

A Correlation of
elevateScience™
West Virginia Modules



To the
West Virginia
Course 6007 – Grade 7 Evaluation Criteria

PUBLISHER:	Savvas Learning Company, formerly Pearson K12 Learning		
SUBJECT:	Science	SPECIFIC GRADE:	7
COURSE:	6007 – Science, Grade 7	TITLE	elevateScience™ West Virginia Modules Package: Energy Transfer Forces Earth Systems Changing Earth and Human Activity Systems, Reproduction, and Growth
COPYRIGHT:	2019		
SE ISBN:	9781418399627	TE ISBN:	9781418399658
URL for Online Resources:	www.SavvasRealize.com		
Teacher Demo Account Username:	WestVirginiaScience	Teacher Demo Account Password:	Savvas2022! (For state reviewer use only)
Student Demo Account Username:	WestVirginiaScience	Student Demo Account Password:	Savvas2022! (For state reviewer use only)

NON-NEGOTIABLE EVALUATION CRITERIA

2022-2028

Group IV – Science – Grade 7

Equity, Accessibility and Format – This section to be completed by the County Adoption Committee Evaluation Responses			
Yes	No	CRITERIA	NOTES – by County Adoption Committee
X		1. INTER-ETHNIC The instructional resource meets the requirements of inter-ethnic concepts, content, and illustrations, as set by WV Board of Education Policy 2445.41.	The photographic, illustrative and digital resources found throughout the Savvas elevateScience™ program show people of a variety of ages, and ethnicities participating in everyday and science-related activities. See representative examples from elevateScience™ module Systems, Reproduction and Growth pages 3, 7, 80, 95, 111, 113, 118, 125, 137, 147, 190.
X		2. EQUAL OPPORTUNITY The instructional resource meets the requirements of equal opportunity: concepts, content, illustrations, heritage, roles, contributions, experiences and achievements of males and females in American and other cultures.	The instructional resources of the Savvas elevateScience™ program, including the Quest scientists and engineers, topic career features, lesson images and illustrations highlight the contributions of specific people of varying genders and cultures to science. See a representative example from elevateScience™ module Systems, Reproduction and Growth pages 147.

SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

X		<p>3. FORMAT The instructional resource includes an interactive electronic/digital component for students.</p>	<p>Yes, the instructional resources of the Savvas elevateScience™ program include both print, digital student text as well as fully interactives digital components like videos, interactives, simulations, virtual labs, and assessments. See SavvasRealize.com.</p>
X		<p>4. BIAS The instructional resource is free of political bias.</p>	<p>Yes, the instructional resources of the Savvas elevateScience™ program are free of political bias.</p>
X		<p>5. COMMON CORE The instructional resource does not reference Common Core academic standards. (WV Code §18-2E-1b-1)</p>	<p>The instructional resources of the Savvas elevateScience™ program do not reference Common Core academic standards.</p>
X		<p>6. INQUIRY This resource must include rigorous and developmentally appropriate active inquiry, investigations, and hands-on activities.</p>	<p>Yes, the instructional resources of the Savvas elevateScience™ program includes a variety of rigorous and developmentally appropriate inquiry investigations, hands-on labs, interactive digital activities. Four types of inquiry and engineering investigations can be found in every topic. Look for the <i>uConnect</i>, <i>uInvestigate</i>, <i>uEngineer It!</i>, <i>uDemonstrate</i> in each topic in any module on the Savvas Realize platform. See representative examples from elevateScience™ module Systems, Reproduction and Growth pages 3A-B, 5, 7, 17, 21, 26, 28, 33, 37, 38, 40, 54-55, 61A-B, 66, 91.</p>
X		<p>7. SAFETY This resource must include explicit guidance for demonstrating the safe and proper techniques for handling, manipulating, and caring for developmentally appropriate science and treating living organisms ethically.</p>	<p>Yes, the Savvas elevateScience™ program contains explicit explanations and guidance of safety procedures and techniques in the investigation notes. Additional safety information may be found within our information on our equipment materials kits on our digital Realize platform. See a representative example from elevateScience™ module Systems, Reproduction and Growth pages Appendix A, B, C pages 244-247.</p>

