

**Mystic Valley Regional Charter School**  
**8<sup>th</sup> Grade Curriculum**

***REVISED May 2003***

### ***Matrix of Student Work***

<b>Date</b>	<b>Language Art</b>	<b>History and Social Studies</b>	<b>Science</b>	<b>Mathematics</b>	
				<b>Algebra ½</b>	<b>Algebra 1</b>
September	Discussion 1	Discussion 1	Lab Report 1		
October	Research project 1 (whole-class)	Research Paper 1 Discussion 2	Lab Report 2	Open response 1	Open response 1
November	Literature essay 1 (analysis of theme)	Research Paper 2	Lab Reports 3, 4	Open response 2	Open response 2
December	Discussion 2 Research project 2	Research Paper 3 Discussion 3			
January	Presentation 1 (research project topic) Literature essay 2 (response to poetry)		Lab Report 5	Open response 3	Open response 3
February	Other writing 1 (choose from 4 genres)	Research Project 1	Lab Report 6		
March	Discussion 3 Presentation 2 (Dramatic scene)	Discussion 4	Independent study and PowerPoint presentation	Open response 4	Open response 4
April	Literature essay 3	Research Paper 4	Lab Report 7	Open response 5	Open response 5
May	Research project 3 Literature essay 4 (analysis of poetry)	Research Paper 5 Discussion 5	Lab Report 8	Open response 6	
June	Other writing 2 (analysis of text based on author's or peoples' beliefs)		Lab Report 9		
<b>Totals</b>	<ul style="list-style-type: none"> <li>• 3 discussions</li> <li>• 4 literature essays</li> <li>• 2 presentations</li> <li>• 2 other pieces of writing</li> <li>• 4 research projects, total</li> </ul>	<ul style="list-style-type: none"> <li>• 5 discussions</li> <li>• 5 research papers</li> </ul>	<ul style="list-style-type: none"> <li>• 9 lab reports</li> <li>• 1 presentation</li> </ul>	<ul style="list-style-type: none"> <li>• 5 or 6 open response assessments</li> </ul>	

## *Language Arts*

<b>Date</b>	<b>Student work</b>	<b>Materials</b>
September	Discussion 1	Chekov, "The Bet" Crane, "The Open Boat"
October	Research project 1 (whole-class)	Buck, <i>The Good Earth</i>
November	Literature essay 1 (analysis of theme)	Hawthorne, "Dr. Heidigger's Experiment" Tolstoy, "God Sees the Truth But Waits" Dostoyevsky, "An Honest Thief" White, "Death of a Pig"
December	Discussion 2	Kennedy, Inaugural Address King, "I Have a Dream"; "Letter from Birmingham Jail"
	Research project 2	Carson, "The Marginal World"
January	Presentation 1 (research project topic)	Same materials and content as Research project 2
	Other writing 1 (analysis of text based on author's or peoples' beliefs)	Orwell, <i>Animal Farm</i>
February	Other writing 2 (choose from 4 genres)	All Core Knowledge material
March	Discussion 3	Folktales related to Core Knowledge history topics
	Presentation 2 (Dramatic scene)	Shakespeare, <i>Twelfth Night</i>
April	Literature essay 2	Shakespeare, <i>Twelfth Night</i>
May	Research project 3	Topics from Core Knowledge history sequence
	Literature essay 3 (analysis of poetry)	Core Knowledge poetry list
June	Literature essay 4 (response to poetry)	Core Knowledge poetry list

<b>Discussions – at least 3 that are formally assessed</b>	
Apply understanding of agreed-upon rules and individual roles in a variety of discussion formats. (LS1)	Analyze how dialects are reflected in slang, jargon, and language styles of different groups and individuals. (LS6)
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)	Compare variants of complex folktales and develop theories to account for the presence of similar tales in diverse cultures, even when there is no evidence for direct contact among these cultures. (LS16)

<b>Discussion 1</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
September	Anton Chekov, “The Bet” Steven Crane, “The Open Boat”  Participate civilly and productively in group discussions.	<ul style="list-style-type: none"> <li>Apply understanding of agreed-upon rules and individual roles in a variety of discussion formats. (LS1)</li> <li>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)</li> </ul>

<b>Discussion 2</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
December	John F. Kennedy (Inaugural Address), “Ask not what your country can do for you” Martin Luther King, “I Have a Dream”; “Letter from Birmingham Jail”	<ul style="list-style-type: none"> <li>Apply understanding of agreed-upon rules and individual roles in a variety of discussion formats. (LS1)</li> <li>Analyze how dialects are reflected in slang, jargon, and language styles of different groups and individuals. (LS6)</li> </ul>

<b>Discussion 3</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
March	Elements of Fiction: <ul style="list-style-type: none"> <li>Review of plot, setting, theme, point of view, conflict, suspense</li> <li>Characterization, via different perspectives in a story, flat and round, static and dynamic, motivation, protagonist and antagonist</li> <li>Tone and diction</li> </ul>	<ul style="list-style-type: none"> <li>Apply understanding of agreed-upon rules and individual roles in a variety of discussion formats. (LS1)</li> <li>Compare variants of complex folktales and develop theories to account for the presence of similar tales in diverse cultures, even when there is no evidence for direct contact among these cultures. (LS16)</li> </ul>

**Research project – 3 projects (one whole-class, two individual)**

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)
Use a variety of media such as computerized card catalogs, on-line data bases, and electronic almanacs and encyclopedias for research. (LS26)	

N.B. The following standards are central to all 3 research projects:

- 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)

Research Project 1		
Date	Core Knowledge	Massachusetts Framework Link
October	<p>Write research essays, with attention to:</p> <ul style="list-style-type: none"> <li>• Asking open-ended questions</li> <li>• Gathering relevant data</li> <li>• Summarizing, paraphrasing, and quoting accurately when taking notes</li> <li>• Defining a thesis</li> </ul> <p>Punctuation review: semi-colons, commas, quotations                      Pearl S. Buck, <i>The Good Earth</i></p>	<ul style="list-style-type: none"> <li>• 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)</li> </ul>

<b>Research Project 2</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
December	<p>Write research essays, with attention to:</p> <ul style="list-style-type: none"> <li>• Asking open-ended questions</li> <li>• Gathering relevant data</li> <li>• Summarizing, paraphrasing, and quoting accurately when taking notes</li> <li>• Defining a thesis</li> <li>• Organizing with an outline</li> <li>• Integrating quotations form sources</li> </ul> <p>Punctuation: misplaced modifiers Rachel Carson, "The Marginal World"</p>	<ul style="list-style-type: none"> <li>• Write coherent compositions with a clear focus and supporting ideas, drawing on strategies that are most helpful for developing and organizing their ideas. (LS19)</li> <li>• 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)</li> <li>• Generate questions, take notes, and summarize information gleaned from reference works and experts for a research project. (LS23)</li> </ul>

<b>Research Project 3</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
May	<p>Write research essays, with attention to:</p> <ul style="list-style-type: none"> <li>• Asking open-ended questions</li> <li>• Gathering relevant data</li> <li>• Summarizing, paraphrasing, and quoting accurately when taking notes</li> <li>• Defining a thesis</li> <li>• Organizing with an outline</li> <li>• Integrating quotations form sources</li> <li>• Acknowledging sources and avoiding plagiarism</li> <li>• Preparing a bibliography</li> </ul> <p>Punctuation: parallelism, sentence variety Topics from Core Knowledge History Sequence</p>	<ul style="list-style-type: none"> <li>• Gather relevant information for a research project through interview techniques. (LS2)</li> <li>• Identify and use common expository organizational structures and graphic features to comprehend information and compose reports or presentations in all academic disciplines. (LS13)</li> <li>• Write coherent compositions with a clear focus and supporting ideas, drawing on strategies that are most helpful for developing and organizing their ideas. (LS19)</li> <li>• 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)</li> </ul>

<b>Presentation – 2 public presentations</b>	
Present similar content for various purposes and to different audiences, showing appropriate changes in delivery. (LS3)	Develop characters through the use of basic acting skills (such as memorization, sensory recall, concentration, diction, body alignment, and expressive gesture), and describe the artistic choices made in their development. (LS18)
Analyze the effect on the reader's or viewer's emotions of text and image in print journalism, and images, text, and sound in electronic journalism, distinguishing the techniques used in each to achieve these effects. (LS27)	Evaluate when to use different kinds of images (images, music, sound effects, graphics) to create an effective production. (LS28)

<b>Presentation 1</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
January	Give a short speech to the class. Demonstrate an ability to use standard pronunciation when speaking to large groups and in formal circumstances.  Topics from Core Knowledge History Sequence	<ul style="list-style-type: none"> <li>• Present similar content for various purposes and to different audiences, showing appropriate changes in delivery. (LS3)</li> <li>• Analyze the effect on the reader's or viewer's emotions of text and image in print journalism, and images, text, and sound in electronic journalism, distinguishing the techniques used in each to achieve these effects. (LS27)</li> </ul>

<b>Presentation 2 – dramatic scene</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
March	Shakespeare, <i>Twelfth Night</i> Elements of drama	<ul style="list-style-type: none"> <li>• Develop characters through the use of basic acting skills (such as memorization, sensory recall, concentration, diction, body alignment, and expressive gesture), and describe the artistic choices made in their development. (LS18)</li> <li>• Evaluate when to use different kinds of images (images, music, sound effects, graphics) to create an effective production. (LS28)</li> </ul>

<b>Literature paper</b>	
Apply knowledge of the concept that theme refers to the main idea and meaning of a selection, whether it is implied or stated directly, and analyze and evaluate similar themes across a variety of selections, distinguishing theme from topic. (LS11)	Locate and analyze elements of plot and characterization and then use an understanding of these elements to compose a short essay on how the qualities of the central characters determine resolution of the conflict. (LS12)
Respond to and analyze the effects of sound in poetry (alliteration, assonance, consonance, onomatopoeia, and rhyme scheme). (LS14)	Identify sensory imagery and direct or indirect comparisons when responding to literature, and then choose words for these purposes in their own compositions. (LS15)
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)
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 literature papers:*

- 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, 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>Literature essay 1 – analysis of theme in short stories</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
November	Nathaniel Hawthorne, “Dr. Heidigger’s Experiment” Leo Tolstoy, “God Sees the Truth But Waits” Fyodor Dostoyevsky, “An Honest Thief” E.B. White, “Death of a Pig”  Literary terms – irony, flashbacks, hyperbole	<ul style="list-style-type: none"> <li>• Apply knowledge of the concept that theme refers to the main idea and meaning of a selection, whether it is implied or stated directly, and analyze and evaluate similar themes across a variety of selections, distinguishing theme from topic. (LS11)</li> </ul>

Literature essay 2 – response to poetry		
Date	Core Knowledge	Massachusetts Framework Link
January	Shakespeare, Sonnet 18, “Shall I Compare Thee” Gerald Manley Hopkins, “Spring and Fall” Langston Hughes, “Theme for English B” Gwendolyn Brooks, “We Real Cool”	<ul style="list-style-type: none"> <li>Identify sensory imagery and direct or indirect comparisons when responding to literature, and then choose words for these purposes in their own compositions. (LS15)</li> </ul>

Literature essay 3 – essay explaining how qualities of characters determine resolution of conflict		
Date	Core Knowledge	Massachusetts Framework Link
April	Shakespeare, <i>Twelfth Night</i>	<ul style="list-style-type: none"> <li>Locate and analyze elements of plot and characterization and then use an understanding of these elements to compose a short essay on how the qualities of the central characters determine resolution of the conflict. (LS12)</li> </ul>

