

**A Correlation of**

**Elevate Science Modules  
Grades 6-8, ©2019**



**To the  
Mississippi  
2018 College- and Career-Readiness  
Standards for Science, Grade 8**

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

**Introduction**

The following document demonstrates how the ***Elevate Science Middle Grades Modules ©2019*** program supports Mississippi College- and Career-Readiness Standards for Science. Correlation references include the Student Edition, Teacher Edition, and online Realize™ digital resources.

Savvas Learning Company is proud to introduce ***Elevate Science Modules*** for Middle Grades – where exploration is the heart of science! Designed to address the rigors of new science standards, students will experience science up close and personal, using real-world, relevant phenomena to solve project-based problems. Our newest program prepares students for the challenges of tomorrow, building strong reasoning skills and critical thinking strategies as they engage in explorations, formulate claims, and gather and analyze data that promote evidence-based arguments. The blended print and digital curriculum covers all Next Generation Science Standards at every grade level.

***Elevate Science*** helps teachers transform learning, promote innovation, and manage their classroom.

**Transform** science classrooms by immersing students in active, three-dimensional learning. ***Elevate Science*** engages students with real-world phenomena, open-ended Quests, uDemonstrate performance-based tasks, and in the engineering/design process with uEngineer It! investigations.

- A new 3-D learning model enhances best practices.
- Engineering-focused features infuse STEM learning.
- Phenomena-based activities put students at the heart of a Quest for knowledge.

**Innovate** learning by focusing on 21st century skills.

Students are encouraged to think, collaborate, and innovate! With ***Elevate Science***, students explore STEM careers, experience engineering activities, and discover our scientific and technological world. The content, strategies, and resources of ***Elevate Science*** equip the science classroom for scientific inquiry and science and engineering practices.

- Problem-based learning Quests put students on a journey of discovery.
- STEM connections help integrate curriculum.
- Coding and innovation engage students and build 21st century skills.

**Manage** the classroom with confidence.

Teachers will lead their class in asking questions and engaging in argumentation. Evidence-based assessments provide new options for monitoring student understanding.

- Professional development offers practical point-of-use support.
- Embedded standards in the program allow for easy integration.
- ELL and differentiated instruction strategies help instructors reach every learner.
- Interdisciplinary connections relate science to other subjects.

Designed for today's classroom, preparing students for tomorrow's world. ***Elevate Science*** promises to:

- Elevate thinking.
- Elevate learning.
- Elevate teaching.

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

**Table of Contents**

<b>(L.8) Life Science</b> .....	<b>4</b>
<b>(P.8) Physical Science</b> .....	<b>10</b>
<b>(E.8) Earth and Space Science</b> .....	<b>13</b>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

