

A Correlation of



To the

**Massachusetts
Science and Technology/Engineering
Curriculum Framework
Grade 4**

SAVVAS

A Correlation of myView Literacy, Grade 4, ©2020 to the Massachusetts Science and Technology/Engineering Curriculum Framework

Introduction

This document demonstrates how *myView Literacy*, ©2020 meets the *Massachusetts Science and Technology/Engineering Curriculum Framework*. Correlation page references are to the Teacher Edition and Digital Resources, and are cited by grade, unit and page references, or digital activities.

myView Literacy is a K-5 comprehensive, interactive literacy program that provides a balanced approach to teaching reading, writing, speaking, listening and viewing using a collection authentic reading texts and collaborative writing workshops. Competencies of 21st century thinking and social-emotional learning are taught and practiced using authentic literature, highly-engaging trade books, collaborative learning, and project-based inquiry. The instructional model follows connected reading and writing workshops that focus on teaching the critical skills and strategies students need to be highly competent thinkers, readers, and writers ready for college and career. It is designed to teach students to think carefully about what they read, discern what is relevant to them, and what is important in their world. *myView Literacy* offers a balanced instructional model with an emphasis on conceptual understandings, standards-based instruction and application through rigorous performance tasks and the workshop model.

Inspire Confidence and Collaboration

- Create opportunities for student success. Provide a supportive and nurturing environment that empowers students to become independent learners.

Focus on Balance and Flexibility

- Develop predictable routines for teaching and learning. Minilessons, small groups, and collaboration lead to a gradual release of responsibility.

Nurture Every Learner

- Spend more time coaching, differentiating, and promoting positive attitudes toward reading and writing.

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Grade 4	
Grade 4: Earth and Space Sciences	
ESS1. Earth’s Place in the Universe	
<p>4-ESS1-1. Use evidence from a given landscape that includes simple landforms and rock layers to support a claim about the role of erosion or deposition in the formation of the landscape over long periods of time.</p>	<p>Unit 5: Selections Infographic: “The Surface of Earth” T20–T21 Read: <i>Planet Earth</i> T32–T43 Read Aloud: “Big Bend: Land of Contrasts” T228–T229 Read: <i>The Himalayas</i> T237–T249 Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T241 (Limestone) Cross-Curricular Perspectives: Science, U5: T243 (Erosion)</p> <p>Digital Resources: Unit 5>Leveled Readers>Adventure in Antarctica (Realistic Fiction) >How Weather Works (Expository Text) – patterns >Patterns in Nature (Informational Text and Procedure) Water, Wind, Patterns >The Dirt on Soil (Informational Text) – diagrams, graphs, protect soil, dust bowl disaster, maps – build a backyard compost bin, recycling >The Water Cycles (Expository Text and Procedure)</p>

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<p>Clarification Statements:</p>	
<ul style="list-style-type: none"> • Examples of evidence and claims could include rock layers with shell fossils above rock layers with plant fossils and no shells, indicating a change from deposition on land to deposition in water over time; and a canyon with rock layers in the walls and a river in the bottom, indicating that a river eroded the rock over time. 	
<ul style="list-style-type: none"> • Examples of simple landforms can include valleys, hills, mountains, plains, and canyons. 	
<ul style="list-style-type: none"> • Focus should be on relative time. 	
<p>State Assessment Boundary:</p>	
<ul style="list-style-type: none"> • Specific details of the mechanisms of rock formation or specific rock formations and layers are not expected in state assessment. 	
<p>ESS2. Earth’s Systems</p>	
<p>4-ESS2-1. Make observations and collect data to provide evidence that rocks, soils, and sediments are broken into smaller pieces through mechanical weathering and moved around through erosion.</p>	<p>Unit 5: Selections Infographic: “The Surface of Earth” T20–T21 Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T33 (Earth’s Crust) Cross-Curricular Perspectives: Science, U5: T241 (Limestone) Cross-Curricular Perspectives: Science, U5: T243 (Erosion)</p> <p>Digital Resources: Unit 5>Leveled Readers>Adventure in Antarctica (Realistic Fiction) >The Dirt on Soil (Informational Text) – diagrams, graphs, protect soil, dust bowl disaster, maps – build a backyard compost bin, recycling</p>