Literature essay 4 – analysis of how sound creates meaning in poetry		
Date	Core Knowledge	Massachusetts Framework Link
May	<p>Poems: (<i>Note – these poems represent a selected core of poems to which students will be exposed. Teachers will decide on a selected list of poetry for students to choose from. This list will be the same for each class and will be approved by the Professional Development Coordinator in advance. Poems may be read earlier than May and June; the essay will be written during this month</i>)</p> <p>e.e. cummings, “Buffalo Bill’s” Carl Sandburg, “Chicago” Dylan Thomas, “Do Not Go Gentle into That Good Night” Elizabeth Barrett Browning, “How do I love thee?” Robert Browning, “How They Brought the Good News From Ghent to Aix” Emily Dickinson, “I dwell in possibility”; “Apparently with no surprise” W. B. Yeats, “The Lake of Innisfree” William Wordsworth, “Lucy Gray (or Solitude)”; “My</p>	<ul style="list-style-type: none"> <li>Respond to and analyze the effects of sound in poetry (alliteration, assonance, consonance, onomatopoeia, and rhyme scheme). (LS14)</li> </ul>

	<p>Heart Leaps Up” Robert Frost, “Mending Wall”; “The Gift Outright” E.A. Robinson, “Mr. Flood’s Party” Shakespeare, From Hamlet, “Neither a borrower...” Percy Byshe Shelley, “Ozymandias”</p> <p>Elements of poetry</p>	
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<b>Other writing -</b>	
Identify and analyze the characteristics of four major genres - non-fiction, fiction, drama, and poetry - as forms chosen by an author to accomplish a purpose. (LS10)	Analyze how a short story, poem, film, or essay can be shown to reflect the author's personal history, attitudes, and beliefs; or how a film or work of literature can be shown to reflect the period, ideas, customs, and outlooks of a people living in a particular time in history. (LS17)
Select and use appropriate genres to achieve different rhetorical purposes. (LS20)	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)	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 literature papers:*

- 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, 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>1 analysis based on the author's history or the beliefs of a people</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
January	George Orwell, <i>Animal Farm</i> Topics from Core Knowledge History Sequence	<ul style="list-style-type: none"> <li>• Analyze how a short story, poem, film, or essay can be shown to reflect the author's personal history, attitudes, and beliefs; or how a film or work of literature can be shown to reflect the period, ideas, customs, and outlooks of a people living in a particular time in history. (LS17)</li> </ul>

<b>1 work of non-fiction, fiction, drama, or poetry</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
February	<i>N.B. All Core Knowledge materials could be used here. This work should occur in tandem with the study of short stories, <u>Twelfth Night</u>, poems, or novels so that</i>	<ul style="list-style-type: none"> <li>• Identify and analyze the characteristics of four major genres - non-fiction, fiction, drama, and poetry - as forms chosen by an author to accomplish a purpose. (LS10)</li> <li>• Select and use appropriate genres to achieve different rhetorical purposes.</li> </ul>

	<i>students can model their work on these examples.</i>	(LS20)
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<b>On-going/ stand-alone</b>		
Identify and use correctly words related as synonyms or shades of meaning, antonyms, and homographs; and words related through parts and origins. Use a dictionary as a reference. (LS4)		Identify all parts of speech, types of sentences, mechanics, usage, sentence structure, and Standard English spelling. (LS5)
Describe the origins and meanings of common, learned, and foreign words used frequently in written English. (LS7)		Use their knowledge of Greek and Latin roots as well as context clues and glossaries to understand the specialized vocabulary in the content areas, and use these words accurately in speaking and writing. (LS8)

<b>Spelling Log, Quizzes and Tests, Informal writing to apply spelling words</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
Ongoing	Spelling words	<ul style="list-style-type: none"> <li>Identify all parts of speech, types of sentences, mechanics, usage, sentence structure, and Standard English spelling. (LS5)</li> </ul>

<b>See Latin activities, attached</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
Ongoing	Vocabulary – Latin and Greek words and the English words based upon them Foreign phrases commonly used in English	<ul style="list-style-type: none"> <li>Describe the origins and meanings of common, learned, and foreign words used frequently in written English. (LS7)</li> <li>Use their knowledge of Greek and Latin roots as well as context clues and glossaries to understand the specialized vocabulary in the content areas, and use these words accurately in speaking and writing. (LS8)</li> </ul>

<b>Vocabulary Log, Quizzes and Tests, Informal writing to apply vocabulary words</b>		
<b>Date</b>	<b>Core Knowledge</b>	<b>Massachusetts Framework Link</b>
Ongoing	Spelling words Vocabulary - Latin and Greek words and the English words based upon them	<ul style="list-style-type: none"> <li>Identify and use correctly words related as synonyms or shades of meaning, antonyms, and homographs; and words related through parts and origins. Use a dictionary as a reference. (LS4)</li> </ul>

Science 7<sup>th</sup> Grade

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
September	<p><i>Sound Waves</i></p> <ul style="list-style-type: none"> <li>• Properties of waves – frequency, wavelength, speed, crest, trough, amplitude</li> <li>• Types of waves</li> <li>• Units of measurement</li> </ul>	<p><i>***Lab Report Standards***</i></p> <ul style="list-style-type: none"> <li>• Explain how technological progress has been the result of cumulative work over many centuries by men and women from various cultures and races. Choose an example of such an invention that formed the bases for a major change in the way we live our lives. (LS76)</li> <li>• Describe ways that technological devices have improved the quality of life for individuals. Choose an example of such an invention that formed the bases for a major change in the way we live our lives. (LS77)</li> <li>• Describe ways that technological advances may be accompanied by negative side effects. (LS78)</li> <li>• Explain ways that energy can be changed from one form to another. For example, heat and light are involved in physical or chemical changes and at times may be accompanied by sound. (LS29)</li> <li>• Document ways that a range of tools and machines, such as measuring, hand and optical tools, are used to implement solutions to design problems. (LS82)</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
October	<p><i>Sound Waves</i></p> <ul style="list-style-type: none"> <li>• Types of waves</li> <li>• Units of measurement</li> <li>• Periodic motion</li> </ul>	<p><i>***Lab Report Standards***</i></p> <ul style="list-style-type: none"> <li>• Explain how technological progress has been the result of cumulative work over many centuries by men and women from various cultures and races. Choose an example of such an invention that formed the bases for a major change in the way we live our lives. (LS76)</li> <li>• Describe ways that technological devices have improved the quality of life for individuals. Choose an example of such an invention that formed the bases for a major change in the way we live our lives. (LS77)</li> <li>• Describe ways that technological advances may be accompanied by negative side effects. (LS78)</li> <li>• Explain ways that energy can be changed from one form to another. For example, heat and light are involved in physical or chemical changes and at times may be accompanied by sound. (LS29)</li> <li>• Document ways that a range of tools and machines, such as measuring, hand and optical tools, are used to implement solutions to design problems. (LS82)</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
November-December	<p><i>Electromagnetic Radiation and Light</i></p> <ul style="list-style-type: none"> <li>• Waves and electromagnetic radiation</li> <li>• Electromagnetic spectrum</li> <li>• Refraction</li> <li>• Reflection</li> </ul>	<ul style="list-style-type: none"> <li>• <i>***Lab Report Standards***</i></li> <li>• Represent an understanding that energy cannot be created or destroyed but exists in different interchangeable forms, such as light, heat, chemical, electrical, and mechanical. (LS25)</li> <li>• Illustrate an understanding that energy comes to the Earth as electromagnetic radiation in a range of wavelengths, such as light, infrared, ultraviolet, microwaves, and radio waves. Explain ways in which the amount of each type of radiation reaching the surface of the Earth depends on the absorption properties of the atmosphere. (LS27)</li> <li>• Investigate and describe an understanding of visible electromagnetic radiation, which we generally call light, with reference to qualities such as color and brightness. Illustrate understanding that light has direction associated with it, and can be absorbed, scattered, reflected or transmitted by intervening matter. Demonstrate and explain refraction as the process by which light's direction can be changed by passing from one medium to another. (LS28)</li> <li>• Explain ways that energy can be changed from one form to another. For example, heat and light are involved in physical or chemical changes and at times may be accompanied by sound. (LS29)</li> <li>• Illustrate that the Sun produces energy and is the major source of heat and light for Earth. Examine evidence that energy received from the Sun as heat and light drives many processes on Earth's surface and in its atmosphere. (LS70)</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
January-February	<p><i>Electricity and Magnetism</i></p> <p>Electricity</p> <ul style="list-style-type: none"> <li>• Basic terms and concepts</li> <li>• Open and closed circuits</li> <li>• Insulators and conductors</li> <li>• Safety</li> <li>• Electrons</li> <li>• Static Electricity</li> <li>• Lightening</li> <li>• Flowing electricity</li> <li>• Volts</li> </ul> <p>Magnetism</p> <ul style="list-style-type: none"> <li>• Earth's magnetism</li> <li>• Compass, navigation</li> <li>• Connection between magnetism and electricity</li> <li>• Magnetic poles – attract or repel?</li> <li>• Electric generator</li> <li>• Transformer</li> </ul>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• Demonstrate principles of electrical circuits. Use wires, batteries, bulbs and instrumentation to measure and analyze electrical energy resistance, current and power. Use electric currents to produce electromagnetic coils of wire, and, conversely, use a moving magnet to generate a current in a circuit. LS 30</li> <li>• Represent an understanding that energy cannot be created or destroyed but exists in different interchangeable forms, such as light, heat, chemical, electrical, and mechanical. (LS25)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> <li>✓ Mid Year exam</li> </ul>
March	<p><i>Electricity and Magnetism</i></p> <p>Magnetism</p> <ul style="list-style-type: none"> <li>• Connection between magnetism and electricity</li> <li>• Electric generator</li> <li>• Transformer</li> <li>• Using electrical power</li> <li>• Batteries</li> </ul> <p><b><i>Independent Exploration</i></b> <i>Self selected topic of study based on previous</i></p>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• Demonstrate principles of electrical circuits. Use wires, batteries, bulbs and instrumentation to measure and analyze electrical energy resistance, current and power. Use electric currents to produce electromagnetic coils of wire, and, conversely, use a moving magnet to generate a current in a circuit. LS 30</li> <li>• Represent an understanding that energy cannot be created or destroyed but exists in different interchangeable forms, such as light, heat, chemical, electrical, and mechanical. (LS25)</li> <li>• Analyze alternative explanations and procedures. (LS9)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> <li>✓ <b>Independent Investigation and Power Point Presentation</b></li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
	<p><i>topic areas. Students will receive a list of topics to choose from that are approved by the Professional Development Coordinator.</i></p>	<ul style="list-style-type: none"> <li>• Communicate ideas and questions generated, and suggest improvements or alternatives to the experimental techniques used. (LS 11)</li> <li>• Communicate the idea that usually there is more than one solution to a technological problem. (LS12)</li> <li>• Design a solution involving a technological problem and describe its advantages and disadvantages.(LS 13)</li> </ul>	
<p>April -May</p>	<p><i>Physics-Motion, Forces</i></p> <ul style="list-style-type: none"> <li>• Velocity</li> <li>• Speed</li> <li>• Formula Speed = Distance/time</li> <li>• Concept of force (push, pull)</li> <li>• Gravity</li> <li>• Magnetic force</li> <li>• Measuring force</li> <li>• Unbalanced force and its effects on velocity</li> </ul> <p><i>Physics-Density and Buoyancy, Work, Energy, Power</i></p> <ul style="list-style-type: none"> <li>• Calculating density</li> <li>• Archimedes</li> <li>• Predicting buoyancy</li> <li>• Work = Force x Distance</li> <li>• Units of measure</li> <li>• Kinetic and Potential energy</li> <li>• Power = Work / Time</li> </ul>	<ul style="list-style-type: none"> <li>• <i>***Lab Report Standards***</i></li> <li>• Show and describe how forces acting on objects as pushes or pulls can either reinforce or oppose each other. (LS22)</li> <li>• Demonstrate that all forces have magnitude and direction. Create situations to model how forces acting in the same direction reinforce each other and forces acting in different directions may detract or cancel each other. (LS 23)</li> <li>• Describe and represent an object's motion graphically in terms of direction, speed, velocity, and/or position versus time. Also describe these quantities verbally and mathematically. (LS 24)</li> <li>• Identify properties that allow materials to be distinguished from one another and often make them well suited to specific purposes. For example, compare and measure different materials in terms of their characteristic properties such as density, texture, color.(LS14)</li> <li>• Present evidence that a chemical change involves the transformation of one or more substances into new substances with different characteristic properties. Give examples that such changes are usually accompanied by the release of or absorption of various types of energy, especially radiant energy such as heat or light. (LS16)</li> <li>• Represent an understanding that energy cannot be created or destroyed but exists in different interchangeable forms, such as light, heat, chemical, electrical, and mechanical. (LS25)</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>• Present evidence that heat energy moves in predictable ways, flowing from warmer objects to cooler ones until both objects are at the same temperature. Predict and use tools to measure this movement. (LS26)</li> <li>• Illustrate that the Sun produces energy and is the major source of heat and light for Earth. Examine evidence that energy received from the Sun as heat and light drives many processes on Earth's surface and in its atmosphere. (LS70)</li> <li>• Describe how power systems are used to convert and transmit mechanical, electrical, fluid, and heat energy. Describe limited (i.e., fossil fuels), unlimited (i.e., solar, gravitational) and renewable (i.e., biomass) energy sources. (LS91)</li> </ul>	
June	<p><i>Chemistry of Food and Respiration – Human Health*</i></p> <ul style="list-style-type: none"> <li>• Balanced diet</li> <li>• Food pyramid</li> <li>• Respiration</li> </ul> <p><b>*Ties into Health</b></p>	<ul style="list-style-type: none"> <li>• <b>***Lab Report Standards***</b></li> <li>• MA Comprehensive Health Standards – Body Systems1.6-1.9)</li> <li>• Describe ways in which innovations and inventions address human biological, physical and psychological needs. Choose an invention that has contributed to your happiness and find out about how it came to be. (LS 81)</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. (LS35)</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. (LS37)</li> <li>• Explain situations in which short-term changes in available food, moisture, or temperature of an ecosystem may result in a change in the number of organisms in a population or in the average size of individual organisms or in the behavior of individuals in a</li> </ul>	<ul style="list-style-type: none"> <li>✓ Tests and quizzes</li> <li>✓ Lab Reports</li> <li>✓ Class Participation</li> <li>✓ Final Exams</li> </ul>