Mississippi College- and Career-Readiness Standards for Science, Grade 8	Elevate Science Modules Grades 6-8, ©2019
<b>(L.8) Life Science</b>	
<b>(DCI.L.8.2) Reproduction and Heredity</b>	
<p>(L.8.2A.1) Obtain and communicate information about the relationship of genes, chromosomes, and DNA, and construct explanations comparing their relationship to inherited characteristics.</p>	<p><b>Systems, Reproduction, and Growth SE/TE:</b> Sexual Reproduction, 184 Inherited Traits, 186-188 Reading Check, 188</p> <p><b>Diversity of Life SE/TE:</b> Chromosomes and Genes, 17-19 Forming Sex Cells, 21-23 The Genetic Code, 27 Lesson 3 Check, #5, 34 Topic 1 Review and Assess, #10, 58</p> <p><b>Realize™ Digital Resources:</b> <b>Systems, Reproduction, and Growth:</b> <b>Reproduction and Growth</b> &gt;Lesson 1: Patterns of Reproduction&gt;Interactivity: Inheritance of Traits <b>Diversity of Life: Genes and Heredity</b> &gt;Lesson 2: Chromosomes and Inheritance&gt;Investigate Lab: Chromosomes and Inheritance;&gt;Interactivity: Colorful Chromosomes;&gt;Quest Check-In Interactivity: About Those Chromosomes</p>
<p>(L.8.2A.2) Create a diagram of mitosis and explain its role in asexual reproduction, which results in offspring with identical genetic information.</p>	<p><b>Systems, Reproduction, and Growth SE/TE:</b> The Functions of Cell Division, 95 The Cell Cycle, 96-100 Literacy Connection, 99 Lesson 4 Check, #5, 101 Asexual Reproduction, 183 Comparing Types of Reproduction, 185 Topic 4 Review and Assess, #5, 224</p> <p><b>Diversity of Life SE/TE:</b> Comparing Meiosis and Mitosis, 23</p> <p><b>Realize™ Digital Resources:</b> <b>Systems, Reproduction, and Growth: The Cell System</b> &gt;Lesson 4: Cell Division&gt;Investigate Lab: Modeling Mitosis <b>Systems, Reproduction, and Growth SE/TE:</b> &gt;Lesson 1: Patterns of Reproduction&gt;Virtual Lab: You've Got to Divide to Multiply;&gt;Investigate Lab: Comparing Methods of Reproduction</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(L.8.2A.3) Construct explanations of how genetic information is transferred during meiosis.	<p><b>Diversity of Life SE/TE:</b> Forming Sex Cells, 21-23 Lesson 2 Check, #5, 24</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Genes and Heredity</b> &gt;Lesson 2: Chromosomes and Inheritance&gt;Interactivity: Look Inside;&gt;Interactivity: Colorful Chromosomes</p>
(L.8.2A.4) Engage in discussion using models and evidence to explain that sexual reproduction produces offspring that have a new combination of genetic information different from either parent.	<p><b>Systems, Reproduction, and Growth SE/TE:</b> Asexual and Sexual Reproduction, 183-185 Model It!, 184 Inherited Traits, 186 Lesson 4 Check, #5, 191 Topic 4 Review and Assess, #5, 224</p> <p><b>Diversity of Life SE/TE:</b> Connect It!, 16 Forming Sex Cells, 21-23 Topic 1 Review and Assess, #10, 58</p> <p><b>Realize™ Digital Resources:</b> <b>Systems, Reproduction, and Growth: Reproduction and Growth</b> &gt;Lesson 1: Patterns of Reproduction&gt;Virtual Lab: You've Got to Divide to Multiply;&gt;Investigate Lab: Comparing Methods of Reproduction <b>Diversity of Life: Genes and Heredity</b> &gt;Topic Launch: Genes and Heredity&gt;Connect Lab: Making More &gt;Lesson 2: Chromosomes and Inheritance&gt;Interactivity: Look Inside;&gt;Virtual Lab: Whose Offspring is This?;&gt;Investigate Lab: Chromosomes and Inheritance;&gt;Interactivity: Colorful Chromosomes</p>
(L.8.2A.5) Compare and contrast advantages and disadvantages of asexual and sexual reproduction.	<p><b>Systems, Reproduction, and Growth SE/TE:</b> Reflect, 183 Asexual and Sexual Reproduction, 183-185 Reading Check, 185</p> <p><b>Realize™ Digital Resources:</b> <b>Systems, Reproduction, and Growth: Reproduction and Growth</b> &gt;Lesson 1: Patterns of Reproduction&gt;Enrichment: Organism Reproduction</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(L.8.2B.1) Construct an argument based on evidence for how environmental and genetic factors influence the growth of organisms.	<p><b>Systems, Reproduction, and Growth SE/TE:</b>            Growth and Development of Organisms, 213            Plant Responses and Growth, 214-216            Plan It!, 216            Animal Growth, 217-220            Math Toolbox, 220            Quest Check-In, 221            Case Study: Warmer Waters, Fewer Fish, 222-223            Topic 4 Review and Assess, #16, #17, 225            Topic 4 Evidence-Based Assessment, 226-227</p> <p><b>Realize™ Digital Resources:</b>  <b>Systems, Reproduction, and Growth:</b>  <b>Reproduction and Growth</b>            &gt;Lesson 4: Factors Influencing Growth&gt;Interactivity: Breeding Bigger Bovines;&gt;Video: Factors Influencing Growth;&gt;uInvestigate Lab: Watching Roots Grow;&gt;uInvestigate Lab: What Are The Factors?</p>
(L.8.2B.2) Use various scientific resources to research and support the historical findings of Gregor Mendel to explain the basic principles of heredity.	<p><b>Diversity of Life SE/TE:</b>            Mendel's Observations, 5-6            Plan It!, 6            Alleles Affect Inheritance, 7-8            Literacy Connection, 8            Making a Punnett Square, 10-11            Lesson 1 Check, #2, #3, #4, 13            Topic 1 Review and Assess, #4, #5, 58            uDemonstrate Lab: Make the Right Call!, 62-65</p> <p><b>Realize™ Digital Resources:</b>  <b>Diversity of Life: Genes and Heredity</b>            &gt;Lesson 1: Patterns of Inheritance&gt;uInvestigate Lab: Observing Pistils and Stamens;&gt;Interactivity: Pea Plant Puzzle</p>
(L.8.2B.3) Use mathematical and computational thinking to analyze data and make predictions about the outcome of specific genetic crosses (monohybrid Punnett Squares) involving simple dominant/recessive traits.	<p><b>Diversity of Life SE/TE:</b>            Making a Punnett Square, 10-11            Genotype, 12            Lesson 1 Check, #2, #3, 13            Topic 1 Review and Assess, #4, #5, 58            uDemonstrate Lab: Make the Right Call!, 62-65</p> <p><b>Realize™ Digital Resources:</b>  <b>Diversity of Life: Genes and Heredity</b>            &gt;Lesson 1: Patterns of Inheritance&gt;Video: Patterns of Inheritance;&gt;Interactivity: Pea Plant Puzzle            &gt;Lesson 2: Chromosomes and Inheritance&gt;Virtual Lab: Whose Offspring is This?;&gt;uInvestigate Lab: Chromosomes and Inheritance</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(L.8.2B.4) Debate the ethics of artificial selection (selective breeding, genetic engineering) and the societal impacts of humans changing the inheritance of desired traits in organisms.	<p><b>Diversity of Life SE/TE:</b> Artificial Selection, 49 Genetic Engineering, 50-53 Controversies of DNA Use, 56 Reading Check, 56 Lesson 5 Check, #2, #5, #7, 57 Topic 1 Review and Assess, #19, 59 Topic 1 Evidence-Based Assessment, 60-61</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Genes and Heredity</b> &gt;Lesson 5: Genetic Technologies&gt;Interactivity: Solving Problems with Genetics</p>
(L.8.2C.1) Communicate through diagrams that chromosomes contain many distinct genes and that each gene holds the instructions for the production of specific proteins, which in turn affects the traits of the individual (not to include transcription or translation).	<p><b>Diversity of Life SE/TE:</b> Case Study: Cephalopods Special Edition, 14-15 Chromosomes and Genes, 17 Genes on Chromosomes, 18 The Genetic Code, 27 Making Proteins, 30-33 Model It!, 33 Lesson 3 Check, #4, #5, #7, 34</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Genes and Heredity</b> &gt;Lesson 3: Genetic Coding and Protein Synthesis&gt;Investigate Lab: Modeling Protein Synthesis;&gt;Interactivity: Making Proteins</p>
(L.8.2C.2) Construct scientific arguments from evidence to support claims about the potentially harmful, beneficial, or neutral effects of genetic mutations on organisms.	<p><b>Diversity of Life SE/TE:</b> Mutation Effects, 43 Topic 1 Review and Assess, #15, 59 Mutations, 87 Lesson 2 Check, #3, 88 Mutations, 92-93 Reading Check, 93</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Natural Selection and Change Over Time</b> &gt;Lesson 3: The Process of Evolution&gt;Interactivity: Mutations Aren't All That Bad</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