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GENERAL EVALUATION CRITERIA

2022 -2028 Group IV – Science

Grade 7

The general evaluation criteria apply to each grade level and are to be evaluated for each grade level unless otherwise specified. These criteria consist of information critical to the development of all grade levels. In reading the general evaluation criteria and subsequent specific grade level criteria, e.g. means “examples of”. Eighty percent of the general and eighty percent of the specific criteria must be met with I (In-depth) or A (Adequate) in order to be recommended.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IRR Committee) Responses										
	I=In-depth	A=Adequate	M=Minimal	N=Nonexistent	I		A		M		N
In addition to alignment of West Virginia College- and Career-Readiness Standards (WVCCRS) for Science, instructional resources must also include opportunities for students to develop:											
College- and Career-Readiness Skills											
Thinking and Problem-Solving Skills											
<i>Science Content:</i>											
Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: 3, 2, 1...Liftoff!, 46-49 Forces SE/TE: uDemonstrate Lab: Stopping on a Dime, 48-51 Earth Systems SE/TE: uDemonstrate Lab: The Rock Cycle in Action, 90-93 Changing Earth and Human Activity SE/TE: uDemonstrate Lab: Washing Away, 150-153	1. provides opportunities for student collaboration.				X						

SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Continued: Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab; Reaction Research, 174-177</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 2: Kinetic Energy and Potential Energy>Quest Check-In Lab: Build a Chain-Reaction Machine</p> <p>Forces: Electricity and Magnetism >Lesson 2: Magnetic Force>uInvestigate Lab: Detecting Fake Coins</p> <p>Earth Systems: Minerals and Rocks in the Geosphere >Lesson 2: Minerals>uInvestigate Lab: Mineral Mash-Up</p>						
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<p>Representative Citations: Energy Transfer SE/TE: Quest Kickoff: How can you build a complicated machine to do something simple?, 2-3</p> <p>Forces SE/TE: Quest Kickoff: How can you take the crash out of a collision?, 2-3</p> <p>Earth Systems SE/TE: Quest Kickoff: How can you depict Earth processes in a movie script?, 46-47</p> <p>Changing Earth and Human Activity SE/TE: Quest Kickoff: How can you help your school reduce its impact on Earth's systems?, 102-103</p> <p>Continued: Systems, Reproduction, and Growth SE/TE: Quest Kickoff: How do your body systems interact when you train for your favorite sport?, 112-113</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Topic Launch: Thermal Energy>Quest Kickoff: Keep Hot Liquids Hot Forces: Electricity and Magnetism >Topic Launch: Electricity and Magnetism>Quest Kickoff: Light as a Feather? Earth Systems: Plate Tectonics >Topic Launch: Plate Tectonics>Quest Kickoff: To Hike or Not to Hike</p>	<p>2. provides opportunities for students to investigate and discover multiple solutions through inquiry.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: Testing Thermal Conductivity, 84-87</p> <p>Forces SE/TE: uEngineer It!: Electromagnetism in Action, 81 uDemonstrate Lab: Planetary Detective, 98-101</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: It's Alive!, 54-57</p> <p>Realize™ Digital Resources: Earth Systems: Plate Tectonics >Lesson 3: Earthquakes and Tsunami Hazards>Interactivity; Earthquake Engineering;>Quest Worksheet: Monitoring a Volcano Systems, Reproduction, and Growth: Human Body Systems >Lesson 1: Body Organization>uEngineer It! Interactivity: Advances in Medical Technology</p>	<p>3. includes options for using technology tools to gather information, make informed decisions, and justify solutions.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: Case Study: U.S. Energy Consumption, 40-41</p> <p>Forces SE/TE: Quest Kickoff: How can you take the crash out of a collision?, 2-3</p> <p>Earth Systems SE/TE: Case Study: Mighty Mauna Loa, 84-85</p> <p>Changing Earth and Human Activity SE/TE: Case Study: Phosphorus Fiasco, 82-83</p> <p>Systems, Reproduction, and Growth SE/TE: Case Study: Warmer Waters, Fewer Fish, 222-223</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 3: Newton's Laws of Motion>uEngineer It! Interactivity: Fuel-Efficient Vehicles Earth Systems: Minerals and Rocks in the Geosphere >Lesson 1: Earth's Interior>uEngineer It! Interactivity: Designing Satellites Changing Earth and Human Activity: Earth's Surface Systems >Lesson 1: Weathering and Soil>uEngineer It! Interactivity: Landslide Prevention</p>	<p>4. engages students in critical thinking and the synthesis of information to analyze real-world problems.</p>	<p>X</p>					
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<p>Representative Citations:</p> <p>Energy Transfer SE/TE: uDemonstrate Lab STEM: 3, 2, 1...Liftoff!, 46-49</p> <p>Forces SE/TE: uDemonstrate Lab: Stopping on a Dime, 48-51</p> <p>Earth Systems SE/TE: uDemonstrate Lab: Modeling Sea-Floor Spreading, 146-149</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: To Drill or Not to Drill, 150-153</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: Clean and Green, 228-231</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 4: Friction and Gravitational Interactions>Quest Check-In Lab: Bumping Cars, Bumper Solutions Earth Systems: Plate Tectonics >Lesson 4: Volcanoes and Earth's Surface>Quest Check-In Lab: Signs of Eruption? Changing Earth and Human Activity: Earth's Surface Systems >Lesson 4: Glacial and Wave Erosion>Interactivity: Coastline Management</p>	<p>5. offers activities to connect multiple scientific phenomena to real-world events.</p>	<p>X</p>					
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Information and Communication Skills