MONTH	CORE KNOWLEDGE CONTENT (Refer to Core Knowledge Sequence)	MASSACHUSETTS CURRICULAR FRAMEWORKS	ASSESSMENT
		<p>population. Explore through models and evidence ways in which long term changes may result in the elimination of a population or the introduction of new populations. (LS38)</p> <ul style="list-style-type: none"> <li>• Present evidence that species depend on one another. Describe ways in which interactions of organisms with each other and non-living parts of their environments result in the flow of energy and matter throughout the system. (LS44)</li>   <li>• Observe and illustrate the variety of ways in which plants, animals, fungi, and microorganisms interact. Represent how matter is cycled and recycled through these interactions, and energy flows through ecosystems.(LS46)</li> </ul>	

### Mathematics

N.B. Open Response questions can be found in Appendix B.

<b>Algebra 1/2</b>		
<b>Date</b>	<b>Open Response Question</b>	<b>Saxon Lessons</b>
October	Open Response 1: Number Operations, Area, and Measures of Central Tendency	<ul style="list-style-type: none"> <li>• Multiplication (4)</li> <li>• Areas of Rectangles (17)</li> <li>• Average (21)</li> <li>• Mean, Median, Mode, and Range (26)</li> <li>• Average in Word Problems (26)</li> </ul>
November	Open Response 2: Order of Operations, Radicals, and Exponents	<ul style="list-style-type: none"> <li>• Order of Operations (31)</li> <li>• Symbols of Inclusion, Division in Order of Operations (42)</li> <li>• Roots, Order of Operations with Exponents and Roots (44)</li> <li>• Evaluation of Exponential Expressions and Radicals (47)</li> </ul>
January	Open Response 3: Ratio, Proportion, Percent	<ul style="list-style-type: none"> <li>• Fractional Part of a Number, Fractional Equations (48)</li> <li>• Decimal Part of a Number (51)</li> <li>• Percent (53)</li> <li>• Ratio and Proportion (54)</li> <li>• Fractions, Decimals, and Percents (55)</li> <li>• Proportions with Fractions (59)</li> <li>• Ratio Word Problems (66)</li> <li>• Percent Word Problems, Visualizing Percents Less Than 100 (68)</li> </ul>
March	Open Response 4: Signed numbers, Rate, and Graphing a Line	<ul style="list-style-type: none"> <li>• Adding Signed Numbers (69)</li> <li>• Rules for Addition of Signed Numbers (70)</li> <li>• Order of Addition (74)</li> <li>• Rate Problems as Proportion Problems (83)</li> <li>• Negative Coefficients (84)</li> </ul>
April	Open Response 5: Angles and the Pythagorean Theorem	<ul style="list-style-type: none"> <li>• Estimating roots (92)</li> <li>• Adjacent Angles, Complementary and Supplementary Angles, Measuring Angles (98)</li> <li>• Classifying Triangles, Angles in Triangles (104)</li> </ul>
May	Open Response 6:	<ul style="list-style-type: none"> <li>• Probability (112 and 114)</li> </ul>

	Probability and Permutations	• Permutations (122)
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<b>Algebra 1</b>		
<b>Date</b>	<b>Open Response Question</b>	<b>Saxon Lessons</b>
October	Open Response 1: Positives, Negatives, and Order of Operations	<ul style="list-style-type: none"> <li>• Rules for Addition, Adding Two or More Numbers (6)</li> <li>• Rules for Multiplication of Signed Numbers, Rules for Division of Timed Numbers (9)</li> <li>• Symbols of Inclusion, Order of Operations (12)</li> <li>• Multiple Symbols of Inclusion, More on Order of Operations, Products of Signed Numbers (13)</li> <li>• Exponents, Powers of Negative Numbers, Roots, Evaluation of Powers (19)</li> <li>• Product Rule for Exponents, Addition of Like Terms with Exponents</li> </ul>
November	Open Response 2: Linear Equations, Slope, and Cartesian Coordinates	<ul style="list-style-type: none"> <li>• Review of Numerical and Algebraic Expressions (22)</li> <li>• Solutions of Equations (25)</li> <li>• More Complicated Equations (26)</li> <li>• Algebraic Phrases (30)</li> <li>• Polynomial Equations, Cartesian Coordinate System (50)</li> <li>• Graphs of Linear Equations (51)</li> <li>• Simultaneous Equations, Solving Simultaneous Equations by Substitution (54)</li> </ul>
January	Open Response 3: Prisms, Cylinders, Pyramids, Cones, and Volume	<ul style="list-style-type: none"> <li>• Geometric Solids, Prisms and Cylinders (60)</li> <li>• Pyramids and Cones (72)</li> </ul>
March	Open Response 4: Functions and Relations	<ul style="list-style-type: none"> <li>• Evaluating Functions, Domain and Range (82)</li> <li>• Tests for Functions (87)</li> <li>• Graphs of Non-Linear Functions, Recognizing Shapes of Various Non-Linear Functions (95)</li> </ul>
April	Open Response 5: Exponential and Linear Growth	<ul style="list-style-type: none"> <li>• Slope Formula (98)</li> <li>• Exponential Growth (114)</li> </ul>

<b>Algebra <math>\frac{1}{2}</math>, Lessons 1-26</b>		
<b>Open Response 1: Number Operations, Area, and Measures of Central Tendency</b>		
<b>Date</b>	<b>Saxon Topics (Lesson)</b>	<b>Massachusetts Framework Link</b>
October	<ul style="list-style-type: none"> <li>• Multiplication (4)</li> <li>• Areas of Rectangles (17)</li> <li>• Average (21)</li> <li>• Mean, Median, Mode, and Range (26)</li> <li>• Average in Word Problems (26)</li> </ul>	<ul style="list-style-type: none"> <li>• Find, describe, and interpret appropriate measures of central tendency (mean, median, and mode) and spread (range) that represent a set of data. Use these notions to compare different sets of data. (8.D.3)</li> <li>• Demonstrate an understanding of the concepts and apply formulas and procedures for determining measures, including those of area and perimeter/circumference of parallelograms, trapezoids, and circles. Given the formulas, determine the surface area and volume of rectangular prisms, cylinders, and spheres. Use technology as appropriate. (8.M.9)</li> </ul>

<b>Algebra <math>\frac{1}{2}</math>, Lessons 26-47</b>		
<b>Open Response 2: Order of Operations, Radicals, and Exponents</b>		
<b>Date</b>	<b>Saxon Topics (Lesson)</b>	<b>Massachusetts Framework Link</b>
November	<ul style="list-style-type: none"> <li>• Order of Operations (31)</li> <li>• Symbols of Inclusion, Division in Order of Operations (42)</li> <li>• Roots, Order of Operations with Exponents and Roots (44)</li> <li>• Evaluation of Exponential Expressions and Radicals (47)</li> </ul>	<ul style="list-style-type: none"> <li>• Apply the rules of powers and roots to the solution of problems. Extend the Order of Operations to include positive integer exponents and square roots. (8.N.1)</li> <li>• Estimate and compute with fractions (including simplification of fractions), integers, decimals, and percents (including those greater than 100 and less than 1). (8.N.10)</li> <li>• Select and use appropriate operations—addition, subtraction, multiplication, division, and positive integer exponents—to solve problems with rational numbers (including negatives). (8.N.12)</li> </ul>

<b>Algebra <math>\frac{1}{2}</math>, Lessons 47-68</b>		
<b>Open Response 3: Ratio, Proportion, Percent</b>		
<b>Date</b>	<b>Saxon Topics (Lesson)</b>	<b>Massachusetts Framework Link</b>
January	<ul style="list-style-type: none"> <li>Fractional Part of a Number, Fractional Equations (48)</li> <li>Decimal Part of a Number (51)</li> <li>Percent (53)</li> <li>Ratio and Proportion (54)</li> <li>Fractions, Decimals, and Percents (55)</li> <li>Proportions with Fractions (59)</li> <li>Ratio Word Problems (66)</li> <li>Percent Word Problems, Visualizing Percents Less Than 100 (68)</li> </ul>	<ul style="list-style-type: none"> <li>Compare, order, estimate, and translate among integers, fractions and mixed numbers (i.e., rational numbers), decimals, and percents. (8.N.1)</li> <li>Use ratios and proportions in the solution of problems, in particular, problems involving unit rates, scale factors, and rate of change. (8.N.3)</li> <li>Estimate and compute with fractions (including simplification of fractions), integers, decimals, and percents (including those greater than 100 and less than 1). (8.N.10)</li> <li>Determine when an estimate rather than an exact answer is appropriate and apply in problem situations. (8.N.11)</li> <li>Select, convert (within the same system of measurement), and use appropriate units of measurement or scale. (8.M.1)</li> <li>Use ratio and proportion (including scale factors) in the solution of problems, including problems involving similar plane figures and indirect measurement. (8.M.4)</li> </ul>