Mississippi College- and Career-Readiness Standards for Science, Grade 8	Elevate Science Modules Grades 6-8, ©2019
<b>(DCI.L.8.4) Adaptation and Diversity</b>	
(L.8.4A.1) Use various scientific resources to analyze the historical findings of Charles Darwin to explain basic principles of natural selection.	<p><b>Diversity of Life SE/TE:</b>            Darwin's Journey, 75-78            Reading Check, 77            Question It!, 77            Lesson 1 Check, #4, #5, 79            Darwin's Search for a Mechanism, 81-83            How Natural Selection Works, 83            Selection, 84            Lesson 2 Check, #1, #4, 88            Topic 2 Review and Assess, #5, #10, 122</p> <p><b>Realize™ Digital Resources:</b>  <b>Diversity of Life: Natural Selection and Change Over Time</b>            &gt;Lesson 1: Early Study of Evolution&gt;Interactivity: Mystery on the Galapagos Islands;&gt;Investigate Lab: How Do Species Change Over Time?</p>
(L.8.4A.2) Investigate to construct explanations about natural selection that connect growth, survival, and reproduction to genetic factors, environmental factors, food intake, and interactions with other organisms.	<p><b>Diversity of Life SE/TE:</b>            Connect It!, 80            Evolution by Natural Selection, 81-87            Literacy Connection, 82            Model It!, 85            Lesson 2 Check, #1, #4, #5, 88            Sexual Selection, 95            Lesson 3 Check, #3, 97            Topic 2 Review and Assess, #10, 122</p> <p><b>Realize™ Digital Resources:</b>  <b>Diversity of Life: Natural Selection and Change Over Time</b>            &gt;Topic Launch: Natural Selection and Change Over Time&gt;Connect Lab: Walking Whales?            &gt;Lesson 2: Natural Selection&gt;Interactivity: Mice Selection on the Prairie;&gt;Virtual Lab: Natural Selection in Butterfly Behavior</p>
(L.8.4B.1) Analyze and interpret data (e.g. pictures, graphs) to explain how natural selection may lead to increases and decreases of specific traits in populations over time.	<p><b>Diversity of Life SE/TE:</b>            Connect It!, 80            Model It!, 85</p> <p><b>Realize™ Digital Resources:</b>  <b>Diversity of Life: Natural Selection and Change Over Time</b>            &gt;Topic Launch: Natural Selection and Change Over Time&gt;Connect Lab: Walking Whales?            &gt;Lesson 2: Natural Selection&gt;Interactivity: Mice Selection on the Prairie;&gt;Virtual Lab: Natural Selection in Butterfly Behavior</p>



