

A Correlation of

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



**To the
Mississippi
2018 College- and Career-Readiness
Standards for Science, Grade 7**

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

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 7**

Table of Contents

(L.7) Life Science	4
(P.7) Physical Science.....	6
(E.7) Earth and Space Science.....	15

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(L.7) Life Science	
(DCI.L.7.3) Ecology and Interdependence	
(L.7.3.1) Analyze diagrams to provide evidence of the importance of the cycling of water, oxygen, carbon, and nitrogen through ecosystems to organisms.	<p>Relationships Within Ecosystems SE/TE: Water Cycle, 58-59 Carbon and Oxygen Cycles, 60-61 Nitrogen Cycle in Ecosystems, 62-63 Lesson 3 Check, #3, 64</p> <p>Realize™ Digital Resources: Relationships Within Ecosystems: Ecosystems >Topic Launch: Ecosystems>uConnect Lab: Every Breath You Take >Lesson 2: Cellular Respiration>Quest Check-In Interactivity: Cycling of Matter in the Greenhouse >Lesson 3: Cycles of Matter>Interactivity: Cycles of Matter;>uInvestigate Lab: Following Water;>Interactivity: Earth’s Recyclables;>Quest Worksheet: Matter and Energy in a Pond</p>
(L.7.3.2) Analyze and interpret data to explain how the processes of photosynthesis, and cellular respiration (aerobic and anaerobic) work together to meet the needs of plants and animals.	<p>Relationships Within Ecosystems SE/TE: Photosynthesis, 8-9 Expressing Photosynthesis, 10-11 Lesson 1 Check, #5, 12 Energy and Cellular Respiration, 17-20 Lesson 2 Check, #1, #2, 22 Quest Findings, 27 uDemonstrate Lab, 28-31</p> <p>Realize™ Digital Resources: Relationships Within Ecosystems: Cell Processes >Lesson 2: Cellular Respiration>Interactivity: Energy to Food and Food to Energy;>Quest Check-In Interactivity: Respiration in the Greenhouse</p>
(L.7.3.3) Use models to describe how food molecules (carbohydrates, lipids, proteins) are processed through chemical reactions using oxygen (aerobic) to form new molecules.	<p>Systems, Reproduction, and Growth SE/TE: Food and Energy, 137-139 Respiratory System, 154</p> <p>Relationships Within Ecosystems SE/TE: Energy and Cellular Respiration, 17-20 Model It!, 19 Topic 1 Review and Assess, #16, 25 uDemonstrate Lab, 28-31</p> <p>Realize™ Digital Resources: Systems, Reproduction, and Growth: Cell Processes >Lesson 2: Cellular Respiration>Interactivity: Making Energy for Cells</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(L.7.3.4) Explain how disruptions in cycles (e.g., water, oxygen, carbon, and nitrogen) affect biodiversity and ecosystem services (e.g., water, food, and medications) which are needed to sustain human life on Earth.	<p>Relationships Within Ecosystems SE/TE: Human Impact, 61 Lesson 3 Check, #5, 64 Damaging Biodiversity, 104 Supporting Services, 114 Lesson 4 Check, #3, 118</p> <p>Realize™ Digital Resources: Relationships Within Ecosystems: Populations, Communities, and Ecosystems >Topic Launch: Population, Communities, and Ecosystems>uConnect Lab: How Communities Change</p>
(L.7.3.5) Design solutions for sustaining the health of ecosystems to maintain biodiversity and the resources needed by humans for survival (e.g., water purification, nutrient recycling, prevention of soil erosion, and prevention or management of invasive species).	<p>Relationships Within Ecosystems SE/TE: Quest Kickoff, 76-77 Quest Check-In, 87 Quest Check-In, 94 Protecting Biodiversity, 105 Quest Check-In, 107 Conservation, 117 Design It!, 117 Lesson 4 Check, #8, 118 Quest Findings, 123</p> <p>Realize™ Digital Resources: Relationships Within Ecosystems Populations, Communities, and Ecosystems >Lesson 1: Interactions in Ecosystems>Quest Check-In Interactivity: Research Animal Crossings >Lesson 2: Dynamic and Resilient Ecosystems>Quest Check-In Interactivity: Community Opinions >Lesson 3: Biodiversity>Interactivity: Human Impacts on Biodiversity;>Quest Check-In Lab: Design and Model a Crossing >Lesson 4: Ecosystem Services>Interactivity: Maintaining Healthy Ecosystems;>Interactivity: Preventing Soil Erosion;>Worksheet: Preventing Soil Erosion;>uInvestigate Lab: Ecosystem Impacts;>uEngineer It! Interactivity: Maintaining Marine Ecosystems;>Interactivity: Walk This Way or That Way</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7) Physical Science	