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Clarification Statements:	
• Mechanical weathering processes can include frost wedging, abrasion, and tree root wedging.	
• Erosion can include movement by blowing wind, flowing water, and moving ice.	
State Assessment Boundary:	
• Chemical processes are not expected in state assessment.	
<p>4-ESS2-2. Analyze and interpret maps of Earth’s mountain ranges, deep ocean trenches, volcanoes, and earthquake epicenters to describe patterns of these features and their locations relative to boundaries between continents and oceans.</p>	<p>Unit 5: Selections Infographic: “The Surface of Earth” T20–T21 Read: <i>Planet Earth</i> T32–T43 Media: Volcanic Activity T86–T87 Read Aloud: “Mount Vesuvius” T88–T89 Read: <i>Volcanoes</i> T97–T109 Read Aloud: “Big Bend: Land of Contrasts” T228–T229 Read: <i>The Himalayas</i> T237–T249 Read Aloud: “The Footprints Across Earth’s Back” T294–T295 Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T33 (Earth’s Crust) Cross-Curricular Perspectives: Science, U5: T42, T99 (Volcanoes) Cross-Curricular Perspectives: Science, U5: T103 (Tectonic Plates) Cross-Curricular Perspectives: Science, U5: T239 (Mountains) Cross-Curricular Perspectives: Science, U5: T242 (Himalayas and Water) Compare Across Texts: Earth and Geographic Features, U5: T360–T361 Digital Resources: Unit 4>Leveled Readers> A Tale of Two Volcanoes (Traditional Literature) Unit 5>Leveled Readers>Adventure in Antarctica (Realistic Fiction)</p>

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ESS3. Earth and Human Activity	
4-ESS3-1. Obtain information to describe that energy and fuels humans use are derived from natural resources and that some energy and fuel sources are renewable and some are not.	<p>Unit 5: Selections Read Aloud: “Energy Recovery of Waste” T22–T23 Diagram: Pollutant Emissions T152–T153 Read: from <i>The Top 10 Ways You Can Reduce Waste</i> T163–T183</p> <p>Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T34 (Renewable and Nonrenewable Resources) Cross-Curricular Perspectives: Science, U5: T164 (Nonrenewable Resources like Coal, Oil, and Natural Gas)</p> <p>Digital Resources: <i>Unit 5</i>>Leveled Readers>Force and Energy (Informational Text)</p>
Clarification Statements:	
<ul style="list-style-type: none"> • Examples of renewable energy resources could include wind energy, water behind dams, tides, and sunlight. • Non-renewable energy resources are fossil fuels and nuclear materials. 	
4-ESS3-2. Evaluate different solutions to reduce the impacts of a natural event such as an earthquake, blizzard, or flood on humans.*	<p>Unit 5: Selections Media: Volcanic Activity T86–T87 Read: <i>Volcanoes</i> T97–T109</p> <p>Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T33 (Earth’s Crust) Cross-Curricular Perspectives: Science, U5: T42, T99 (Volcanoes) Cross-Curricular Perspectives: Science, U5: T103 (Tectonic Plates) Research Project: Persuasive Writing: The Most Dangerous Type of Weather, U5: T362–T377</p> <p>Digital Resources: <i>Unit 2</i>>Leveled Readers>Wildfires (Informational Text) <i>Unit 5</i>>Leveled Readers>How Weather Works (Expository Text)</p>

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Clarification Statement:	
• Examples of solutions could include an earthquake-resistant building or a constructed wetland to mitigate flooding.	
Grade 4: Life Science	
LS1. From Molecules to Organisms: Structures and Processes	
4-LS1-1. Construct an argument that animals and plants have internal and external structures that support their survival, growth, behavior, and reproduction.	<p>Unit 2: Selections Infographic: Why Animals Adapt T20–T21 Read Aloud: “Snowy Owls” T22–T23 Read: <i>Feathers: Not Just for Flying</i> T31–T49 Media: Survival Adaptations T92–T93 Read Aloud: “Moths in Hiding” T94–T95 Read: <i>Animal Mimics</i> T103–T123 Read Aloud: “Chameleon” T232–T233 Read: <i>Butterfly Eyes and Other Secrets of the Meadow</i> T241–T253 Read Aloud: “Primates of Madagascar” T298–T299 Read: <i>The Weird and Wonderful Echidna</i> and <i>The Very Peculiar Platypus</i> T307–T315, T317–T323 Activities and Supplemental Material Cross-Curricular Perspectives: Science, U2: T32, T37, T47 (Adaptation) Cross-Curricular Perspectives: Science, U2: T39 (Camouflage) Cross-Curricular Perspectives: Science, U2: T104 (Mimicry) Cross-Curricular Perspectives: Science, U2: T106, T309, T320 (Physical Adaptation) Cross-Curricular Perspectives: Science, U2: T117, T119 (Survival Adaptations) Cross-Curricular Perspectives: Science, U2: T183 (Turtles and Hibernating) Cross-Curricular Perspectives: Science, U2: T248, T252 (Living Things Depend on Each Other) Compare Across Texts: Living Things Adjust to Different Habitats and Environments, U2: T364–T365</p> <p>Digital Resources: Unit 2> Leveled Readers>Jellyfish (Informational Text) >Here Comes the Night (Expository Text) animals of the night >Invasive Species (Expository Text) insects and plants >Plant and Animal Communication (Expository Text) >Where Am I? Amazing Natural Camouflage (Informational Text)</p>