**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(L.8.4B.2) Construct written and verbal explanations to describe how genetic variations of traits in a population increase some organisms' probability of surviving and reproducing in a specific environment.	<p><b>Systems, Reproduction, and Growth SE/TE:</b> Comparing Types of Reproduction, 185 Reading Check, 185</p> <p><b>Diversity of Life SE/TE:</b> Connect It!, 80 Natural Selection, 82 Selection, 84-85 Reading Check, 84 Model It!, 85 Lesson 2 Check, #4, #5, #6, 88 Mutations, 92-93</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Natural Selection and Change Over Time</b> &gt;Lesson 1: Early Study of Evolution&gt;Interactivity: Adaptations and Variations &gt;Lesson 2: Natural Selection&gt;Interactivity: Mice Selection on the Prairie;&gt;Interactivity: Lessons from the Potato Famine &gt;Lesson 3: The Process of Evolution&gt;Interactivity: Mutations Aren't All That Bad</p>
(L.8.4B.3) Obtain and evaluate scientific information to explain that separated populations, that remain separated, can evolve through mutations to become a new species (speciation).	<p><b>Diversity of Life SE/TE:</b> Galapagos Organisms, 76-77 Beginning and End of a Species, 106 Many Types of Terrapins, 107</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Natural Selection and Change Over Time</b> &gt;Lesson 3: The Process of Evolution&gt;Interactivity: Separated Species</p>
(L.8.4B.4) Analyze displays of pictorial data to compare and contrast embryological and homologous/analogous structures across multiple species to identify evolutionary relationships.	<p><b>Diversity of Life SE/TE:</b> Comparisons of Anatomy, 104 Math Toolbox, 105 Lesson 4 Check, #3, 109 uDemonstrate Lab, 126-129</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Natural Selection and Change Over Time</b> &gt;Lesson 4: Evidence in the Fossil Record&gt;Interactivity: Legs, Arms, Wings, and Flippers</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