(DCI.P.7.5) Organization of Matter and Chemical Interactions	
<p>(P.7.5A.1) Collect and evaluate qualitative data to describe substances using physical properties (state, boiling/melting point, density, heat/electrical conductivity, color, and magnetic properties).</p>	<p>Structure and Properties of Matter SE/TE: Physical Properties, 6 Reflect, 7 Determining Density, 18-19 Model It!, 18 Using Density, 20 Math Toolbox, 20 Physical Properties of Solids, 49 Physical Properties of Liquids, 52 Physical Properties of Gases, 53</p> <p>Atoms and Chemical Reactions SE/TE: Physical Properties of Metals, 33 Physical Properties, 34 Properties of Compounds, 45-46 Math Toolbox, 46 Topic 1 Review and Assess, #15, 57 uDemonstrate Lab, 60-63 Plan It!, 70 Concentration, 73 Solubility, 74-75 Lesson 1 Check, #2, #3, 76</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Introduction to Matter >Lesson 2: Measuring Matter>Interactivity: Calculating Density;>uInvestigate Lab: Observing Physical Properties >Lesson 3: Changes in Matter>Virtual Lab: What's the Matter with My Chocolate?;>Interactivity: Properties of Matter Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 3: Bonding and the Periodic Table>Interactivity: Transferring Energy Through Bonding;>Enrichment: All That Glitters Is Not Gold >Lesson 4: Types of Bonds>Interactivity: Ionic or Covalent Bonding;>Worksheet: Ionic or Covalent Bonding;>Virtual Lab: Protect the Helpers!;>uInvestigate Lab: Properties of Molecular Compounds Atoms and Chemical Reactions: Chemical Reactions >Lesson 1: Mixtures and Solutions>Interactivity: Separating a Mixture;>uInvestigate Lab: Particles in Liquids</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7.5A.2) Analyze and interpret qualitative data to describe substances using chemical properties (the ability to burn or rust).	<p>Structure and Properties of Matter SE/TE: Chemical Properties, 7 Reflect, 7 Lesson 1 Check, #3, 12 Examples of Chemical Change, 28 Lesson 3 Check, #2, #5, 32</p> <p>Atoms and Chemical Reactions SE/TE: Chemical Properties of Metals, 32 Chemical Properties, 34 Reactions With Metals, 50 Reactions With Carbonates, 50 Properties of Pure Substances, 101</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Introduction to Matter >Lesson 1: Describing and Classifying Matter>Video: Describing and Classifying Matter Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 3: Bonding and the Periodic Table>Quest Check-In Interactivity: The Iodine Test for Starch >Lesson 4: Types of Bonds>Quest Check-In Interactivity: The Vinegar Test >Lesson 5: Acids and Bases>Investigate Lab: Properties of Acids and Bases</p>
(P.7.5A.3) Compare and contrast chemical and physical properties (e.g., combustion, oxidation, pH, solubility, reaction with water).	<p>Structure and Properties of Matter SE/TE: Physical and Chemical Properties, 6-7 Reading Check, 7</p> <p>Atoms and Chemical Reactions SE/TE: Bonding and Periodic Properties, 32-35</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Introduction to Matter >Lesson 1: Describing and Classifying Matter>Video: Describing and Classifying Matter Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 3: Bonding and the Periodic Table>Quest Check-In Interactivity: The Iodine Test for Starch >Lesson 4: Types of Bonds>Quest Check-In Interactivity: The Vinegar Test</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