<b>Algebra <math>\frac{1}{2}</math>, Lessons 69-85</b>		
<b>Open Response 4: Signed numbers, Rate, and Graphing a Line</b>		
<b>Date</b>	<b>Saxon Topics (Lesson)</b>	<b>Massachusetts Framework Link</b>
March	<ul style="list-style-type: none"> <li>Adding Signed Numbers (69)</li> <li>Rules for Addition of Signed Numbers (70)</li> <li>Order of Addition (74)</li> <li>Rate Problems as Proportion Problems (83)</li> <li>Negative Coefficients (84)</li> <li>Equation of a Line, Graphing a Line (85)</li> </ul>	<ul style="list-style-type: none"> <li>Use linear equations to model and analyze problems involving proportional relationships. Use technology as appropriate. (8.P.9)</li> <li>Use tables and graphs to represent and compare linear growth patterns. In particular, compare rates of change and x- and y-intercepts of different linear patterns. (8.P.10)</li> </ul>

<b>Algebra <math>\frac{1}{2}</math>, Lessons 86-108</b>		
<b>Open Response 5: Angles and the Pythagorean Theorem</b>		
<b>Date</b>	<b>Saxon Topics (Lesson)</b>	<b>Massachusetts Framework Link</b>
April	<ul style="list-style-type: none"> <li>Estimating roots (92)</li> <li>Adjacent Angles, Complementary and</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate an understanding of the relationships of angles formed by intersecting lines, including parallel lines cut by a transversal. (8.G.3)</li> </ul>

	Supplementary Angles, Measuring Angles (98) • Classifying Triangles, Angles in Triangles (104)	• Demonstrate an understanding of the Pythagorean Theorem. Apply the theorem to the solution of problems. (8.G.4)
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Algebra $\frac{1}{2}$ , Lessons 108-123 Open Response 6: Probability and Permutations		
Date	Saxon Topics (Lesson)	Massachusetts Framework Link
May	<ul style="list-style-type: none"> <li>Probability (112 and 114)</li> <li>Permutations (122)</li> </ul>	<ul style="list-style-type: none"> <li>Use tree diagrams, tables, organized lists, basic combinatorics (“fundamental counting principle”), and area models to compute probabilities for simple compound events, e.g., multiple coin tosses or rolls (8.D.4)</li> </ul>

Algebra 1, Lessons 1-21 Open Response 1: Positives, Negatives, and Order of Operations		
Date	Saxon Topics (Lesson)	Massachusetts Framework Link
October	<ul style="list-style-type: none"> <li>Rules for Addition, Adding Two or More Numbers (6)</li> <li>Rules for Multiplication of Signed Numbers, Rules for Division of Timed Numbers (9)</li> <li>Symbols of Inclusion, Order of Operations (12)</li> <li>Multiple Symbols of Inclusion, More on Order of Operations, Products of Signed Numbers (13)</li> <li>Exponents, Powers of Negative Numbers, Roots, Evaluation of Powers (19)</li> <li>Product Rule for Exponents, Addition of Like Terms with Exponents</li> </ul>	<ul style="list-style-type: none"> <li>Apply the rules of powers and roots to the solution of problems. Extend the Order of Operations to include positive integer exponents and square roots. (8.N.1)</li> <li>Estimate and compute with fractions (including simplification of fractions), integers, decimals, and percents (including those greater than 100 and less than 1). (8.N.10)</li> <li>Select and use appropriate operations—addition, subtraction, multiplication, division, and positive integer exponents—to solve problems with rational numbers (including negatives). (8.N.12)</li> </ul>

Algebra 1, Lessons 22-54 Open Response 2: Linear Equations, Slope, and Cartesian Coordinates		
Date	Saxon Topics (Lesson)	Massachusetts Framework Link
November	<ul style="list-style-type: none"> <li>Review of Numerical and Algebraic Expressions (22)</li> <li>Solutions of Equations (25)</li> </ul>	<ul style="list-style-type: none"> <li>Identify the slope of a line as a measure of its steepness and as a constant rate of change from its table of values, equation, or graph. Apply the concept of slope to the solution of problems.</li> </ul>

	<ul style="list-style-type: none"> <li>• More Complicated Equations (26)</li> <li>• Algebraic Phrases (30)</li> <li>• Polynomial Equations, Cartesian Coordinate System (50)</li> <li>• Graphs of Linear Equations (51)</li> <li>• Simultaneous Equations, Solving Simultaneous Equations by Substitution (54)</li> </ul>	<p>(8.P.5)</p> <ul style="list-style-type: none"> <li>• Identify the roles of variables within an equation, e.g., <math>y = mx + b</math>, expressing <math>y</math> as a function of <math>x</math> with parameters <math>m</math> and <math>b</math>. (8.P.6)</li> <li>• Set up and solve linear equations and inequalities with one or two variables, using algebraic methods, models, and/or graphs. (8.P.7)</li> </ul>
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<b>Algebra 1, Lessons 55-72</b>		
<b>Open Response 3: Prisms, Cylinders, Pyramids, Cones, and Volume</b>		
<b>Date</b>	<b>Saxon Topics (Lesson)</b>	<b>Massachusetts Framework Link</b>
January	<ul style="list-style-type: none"> <li>• Geometric Solids, Prisms and Cylinders (60)</li> <li>• Pyramids and Cones (72)</li> </ul>	<ul style="list-style-type: none"> <li>• Predict the results of transformations on unmarked or coordinate planes and draw the transformed figure, e.g., predict how tessellations transform under translations, reflections, and rotations. (8.G.6)</li> <li>• Identify three-dimensional figures (e.g., prisms, pyramids) by their physical appearance, distinguishing attributes, and spatial relationships such as parallel faces. (8.G.7)</li> <li>• Recognize and draw two-dimensional representations of three-dimensional objects, e.g., nets, projections, and perspective drawings. (8.G.8)</li> </ul>

Algebra 1, Lessons 73-95		
Open Response 4: Functions and Relations		
Date	Saxon Topics (Lesson)	Massachusetts Framework Link
March	<ul style="list-style-type: none"> <li>Evaluating Functions, Domain and Range (82)</li> <li>Tests for Functions (87)</li> <li>Graphs of Non-Linear Functions, Recognizing Shapes of Various Non-Linear Functions (95)</li> </ul>	<ul style="list-style-type: none"> <li>Explain and analyze—both quantitatively and qualitatively, using pictures, graphs, charts, or equations—how a change in one variable results in a change in another variable in functional relationships, e.g., <math>C = \pi d</math>, <math>A = \pi r^2</math> (A as a function of r), <math>A_{\text{rectangle}} = lw</math> (<math>A_{\text{rectangle}}</math> as a function of l and w). (8.P.8)</li> </ul>

Algebra 1, Lessons 95-120		
Open Response 5: Exponential and Linear Growth		
Date	Saxon Topics (Lesson)	Massachusetts Framework Link
April	<ul style="list-style-type: none"> <li>Slope Formula (98)</li> <li>Exponential Growth (114)</li> </ul>	<ul style="list-style-type: none"> <li>Use models, graphs, and formulas to solve simple problems involving rates, e.g., velocity and density. (8.M.5)</li> <li>Use tables and graphs to represent and compare linear growth patterns. In particular, compare rates of change and x- and y-intercepts of different linear patterns. (8.P.10)</li> </ul>

### ***Eight Grade U.S. History II Curriculum***

**History:** Students will study history through a collection of primary and secondary sources that represent a wide variety of viewpoints. The class will be using the textbook, *America: Pathways to the Present*, published by Prentice Hall.

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resource Connection
August/Sept	<p><i>Review of U.S. History I</i></p> <p><b>Colonizing America</b></p> <ul style="list-style-type: none"> <li>◆ Road to Revolution</li> <li>◆ Constitution</li> <li>◆ Anti-Bellum Period</li> <li>◆ Civil War</li> </ul> <p><b>Reconstruction, 1865-1877</b></p> <ul style="list-style-type: none"> <li>◆ Presidential Reconstruction</li> <li>◆ Congressional Reconstruction</li> <li>◆ The “New South”</li> <li>◆ The End of Reconstruction</li> </ul> <p><b>The Expansion of American Industry, 1850-1900</b></p> <ul style="list-style-type: none"> <li>◆ Technology Revolution</li> <li>◆ Growth of a Big Business</li> <li>◆ Industrialization &amp; Workers</li> <li>◆ The Great Strikes</li> </ul> <p><b>Looking West, 1860-1900</b></p> <ul style="list-style-type: none"> <li>◆ Moving West Conflict with Native Americans</li> <li>◆ Mining, Ranching, &amp; Farming</li> <li>◆ Populism</li> </ul>	<p>1.1 Chronology and Cause</p> <p>1.2 Historical Understanding</p> <p>1.4 Society, Diversity, Commonality and the Individual</p> <p>4.16 Authority, Responsibility and Power</p> <p>4.18 Principles and Practices of American Government</p> <p>4.19 Citizenship</p> <p>4.20 Forms of Government</p>	<p>Oral Presentation using Power Point</p> <p>Newspaper-Publisher</p> <p>Quizzes</p> <p>Test</p>	<p>Chapter 4, 5, 6, 7</p>
October		1.1 Chronology and Cause	Heritage Day	Chapter 8, 9, 10

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resource Connection
	<p><b>Politics, Immigration, and Urban Life, 1870-1915</b></p> <ul style="list-style-type: none"> <li>◆ Politics in the Gilded Age</li> <li>◆ People on the move</li> <li>◆ The Challenge of Cities</li> <li>◆ Ideas of Reform</li> </ul> <p><b>Life at the Turn of the 20<sup>th</sup> Century, 1870-1915</b></p> <ul style="list-style-type: none"> <li>◆ Expansion of Education</li> <li>◆ New Forms of Entertainment</li> <li>◆ The World of Jim crow</li> <li>◆ Changing Roles of Women</li> </ul> <p><b>Becoming a World Power, 1890-1915</b></p> <ul style="list-style-type: none"> <li>◆ Pressure to Expand</li> <li>◆ Spanish-American War</li> <li>◆ A New Foreign Policy</li> <li>◆ Debating America’s New Role</li> </ul>	<p>1.2 Historical Understanding                      1.4 Society, Diversity, Commonality and the Individual                      4.16 Authority, Responsibility and Power                      4.18 Principles and Practices of American Government                      4.19 Citizenship                      4.20 Forms of Government</p>	<p>Projects                      Test</p>	
<p>November</p>	<p>The Progressive Reform Era, 1890-1920  <b>The Origins of Progressivism</b></p> <ul style="list-style-type: none"> <li>◆ Progressive Legislation</li> <li>◆ Progressivism Under Taft &amp; Wilson</li> <li>◆ Suffrage at Last</li> </ul>	<p>1.1 Chronology and Cause                      1.2 Historical Understanding                      1.4 Society, Diversity, Commonality and the Individual                      3.13 American and Massachusetts Economic History                      3.14 Today's Economy</p>	<p>Quizzes                      Test                      Essay/Research Report</p>	<p>Chapter 27   <i>Chapter 11, 12, 13</i>                      Report</p>