Mississippi College- and Career-Readiness Standards for Science, Grade 8	Elevate Science Modules Grades 6-8, ©2019
<b>(P.8) Physical Science</b>	
<b>(DCI.P.8.6) Motions, Forces, and Energy</b>	
<p>(P.8.6.1) Collect, organize, and interpret data about the characteristics of sound and light waves to construct explanations about the relationship between matter and energy.</p>	<p><b>Waves and Information Technologies SE/TE:</b> Types of Waves, 5-7 Properties of Waves, 8-9 Wave Energy, 10 Resonance, 21 The Behavior of Sound, 25-27 Reading Check, 27 Factors Affecting the Speed of Sound, 28 Factors Affecting Pitch, 31 Lesson 3 Check, #3, #5, #6, 33 Characteristics of Electromagnetic Waves, 35 Models of Electromagnetic Wave Behavior, 36-37 Connect It!, 44 Light, Color, and Objects, 45-47 Lesson 5 Check, #5, 53 Topic 1 Evidence-Based Assessment, 56-57</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 3: Sound Waves&gt;Interactivity: Reflection, Transmission, and Absorption of Sound Waves;&gt;Investigate Lab: Understanding Sound;&gt;Enrichment: Violins and Sound &gt;Lesson 5: Light&gt;Interactivity: Describe the Behavior of Light;&gt;Interactivity: Blinded by the Light;&gt;Investigate Lab: Light Interacting with Matter;&gt;Interactivity: Predict the Behavior of Light Rays</p>
<p>(P.8.6.2) Investigate research-based mechanisms for capturing and converting wave energy (frequency, amplitude, wavelength, and speed) into electrical energy.</p>	<p><b>Energy Transfer SE/TE:</b> Reading Check, 38</p> <p><b>Waves and Information Technologies SE/TE:</b> Properties of Waves, 8-9 Wave Energy, 10 Math Toolbox, 10</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 1: Wave Properties&gt;Interactivity: Describe the Properties of Waves</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
<p>(P.8.6.3) Conduct simple investigations about the performance of waves to describe their behavior (e.g., refraction, reflection, transmission, and absorption) as they interact with various materials (e.g., lenses, mirrors, and prisms).</p>	<p><b>Waves and Information Technologies SE/TE:</b> Reflection, Refraction, and Absorption, 15-17 Plan It!, 16 Wave Interference, 18-21 The Behavior of Sound, 25-27 Model It!, 27 Reflecting Light, 48-50 Model It!, 50 Lenses, 51-52 Topic 1 Review and Assess, #18, 55 Topic 1 Evidence-Based Assessment, 56-57 uDemonstrate Lab, 58-61</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 2: Wave Interactions&gt;uInvestigate Lab: Standing Waves and Wave Interference;&gt;Interactivity: Use Models to Describe Wave Behavior;&gt;Quest Check-In Interactivity: Virtual Optics;&gt;Worksheet: Virtual Optics &gt;Lesson 3: Sound Waves&gt;Interactivity: Reflection, Transmission, and Absorption of Sound Waves;&gt;uInvestigate Lab: Understanding Sound &gt;Lesson 5: Light&gt;Interactivity: Describe the Behavior of Light;&gt;Virtual Lab; Colors of the Sky;&gt;uInvestigate Lab: Light Interacting With Matter;&gt;Interactivity: Predict the Behavior of Light Rays</p>
<p>(P.8.6.4) Use scientific processes to plan and conduct controlled investigations to conclude sound is a wave phenomenon that is characterized by amplitude and frequency.</p>	<p><b>Waves and Information Technologies SE/TE:</b> Loudness and Pitch, 29-31 The Doppler Effect, 32 Reading Check, 32</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 3: Sound Waves&gt;Inquiry Warm-Up Lab: Amplitude and Loudness;&gt;Interactivity: Sound;&gt;Worksheet: Sound;&gt;Interactivity; Doppler Effect</p>
<p>(P.8.6.5) Conduct scientific investigations that describe the behavior of sound when resonance changes (e.g., waves in a stretched string and design of musical instruments).</p>	<p><b>Waves and Information Technologies SE/TE:</b> Resonance, 21</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 2: Wave Interactions&gt;uInvestigate Lab: Standing Waves and Wave Interference</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(P.8.6.6) Obtain and evaluate scientific information to explain the relationship between seeing color and the transmission, absorption, or reflection of light waves by various materials.	<p><b>Waves and Information Technologies SE/TE:</b> Light, Color, and Objects, 45-47 Reading Check, 46 Lesson 5 Check, #5, 53</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 5: Light&gt;Interactivity: Describe the Behavior of Light;&gt;Interactivity: Blinded by the Light;&gt;Virtual Lab: Colors of the Sky;&gt;Investigate Lab: Light Interacting with Matter</p>
(P.8.6.7) Research the historical significance of wave technology to explain how digitized tools have evolved to encode and transmit information (e.g., telegraph, cell phones, and wireless computer networks).	<p><b>Waves and Information Technologies SE/TE:</b> Signals and Information, 77-79 Analog and Digital Signals, 80-82 Transmitting Signals, 83-84 Case Study: Super Ultra High Definition!, 86-87 The Information Age, 89-90 Communications Systems, 91-93 Topic 2 Review and Assess, #14, 99</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Information Technologies</b> &gt;Lesson 2: Signals&gt;Investigate Lab: Constructing a Simple Computer Circuit;&gt;Interactivity: Digitized Images;&gt;Interactivity: I've Got to Take This Call;&gt;Enrichment: Wireless Communication &gt;Lesson 3: Communication and Technology&gt;Interactivity: Technology and Communication;&gt;Interactivity: Signal Reliability</p>
(P.8.6.8) Compare and contrast the behavior of sound and light waves to determine which types of waves need a medium for transmission.	<p><b>Waves and Information Technologies SE/TE:</b> Types of Waves, 5-7 Connect It!, 24 The Behavior of Sound, 25 Lesson 3 Check, #2, 33 Characteristics of Electromagnetic Waves, 35 Wavelength and Frequency, 38</p> <p><b>Realize™ Digital Resources:</b> <b>Waves and Information Technologies: Waves and Electromagnetic Radiation</b> &gt;Lesson 1: Wave Properties&gt;Interactivity: Describe the Properties of Waves &gt;Lesson 4: Electromagnetic Waves&gt;Interactivity: Build an Electromagnetic Wave;&gt;Investigate Lab: Build a Wave</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