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Clarification Statements:	
• Animal structures can include legs, wings, fins, feathers, trunks, claws, horns, antennae, eyes, ears, nose, heart, stomach, lung, brain, and skin.	
• Plant structures can include leaves, roots, stems, bark, branches, flowers, fruit, and seeds.	
State Assessment Boundary:	
• State assessment will be limited to macroscopic structures.	
[4-LS1-2 from NGSS is not included.]	
Grade 4: Physical Science	
PS3. Energy	
4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.	<p>Unit 1: Selections Media: “Everyday Space Technology” T154–T155 Read Aloud: “Exploring Mars” T156–T157 Activities and Supplemental Material Cross-Curricular Perspectives: Social Studies, U1: T40 (Space Travel) Cross-Curricular Perspectives: Social Studies, T231 (Altitude and Running)</p> <p>Unit 5: Selections Read Aloud: “Energy Recovery of Waste” T22–T23 Diagram: Pollutant Emissions T152–T153</p> <p>Digital Resources: Unit 2> Leveled Readers>Railroad Networks (Informational Text) Unit 5> Leveled Readers>Force and Energy (Informational Text) >Trouble on Zeplin 5 (Science Fiction)</p>

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State Assessment Boundaries:	
<ul style="list-style-type: none"> State assessment will be limited to analysis of kinetic energy. Accounting for mass, quantitative measures of changes in the speed of an object, or any precise or quantitative definition of energy is not expected in state assessment. 	
4-PS3-2. Make observations to show that energy can be transferred from place to place by sound, light, heat, and electric currents.	<p>Unit 1: Selections Media: “Everyday Space Technology” T154–T155 (NASA develops glasses that block out blue and ultraviolet light)</p> <p>Unit 5: Selections Read Aloud: “Energy Recovery of Waste” T22–T23 Diagram: Pollutant Emissions T152–T153 Read: from <i>The Top 10 Ways You Can Reduce Waste</i> T163–T183</p> <p>Digital Resources: <i>Unit 5</i>> Leveled Readers>Force and Energy (Informational Text) >Trouble on Zeplin 5 (Science Fiction)</p>
Clarification Statement:	
<ul style="list-style-type: none"> Evidence of energy being transferred can include vibrations felt a small distance from a source, a solar-powered toy that moves when placed in direct light, warming a metal object on one end and observing the other end getting warm, and a wire carrying electric energy from a battery to light a bulb. 	
State Assessment Boundary:	
<ul style="list-style-type: none"> Quantitative measurements of energy are not expected in state assessment. 	
4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide.	<p>Teachers can introduce this objective with the following:</p> <p>Unit 5: Selections Infographic: “The Surface of Earth” T20–T21 Read: <i>Planet Earth</i> T32–T43 Media: Volcanic Activity T86–T87 Read Aloud: “Mount Vesuvius” T88–T89 Read: <i>Volcanoes</i> T97–T109</p> <p>Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T33 (Earth’s Crust) Cross-Curricular Perspectives: Science, U5: T42, T99 (Volcanoes) Cross-Curricular Perspectives: Science, U5: T103 (Tectonic Plates) Cross-Curricular Perspectives: Science, U5: T247 (Climbing Technology)</p> <p>Digital Resources: <i>Unit 5</i>> Leveled Readers>Force and Energy (Informational Text)</p>

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Clarification Statement:	
• Changes in energy can include a change in the object’s motion, position, and the generation of heat and/or sound.	
State Assessment Boundary:	
• Analysis of forces or quantitative measurements of energy are not expected in state assessment.	
4-PS3-4. Apply scientific principles of energy and motion to test and refine a device that converts kinetic energy to electrical energy or uses stored energy to cause motion or produce light or sound.*	<p>Teachers can introduce this objective with the following:</p> <p>Unit 5: Selections Read Aloud: “Energy Recovery of Waste” T22–T23</p> <p>Digital Resources: <i>Unit 5</i>>Leveled Readers>Force and Energy (Informational Text)</p>
Clarification Statement:	
• Sources of stored energy can include water in a bucket or a weight suspended at a height, and a battery.	<p>Teachers can introduce this objective with the following:</p> <p>Unit 1: Selections Media: “Everyday Space Technology” T154–T155 (NASA develops glasses that block out blue and ultraviolet light)</p> <p>Unit 5: Selections Read Aloud: “Energy Recovery of Waste” T22–T23 Diagram: Pollutant Emissions T152–T153 Read: from <i>The Top 10 Ways You Can Reduce Waste</i> T163–T183</p> <p>Digital Resources: <i>Unit 5</i>>Leveled Readers>Force and Energy (Informational Text) >Trouble on Zeplin 5 (Science Fiction)</p>

