scott Fitzgerald</li> <li>◆ 19<sup>th</sup> Amendment</li> <li>◆ Technological advances</li> <li>◆ The Great Depression</li> <li>◆ Dust Bowl</li> <li>◆ Roosevelt and the New Deal</li> </ul>	<p>History</p> <p>2.7 Physical Spaces of the Earth</p> <p>2.10 Places and Regions of the World</p> <p>2.11 The Effects of Geography</p> <p>2.10 Human Alteration of Environments</p> <p>4.16 Authority, Responsibility and Power</p>		<p>(American Reader)</p> <p><i>First Inaugural Address</i>, Franklin D. Roosevelt (American Reader)</p> <p><i>The Four Freedoms</i>, Franklin D. Roosevelt (American Reader)</p>

Date	Key Content – (Core Knowledge and MA Frameworks)	Massachusetts Frameworks Link	Assessment	Resources
	<p><b>World War 2</b></p> <ul style="list-style-type: none"> <li>◆ Rise of totalitarianism in Europe – Hitler, Mussolini, Stalin, Franco</li> <li>◆ Blitzkrieg</li> <li>◆ Holocaust</li> <li>◆ D-Day</li> <li>◆ Battle of the Bulge</li> <li>◆ Yalta Conference</li> <li>◆ WWII in the Pacific</li> <li>◆ Pearl Harbor</li> <li>◆ Surrender of Japan</li> <li>◆ Creation of the United Nations</li> </ul> <p><b>Geography of the United States</b></p> <ul style="list-style-type: none"> <li>◆ Physical features</li> <li>◆ Political, social and economic features</li> <li>◆ Cities,=</li> <li>◆ Population</li> <li>◆ Regions</li> </ul>			

## Grade 7 American History Supplement

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resources
August-September	Early English Settlements/Daily Life In Massachusetts Colonial Labor Family Life across classes, races, and Religions	1.3 Chronology and Cause 1.4 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 4.17 The Founding Documents 4.18 Principles and Practices of American Government 4.19 Citizenship	Quizzes Tests  Discussion 1	
October-November	Events behind the American Revolution First Battles in Massachusetts Leaders, turning points and deciding factor of the Revolution	1.3 Chronology and Cause 1.4 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 4.16 Authority, Responsibility and Power 4.17 The Founding Documents 4.18 Principles and Practices of American Government 4.19 Citizenship 4.20 Forms of Government	Quizzes Tests  Research Paper 1  Discussion 2	
December	Constitution and Civil Rights	11.2 Historical Understanding 1.3 Research, Evidence, and Point of View 1.4 Society, Diversity, Commonality,	Quizzes Test  Research	

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resources
		and the Individual 2.9 The Effects of Geography 3.11 Fundamental Economic Concepts 3.12 Economic Reasoning 3.13 American and Massachusetts Economic History 4.16 Authority, Responsibility, and Power 4.18 Principles and Practices of American Government	Paper 2	
January - February	Expansion Reform and Economic Growth (1800-1861)	1.6 Chronology and Cause 1.7 Historical Understanding 1.8 Research, Evidence, and Point of View 1.9 Society, Diversity, Commonality and the Individual 1.10 Interdisciplinary Learning: Natural Science, Mathematics and Technology in History 2.7 Physical Spaces of the Earth 2.12 Places and Regions of the World 2.13 The Effects of Geography 2.10 Human Alteration of Environments 4.16 Authority, Responsibility and Power	Quizzes Test  Discussion3	
March-April	Westward Expansion Social changes	1.3 Chronology and Cause 1.4 Historical Understanding	Quizzes Test	

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resources
		2.11 The Effects of Geography 2.12 Human Alteration of Environments 3.13 American and Massachusetts Economic History 4.19 Citizenship	Research Paper 3  Discussion 4	
May-June	The Civil War Reconstruction  The advent of Modern America Geography	1.6 Chronology and Cause 1.7 Historical Understanding 1.8 Research, Evidence, and Point of View 2.14 Society, Diversity, Commonality and the Individual 2.10 Human Alteration of Environments 4.16 Authority, Responsibility and Power	Quizzes Tests  Research Project	

## Assessment

**Discussions** – Groups of students are responsible for facilitating the discussions each month. Students will develop key questions for the discussions and the facilitators will work to make sure all students become actively involved in the dialogue. During discussions students will be expected to explore an issue from a variety of perspectives.