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resource Connection
	<p><b>World War I, 1914-1920</b></p> <ul style="list-style-type: none"> <li>◆ The Road to War</li> <li>◆ The United States Declares War</li> <li>◆ Americans on the European Front</li> <li>◆ Americans on the home front</li> <li>◆ Global Peacemaker</li> </ul> <p><b>Postwar Social Change, 1920-1929</b>                      Society in the 1920's                      Mass Media and The Jazz Age                      Cultural Conflicts</p> <ul style="list-style-type: none"> <li>◆</li> </ul>	4.16 Authority, Responsibility and Power 4.18 Principles and Practices of American Government 4.19 Citizenship 4.20 Forms of Government		
December-January	<p>Review for exams  <b>Mid-year exams</b></p> <p><b>Politics and Prosperity, 1920-1929</b></p> <ul style="list-style-type: none"> <li>◆ A Republican Decade</li> <li>◆ A Business Boom</li> <li>◆ The Economy in the Late 1920's</li> </ul> <p><b>Crash and Depression, 1929-1933</b></p> <ul style="list-style-type: none"> <li>◆ The Stock Market Crash</li> <li>◆ Social Effects of the Depression</li> <li>◆ Surviving the Great Depression</li> <li>◆ The Election of 1932</li> </ul> <p><b>The New Deal, 1933-1941</b></p> <ul style="list-style-type: none"> <li>◆ Forging a New Deal</li> <li>◆ The New Deal's Critics</li> </ul>	1.1 Chronology and Cause 1.2 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 3.13 American and Massachusetts Economic History 3.14 Today's Economy  4.16 Authority, Responsibility and Power 4.18 Principles and Practices of American Government 4.19 Citizenship 4.20 Forms of Government	Mid year exams  Quizzes Test Newspaper Using Publisher Essay/Research Report	Chapter 5-13  Chapter 14, 15 ,16

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resource Connection
	<ul style="list-style-type: none"> <li>◆ The Last Days of the new Deal</li> </ul>			
February-March	<p><b>World War II: The Road to War, 1931-1941</b></p> <ul style="list-style-type: none"> <li>◆ The Rise of Dictators</li> <li>◆ Europe Goes to War</li> <li>◆ Japan Builds an Empire</li> <li>◆ From Isolationism to War</li> </ul> <p><b>World War II: Americans at War, 1941-1945</b></p> <ul style="list-style-type: none"> <li>◆ Mobilization</li> <li>◆ Retaking Europe</li> <li>◆ The Holocaust</li> <li>◆ The War in the Pacific</li> <li>◆ The Social Impact of the War</li> </ul> <p><b>The Cold War, 1945-1960</b></p> <ul style="list-style-type: none"> <li>◆ The Origins of the cold War</li> <li>◆ The Cold War Heats Up</li> <li>◆ The Korean War</li> <li>◆ The Continuing Cold War</li> </ul> <p><b>The Postwar Years at Home, 1945-1960</b></p> <ul style="list-style-type: none"> <li>◆ The Postwar Economy</li> <li>◆ The Mood of the 1950's</li> <li>◆ Domestic Politics and Prosperity</li> </ul> <p><b>The Civil Rights Movement, 1950-1968</b></p>		Quizzes Tests Research Project Discussion and Debate	Chapters 17, 18, 19,20, 21, 22

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resource Connection
	<ul style="list-style-type: none"> <li>◆ Demands for Civil Rights</li> <li>◆ Leaders and Strategies</li> <li>◆ The Struggle Intensifies</li> <li>◆ The Political Response</li> <li>◆ The Movement Takes a Turn</li> </ul> <p><b>The Kennedy &amp; Johnson Years, 1961-1969</b>                      The New Frontier                      The Great Society                      ◆ Foreign Policy in the Early 1960's</p>			
April	<p><b>An Era of Activism, 1960-1975</b></p> <ul style="list-style-type: none"> <li>◆ The Women's Movement</li> <li>◆ Ethnic Minorities Seek Equality</li> <li>◆ The Counterculture</li> <li>◆ The Environment and Consumer Movements</li> </ul> <p><b>The Vietnam War, 1954-1975</b></p> <ul style="list-style-type: none"> <li>◆ The War Unfolds</li> <li>◆ Fighting the War</li> <li>◆ Political Divisions</li> <li>◆ The End of the War</li> </ul>	1.1 Chronology and Cause 1.2 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 3.13 American and Massachusetts Economic History 3.14 Today's Economy 4.16 Authority, Responsibility and Power 4.18 Principles and Practices of American	Tests Journal using Word, Publisher, or PPT	Chapters 23-24
May-June	<p><b>Nixon, Ford, &amp; Carter, 1969-1981</b></p> <ul style="list-style-type: none"> <li>◆ Nixon's Domestic Policy</li> <li>◆ Nixon's Foreign Policy</li> <li>◆ The Ford Administration</li> <li>◆ The Watergate Scandal</li> </ul>	1.3 Chronology and Cause 1.4 Historical Understanding 1.4 Society, Diversity, Commonality and the Individual 3.13 American and Massachusetts Economic History	Quizzes Tests Discussion and Debate  Final Exams	Chapters 25, 26, 27 <i>Review Chapters 14-27</i>

Date	Key Content	Massachusetts Frameworks Link	Assessment	Resource Connection
	<p><b>The Conservation Revolution, 1980-1992</b></p> <ul style="list-style-type: none"> <li>◆ Roots of the New Conservatism</li> <li>◆ The Regan Revolution</li> <li>◆ Regan's second Term</li> <li>◆ The George H.W. Bush Presidency</li> </ul> <p><b>Entering a New Era, 1992-Present</b></p> <ul style="list-style-type: none"> <li>◆ Politics in Recent Years</li> <li>◆ The United States in a New World</li> <li>◆ Americans in the New millennium</li> </ul> <p>Review for exams <b>Final exams</b></p>	<p>3.14 Today's Economy 4.16 Authority, Responsibility and Power 4.18 Principles and Practices of American Government 4.19 Citizenship 4.20 Forms of Government</p>		

Remove

			Assessment	Resource Connection
			<p>Quizzes Test Discussion 1</p>	<p>Chapter 20, 23, 24, 25,  <i>The Marine's Hymn</i>, (American Reader)  <i>Second Inaugural Address</i>, Franklin D. Roosevelt (American Reader)</p>

			Assessment	Resource Connection
				<i>The Four Freedoms</i> , Franklin D. Roosevelt (American Reader)
			Quizzes Test Research Paper 1 Discussion 2	Chapters 26  <i>Inaugural Address</i> , Harry S. Truman (American Reader)  <i>Duty, Honor, Country</i> , Douglas MacArthur (American Reader)
	◆		Quizzes Test Research Paper 2	Chapter 27  <i>Farewell Address</i> , Dwight D. Eisenhower (American Reader)
	◆		Quizzes Test Research Paper 3 Discussion 3	Chapter 28  Profile in Courage  <i>Inaugural Address</i> , JFK (American Reader)

			Assessment	Resource Connection
			Quizzes Test Research Project 1 Discussion 4	Chapter 29, 31  <i>Brown vs. Board of Education</i> (American Reader)  <i>Letter from a Birmingham Jail,</i> Martin Luther King (American Reader)  <i>March on Washington,</i> Martin Luther King (American Reader)
			Quizzes Tests Research Paper 4	32, 33
			Quizzes Test Research Paper 5 Discussion 5	Chapter 30, 32, 33,, 34, 35  <i>Speech at Moscow State University,</i> Ronald Reagan (American Reader)

### 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 Language Arts.

**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 history and geography 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>Formation of the United Nations</b>	ELA – Discussion Standards LS 1, LS 9
<b>October</b>	Research Paper 1 Possible Topic: <b>Fear of Communist expansion</b>  Discussion 2 Possible Topic: <b>Korean War</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>November</b>	Research Paper 2 Possible Topic: <b>American culture in the 50’s-60’s</b>	ELA Standards LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25
<b>December- January</b>	Research Paper 3 Possible Topic: <b>Cuban Missile Crisis</b> Discussion 3	ELA – Discussion Standards LS 1, LS 9  ELA Standards

Date	Suggested Student Work	Massachusetts Frameworks Link ( in addition to the History standards indicated above)
	Possible Topic: <b>Assassination of President Kennedy</b>	LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25
<b>February-March</b>	Research Project 1 Possible Topic: <b>Civil Rights Movement</b>  Discussion 4 Possible Topic: <b>Vietnam War</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>April</b>	Research Paper 4 Possible Topic: <b>Middle East and Oil Politics</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 Paper 5 Possible Topic: <b>Social Activism</b>  Discussion 5 Possible Topic: <b>Apartheid</b>	ELA Standards LS 2, LS 13, LS 19, LS 21, LS 22, LS 23, LS 24, LS 25  ELA – Discussion Standards LS 1, LS 9

**Spanish:** Mystic Valley Regional Charter School expects students to be proficient in Spanish by the time they graduate from high school. Students will be provided opportunities to listen to, read, speak and write in Spanish throughout their course of study. Students will also be exposed to Spanish cultures around the world as well as within the United States. The course text is *Abordo* by Glencoe Publishers

	Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
August - September	<p><b>A. REVIEW</b></p> <p>Topics</p> <ul style="list-style-type: none"> <li>• School</li> <li>• Activities (school, hobbies)</li> <li>• Greetings and farewells</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• -ar (hablar, tomar, cantar)</li> <li>• ir, dar, estar (present tense)</li> <li>• -er (comer)</li> <li>• ser</li> <li>• Present progressive</li> <li>• Agreement of articles and adjectives</li> </ul> <p><u>Cultural connection:</u> Schools, classmates</p> <p><b>B. TELEPHONE</b></p> <p>Topics</p> <ul style="list-style-type: none"> <li>• How to make a call</li> <li>• Telephone etiquette</li> </ul>	<p>1. Communication – Interpersonal Communications</p> <p>1.1 Greet and respond to greeting</p> <p>1.2 Introduce and respond to introductions</p> <p>1.3 Ask and answer questions</p> <p>1.4 Make and respond to requests</p> <p>1.5 Exchange information and knowledge</p> <p>1.10 Exchange opinions about people, activities or events</p> <p>1.11 Discuss class readings</p> <p>2. Communication – Interpretive Communication</p> <p>2.1 Follow directions</p> <p>2.2 Understand some ideas and familiar details</p> <p>2.3 Obtain information and knowledge</p> <p>3. Communications – Presentational Communication</p> <p>3.1 Express opinions and ideas</p> <p>3.3 Express agreement and disagreement</p> <p>3.4 Describe people, places and things</p> <p>4 Cultures</p> <p>4.1 Use appropriate words, phrases, expressions and</p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> </ul>	<p>Repaso A and B</p> <p>Chapter 1</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
<p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Imperfect tense –<i>ar</i></li> <li>• Imperfect tense – <i>er, ir</i></li> <li>• Imperfect tense – <i>ir, ser</i></li> <li>• Uses of imperfect tense</li> </ul> <p><u>Cultural connection:</u> Spanish telephone etiquette; telephone service in Spanish speaking countries</p>	<p>gestures in interactions such as greetings, farewells, school routines and other daily activities</p> <p>4.2 Interact appropriately in group cultural activities</p> <p>4.9 Interact appropriately in social and cultural activities such as in a restaurant, bus stop, store or in a classroom.</p> <p>5 Comparisons – Linguistic</p> <p>5.5 Compare, contrast and exchange views on an aspect of the target language.</p> <p>5.9 Recognize grammatical categories such as tense, gender and agreement in the target language and in English</p> <p>5.10 Give examples of words or word parts that have been adopted into the English language</p> <p>6 Comparisons – Cultural</p> <p>6.5 Compare, contrast, and exchange views on an aspect of the target culture</p> <p>6.6 Discuss basic needs of people for food, clothing and shelter and compare how they are met in various cultures.</p> <p>6.8 Compare, contrast and report on cultural traditions and celebrations.</p>		
		✓	
<p>October</p> <p><b>FOOD MARKETS</b></p> <p>Topics</p> <ul style="list-style-type: none"> <li>• Types of food</li> <li>• Grocery shopping</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Preterite and imperfect</li> <li>• Querer (past)</li> </ul>	<p>1. Communication – Interpersonal Communications</p> <p>1.1 Greet and respond to greeting</p> <p>1.2 Introduce and respond to introductions</p> <p>1.3 Ask and answer questions</p> <p>1.7 express needs and emotions</p> <p>1.9. Ask and respond to question to clarify information</p> <p>2. Communication – Interpretive Communication</p>	<p>✓ Chapter Test</p> <p>✓ Quizzes</p> <p>✓ Homework</p> <p>✓ Notebooks</p> <p>✓ Class Participation</p> <p>✓ Independent project</p>	<p>Chapter 2, 3</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<ul style="list-style-type: none"> <li>• Creer (past)</li> </ul> <p><u>Cultural connection:</u> Comparison of American food and shopping customs with Hispanic</p> <p><b>POST OFFICE</b> Topics</p> <ul style="list-style-type: none"> <li>• Letter writing</li> <li>• Post office etiquette</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Future tense</li> <li>• Comparative and superlative statements</li> </ul> <p><u>Cultural connection:</u> Postal systems in Spanish speaking countries; services provided</p>		