<p>(P.7.5B.1) Make predictions about the effect of temperature and pressure on the relative motion of atoms and molecules (speed, expansion, and condensation) relative to recent breakthroughs in polymer and materials science (e.g. self-healing protective films, silicone computer processors, pervious/porous concrete).</p>	<p>Structure and Properties of Matter SE/TE: Temperature, 57 Changes of State Between Solid and Liquid, 58-59 Changes of State Between Liquid and Gas, 60-62 Changing State from Solid to Gas, 63 Lesson 2 Check, #3, #5, 64 Connect It!, 66 Pressure and Temperature of a Gas, 67-68 Temperature and Volume, 69-70 Pressure and Volume, 71-73 Model It!, 71 Lesson 3 Check, #4, 75 Case Study: Rising to the Occasion: Charles’s Law in the Oven!, 76-77 Topic 2 Review and Assess, #11, 79 Topic 2 Evidence-Based Assessment, 80-81 uDemonstrate Lab, 82-85</p> <p>Energy Transfer SE/TE: Thermal Energy, 25 Lesson 3 Check, #3, 30 How Thermal Energy and Temperature and Related, 57-59</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Solids, Liquids, and Gases >Lesson 1: States of Matter>uEngineer It! Interactivity: A Matter of Printing;>Career Video: Materials Scientist >Lesson 2: Changes of State>Interactivity: Particle Motion and States of Matter;>Interactivity: States of Matter;>Interactivity: Thermal Energy and Changes of State >Lesson 3: Gas Behavior>Interactivity: The Gas Laws;>uInvestigate Lab: Testing Charles’s and Boyle’s Gas Laws;>Interactivity: Hot Air Balloon Ride</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7.5B.2) Use evidence from multiple scientific investigations to communicate the relationships between pressure, volume, density, and temperature of a gas.	<p>Structure and Properties of Matter SE/TE: Connect It!, 67 Pressure and Temperature of a Gas, 67-68 Temperature and Volume, 69-70 Math Toolbox, 70 Pressure and Volume, 71-73 Model It!, 71 Math Toolbox, 72 How Pistons Work, 74 Quest Check-In, 75 Topic 2 Review and Assess, #14, 79</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Solids, Liquids, and Gases >Lesson 3: Gas Behavior>Interactivity: The Gas Laws;>Investigate Lab: Testing Charles's and Boyle's Gas Laws;>Interactivity: Hot Air Balloon Ride</p>
(P.7.5B.3) Ask questions to explain how density of matter (observable in various objects) is affected by a change in heat and/or pressure.	<p>Structure and Properties of Matter SE/TE: Density and Temperature, 19 Math Toolbox, 19 Lesson 2 Check, #2, 21</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Introduction to Matter >Lesson 2: Measuring Matter>Interactivity: Calculating Density;>Enrichment: Ocean Currents</p>
(P.7.5C.1) Develop and use models that explain the structure of an atom.	<p>Atoms and Chemical Reactions SE/TE: A Modern Model of the Atom, 10-12 Lesson 1 Check, #3, #5, 13 Topic 1 Review and Assess, #5, 56</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 1: Atomic Theory>Interactivity: Build an Atom;>Investigate Lab: How Far Away Is the Electron?;>Interactivity: Models of Atoms</p>
(P.7.5C.2) Use informational text to sequence the major discoveries leading to the current atomic model.	<p>For supporting content, please see: Atoms and Chemical Reactions SE/TE: Development of Atomic Theory, 5-9 Reading Check, 9 Model It!, 9 Lesson 1 Check, #1, 13</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
<p>(P.7.5C.3) Collect, organize, and interpret data from investigations to identify and analyze the relationships between the physical and chemical properties of elements, atoms, molecules, compounds, solutions, and mixtures.