**Research Projects** - Students are expected to utilize different primary and secondary sources, representing a wide variety of viewpoints, in order to answer key questions and support a thesis. Students will critically evaluate the primary sources in order to draw conclusions and differentiate historical fact from historical interpretation and fiction. In all research projects, students will make connections to the current implications of historical eras or movements. When applicable, research projects will be integrated with English.

**Research Papers** - Students will primarily use secondary sources in order to answer key questions and support a thesis. Papers will be shorter in length and will review the historiography of the given subject.

Date	Suggested Student Work	Massachusetts Frameworks Link ( in addition to the History standards indicated above)
<b>September</b>	Discussion 1 Possible Topic: <b>Religious Freedom, Town Meetings</b>	ELA – Discussion Standards LS 1, LS 9
<b>October- November</b>	Research Paper 1 Possible Topic: <b>Bill of Rights</b>  Discussion 2 Possible Topic: <b>Colonist Rebellion</b>	ELA – Discussion Standards LS 1, LS 9  ELA Standards LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25
<b>December</b>	Research Paper 2 Possible Topic: <b>Immigration and migration patterns</b>	ELA Standards LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25
<b>January - February</b>	Discussion 3 Possible Topic: <b>Resistance in the American South (pre-Civil War)</b>	ELA – Discussion Standards LS 1, LS 9
<b>March- April</b>	Research Paper 3 Possible Topic: <b>Industrial Expansion</b>  Discussion 4 Possible Topic: <b>Organizing labor</b>	ELA – Discussion Standards LS 1, LS 9  ELA Standards LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25
<b>May- June</b>	Research Project	ELA Standards

Date	Suggested Student Work	Massachusetts Frameworks Link ( in addition to the History standards indicated above)
	Possible topic: <b>World Wars - student generated research question,</b>	LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25

<b>Research project and Papers – MA English Language Arts Standards</b>	
Gather relevant information for a research project through interview techniques. (LS2)	Identify and use common expository organizational structures and graphic features to comprehend information and compose reports or presentations in all academic disciplines. (LS13)
Write coherent compositions with a clear focus and supporting ideas, drawing on strategies that are most helpful for developing and organizing their ideas. (LS19)	Revise their writing to improve organization and diction after checking the logic underlying the order of their ideas and the precision of their vocabulary. (LS21)
Use knowledge of types of sentences (e.g., simple, compound, and complex), mechanics (e.g., quotation marks, comma at the end of a dependent clause before a main clause), usage (pronoun reference), sentence structure (parallelism, properly placed modifiers), and standard English spelling (homophones) to edit their writing. (LS22)	Generate questions, take notes, and summarize information gleaned from reference works and experts for a research project. (LS23)
Formulate open-ended research questions to explore a topic of class interest and devise appropriate ways to document and display the information they gather. (LS24)	Use prescribed criteria from a scoring rubric to evaluate their own and others' compositions, recitations, or performances before presenting them to an audience. (LS25)

*N.B. The following standards are central to all writing:*

- Use knowledge of types of sentences, mechanics, usage, sentence structure, and standard English spelling to edit their writing. (LS22)
- Use prescribed criteria from a scoring rubric to evaluate their own and others' compositions, recitations, or performances before presenting them to an audience. (LS25)

<b>Discussion– MA English Language Arts Standards</b>	
Apply understanding of agreed-upon rules and individual roles in a variety of discussion formats. (LS1)	Identify basic facts and ideas in what they have read, heard, or viewed, drawing on such strategies as recalling genre characteristics, setting a purpose, generating essential questions, and clarifying ideas by rereading and discussing. (LS9)

# 7<sup>th</sup> Grade Mathematics Curriculum

## Overview

Data gathered from the Third International Mathematics and Science Study (TIMSS) revealed that mathematics students from high performing countries are expected to carry out complex mathematical problem solving much earlier than in traditional US mathematics classrooms. Topics once reserved for advanced mathematics students are now introduced in the elementary grades and proficiency is expected by middle school.

The mathematics curriculum designed for Mystic Valley Charter School seventh graders covers five content strands: number sense and operations; patterns, functions and algebra; geometry; measurement; and data analysis, statistics and probability. The focus of instruction in mathematics is on reinforcing computation skills in the context of solving realistic problems. Students are expected to explain why addition, subtraction or multiplication would be the appropriate operation for a specific situation. Problems that mirror real-life experiences with multiple layers and sequences of operations are typical. Unknown quantities must be calculated and large and small values handled confidently.

The seventh grade mathematics program prepares students to use mathematics as a tool in a variety of other areas. Measurement and data analysis are essential for science class. Computations of scale are required for mapping activities in geography class. Spreadsheets are useful for manipulating numbers in an economics simulation. Reminders about careers using mathematics helps seventh graders answer their perennial question, Why do we need to know this stuff?