Mississippi College- and Career-Readiness Standards for Science, Grade 8	Elevate Science Modules Grades 6-8, ©2019
<b>(E.8) Earth and Space Science</b>	
<b>(DCI.E.8.7) Earth's Structure and History</b>	
<p>(E.8.7.1) Use scientific evidence to create a timeline of Earth's history that depicts relative dates from index fossil records and layers of rock (strata).</p>	<p><b>Earth Systems SE/TE:</b>            Connect It!, 164            The Geologic Time Scale, 165-167            Dividing Geologic Time, 168-169            Question It!, 169            Lesson 2 Check, #5, 170            Quest Check-In, 170            How Scientists Organize Earth's History, 179            Lesson 3 Check, #5, 180</p> <p><b>Realize™ Digital Resources:</b>  <b>Earth Systems: History of Earth</b>            &gt;Topic Launch: History of Earth&gt;uConnect Lab:            Dividing History            &gt;Lesson 2: Geologic Time Scale&gt;uInvestigate Lab:            Going Back in Time            &gt;Lesson 3: Major Events in Earth's History&gt;Virtual            Lab: The Story in the Strata</p>
<p>(E.8.7.2) Create a model of the processes involved in the rock cycle and relate it to the fossil record.</p>	<p><b>Earth Systems SE/TE:</b>            The Cycling of Earth's Materials, 79-82            Model It!, 82            uDemonstrate Lab, 90-93            Clues from Igneous Rocks, 156            Changes in Rocks, 158</p> <p><b>Realize™ Digital Resources:</b>  <b>Earth Systems: Minerals and Rocks in the Geosphere</b>            &gt;Lesson 4: Cycling of Rocks&gt;Interactivity: Earth's            Rock Cycle;&gt;Worksheet: Earth's Rock            Cycle;&gt;Interactivity: Rocks on the Move</p> <p><b>Earth Systems: History of Earth</b>            &gt;Lesson 1: Determining Ages of Rocks&gt;uInvestigate            Lab: The Story in Rocks</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(E.8.7.3) Construct and analyze scientific arguments to support claims that most fossil evidence is an indication of the diversity of life that was present on Earth and that relationships exist between past and current life forms.	<p><b>Diversity of Life SE/TE:</b> The Fossil Record, 99-101 Fossil Evidence of Evolution, 102-103 Question It!, 103 Lesson 4 Check, #4, 109</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Natural Selection and Change Over Time</b> &gt;Lesson 4: Evidence in the Fossil Record&gt;Interactivity: Along the Canyon Wall;&gt;Enrichment: The Horse Fossil Record</p>
(E.8.7.4) Use research and evidence to document how evolution has been shaped both gradually and through mass extinction by Earth’s varying geological conditions (e.g., climate change, meteor impacts, and volcanic eruptions).	<p><b>Diversity of Life SE/TE:</b> Beginning and End of a Species, 106 Lesson 4 Check, #5, #6, 109</p> <p><b>Realize™ Digital Resources:</b> <b>Diversity of Life: Natural Selection and Change Over Time</b> &gt;Lesson 4: Evidence in the Fossil Record&gt;Interactivity: Along the Canyon Wall;&gt;Interactivity: Fossils Around the World</p>
<b>(DCI.E.8.9) Earth’s Systems and Cycles</b>	
(E.8.9A.1) Investigate and explain how the flow of Earth’s internal energy drives the cycling of matter through convection currents between Earth’s surface and the deep interior causing plate movements.	<p><b>Earth Systems SE/TE:</b> Movement in Earth’s Mantle, 56-57 Lesson 1 Check, #4, #5, 58 Convection Drives Plate Motions, 110 Oceanic and Continental Crust, 110</p> <p><b>Realize™ Digital Resources:</b> <b>Earth Systems: Mineral and Rocks in the Geosphere</b> &gt;Lesson 1: Earth’s Interior&gt;Investigate Lab: Heat and Motion in a Liquid</p>
(E.8.9A.2) Explore and debate theories of plate tectonics to form conclusions about past and current movements of rocks at Earth’s surface throughout history.	<p><b>Earth Systems SE/TE:</b> Hypothesis of Continental Drift, 99-101 Lesson 1 Check, #1, #2, 106 Connect It!, 108 The Theory of Plate Tectonics, 109-112 Plate Boundaries, 113-116 Math Toolbox, 114 Lesson 2 Check, #5, 117 Case Study: Australia on the Move, 118-119</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