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>7 Connections 7.2 Obtain information and knowledge related to other disciplines from sources in target language</p> <p>8 Communities 8.2 Apply knowledge of target language and culture beyond the classroom setting.</p>		
<p>November</p> <p><b>HEALTH CARE</b> Topics</p> <ul style="list-style-type: none"> <li>• Accidents</li> <li>• Minor injuries</li> <li>• Hospitals</li> <li>• Observations and opinions</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Future tense – irregular verbs</li> <li>• Comparative adjectives</li> </ul> <p><u>Cultural connection:</u> Health services in Spanish speaking countries</p> <p><b>Unit Review</b></p>	<p>1. Communication – Interpersonal Communications 1.1 Greet and respond to greeting 1.2 Introduce and respond to introductions 1.3 Ask and answer questions 1.7 express needs and emotions 1.9. Ask and respond to question to clarify information</p> <p>2. Communication – Interpretive Communication 2.1 Follow directions 2.2 Understand some ideas and familiar details 2.3 Obtain information and knowledge 2.9 Understand learned expressions, sentences, questions and polite commands in messages 2.10 Identify themes in fictional and non-fictional works relate them to personal experiences.</p> <p>3. Communications – Presentational Communication 3.2 Express needs and emotions 3.5 Write lists and short notes</p> <p>4 Cultures 4.1 Use appropriate words, phrases, expressions and gestures in interactions such as greetings, farewells, school routines and other daily activities 4.9 Interact appropriately in social and cultural</p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Unit exam</li> </ul>	<p>Chapter 4</p> <p>Unit review</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>activities such as in a restaurant, bus stop, store or in a classroom.</p> <p>Comparisons – Linguistic 5.9 Recognize grammatical categories such as tense, gender and agreement in the target language and in English</p> <p>6 Comparisons – Cultural 6.5 Compare, contrast, and exchange views on an aspect of the target culture</p>		
<p>December</p>	<p><b>TRANSPORTATION</b> Topics</p> <ul style="list-style-type: none"> <li>• Cars</li> <li>• Driving habits</li> <li>• Gas station</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Forms of conditional with regular and irregular verbs</li> <li>• Pronouns</li> </ul> <p><u>Cultural connection:</u> Traffic conditions in some Spanish speaking countries; Automobiles and air pollution around the world</p> <p><b>REVIEW</b> Topics</p> <ul style="list-style-type: none"> <li>• Plane travel</li> <li>• Vacations</li> <li>• Cultural activities</li> </ul> <p>Grammar, usage</p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Independent project</li> </ul>	<p>Chapter 5</p> <p>Repaso C</p> <p>Repaso E</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>school routines and other daily activities                      4.9 Interact appropriately in social and cultural activities such as in a restaurant, bus stop, store or in a classroom.</p> <p>7 Connections                      7.2 Obtain information and knowledge related to other disciplines from sources in target language</p> <p>8 Communities                      8.2 Apply knowledge of target language and culture beyond the classroom setting.</p>		
<p>January</p>	<p><b>TRAVEL</b>                      Topics:</p> <ul style="list-style-type: none"> <li>• Hotels – reservations, check in, check out.</li> <li>• Air travel – airports</li> <li>• Geography</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Present perfect tense</li> <li>• <i>Se</i> with direct and indirect object pronouns</li> <li>• Past progressive tense</li> <li>• Future progressive tense</li> <li>• Comparisons of equality</li> </ul> <p><u>Cultural connections:</u> Influence of Latin America’s geography on air travel</p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Semester exam</li> </ul>	<p>Chapter 6, 7</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>4.7 Demonstrate knowledge of the target culture’s geography by naming features such as rivers, mountains, cities and climate on a map</p> <p>4.13 Identify on maps and globes, the location(s) and major geographic features of countries where the target language is or was used.</p> <p>7 Connections</p> <p>7.2 Obtain information and knowledge related to other disciplines from sources in target language</p> <p>8 Communities</p> <p>8.2 Apply knowledge of target language and culture beyond the classroom setting.</p>		
<p>February</p>	<p><b>BARBER SHOP/HAIR SALON</b></p> <p>Topics:</p> <ul style="list-style-type: none"> <li>• Hair descriptions</li> <li>• Equipment</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Pronouns in progressive tenses and in relation to infinitives</li> <li>• Completed actions using <i>acabar de</i></li> </ul> <p><b>UNIT REVIEW</b></p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Unit exam</li> </ul>	<p>Chapter 8</p> <p>Repaso – chapters 5-8</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	6.5 Compare, contrast, and exchange views on an aspect of the target culture 6.8 Compare, contrast and report on cultural traditions and celebrations.		
March  <b>FOOD – AT HOME</b> Topics <ul style="list-style-type: none"> <li>• Food preparation</li> <li>• Kitchen equipment</li> <li>• Spanish foods and dishes</li> </ul> Grammar and usage <ul style="list-style-type: none"> <li>• Commands</li> <li>• Information and directions in passive voice</li> </ul> <u>Cultural connections:</u> Variety of foods and recipes in Spanish speaking countries and the importance of cuisine.  <b>DRIVING</b> Topics <ul style="list-style-type: none"> <li>• Directions – ask and give</li> <li>• Driving – highways, city streets</li> </ul> Grammar and usage <ul style="list-style-type: none"> <li>• Imperative</li> <li>• Pronouns in the imperative</li> </ul>	1. Communication – Interpersonal Communications 1.3 Ask and answer questions 1.6 express likes and dislikes 1.7 express needs and emotions 1.9. Ask and respond to question to clarify information  2. Communication – Interpretive Communication 2.1 Follow directions 2.2 Understand some ideas and familiar details 2.3 Obtain information and knowledge 2.6 follow directions such as a recipe, word maze or logic puzzle  3. Communications – Presentational Communication 3.2 Express needs and emotions 3.5 Write lists and short notes 3.6 Present information in a brief report  4 Cultures 4.1 Use appropriate words, phrases, expressions and gestures in interactions such as greetings, farewells, school routines and other daily activities 4.9 Interact appropriately in social and cultural activities such as in a restaurant, bus stop, store or in a classroom.  6 Comparisons – Cultural 6.6 Discuss basic needs of people for food, clothing and shelter and compare how they are met in various	✓ Chapter Test ✓ Quizzes ✓ Homework ✓ Notebooks ✓ Class Participation ✓ Group project	Chapter 9, 10

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>cultures. 6.8 Compare, contrast and report on cultural traditions and celebrations.</p> <p>7 Connections 7.2 Obtain information and knowledge related to other disciplines from sources in target language</p> <p>8 Communities 8.2 Apply knowledge of target language and culture beyond the classroom setting.</p>		
<p>April</p> <p><b>ETIQUETTE</b> Topics</p> <ul style="list-style-type: none"> <li>• Social behavior, manners</li> <li>• Cultural customs</li> <li>• Preferences and opinions</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Subjunctive</li> <li>• Expressing wishes, preferences and commands</li> </ul> <p><b>HOLIDAYS</b> Topics</p> <ul style="list-style-type: none"> <li>• Family celebrations</li> <li>• Hispanic customs, holidays and celebrations (religious and secular)</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Express doubt, uncertainty and disbelief</li> <li>• Emotional reactions</li> <li>• Subjunctive – giving advice, suggestions</li> </ul>	<p>1. Communication – Interpersonal Communications 1.3 Ask and answer questions 1.6 express likes and dislikes 1.7 express needs and emotions 1.9. Ask and respond to question to clarify information</p> <p>2. Communication – Interpretive Communication 2.1 Follow directions 2.2 Understand some ideas and familiar details 2.3 Obtain information and knowledge 2.6 follow directions such as a recipe, word maze or logic puzzle</p> <p>3. Communications – Presentational Communication 3.2 Express needs and emotions 3.5 Write lists and short notes</p> <p>4 Cultures 4.8 Identify patterns of social behavior that are typical of the target culture 4.9 Interact appropriately in social and cultural activities such as in a restaurant, bus stop, store or in</p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Unit exam</li> </ul>	<p>Chapter 11, 12</p> <p>Unit review</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>a classroom.</p> <p>Comparisons – Linguistic 5.9 Recognize grammatical categories such as tense, gender and agreement in the target language and in English 6 Comparisons – Cultural 6.6 Discuss basic needs of people for food, clothing and shelter and compare how they are met in various cultures. 6.8 Compare, contrast and report on cultural traditions and celebrations.</p>		
<p>May</p> <p><b>CLOTHING</b> Topics</p> <ul style="list-style-type: none"> <li>• Types</li> <li>• Care – Laundromat, dry cleaners</li> <li>• Camping/Backpacking</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Reflexive verbs</li> <li>• Present tense forms of radical-changing verbs</li> <li>• Subjunctive</li> <li>• Review of irregular verbs in the preterite</li> </ul> <p><u>Cultural connection:</u> Spain and Latin America</p> <p><b>FINANCES</b> Topics:</p> <ul style="list-style-type: none"> <li>• Money</li> <li>• Personal finance</li> <li>• Banking transactions</li> </ul>	<p>1. Communication – Interpersonal Communications 1.3 Ask and answer questions 1.6 express likes and dislikes 1.7 express needs and emotions 1.9. Ask and respond to question to clarify information</p> <p>2. Communication – Interpretive Communication 2.1 Follow directions 2.2 Understand some ideas and familiar details 2.3 Obtain information and knowledge 2.6 follow directions such as a recipe, word maze or logic puzzle</p> <p>3. Communications – Presentational Communication 3.2 Express needs and emotions 3.5 Write lists and short notes 3.6 Present information in a brief report</p> <p>4 Cultures 4.1 Use appropriate words, phrases, expressions and gestures in interactions such as greetings, farewells,</p>	<ul style="list-style-type: none"> <li>✓ Chapter Test</li> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Independent Project</li> </ul>	<p>Chapter 13, 14</p> <p>Repaso F</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
<ul style="list-style-type: none"> <li>• Currency exchange</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Imperfect tense of subjunctive</li> </ul> <p>Cultural Focus: Education in Hispanic world in contrast to US</p>	<p>school routines and other daily activities</p> <p>4.4 Identify distinctive cultural products from the target culture such as toys, currencies, food, games</p> <p>7 Connections</p> <p>7.2 Obtain information and knowledge related to other disciplines from sources in target language</p> <p>8 Communities</p> <p>8.2 Apply knowledge of target language and culture beyond the classroom setting.</p>		
<p>June</p> <p><b>PROFESSIONS AND TRADE</b></p> <p>Topic</p> <ul style="list-style-type: none"> <li>• Occupations</li> <li>• Job interviews and resumes</li> </ul> <p>Grammar and usage</p> <ul style="list-style-type: none"> <li>• Indefinite persons or things</li> </ul> <p><u>Cultural connection:</u> Importance of the Spanish language in the business world</p> <p><b>YEARLONG REVIEW</b></p>	<p>1. Communication – Interpersonal Communications</p> <p>1.3 Ask and answer questions</p> <p>1.6 express likes and dislikes</p> <p>1.7 express needs and emotions</p> <p>1.9. Ask and respond to question to clarify information</p> <p>2. Communication – Interpretive Communication</p> <p>2.1 Follow directions</p> <p>2.2 Understand some ideas and familiar details</p> <p>2.3 Obtain information and knowledge</p> <p>2.4 Read or listen to and interpret signs, simple stories, poems and informational texts.</p> <p>2.6 follow directions such as a recipe, word maze or logic puzzle</p> <p>3. Communications – Presentational Communication</p> <p>3.2 Express needs and emotions</p> <p>3.5 Write lists and short notes</p> <p>4 Cultures</p> <p>4.1 Use appropriate words, phrases, expressions and</p>	<ul style="list-style-type: none"> <li>✓ Quizzes</li> <li>✓ Homework</li> <li>✓ Notebooks</li> <li>✓ Class Participation</li> <li>✓ Final Exam</li> </ul>	<p>Chapter 16</p> <p>Respado D</p>