</p>	<p>Atoms and Chemical Reactions SE/TE: Bonding, 30-31 Bonding and Periodic Properties, 32-35 Lesson 3 Check, #4, 36 Properties of Compounds, 45-46 Math Toolbox, 46 uDemonstrate Lab, 60-63</p> <p>Atoms and Chemical Reactions SE/TE: Connect It!, 68 Types of Mixtures, 69 Separating Mixtures, 70 Plan It!, 70 Classifying Mixtures, 71-72 Concentration, 73 Solubility, 74-75 Lesson 1 Check, #2, #3, 76</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Atoms and the Periodic Table >Topic Launch: Atoms and the Periodic Table>uConnect Lab: Modeling Matter >Lesson 3: Bonding and the Periodic Table>uInvestigate Lab: Element Chemistry;>Interactivity: Transferring Energy Through Bonding;>Quest Check-In Interactivity: The Iodine Test for Starch >Lesson 4: Types of Bonds>Interactivity: Ionic or Covalent Bonding;>Worksheet: Ionic or Covalent Bonding;>uInvestigate Lab: Properties of Molecular Compounds Atoms and Chemical Reactions: Chemical Reactions >Lesson 1: Mixtures and Solutions>Interactivity: Separating a Mixture;>uInvestigate Lab: Particles in Liquids;>Interactivity: Inside a Water Treatment Plant</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7.5C.4) Predict the properties and interactions of elements using the periodic table (metals, non-metals, reactivity, and conductors).	<p>Atoms and Chemical Reactions SE/TE: Using the Periodic Table, 19-21 Math Toolbox, 21 Periods in the Periodic Table, 22 Groups in the Periodic Table, 24-26 Lesson 2 Check, #3, 27 Connect It!, 28 Elements and the Periodic Table, 29 Valence Electrons and the Table, 31 Bonding and Periodic Properties, 32-35 Question It!, 32 Lesson 3 Check, #4, 36 Topic 1 Evidence-Based Assessment, 58-59</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 2: The Periodic Table>Interactivity: Organization of the Periodic Table;>Interactivity: Interactive Periodic Table;>Worksheet: Interactive Periodic Table;>uInvestigate Lab: Classifying Elements;>Interactivity: Groups of Elements;>Enrichment: Mystery of the Unknown Element >Lesson 3: Bonding and the Periodic Table>Inquiry Warm-Up Lab: What Are the Trends in the Periodic Table?</p>
(P.7.5C.5) Describe concepts used to construct chemical formulas (e.g. CH ₄ , H ₂ O) to determine the number of atoms in a chemical formula.	<p>Structure and Properties of Matter SE/TE: Compounds, 10 Lesson 1 Check, #2, 12</p> <p>Atoms and Chemical Reactions SE/TE: Formulas, 92 Topic 1 Evidence-Based Assessment, 58-59</p> <p>Realize™ Digital Resources: Structure and Properties of Matter: Introduction to Matter >Topic Launch: Introduction to Matter>uConnect Lab: The Nuts and Bolts of Formulas</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7.5C.6) Using the periodic table, make predictions to explain how bonds (ionic and covalent) form between groups of elements (e.g., oxygen gas, ozone, water, table salt, and methane).	<p>Atoms and Chemical Reactions SE/TE: Valence Electrons and the Table, 31 Ionic Bonding, 40-41 Covalent Bonding, 42-44 Lesson 4 Check, #2, #5, 47 Topic 1 Evidence-Based Assessment, 58-59</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 4: Types of Bonds>Interactivity: Build an Ionic Compound;>Interactivity: Chemical Bonding</p>
(P.7.5D.1) Analyze evidence from scientific investigations to predict likely outcomes of chemical reactions.	<p>Atoms and Chemical Reactions SE/TE: Types of Chemical Reactions, 96</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Chemical Reactions >Lesson 3: Modeling Chemical Reactions>Enrichment: Formula for Success</p>
(P.7.5D.2) Design and conduct scientific investigations to support evidence that chemical reactions (e.g., cooking, combustion, rusting, decomposition, photosynthesis, and cellular respiration) have occurred.	<p>Atoms and Chemical Reactions SE/TE: Connect It!, 78 Evidence of Chemical Reactions, 82-83 Reading Check, 83 Lesson 2 Check, #2, #3, #4, 88 uDemonstrate Lab, 112-115</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Chemical Reactions >Topic Launch: Chemical Reactions>uConnect Lab: What Happens When Chemicals React? >Lesson 2: Chemical Change>Interactivity: Evidence of Chemical Reactions;>Virtual Lab: Chemistry of Glow Sticks;>uInvestigate Lab: Changes in a Burning Candle</p>