Mississippi College- and Career-Readiness Standards for Science, Grade 8	Elevate Science Modules Grades 6-8, ©2019
Continued:	Continued: <b>Realize™ Digital Resources:</b> <b>Earth Systems: Plate Tectonics</b> >Topic Launch: Plate Tectonics>uConnect Lab: How Are Earth’s Continents Linked Together? >Lesson 1: Evidence of Plate Motions>uInvestigate Lab: Piecing Together a Supercontinent;>Interactivity: Slow and Steady;>Enrichment: Drifting Continents >Lesson 2: Plate Tectonics and Earth’s Surface>Interactivity: By No Fault of Their Own;>Interactivity: Relative Plate Motion;>Worksheet: Relative Plate Motion;>Interactivity: Stressed to a Fault
(E.8.9A.3) Map land and water patterns from various time periods and use rocks and fossils to report evidence of how Earth’s plates have moved great distances, collided, and spread apart.	<b>Earth Systems SE/TE:</b> Hypothesis of Continental Drift, 99-101 Lesson 1 Check, #2, 106  <b>Realize™ Digital Resources:</b> <b>Earth Systems: Plate Tectonics</b> >Lesson 1: Evidence of Plate Motions>uInvestigate Lab: Piecing Together a Supercontinent;>Interactivity: Slow and Steady;>Enrichment: Drifting Continents
(E.8.9A.4) Research and assess the credibility of scientific ideas to debate and discuss how Earth’s constructive and destructive processes have changed Earth’s surface at varying time and spatial scales.	<b>Earth Systems SE/TE:</b> Constructive and Destructive Forces in the Geosphere, 14-15 Hypothesis of Continental Drift, 99-101 Sea-Floor Spreading, 103 Ocean Trenches, 104-105 Plate Motions Over Time, 111 Plate Boundaries, 113-116 Case Study: Australia on the Move, 118-119  <b>Changing Earth and Human Activity SE/TE:</b> Connect It!, 4 Breaking Down Earth’s Surface, 5 Water Erosion and Deposition Change Earth’s Surface, 25-27 Modeling How a River Changes Earth’s Surface, 28 Groundwater Changes Earth’s Surface, 29-30 Glaciers Change Earth’s Surface, 35-39 Waves Change Earth’s Surface, 40-42  <b>Realize™ Digital Resources:</b> <b>Earth Systems: Plate Tectonics</b> >Topic Launch: Plate Tectonics>uConnect Lab: How Are Earth’s Continents Linked Together? >Lesson 1: Evidence of Plate Motions>Interactivity: Slow and Steady

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(E.8.9A.5) Use models that demonstrate convergent and divergent plate movements that are responsible for most landforms and the distribution of most rocks and minerals within Earth’s crust.	<p><b>Earth Systems SE/TE:</b> Divergent Boundaries, 114 Convergent Boundaries, 115 Lesson 2 Check, #2, 117 uDemonstrate Lab, 146-149</p> <p><b>Realize™ Digital Resources:</b> <b>Earth Systems: Plate Tectonics</b> &gt;Lesson 2: Plate Tectonics and Earth’s Surface&gt;uInvestigate Lab: Plate Interactions</p>
(E.8.9A.6) Design and conduct investigations to evaluate the chemical and physical processes involved in the formation of soils.	<p><b>Changing Earth and Human Activity SE/TE:</b> Forming Soil, 9-11 Reading Check, 11 Model It!, 11</p> <p><b>Realize™ Digital Resources:</b> <b>Changing Earth and Human Activity: Earth’s Surface Systems</b> &gt;Lesson 1: Weathering and Soil&gt;Interactivity: Classify the Force of Weathering;&gt;Enrichment: Soil Formation</p>
(E.8.9A.7) Explain the interconnected relationship between surface water and groundwater.	<p><b>Earth Systems SE/TE:</b> Surface Water, 28-29 Groundwater, 30</p> <p><b>Realize™ Digital Resources:</b> <b>Earth Systems: Introduction to Earth’s Systems</b> &gt;Lesson 3: The Hydrosphere&gt;Interactivity: Floridian Aquifer System</p>
(E.8.9B.1) Research and map various types of natural hazards to determine their impact on society.	<p><b>Cycles Influencing Weather and Climate SE/TE:</b> Connect It!, 38 Types of Severe Storms, 39-44 Floods and Drought, 45 Case Study: The Case of the Runaway Hurricane, 48-49</p> <p><b>Earth Systems SE/TE:</b> Earthquake Risks and Tsunamis, 128-129 Volcano Hazards, 138-140</p> <p><b>Realize™ Digital Resources:</b> <b>Earth Systems: Plate Tectonics</b> &gt;Lesson 3: Earthquakes and Tsunamis Hazards&gt;uInvestigate Lab: Analyze Earthquake Data to Identify Patterns;&gt;Interactivity: Placing a Bay Area Stadium;&gt;Enrichment: The San Andreas Fault</p>