Performance on the MCAS test has become a significant consideration for MVCS students. The mathematics program outlined in this document continues the expectation for accurate computation while developing students' problem solving skills, an important element of the MCAS examination. All students who successfully complete the seventh grade program will be prepared to begin Algebra or pre-Algebra in eighth grade.

Resources: Saxon Publishers, *Algebra ½* will be used for this level of math instruction. Supplementary materials are available to assist teachers, to support weaker students, and to provide enrichment for more able students.

Saxon: Math Algebra Level 1/2	Mathematics Skills/ Content	Assessment
<b>August/September:</b> Interpreting Data and Statistics	<b>Content:</b> <ul style="list-style-type: none"> <li>• Mean, median and mode</li> <li>• Discrete data, continuous data</li> <li>• Data tables – types and uses <b>(CK Grade 7)</b></li> <li>• Graphs – line, bar, histograms, stem and leaf plots <b>(CK Grade 7)</b></li> <li>• Identify trends <b>(CK Grade 7)</b></li> <li>• Selecting samples from populations <b>(CK Grade 7)</b></li> <li>• Computation skill review</li> </ul> <b>Skills:</b> <ul style="list-style-type: none"> <li>• Use Excel (or similar) program to record, graph data</li> <li>• Identify biases in survey items</li> <li>• Use statistics to make predictions, inferences, identify trends</li> <li>• Understand and use basic statistics vocabulary</li> </ul>	<b>Assessments:</b> <ul style="list-style-type: none"> <li>• Tests and quizzes including open ended items</li> <li>• Project: construct a statistical profile of relevant traits among your classmates</li> <li>• Oral Presentation: statistics of local interest (Big Dig? Sports teams? Economic data?)</li> </ul>
<b>October:</b> Integers and Equations	<b>Content:</b> <ul style="list-style-type: none"> <li>• Model events and processes</li> <li>• Writing algebraic expressions <b>(CK Grade 7)</b></li> <li>• Solving algebraic equations</li> </ul>	<b>Assessments:</b> <ul style="list-style-type: none"> <li>• Tests and quizzes including translating narrative stories into algebraic equations</li> <li>• Reports: Real life algebra uses</li> </ul>

Saxon: Math Algebra Level 1/2	Mathematics Skills/Content	Assessment
	<p><b>(CK Grade 7)</b></p> <ul style="list-style-type: none"> <li>• Commutative property</li> <li>• Inverse operations</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Use formulas on a spreadsheet</li> <li>• Construct a table to order data and solve problems</li> <li>• Compute with decimals</li> <li>• Compare and order numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Project: Create a board game whose rules are written as algebraic expressions</li> </ul>
<p><b>November:</b> Fractions, Decimals and Number Theory</p>	<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Compare decimals <b>(CK Grade 7)</b></li> <li>• Add, subtract, multiply and divide decimals <b>(CK Grade 7)</b></li> <li>• Place value <b>(CK Grade 7)</b></li> <li>• Associative property</li> <li>• Commutative property</li> <li>• Order of operations <b>(CK Grade 7)</b></li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Use scientific notation to convert large numbers</li> <li>• Use estimation to judge reasonableness of a solution</li> <li>• Solve word problems using decimals, fractions</li> </ul>	<p><b>Assessments:</b></p> <ul style="list-style-type: none"> <li>• Tests and quizzes including estimation items</li> <li>• Project: Scorekeeping in gymnastic, racing, etc.</li> <li>• Research: Number systems in other bases</li> </ul>

Saxon: Math Algebra Level 1/2	Mathematics Skills/ Content	Assessment
<p><b>December:</b> Fractions, Decimals and Number Theory, Continued</p>	<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Fractions to decimals <b>(CK Grade 7)</b></li> <li>• Decimals to fractions <b>(CK Grade 7)</b></li> <li>• Order of operations with fractions, decimals <b>(CK Grade 7)</b></li> <li>• Exponents</li> <li>• Greatest common factor</li> <li>• Least common denominator</li> <li>• Least common multiple</li> <li>• Composite numbers</li> <li>• Primes, prime factorization</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Estimate and compute fractions</li> <li>• Translate real world events into fractional representations</li> <li>• Define and apply irrational numbers</li> <li>• Identify and apply the identity property of addition and multiplication</li> </ul>	<p><b>Assessments:</b></p> <ul style="list-style-type: none"> <li>• Tests and quizzes including translating stories into mathematical expressions</li> <li>• Project: Construction Problems</li> <li>• Oral Report: People in mathematics</li> </ul>
<p><b>January:</b> Proportions and Percents</p>	<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Equivalent fractions <b>(CK Grade 7)</b></li> <li>• Solving equations by dividing</li> <li>• Writing fractions as decimals <b>(CK Grade 7)</b></li> </ul>	<p><b>Assessments:</b></p> <ul style="list-style-type: none"> <li>• Tests and quizzes including map reading items</li> </ul>