Core Content	MA Foreign Language Curriculum Frameworks	Assessment	Resource Connection
	<p>gestures in interactions such as greetings, farewells, school routines and other daily activities</p> <p>4.2 Interact appropriately in group cultural activities</p> <p>4.4 Identify distinctive cultural products from the target culture such as toys, currencies, food, games</p> <p>4.8 Identify patterns of social behavior that are typical of the target culture</p> <p>4.9 Interact appropriately in social and cultural activities such as in a restaurant, bus stop, store or in a classroom.</p> <p>6 Comparisons – Cultural</p> <p>6.6 Discuss basic needs of people for food, clothing and shelter and compare how they are met in various cultures.</p>		

***Vocabulary Development through Latin Roots***

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
<b>September</b>	<ul style="list-style-type: none"> <li>• Words in dictionary</li> <li>• Basic meanings from dictionary</li> <li>• Syllabic breakdown of words</li> <li>• Words from Latin <b>number</b> lists</li> <li>• <i>Aequus, pendo</i> from Core Knowledge list</li> <li>• Latin phrases: <i>nota bene, per capita, per se, et ceter</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>• Look up words in the dictionary</li> <li>• Decode meanings of words with improving efficiency</li> <li>• Break down words into syllables</li> <li>• Recognize some Latin roots (<b>numbers</b>)</li> <li>• Grasp several Latin phrases (<b>Sept. list</b>) used in English</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment in class of dictionary skills (game)</li> <li>• Written exercises in class</li> <li>• Written exercises at home</li> <li>• Quizzes/ tests</li> <li>• Pronunciation drills</li> </ul>
<b>October</b>	<ul style="list-style-type: none"> <li>• Varied meanings and some etymology from dictionary</li> <li>• Relationships between familiar words from similar roots</li> <li>• Speaking to peers in class</li> <li>• Words from <b>all or nothing</b> lists</li> <li>• <i>Brevis, medius, plenus, rego, satis, solus</i> from Core Knowledge list</li> <li>• Latin phrases: <i>caveat emptor, sub rosa, alter ego, sine qua non, status quo</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>• Grasp a variety of meanings from a given entry in the dictionary</li> <li>• Determine basic etymology of familiar words</li> <li>• Ascertain relationships between familiar words and their shared Latin root</li> <li>• Demonstrate the meaning of a word by using it in context</li> <li>• Use more Latin words (<b>all or nothing</b>) and phrases (<b>Oct. list</b>)</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/ tests</li> <li>• Oral exercise in pairs</li> <li>• Informal presentations in class</li> <li>• Written exercise at home and in class</li> </ul>
<b>November</b>	<ul style="list-style-type: none"> <li>• All different definitions of a word given in dictionary</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p>	<ul style="list-style-type: none"> <li>• Pair work with dictionary</li> <li>• Written work with dictionary</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
	<ul style="list-style-type: none"> <li>• Words from <b>more or less</b> lists</li> <li>• <i>Caput, cognito, credo, culpa, dominus, duco, loquor</i> from Core Knowledge list</li> <li>• Latin phrases: <i>ad hoc, pro bono, ad infinitum quid pro quo</i></li> </ul>	<ul style="list-style-type: none"> <li>• Decode and understand all definitions of a given word in dictionary</li> <li>• Grasp relationships, possibly etymological, between those meanings</li> <li>• Assimilate further knowledge of Latin words (<b>more or less</b>)</li> <li>• Extend their understanding of these words in context</li> <li>• Use more Latin phrases (<b>Nov. list</b>) correctly in writing and speaking</li> </ul>	<ul style="list-style-type: none"> <li>• Written exercises</li> <li>• Quizzes/test</li> </ul>
<b>December</b>	<ul style="list-style-type: none"> <li>• Pronunciation from dictionary</li> <li>• Writing a definition</li> <li>• Prefix work</li> <li>• Words in changing contexts</li> <li>• Oral explanations</li> <li>• Writing</li> <li>• Words from <b>before and after</b> lists</li> <li>• Latin phrases: <i>in memoriam, non sequitur, de facto, cogito ergo sum</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>• Pronounce a word by looking it up in the dictionary</li> <li>• Write their own definition of a familiar word</li> <li>• Write sentences using familiar and new words</li> <li>• Use several common Latin prefixes to change the meaning of words</li> <li>• Begin to explain challenging words to their peers in class</li> <li>• Communicate with more extensive knowledge of Latin words (<b>before and after</b>) and phrases (<b>Dec. list</b>)</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/test</li> <li>• Pronunciation in small groups (3 or 4)</li> <li>• Written exercises</li> <li>• Paraphrasing new definitions in writing and in class</li> <li>• Writing sentences</li> <li>• Brief presentations to a peer</li> </ul>
<b>January</b>	<ul style="list-style-type: none"> <li>• Different forms of words</li> <li>• Suffix work</li> <li>• Small group presentations</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>• Decode and understand all definitions of a</li> </ul>	<ul style="list-style-type: none"> <li>• Pair work with dictionary</li> <li>• Written work with dictionary</li> <li>• Written exercises</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
	<ul style="list-style-type: none"> <li>• Written explanations of etymology</li> <li>• Reading comprehension with Latin root vocabulary</li> <li>• Words from creativity list</li> <li>• Latin phrases: <i>bona fide, ipso facto, veritas vos liberabit</i></li> </ul>	<ul style="list-style-type: none"> <li>• given word in dictionary</li> <li>• Grasp relationships, possibly etymological, between those meanings</li> <li>• Assimilate further knowledge of Latin words (<b>more or less</b>)</li> <li>• Extend their understanding of these words in context</li> <li>• Use more Latin phrases (<b>Nov. list</b>) correctly in writing and speaking</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/test</li> </ul>
<b>February</b>	<ul style="list-style-type: none"> <li>• Familiar word roots relating to more challenging words</li> <li>• Reading in context (pairs)</li> <li>• Writing short essays</li> <li>• More words from <b>creativity</b> list</li> <li>• <i>Ago, fido, lego, possum, scio, verbum</i> from Core Knowledge list</li> <li>• Latin phrases: <i>carpe diem, errare humanum est, ad nauseum, ars longa vita brevis</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>• Decode an unfamiliar word by using Latin root knowledge</li> <li>• Read a complicated passage with a partner and discuss meaning</li> <li>• Write linked sentences that demonstrate their understanding of newly acquired vocabulary</li> <li>• Use a more extensive knowledge base of Latin (<b>creativity and Feb. list</b>) to accomplish the previously mentioned skills</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/test</li> <li>• Reading comprehension questions</li> <li>• Written exercises</li> <li>• Writing assignments (linked sentences)</li> <li>• Word games</li> </ul>
<b>March</b>	<ul style="list-style-type: none"> <li>• Latin Root/ multiple English derivatives</li> <li>• Pronunciation</li> <li>• Public speaking</li> <li>• Words in context</li> <li>• Words from <b>travel</b> list</li> </ul>	<p><i>By the end of this month, students will know how to:</i></p> <ul style="list-style-type: none"> <li>• Connect many English derivatives to a given Latin root</li> <li>• Pronounce many new Latin words and phrases</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/test</li> <li>• Reading comprehension activities</li> <li>• Class presentations</li> <li>• Word games</li> <li>• Written exercises</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
	<ul style="list-style-type: none"> <li>• <i>Locus, missio, positum, porto, punctum, tractum,, verito</i> from Core Knowledge list</li> <li>• Latin Phrases: <i>Nova Scotia a mari usque mare</i></li> </ul>	<ul style="list-style-type: none"> <li>• Make a presentation on a given subject using a required number of words from their new vocabulary lists</li> <li>• Read a more complicated passage and decipher the meanings of challenging words through their knowledge of Latin roots (<b>travel</b> list) and phrases (<b>March</b> list)</li> </ul>	
<b>April</b>	<ul style="list-style-type: none"> <li>• Efficiency with dictionary</li> <li>• Paraphrasing</li> <li>• Paragraphs and essays with newly acquired vocabulary</li> <li>• Words from <b>sports</b> lists</li> <li>• <i>Fundo, pugno, clino, usus</i> from Core Knowledge list</li> <li>• Latin Phrases: <i>habeas corpus, modus operandi, vice versa</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>• Look up a word with improved efficiency</li> <li>• Write their own definition of challenging words</li> <li>• Write paragraphs and essays using their increased vocabulary creatively and effectively</li> <li>• Incorporate more challenging words(<b>sports</b>) and phrases (<b>April</b> list) into their reading, writing and speaking</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/ tests</li> <li>• Dictionary contest</li> <li>• Written essays</li> <li>• Written exercises</li> <li>• Pair work</li> <li>• Group presentations</li> </ul>
<b>May</b>	<ul style="list-style-type: none"> <li>• Etymology of complicated words</li> <li>• Creative writing</li> <li>• Words from <b>animals</b> lists</li> <li>• <i>Genus, morior, occido, sanguis, sonus, spiritus</i> from Core Knowledge list</li> <li>• Latin phrases: <i>semper fidelis, ad libitum, O tempora, O mores, de jure</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>• Decipher the etymology of a word using their knowledge of Latin and other resources</li> <li>• Compose creative pieces using their improved and expanded vocabulary</li> <li>• Grasp the meanings and uses of more Latin words (<b>animals</b>) and phrases (<b>May list</b>)</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes/ test</li> <li>• Reading comprehension questions</li> <li>• Creative writing assignment</li> <li>• Written exercises</li> <li>• Word games</li> <li>• Pair work</li> </ul>

MONTH	CONTENT	SKILLS	ASSESSMENT Examples
<b>June</b>	<ul style="list-style-type: none"> <li>• Review of Latin roots</li> <li>• Favorite theme or new theme</li> <li>• More challenging words</li> <li>• Creation of new list</li> <li>• Oral presentations of the history of new, related words</li> <li>• Creative writing</li> </ul>	<p><i>By the end of this month, students will have:</i></p> <ul style="list-style-type: none"> <li>• Reviewed all material introduced since September</li> <li>• Chosen a favorite theme (familiar or new)</li> <li>• Created a new list of more challenging words for this theme</li> <li>• Presented the historical background of some of these words to the class</li> <li>• Used some of these words in creative writing</li> </ul>	<ul style="list-style-type: none"> <li>• Quizzes of review material</li> <li>• Class presentations</li> <li>• Pair work</li> <li>• Student-generated practice</li> <li>• Creative writing assignment</li> <li>• "Exam" on material from entire year</li> </ul>

### ***Latin Connections***

In an effort to align the eighth grade vocabulary curriculum with the readings that the students will do throughout the year, the teacher may want to consider grouping them with a related vocabulary theme that they are studying. A possible outline is suggested below.