**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(E.8.9B.2) Compare and contrast technologies that predict natural hazards to identify which types of technologies are most effective.	<p><b>Earth Systems SE/TE:</b> Seismographs, 126 Predicting Volcano Hazards, 140 Topic 3 Evidence-Based Assessment, 144-145</p> <p><b>Realize™ Digital Resources:</b> <b>Cycles Influencing Weather and Climate: Weather in the Atmosphere</b> &gt;Lesson 5: Severe Weather and Floods&gt;Interactivity: Tinkering with Technology <b>Earth Systems: Plate Tectonics</b> &gt;Lesson 3: Earthquakes and Tsunami Hazards&gt;Interactivity: Locating an Earthquake;&gt;Worksheet: Locating an Earthquake;&gt;Quest Check-In Interactivity: Monitoring a Volcano;&gt;Quest Worksheet: Monitoring a Volcano</p>
(E.8.9B.3) Using an engineering design process, create mechanisms to improve community resilience, which safeguard against natural hazards (e.g., building restrictions in flood or tidal zones, regional watershed management, Fire-wise construction).	<p><b>Earth Systems SE/TE:</b> uEngineer It!: Designing to Prevent Destruction, 131</p> <p><b>Realize™ Digital Resources:</b> <b>Earth Systems: Plate Tectonics</b> &gt;Lesson 3: Earthquakes and Tsunami Hazards&gt;Interactivity: Earthquake Engineering</p>
<b>(DCI.E.8.10) Earth's Resources</b>	
(E.8.10.1) Read and evaluate scientific information about advancements in renewable and nonrenewable resources. Propose and defend ways to decrease national and global dependency on nonrenewable resources.	<p><b>Energy Transfer SE/TE:</b> Case Study: U.S. Energy Consumption, 40-41 Case Study: Earth Power, 70-71</p> <p><b>Changing Earth and Human Activity SE/TE:</b> Solar Energy, 68 Bioenergy Resources, 71 Lesson 2 Check, #4, 72</p> <p><b>Realize™ Digital Resources:</b> <b>Energy Transfer: Energy</b> &gt;Lesson 4: Energy Change and Conservation&gt;Video: Energy Change and Conservation <b>Changing Earth and Human Activity: Distribution of Natural Resources</b> &gt;Lesson 2: Renewable Energy Resources&gt;Interactivity: Biogas Farming;&gt;Worksheet: Biogas Farming;&gt;Quest Check-In Interactivity: Renewable Energy;&gt;Enrichment: Biofuels From Crops</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019  
To the  
Mississippi College- and Career-Readiness Standards for Science, Grade 8**

<b>Mississippi College- and Career-Readiness Standards for Science, Grade 8</b>	<b>Elevate Science Modules Grades 6-8, ©2019</b>
(E.8.10.2) Create and defend a proposal for reducing the environmental effects humans have on Earth (e.g., population increases, consumer demands, chemical pollution, deforestation, and change in average annual temperature).	<p><b>Cycles Influencing Weather and Climate SE/TE:</b> Dealing with Climate Change, 132-133</p> <p><b>Changing Earth and Human Activity SE/TE:</b> Quest Kickoff, 102-103 Balancing Needs, 110 Lesson 1 Check, #3, 111 Controlling Air Pollution, 118-119 Quest Check-In, 120 Plan It!, 125 Sustainable Forest Management, 130-132 Write About It, 132 Quest Check-In, 133 Reading Check, 141 Reducing Water Pollution, 142-143 Reading Check, 143 Plan It!, 143 Quest Findings, 149</p> <p><b>Realize™ Digital Resources:</b> <b>Cycles Influencing Weather and Climate: Climate</b> &gt;Lesson 3: Effects of a Changing Climate&gt;Interactivity: Emission Reduction;&gt;Quest Check-In Interactivity: Make a Difference <b>Changing Earth and Human Activity: Human Impacts on the Environment</b> &gt;Topic Launch: Human Impacts on the Environment&gt;uConnect Lab: Finding a Solution for Your Pollution &gt;Lesson 2: Air Pollution&gt;Interactivity: Air Pollution Sources and Solutions &gt;Lesson 4: Water Pollution&gt;Quest Check-In Lab: Reducing Waste</p>
(E.8.10.3) Using scientific data, debate the societal advantages and disadvantages of technological advancements in renewable energy sources.	<p>For supporting content, please see: <b>Energy Transfer TE Only:</b> Differentiated Instruction, 31</p> <p><b>Changing Earth and Human Activity TE Only:</b> Differentiated Instruction, 69</p>
(E.8.10.4) Using an engineering design process, develop a system to capture and distribute thermal energy that makes renewable energy more readily available and reduces human impact on the environment (e.g., building solar water heaters, conserving home energy).	<p>For supporting content, please see: <b>Realize™ Digital Resources:</b> <b>Energy Transfer: Energy</b> &gt;Lesson 2: Heat Transfer&gt;Interactivity: Solar Oven Design;&gt;Worksheet: Solar Oven Design</p>

©2020 Savvas Learning Company, LLC.