

Mystic Valley Regional Charter School

Sixth Grade Curriculum Matrix- draft

	Reading	Mathematics - Saxon	Science - Core Knowledge	History - Core Knowledge
August/ September	<p><i>Literature:</i></p> <p>Incredible Journey</p> <p><i>Language Skills:</i></p> <p>Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Essay • Hypothesis 	<ol style="list-style-type: none"> 1) Identify whole numbers, integers 2) Read and write decimal numbers 3) Recognize place value in whole and decimal numbers 4) Number patterns and sequences 5) Compare and order whole numbers and integers 6) Fact families 7) Number lines 8) Factors, multiples and divisibility 9) Even and odd numbers 10) Equivalency 11) Equality and inequality 12) Greatest common factor 13) Least common multiple 14) Order of operations 15) Addition and subtraction of whole numbers with regrouping, money, fractions 16) Multiply and divide whole numbers with regrouping, fractions 17) Fractions and mixed numbers, percents 18) Compare fractions 19) Reciprocals 20) Simplify expressions 21) Solve for an unknown in an equation 22) Measurement <ul style="list-style-type: none"> • Temperature – Fahrenheit and Celsius • Area and perimeter • Volume 23) Data on a chart, graph, table 24) Round and estimate 25) Apply geometric formulas and theorems 	<p><i>Astronomy</i></p> <ul style="list-style-type: none"> • Earth, moon, sun • Satellites, Rockets • Role of gravity • Solar system – planets, sun • Galaxies – Milky Way, Andromeda 	<p><i>Deserts</i></p> <ul style="list-style-type: none"> • Deserts of Africa: Sahara and Kalahari • Deserts of Australia • Deserts of Asia: Gobi and Arabian Peninsula • Deserts of North America • Deserts of South America: Patagonia <p><i>Map Skills</i></p> <ul style="list-style-type: none"> • Latitude/longitude • Time Zones • Climates
October	<p><i>Literature:</i></p> <p>The Giver (advanced)</p> <p>House of Dries Drier</p> <p><i>Language Skills:</i></p>	Continuation of last month.	<p><i>Astronomy</i></p> <ul style="list-style-type: none"> • Comets • Meteors • Asteroids • Stars – sun, supernova, black holes 	<p><i>Judaism and Christianity</i></p> <ul style="list-style-type: none"> • Geography of the Middle East • The Covenant • The Commandments • The Prophets

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	Grammar <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing Writing <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Explanatory writing 		holes <ul style="list-style-type: none"> • Constellations • History of the universe 	<ul style="list-style-type: none"> • The life of Jesus • The Rise of Christianity • Ideas about God and humanity
November	<i>Literature:</i> Flowers for Algernon (advanced) Tuck Everlasting <i>Language Skills:</i> Grammar <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing Writing <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Outline • Bibliography • Thesis statement 	<i>Continue previous skills</i> <ol style="list-style-type: none"> 1) Number lines 2) Compare and order decimal numbers 3) Factors, multiples and divisibility 4) Approximation and rounding 5) Prime and composite numbers 6) Prime factorization 7) Compare fractions 8) Least common denominator 9) Convert improper fraction 10) Simplify fractions 11) Add and subtract mixed numbers, fractions and decimals 12) Multiply and divide mixed numbers, fractions and decimals 13) Place value in decimal numbers 14) Compare and simplify decimal numbers 15) Point, line, segment, ray and angle 16) Line segments, rays, and lines 17) Plane 18) Parallel, perpendicular and intersecting lines 19) Horizontal, vertical and oblique 20) Round and estimate 	<i>Energy</i> <ul style="list-style-type: none"> • Kinetic and potential • Energy conversion • Conservation of energy • Physics and energy • Sources of energy – heat, mechanical 	<i>Ancient Greece and Rome</i> <ul style="list-style-type: none"> • Governments of ancient Greece and Rome • Epic poems • Geography of Greece and Rome • Sparta and Athens • Olympic Games
December	<i>Literature:</i> A Christmas Carol	Continuation of last month	<i>Heat</i> <ul style="list-style-type: none"> • Temperature • Heat Transfer 	<i>Ancient Greece and Rome</i> <ul style="list-style-type: none"> • Persian Wars • Golden Age of Athens

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	<p><i>Language Skills:</i> Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Research essay 			<ul style="list-style-type: none"> • Peloponnesian War • Greek Philosophy • Plato and Aristotle • Alexander and Hellenistic Period
January	<p><i>Literature:</i></p> <p>The Hobbit (advanced)</p> <p>Amos Fortune Free Man</p> <p><i>Language Skills:</i> Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters 	Continuation of last month.	<p><i>The Human Body</i></p> <ul style="list-style-type: none"> • Circulatory System • Lymphatic system • Immune system • Viral diseases – cold, chicken pox, • Vaccines 	<p><i>Roman Republic</i></p> <ul style="list-style-type: none"> • Plebians and Patricians • Punic Wars • Julius Caesar • Age of Augustus • Rome and Christianity • Fall of the Roman Empire • Heritage of Greece and Rome
February	<p><i>Literature:</i></p> <p>And Then Were None (advanced)</p> <p>The Giver</p> <p><i>Language Skills:</i> Grammar</p>	<p><i>Continue previous skills</i></p> <ol style="list-style-type: none"> 1) Powers and exponents 2) Perfect squares and square roots 3) Ratio and proportion 4) Addition and subtraction of fractions 5) Multiply and divide fractions 6) Write fractions/mixed numbers as decimals (and vice versa) 7) Add and subtract fractions and mixed 	<p><i>Oceans</i></p> <ul style="list-style-type: none"> • Water cycle • Properties of water • Ocean chemistry • Currents – Gulf Stream, Kuroshio • Tides- role of sun and moon • Waves – crest, trough, 	<p><i>Enlightenment</i></p> <ul style="list-style-type: none"> • Isaac Newton • Descartes • Hobbes • Locke • Enlightenment in France • Enlightenment in action