Saxon: Math Algebra Level 1/2	Mathematics Skills/Content	Assessment
	<ul style="list-style-type: none"> <li>• Powers of 10</li> <li>• Proportion <b>(CK Grade 7)</b></li> <li>• Ratio</li> </ul> Converting words to numerical expressions (fractions) <b>(CK Grade 7)</b>  <b>Skills:</b> <ul style="list-style-type: none"> <li>• Use proportions to solve problems</li> <li>• Find scale for maps and scale drawings</li> <li>• Create an appropriate scale for a set of data</li> <li>• Model percents</li> <li>• Solve multiple stage problems</li> </ul>	<ul style="list-style-type: none"> <li>• Project: Proportions in the animal kingdom</li> <li>• Oral Reports: Stock market use of percents</li> </ul>
<b>February:</b> Geometry: Patterns and Shapes	<b>Content:</b> <ul style="list-style-type: none"> <li>• Geometric figures, terms <b>(CK Grade 7)</b></li> <li>• Circle graphs</li> <li>• Measuring angles <b>(CK Grade 7)</b></li> <li>• Properties of triangles <b>(CK Grade 7)</b></li> <li>• Properties of polygons</li> <li>• Congruent, similar figures</li> <li>• Diameter</li> <li>• Inscribed figures</li> <li>• Classification of angles, triangles <b>(CK Grade 7)</b></li> <li>• Regular Figures</li> </ul> <b>Skills:</b>	<b>Assessments:</b> <ul style="list-style-type: none"> <li>• Tests and quizzes including construction of polygons items</li> <li>• Project: Tiling and tessellations</li> <li>• Oral Report: First Geometers of Greece</li> </ul>

Saxon: Math Algebra Level 1/2	Mathematics Skills/Content	Assessment
	<ul style="list-style-type: none"> <li>• Classify triangles, polygons, angles</li> <li>• Use protractors, compass and straightedge to make specific shapes</li> <li>• Draw an accurate diagram to represent a narrative event</li> <li>• Solve equations using percents</li> <li>• Compute with decimals, fractions</li> </ul>	
<p><b>March:</b> Geometry and Measurement</p>	<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Transformations</li> <li>• Pythagorean theorem</li> <li>• Congruent and similar figures</li> <li>• Two and three dimensional figures</li> <li>• Trigonometric ratios</li> <li>• Relationship between sides and angles in polygons</li> <li>• Formulas for area, perimeter</li> <li>• Volume of three dimensional figures</li> <li>• Units of measurement</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Define angles and figures by their measurements</li> <li>• Use protractors, astrolabe to solve problems</li> <li>• Use compass and straightedge to construct figures of particular characteristics</li> </ul>	<p><b>Assessments:</b></p> <ul style="list-style-type: none"> <li>• Tests and quizzes including scale reductions, enlargements</li> <li>• Project: The Golden Rectangle</li> </ul>

Saxon: Math Algebra Level 1/2	Mathematics Skills/Content	Assessment
<b>April:</b> Probability	<b>Content:</b> <ul style="list-style-type: none"> <li>• Chance and odds</li> <li>• Independent events</li> <li>• Mean, median, mode</li> <li>• Percentile, quartile</li> <li>• Tree diagrams, tables</li> <li>• Permutations</li> </ul> <b>Skills:</b> <ul style="list-style-type: none"> <li>• Compute accurately with fractions, decimals and percents</li> <li>• Create a spreadsheet and use formulas to analyze probability data</li> </ul>	<b>Assessments:</b> <ul style="list-style-type: none"> <li>• Tests and quizzes including open response items</li> <li>• Project: Patterns of Inheritance</li> <li>• Report: Games of chance</li> </ul>
<b>May:</b> Algebra: Patterns and Functions	<b>Content:</b> <ul style="list-style-type: none"> <li>• Iterative, recursive, linear and quadratic patterns</li> <li>• Compare linear and quadratic patterns</li> <li>• Domain and range for dependent and independent variables</li> <li>• Factoring and rearranging polynomial expressions</li> <li>• Absolute value</li> <li>• Systems of equations</li> <li>• Geometric and arithmetic progressions</li> </ul> <b>Skills:</b>	<b>Assessments:</b> <ul style="list-style-type: none"> <li>• Tests and quizzes including open ended items</li> <li>• Project: Search for the Fibonacci Sequence</li> <li>• Oral Report: Careers using mathematics</li> </ul>