(P.7.5D.3) Collect, organize, and interpret data using various tools (e.g., litmus paper, pH paper, cabbage juice) regarding neutralization of acids and bases using common substances.	<p>Atoms and Chemical Reactions SE/TE: Neutralization of Acids and Bases, 53</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Atoms and the Periodic Table >Lesson 5: Acids and Bases>Inquiry Warm-Up Lab: What Can Cabbage Juice Tell You?</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7.5D.4) Build a model to explain that chemical reactions can store (formation of bonds) or release energy (breaking of bonds).	<p>Atoms and Chemical Reactions SE/TE: Quest Kickoff, 66-67 Changes in Energy, 84 Energy Graphs for Chemical Reactions, 85 Quest Check-In, 88 Quest Findings, 111</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Chemical Reactions >Lesson 1: Mixtures and Solutions>Quest Check-In Lab: Energy Salts >Lesson 2: Chemical Change>Interactivity: Analyze Exothermic and Endothermic Graphs;>Quest Check-In Interactivity: Design Your Pack >Lesson 3: Modeling Chemical Reactions>Quest Check-In Lab: Pack Building >Lesson 4: Producing Useful Materials>Quest Check-In Lab: Heat It Up or Ice It Down</p>
(P.7.5E.1) Conduct simple scientific investigations to show that total mass is not altered during a chemical reaction in a closed system. Compare results of investigations to Antoine-Laurent Lavoisier’s discovery of the law of conservation of mass.	<p>Structure and Properties of Matter SE/TE: Conservation of Mass, 28 Math Toolbox, 29</p> <p>Atoms and Chemical Reactions SE/TE: Law of Conservation of Mass, 94-95 Math Toolbox, 95 Lesson 3 Check, #3, 97 Topic 2 Review and Assess, #13, 109</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Chemical Reactions >Lesson 3: Modeling Chemical Reactions>Interactivity: Conservation of Matter;>Interactivity: Reactants and Products;>Worksheet: Reactants and Products;>Investigate Lab: Is Matter Conserved?;>Interactivity: Model the Conservation of Mass</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(P.7.5E.2) Analyze data from investigations to explain why the total mass of the product in an open system appears to be less than the mass of reactants.	<p>Atoms and Chemical Reactions SE/TE: Open Systems, 95</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Chemical Reactions >Lesson 3: Modeling Chemical Reactions>Interactivity: Reactants and Products;>Worksheet: Reactants and Products;>Enrichment: Formula for Success</p>
(P.7.5E.3) Compare and contrast balanced and unbalanced chemical equations to demonstrate the number of atoms does not change in the reaction.	<p>Structure and Properties of Matter SE/TE: Math Toolbox, 29</p> <p>Atoms and Chemical Reactions SE/TE: Math Toolbox, 95 Lesson 3 Check, #3, 97 Topic 2 Review and Assess, #13, 109</p> <p>Realize™ Digital Resources: Atoms and Chemical Reactions: Chemical Reactions >Lesson 3: Modeling Chemical Reactions>Interactivity: Conservation of Matter;>Interactivity: Model a Chemical Reaction;>Interactivity: Model the Conservation of Mass</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(E.7) Earth and Space Science	
(DCI.E.7.9) Earth's Systems and Cycles	
<p>(E.7.9A.1) Analyze and interpret weather patterns from various regions to differentiate between weather and climate.</p>	<p>Cycles Influencing Weather and Climate SE/TE: Global Patterns and Local Weather, 33 Learning from Weather Maps, 34-35 Lesson 4 Check, #2, 36</p> <p>Cycles Influencing Weather and Climate SE/TE: Factors That Affect Temperature, 105-107 World Climates, 110-111 Model It!, 111 Lesson 1 Check, #1, #3, 112</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Weather in the Atmosphere >Lesson 3: Air Masses>Interactivity: Mapping Out the Weather >Lesson 4: Predicting Weather Changes>Interactivity: Using Air Masses to Predict Weather;>Investigate Lab: Tracking Weather;>Interactivity: Weather Predicting Cycles Influencing Weather and Climate: Climate >Topic Launch: Climate>Connect Lab: How Do Climates Differ? >Lesson 1: Climate Factors>Investigate Lab: Classifying Climates;>Interactivity: Olympic Choices</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(E.7.9A.2) Analyze evidence to explain the weather conditions that result from the relationship between the movement of water and air masses.	