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	<ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters 	<p>numbers</p> <ol style="list-style-type: none"> 8) Write fractions, mixed numbers and decimals as percents 9) Read and write money amounts 10) Order of operations 11) Solve for the unknown in an equation 12) Describe triangle. Rectangle, square or circle 13) Identify edges, faces and vertices 14) Identify radius, diameter, circumference 15) Describe and classify quadrilaterals 16) Calculate using mixed measures 17) Identify square and cubic units 18) Perimeter of polygons 19) Area of simple figures 20) Perimeter of circles 21) Volume of prism 22) Combinations/Permutations 23) Probability or chance 24) Apply ratios, proportions, or scale factor 25) Apply geometric formulas or theorems 	<p>tsunamis</p>	
March	<p><i>Literature:</i></p> <p>The Pearl (advanced) The Lion, the Witch, and the Wardrobe</p> <p><i>Language Skills:</i></p> <p>Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters 	Continuation of last month.	Continuation from previous month	<p><i>French Revolution</i></p> <ul style="list-style-type: none"> • 3 Estates • Absolute Monarchy • Louis the XIV, XV, and XVI • Marie Antoinette • Estate revolts • Time of violence • "Tale of Two Cities" video • New Government
April	<p><i>Literature:</i></p> <p>Connecticut Yankee in King</p>	Continuation of last month.	Continuation from previous month	<p><i>French Revolution</i></p> <ul style="list-style-type: none"> • French Declaration of Rights

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	<p>Arthur's Court (advanced)</p> <p>The Hobbit</p> <p><i>Language Skills:</i> Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Poetry 			<ul style="list-style-type: none"> • French calendar • Napoleon and Josephine • Romantic Revolution
May	<p><i>Literature:</i></p> <p>Captains Courageous (advanced)</p> <p>A Wrinkle in Time</p> <p><i>Language Skills:</i> Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Persuasive writing 	<p><i>Continue previous skills</i></p> <ol style="list-style-type: none"> 1) Describe irrational numbers 2) Perfect squares and square roots 3) Ratio and proportion 4) Opposites (negatives) 5) Divide whole numbers with quotient as a decimal 6) Find percents of whole, group, set or number 7) Write percents as fractions 8) Functions 9) Congruent figures 10) Symmetry 11) Rotation, reflection, translation 12) Classify triangles 13) Circumference of circles 14) Area of circles 15) Area of complex figures 16) Volume of cylinders 17) Measure angles 18) Mean, median, mode, and range 19) Round and estimate 20) Solve multi-step problems 	Plate Tectonics	<p><i>Immigration</i></p> <ul style="list-style-type: none"> • Nation of Immigrants • Reasons for immigration to the U.S. • U.S. attitudes and policies toward immigrants • Becoming American • "A True American Writing"

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June	<p><i>Literature:</i></p> <p>Old Man of the Sea or Lord of the Flies (advanced)</p> <p>Flowers for Algernon or Number the Stars</p> <p><i>Language Skills:</i></p> <p>Grammar</p> <ul style="list-style-type: none"> • Sentence analysis • Punctuation • Editing <p>Writing</p> <ul style="list-style-type: none"> • Paragraphs • Stories • Letters • Persuasive Writing 	<p><i>Continue previous skills</i></p>	<p><i>People in Science Project</i></p>	<p><i>Urbanization and the Industrial Revolution</i></p> <ul style="list-style-type: none"> • Lord Ashley • Events leading up to the Industrial Revolution • The Enclosure Movement • Farms to factories • Capitalism • Economics • Growth of the U.S. • Reform for African Americans • Women's voting rights • Socialism

Reading— Reading instruction centers around the novels. Students in the sixth grade learn to analyze novels focusing on elements such as plot, character, setting, and symbolism. Students become adept at having in-depth discussions about a literary work. Students learn to answer and formulate their own interpretive questions about a novel they are reading.

Mathematics— Math instruction in sixth grade is presented incrementally and builds on concepts introduced in previous lessons. Each lesson contains continually daily practice to reinforce skills taught throughout the year. The main components of the program include: basic facts practice, mental math and problem solving; daily lesson of new skills; daily practice of new skills; and a daily problem set that includes all material studied thus far in the school year.

History and Geography— In the Sixth grade, the History and Geography curriculum continues to focus on United States and World History. Students will learn about Ancient Civilizations, government structures, conflicts throughout history, immigration, and industrialization in the United States. Within the area of Geography, students will continue to build on their spatial understanding and their geographic vocabulary

Science— The Science curriculum in the Sixth grade will explore a variety of topics in Life Science, Physical Science, Earth and Space Science and Technology/Engineering. Instruction will focus on hands-on experiences and observation while also building reading and writing skills. Students will conduct experiments and read literature that will broaden their understanding of scientific concepts.

Character Education— The character education program at Mystic Valley Regional Charter School is literature based. Students listen to, read and discuss literature and how the stories exemplify the virtue of the month. The goal is to cultivate character through the promotion of basic moral, civic and intellectual virtues.¹

Music and Visual Arts— Music and the arts are an integral part of the curriculum focusing on creativity and active participation. Instruction is non-competitive and provides significant opportunities to sing, dance, listen to music, play act, listen to and read poetry, draw, paint, and create. In addition, children are also exposed to great pieces of art and music.

¹ Klee, Mary Beth; Core Virtues 2000