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PS4. Waves and Their Applications in Technologies for Information Transfer	
<p>4-PS4-1. Develop a model of a simple mechanical wave (including sound) to communicate that waves (a) are regular patterns of motion along which energy travels and (b) can cause objects to move.</p>	<p>Teachers can introduce this objective with the following: Unit 5: Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T33 (Earth’s Crust) Cross-Curricular Perspectives: Science, U5: T103 (Tectonic Plates) Cross-Curricular Perspectives: Science, U5: T174 (Water)</p> <p>Digital Resources: Unit 5> Leveled Readers>Force and Energy (Informational Text) >Trouble on Zeplin 5 (Science Fiction) >Patterns in Nature (Informational Text and Procedure) >The Water Cycles (Expository Text and Procedure)</p>
Clarification Statement:	
• Examples of models could include diagrams, analogies, and physical models.	
State Assessment Boundary:	
• Interference effects, electromagnetic waves, or non-periodic waves are not expected in state assessment.	
<p>4-PS4-2. Develop a model to describe that light must reflect off an object and enter the eye for the object to be seen.</p>	<p>For supporting content please see: Unit 1: Selections Media: “Everyday Space Technology” T154–T155 (NASA develops glasses that block out blue and ultraviolet light)</p>

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<p>State Assessment Boundary:</p>	
<p>• Specific colors reflected and seen, the cellular mechanisms of vision, angles of incidence and reflection, or how the retina works are not expected in state assessment.</p>	
<p>4-PS4-3. Develop and compare multiple ways to transfer information through encoding, sending, receiving, and decoding a pattern.*</p>	<p>For supporting content please see: Unit 3: Selections Infographic: Diverse Ways We Communicate T20–T21</p> <p>Digital Resources: Unit 1>Leveled Readers>Railroad Networks (Informational Text) Unit 2>Leveled Readers>Plant and Animal Communication (Expository Text) Unit 3>Leveled Readers>The Unbreakable Code (Historical Fiction) native American coders Unit 3>Leveled Readers>How Weather Works (Expository Text) – patterns, maps, diagrams, charts >Patterns in Nature (Informational Text and Procedure)</p>

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Clarification Statement:	
<ul style="list-style-type: none"> • Examples of solutions could include drums sending coded information through sound waves, using a grid of 1s and 0s representing black and white to send information about a picture, and using Morse code to send text. 	
Grade 4: Technology/Engineering	
ETS1. Engineering Design	
<p>4.3-5-ETS1-3. Plan and carry out tests of one or more design features of a given model or prototype in which variables are controlled and failure points are considered to identify which features need to be improved. Apply the results of tests to redesign a model or prototype.*</p>	<p>Teachers can introduce this objective with the following:</p> <p>Unit 1: Selections Read: <i>Reaching for the Moon</i> T31–T45 Media: “Everyday Space Technology” T154–T155 Infographic: “Cool Homes Around the World” T218–T219 Activities and Supplemental Material Cross-Curricular Perspectives: Social Studies, U1: T40 (Space Travel)</p> <p>Unit 5: Selections Read Aloud: “Energy Recovery of Waste” T22–T23 Read Aloud: “The New Downtown” T154–T155 Read: from <i>The Top 10 Ways You Can Reduce Waste</i> T163–T183 Activities and Supplemental Material Cross-Curricular Perspectives: Science, U5: T247 (Climbing Technology) Cross-Curricular Perspectives: Science, U5: T307 (Food Carrying Materials)</p>

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Clarification Statement:	
• Examples of design features can include materials, size, shape, and weight.	
4.3-5-ETS1-5(MA). Evaluate relevant design features that must be considered in building a model or prototype of a solution to a given design problem.*	<p>Unit 1: Selections Infographic: “Cool Homes Around the World” T218–T219</p> <p>Unit 3: Selections Infographic: Diverse Ways We Communicate T20–T21 Infographic: New Places Affect How We Eat T218–T219</p> <p>Unit 5: Selections Infographic: “The Surface of Earth” T20–T21 Read Aloud: “Energy Recovery of Waste” T22–T23 Read Aloud: “The New Downtown” T154–T155 Read: <i>Trashing Paradise</i> and “Bye Bye Plastic Bags on Bali” T303–T319</p> <p>Digital Resources: Unit 1>Leveled Readers>Health and Home (Informational Text) >Railroad Networks (Informational Text) Unit 4>Leveled Readers> Biographies) immigrants including science and technology >Enriching America (Informational Text)</p>