September-**numbers**-related poetry  
October-**all or nothing** -Essays and Speeches, Maya Angelou selections  
November-**more or less** -Shakespeare poetry, related short story  
December-**before and after** -The Good Earth  
January-**creativity** -Shakespeare, related poetry  
February-**creativity** -same and related short stories  
March-**travel** -the Open Boat, Twelfth Night  
April-**sports** -related poetry, short stories  
May-**animals** -Animal Farm

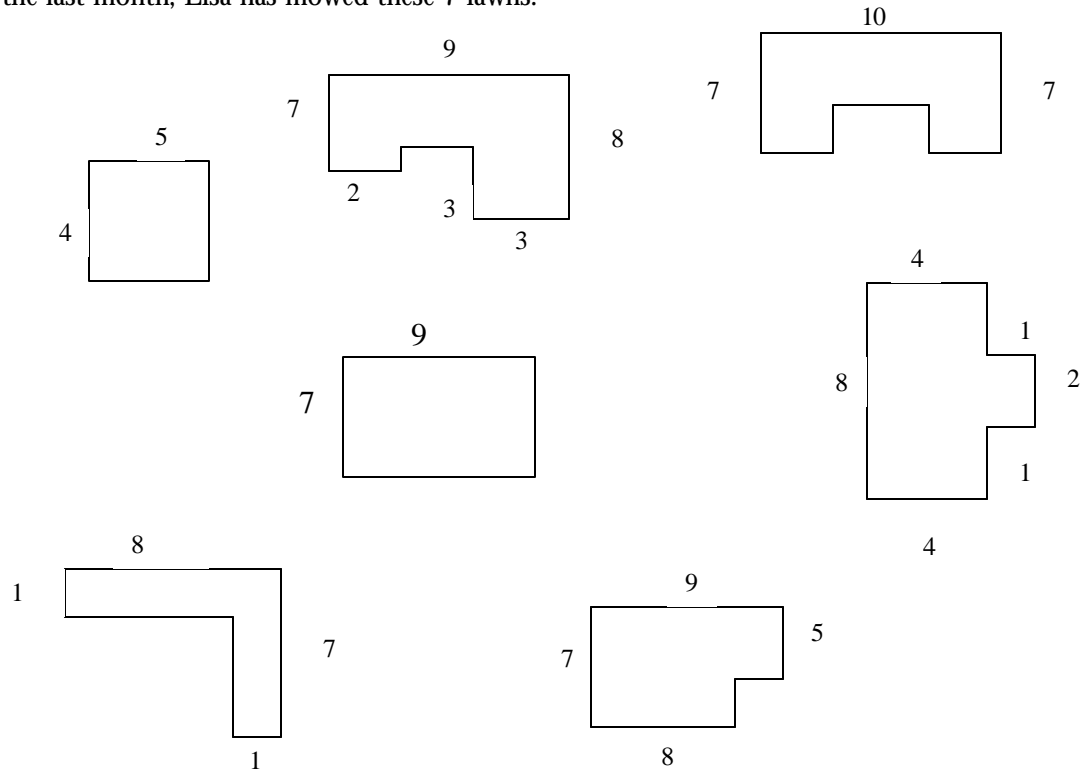
**Lab Report Standards** *(Taken from MA Curriculum Frameworks Science and Technology, Strand 1: Inquiry)*

Students in 8<sup>th</sup> grade will complete lab reports for each unit of study. In March, each student will complete an independent study in which students will design and carry out an investigation that is self-selected. Students will report the data and conclusions to the class through an oral presentation, which includes use of Power Point software.

- Note and describe relevant details, patterns, and relationships. (LS 1)
- Differentiate between questions that can be answered through direct investigation and those that cannot. (LS 2)
  
- Apply personal experience and knowledge to make predictions. (LS 3)
- Apply multiple lines of inquiry to address and analyze a question, e.g., experimentation, trial and error, survey, interview, and secondary sources. (LS 4)
- Design an investigation or problem specifying variables to be changed, controlled, and measured. (LS5)
- Use more complex tools to make observations, and gather and represent quantitative data, e.g., microscopes, graduated cylinders, computer probes, stress and impact testers, wind tunnels and timers. (LS 6)
- Describe trends in data even when patterns are not exact. (LS 7)
- Represent data and findings using tables, models, demonstrations and graphs.
- Use tools, materials, and machines safely and effectively. (LS83)
- Give examples that a range of technological processes can communicate information both graphically and electronically. (LS87)

**Algebra  $\frac{1}{2}$**   
**Open Response 1**  
*Adapted from Grade 8 sample MCAS questions*

In the last month, Lisa has mowed these 7 lawns:



- a. Find the mean of the area of the lawns. Show how you found the mean.
  
- b. Find the median of the area of the lawns. Show how you found the median.
  
- c. You are writing an article for the local paper comparing a few landscaping services. Is mean or median more useful for informing people about Lisa's landscaping experience? Explain your answer.

**Open Response 2**

A math group looks at the following expression:

$$(8+2)^2 - (3^2 \cdot 10) \div ? 27 = X$$

Brett says, "X equals 10. I'm sure of it."

Jamal says, "No, 10 is wrong. X equals 70."

"Oh, how ridiculous," says Georgia. "The answer is  $10/3$ , which is the same as  $3 \frac{1}{3}$ , or 3.333333."

"No, I think X equals 2. Ten, 70, and  $3 \frac{1}{3}$  are certainly not correct," says Ricki.

a. Which answer is right? Explain and show work that tells why the right answer is correct.

b. Explain what each of the other students did to get his or her answer wrong.



**Open Response 4**  
Adapted from Grade 8 sample MCAS questions

Antonio has \$31 saved but wants to buy a new jacket that costs \$50. He has just seen this ad in the paper.

**Come to**  
**Jacket CITY's**  
**ONE DAY SALE! Saturday, 9-5**

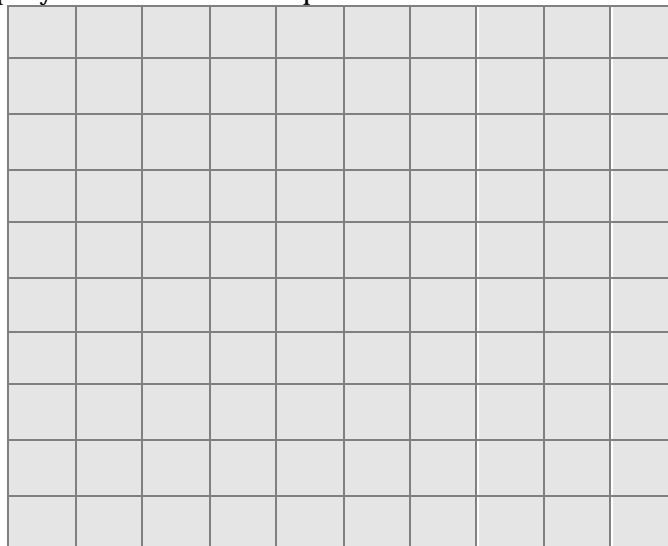
- ◆ At 9 am, all jackets are 10% off
- ◆ Every hour from 10 a.m. until 4 p.m., every jacket will be marked down 10% from the previous hour's price

*Don't wait too long! Supplies are limited!*

**ONE  
DAY  
ONLY!**

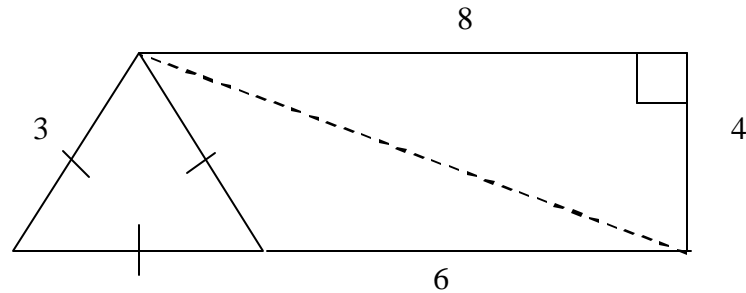
a. Write equations to find the price at each hour from 9:00 a.m., when the first 10% discount is applied, until Antonio can afford the jacket. Put the prices at each hour into a table.

b. Jacket City's owner had considered making the sale work differently. Her other plan was to reduce the price of jackets by 4 dollars each hour. On the grid below, construct a graph that shows the price each hour under the 10%-off sale plan, and also under the \$4-off sale plan. Be sure your graph and the two lines on it are properly labeled. Which sale plan would have been better for Antonio?



### Open Response 5

Hsu-Fan and Andres are designing the outline for a mural. This is what they have drawn so far. The dotted line ( --- ) represents a line they have planned out but have not yet drawn.



To finish the outline, they want to draw one line all the way across the shape so it begins at one vertex and ends at another. They also want that line segment to be the longest in the entire mural. Does the dotted line meet those criteria, or is there a different segment that they could draw that would touch two vertices and would be longer than the dotted line?

*Note: The diagram is not drawn to scale.*

- a. Show all the work you did to determine if the dotted line was the longest possible segment in the diagram.

- b. Explain how you used estimation in your answer. *Note: Because the diagram is not drawn to scale, guessing the length of a line based on its appearance is not valid estimation.*



**Algebra 1**  
**Open Response 1**

A math group looks at the following expression:

$$\frac{-2x(x^2 + x^3) - [(-5)^2 + (-51/17) + (? 27)]}{(125/6)}$$

They work to simplify it.

Brett says, "It simplifies to  $-2x^6 - (1/30)$ ."

Jamal says, "No, Brett, that is certainly not it. I believe that it can be simplified to  $-4x^6 + (19/25)$ ."

Georgia says, "Ridiculous. The correct answer is  $-(2x^6 + 1)$ ."

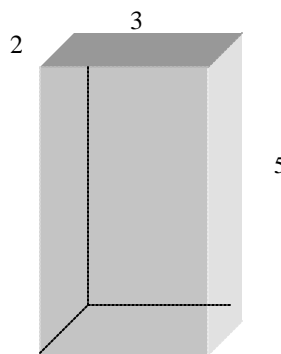
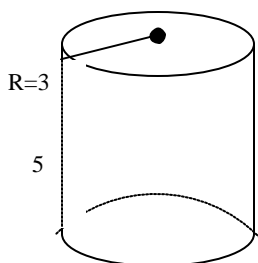
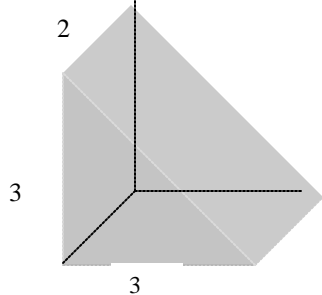
c. Which answer is right? Explain and show work that tells why the right answer is correct.

d. Explain what each of the other students did to get his or her answer wrong.



### Open Response 3

a. Name the following solids.




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b. Sketch the 2-dimensional figure you would see if you looked directly at the middle figure at eye level.

c. Compute the volume of one of them. Be sure to show the formula you used, as well as all your work.

d. Sketch, label, and write the dimensions of a 3-D figure that has 150% of the volume of the shape you used in part B. Explain how you increased the volume exactly 150%.