<p>Cycles Influencing Weather and Climate SE/TE: Water Enters the Atmosphere, 13-15 Water Leaves the Atmosphere, 16-18 The Water Cycle, 19 Quest Check-In, 20 Major Air Masses, 23-24 Types of Fronts, 25-26 Model It!, 27 Cyclones and Anticyclones, 28 Winter Storms, 40 Thunderstorms, 41 Model It!, 41 Hurricanes, 42 Tornadoes, 44</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Weather in the Atmosphere >Lesson 2: Water in the Atmosphere>uInvestigate Lab: How Clouds and Fog Form >Lesson 3: Air Masses>Interactivity: When Air Masses Collide;>uInvestigate Lab: Weather Fronts;>Interactivity: Mapping Out the Weather;>Quest Check-In Interactivity: All About Air Masses;>Enrichment: Occluded Fronts >Lesson 5: Severe Weather and Floods> Interactivity: Not in Kansas Anymore;>Virtual Lab: Hurricane Season</p>
(E.7.9A.3) Interpret atmospheric data from satellites, radar, and weather maps to predict weather patterns and conditions.	<p>Cycles Influencing Weather and Climate SE/TE: How to Predict Weather, 31-33 Learning from Weather Maps, 34-35 Lesson 4 Check, #2, 36</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Weather in the Atmosphere >Lesson 4: Predicting Weather Changes>Interactivity: Using Air Masses to Predict Weather;>uInvestigate Lab: Tracking Weather;>Interactivity: Weather Predicting</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(E.7.9A.4) Construct an explanation for how climate is determined in an area using global and surface features (e.g. latitude, elevation, shape of the land, distance from water, global winds and ocean currents).	<p>Cycles Influencing Weather and Climate SE/TE: Factors That Affect Temperature, 105-107 Reading Check, 107 Factors That Affect Precipitation, 108-109 Lesson 1 Check, #2, #3, #4, 112 Topic 3 Review and Assess, #4, #5, 136</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Climate >Lesson 1: Climate Factors>Inquiry Warm-Up Lab: How Does Latitude Affect Climate?>Interactivity: Two sides of the Mountain;>Video: How Ocean Currents Help Regulate Climate;>Interactivity: Olympic Choices</p>
(E.7.9A.5) Analyze models to explain the cause and effect relationship between solar energy and convection and the resulting weather patterns and climate conditions.	<p>Cycles Influencing Weather and Climate SE/TE: Heat Transfer in the Atmosphere, 67-69 Model It!, 69 Causes of Winds, 73 Local Winds and Global Winds, 75-77 Model It!, 76 Global Wind Patterns, 78-79 Lesson 2 Check, #3, #4, #5, 80 Surface Currents, 83-86 Deep Ocean Currents, 87-88 Lesson 3 Check, #3, #4, 89 Topic 2 Review and Assess, #8, #15, 92-93 Topic 2 Evidence-Based Assessment, 94-95</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Energy in the Atmosphere and Ocean >Lesson 2: Patterns of Circulation in the Atmosphere>Interactivity: Winds Across the Globe >Lesson 3: Patterns of Circulation in the Ocean>Investigate Lab: Modeling Ocean Current Formation;>Interactivity: Keeping Current on Currents</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
<p>(E.7.9A.6) Research and use models to explain what type of weather (thunderstorms, hurricanes, and tornadoes) results from the movement and interactions of air masses, high and low pressure systems, and frontal boundaries.</p>	<p>Cycles Influencing Weather and Climate SE/TE: Major Air Masses, 23-24 Types of Fronts, 25-26 Model It!, 27 Cyclones and Anticyclones, 28 Winter Storms, 40 Thunderstorms, 41 Model It!, 41 Hurricanes, 42 Tornadoes, 44 Topic 1 Evidence-Based Assessment, 52-53</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Weather in the Atmosphere >Lesson 3: Air Masses>Interactivity: When Air Masses Collide;>Investigate Lab: Weather Fronts;>Interactivity: Mapping Out the Weather;>Quest Check-In Interactivity: All About Air Masses;>Enrichment: Occluded Fronts >Lesson 5: Severe Weather and Floods>Interactivity: Not in Kansas Anymore;>Virtual Lab: Hurricane Season</p>