Saxon: Math Algebra Level 1/2	Mathematics Skills/Content	Assessment
	<ul style="list-style-type: none"> <li>• Translate observed patterns and events into mathematical expressions</li> <li>• Compute accurately, using pencil and paper and calculator</li> <li>• Use the time line to demonstrate mathematical operations</li> <li>• Translate algebraic equations into descriptions of natural events or patterns</li> </ul>	
<p><b>June:</b> Graphing on the Coordinate Plane</p>	<p><b>Content:</b></p> <ul style="list-style-type: none"> <li>• Plotting points, lines of best fit</li> <li>• Slope and x and y intercepts</li> <li>• Graphing linear equations</li> <li>• Graphing quadratic equations</li> <li>• Point-slope formula</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Estimate and compute with decimals, fractions and whole numbers</li> <li>• Use the TI-83 (or similar) graphing calculator to display patterns and equations</li> <li>• Translate graphical representations into written descriptions of natural events or patterns</li> </ul>	<p><b>Assessments:</b></p> <ul style="list-style-type: none"> <li>• Tests and quizzes including graphing items</li> <li>• Project 3-D Othello</li> </ul>

## Vignette: Not All Triangles are the Same!

Mrs. Graham checked her watch, giving students the full fifteen minutes to finish the opening skill drill. She noticed some pencils down already, telling her that some of the students were quite proficient in the fraction skills she chose to review today. These reinforcing drills at the beginning of each class were a welcome calm moment in the hectic day, especially for this class right after recess. She switched transparencies and put the answers on the overhead, and students scored their own sheets. Paper Collectors for this week gathered the scored pages and put them in the red folder on her desk.

“What’s this shape?” Mrs. Graham asked as she held up one of the attribute blocks she ‘borrowed’ from a first grade teacher.

“That’s too easy!” some of the students called out, giving her that look that says she better not treat them like elementary school ‘babies.’

“Oh, really?” Mrs. Graham came back at them. “Then each of you make one of these with the index cards on your desk. Cut out your shape and let’s compare.”

When everyone had a triangle cut from the card, Mrs. Graham instructed them to get into their groups of four and compare shapes. Were all the triangles the same? If not, why not? What made them different?

Passing out rulers while monitoring group discussion, Mrs. Graham heard some students using terms like ‘corner,’ ‘angle,’ ‘equilateral.’ This helped her decide which sections of the lesson students would be able to do on their own.

“Now, let’s compile a full list of your similarities and differences on the board. Who’s my recorder this week?” Garrett jumped from his seat and took the chalk at the board. Mrs. Graham helped Garrett spell some of the terms students called out.

“I’m going to have you get more quantitative about your comparisons,” said Mrs. Graham. A teasing groan rose from the class. “Take the rulers I passed out and measure each side of your triangle. I’m going to ask you to tell me the sides, and I’m going to put the measures on the board in particular columns. Pay attention because I want you to notice what makes the triangles fit into each category.”

Mrs. Graham listed the side lengths and student initials in three columns. She covered up the headings of each column, waiting for students to notice the pattern appearing among the lists. When the list was completed, she quickly called on some of the average students to define the similarities among the triangle sides. The brighter students were anxious to jump in, but Mrs. Graham reminded them that she had called on someone for a reason, and only one person should talk at a time. The class continued to construct a wonderful definition for the new triangle terms, equilateral, isosceles, and scalene.

Mrs. Graham continued the lesson with protractors, asking the students to measure the angles in their triangle, and she recorded the student's initials in particular columns depending on the size of the largest angle. Students developed a definition for three more triangle words, obtuse, right, and acute. Since class was quickly coming to an end, Mrs. Graham converted the 'sum of the interior angles' part of the lesson into a homework activity.

"I want you to make at least three different types of triangles, using the categories we just defined. For each triangle, label one vertex A, another B, and the third vertex C. Tear off angles A and B, and tape them next to vertex C. See if you can find the measure of those three angles together. That's your homework assignment for tonight." Mrs. Graham asked Shauna and Jorge to collect rulers and protractors and students packed up their books to head to the next class.