<p>(E.7.9A.7) Interpret topographic maps to predict how local and regional geography affect weather patterns and make them difficult to predict.</p>	<p>Cycles Influencing Weather and Climate SE/TE: Global Patterns and Local Weather, 33 Learning from Weather Maps, 34-35 Lake-Effect Snow, 40 Case Study: The Case of the Runaway Hurricane, 48-49</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Weather in the Atmosphere >Lesson 4: Predicting Weather Changes>Class Discussion: Weather Prediction Woes >Lesson 5: Severe Weather and Floods>Investigate Lab: Predicting Hurricanes</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(E.7.9B.1) Read and evaluate scientific or technical information assessing the evidence and bias of each source to explain the causes and effects of climate change.	<p>Cycles Influencing Weather and Climate SE/TE: Greenhouse Effect, 115 Natural Processes, 117 Ice Ages, 118 Recent Climate Change, 119-122 Reading Check, 122 Lesson 2 Check, #2, #4, #6, 123 Impact of Rising Temperatures, 127-131 Math Toolbox, 129 Lesson 3 Check, #1, #2, 3, #4, 134 Topic 3 Review and Assess, #9, #10, #15, 136-137 Topic 3 Evidence-Based Assessment, 138-139 uDemonstrate Lab, 140-143</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Climate >Lesson 2: Climate Change>Interactivity: In the Greenhouse;>Interactivity: Human Impact on Climate Change;>Worksheet: Human Impact on Climate Change >Lesson 3: Effects of a Changing Climate>Video: Effects of a Changing Climate>uInvestigate Lab: Thermal Expansion of Water</p>
(E.7.9B.2) Interpret data about the relationship between the release of carbon dioxide from burning fossil fuels into the atmosphere and the presence of greenhouse gases.	<p>Cycles Influencing Weather and Climate SE/TE: Carbon Dioxide Concentrations, 122 Reading Check, 122 Lesson 2 Check, #4, #6, 123 Topic 3 Evidence-Based Assessment, 138-139</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Climate >Lesson 2: Climate Change>Interactivity: In the Greenhouse;>Interactivity: Human Impact on Climate Change;>Worksheet: Human Impact on Climate Change</p>
(E.7.9B.3) Engage in scientific argument based on current evidence to determine whether climate change happens naturally or is being accelerated through the influence of man.	<p>Cycles Influencing Weather and Climate SE/TE: Ice Ages, 118 Math Toolbox, 118 Recent Climate Change, 119-122 Lesson 2 Check, #3, #4, #6, 123 Topic 3 Review and Assess, #9, 136</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Climate >Lesson 2: Climate Change>Interactivity: Human Impact on Climate Change;>Worksheet: Human Impact on Climate Change</p>

**A Correlation of Elevate Science Modules, Grades 6-8, ©2019
To the
Mississippi College- and Career-Readiness Standards for Science, Grade 7**

Mississippi College- and Career-Readiness Standards for Science, Grade 7	Elevate Science Modules Grades 6-8, ©2019
(E.7.9C.1) Construct models and diagrams to illustrate how the tilt of Earth’s axis results in differences in intensity of sunlight on the Earth’s hemispheres throughout the course of one full revolution around the Sun.	For supporting content, please see: Earth’s Place in the Universe SE/TE: How Earth Moves, 17-18 Model It!, 18 The Seasons, 19-20
(E.7.9C.2) Investigate how variations of sunlight intensity experienced by each hemisphere (to include the equator and poles) create the four seasons.	For supporting content, please see: Earth’s Place in the Universe SE/TE: The Seasons, 19-20 Lesson 2 Check, #2, 24

©2020 Savvas Learning Company, LLC.