For student mastery of college- and career-readiness standards, the instructional resources will include multiple strategies that provide students with opportunities to:

<p>Representative Citations: For supporting content, please see: Energy Transfer TE Only: Professional Development, 70</p> <p>Earth Systems SE/TE: My Community, 11 My Community, 69</p> <p>Changing Earth and Human Activity SE/TE: My Community, 121 TE Only: Professional Development, 26 Professional Development, 78</p> <p>Systems, Reproduction, and Growth TE Only: Professional Development, 162 Professional Development, 180</p>	<p>6. interact with secure external multimedia resources for local and global collaboration.</p>		X			
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<p>Representative Citations: Energy Transfer TE Only: Differentiated Instruction, 41</p> <p>Forces SE/TE: My Discovery, 65</p> <p>Earth Systems SE/TE: My Community, 11</p> <p>Changing Earth and Human Activity TE Only: Differentiated Instruction, 12</p> <p>Systems, Reproduction, and Growth SE/TE: My Discovery, 211</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Lesson 3: Heat and Materials>Enrichment: Probing the Sun Changing Earth and Human Activity: Distribution of Natural Resources >Lesson 2: Renewable Energy Resources>Quest Check-In Interactivity: Renewable Energy Changing Earth and Human Activity: Human Impacts on the Environment >Lesson 4: Water Pollution>Interactivity: Research Water Pollution</p>	<p>7. develop conceptual understanding and research skills.</p>	<p>X</p>					
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SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Representative Citations: Forces TE Only: Differentiated Instruction, 97</p> <p>Earth Systems SE/TE: Quest Findings: Complete the Quest!, 39 Quest Findings: Complete the Quest!, 145</p> <p>Changing Earth and Human Activity SE/TE: Quest Findings: Complete the Quest!, 95</p> <p>Systems, Reproduction, and Growth SE/TE: Quest Findings: Complete the Quest!, 173</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 4: Friction and Gravitational Interactions>uInvestigate Lab: Sticky Sneakers Earth Systems: Introduction to Earth's Systems >Topic Launch: Introduction to Earth's Systems>uConnect Lab: What Interactions Occur Within the Earth System? Systems, Reproduction, and Growth: Reproduction and Growth >Topic Close: Reproduction and Growth>Quest Findings: Reflect on Your Basketball Court Plans</p>	<p>8. articulate thoughts and ideas through oral, written, and multimedia communications.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: Math Toolbox: Home Runs and Air Density, 37</p> <p>Forces SE/TE: Literacy Connection: Integrate with Visuals, 60</p> <p>Earth Systems SE/TE: Math Toolbox: Finding an Epicenter, 127</p> <p>Changing Earth and Human Activity SE/TE: Modeling How a River Change Earth’s Surface, Figure 6, 28</p> <p>Systems, Reproduction, and Growth SE/TE: Levels of Classification, Figure 2, 19</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 2: Kinetic Energy and Potential Energy>ulInvestigate Lab: Mass, Velocity, and Kinetic Energy Earth Systems: Plate Tectonics >Lesson 3: Earthquakes and Tsunami Hazards>ulInvestigate Lab: Analyze Earthquake Data to Identify Patterns >Lesson 4: Volcanoes and Earth’s Surface>Quest Check-In Lab: Signs of Eruption?</p>	<p>9. analyze and interpret visually expressed information (e.g., flowchart, diagram, model, graph, table, or digital mapping technology).</p>	<p>X</p>					
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Personal and Workplace Productivity Skills

For student mastery of college- and career-readiness standards, the instructional resources will provide students with opportunities to:

<p>Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: Testing Thermal Conductivity, 84-87</p> <p>Forces SE/TE: uDemonstrate Lab: Planetary Detective, 98-101</p> <p>Earth Systems SE/TE: uDemonstrate Lab: Modeling a Watershed, 40-43</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: Washing Away, 150-153</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: Reaction Research, 174-177</p> <p>Realize™ Digital Resources: Forces: Electricity and Magnetism >Lesson 2: Magnetic Force>Quest Check-In Lab: Tracking Levitation Changing Earth and Human Activity: Earth’s Surface Systems >Lesson 4: Glacial and Wave Erosion>uInvestigate Lab: Changing Coastlines Systems, Reproduction, and Growth: The Cell System >Lesson 3: Obtaining and Removing Materials>uInvestigate Lab: Egg-speriment with a Cell</p>	<p>10. use interpersonal skills to work cooperatively to accomplish a task.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: 3, 2, 1...Liftoff!, 46-49</p> <p>Forces SE/TE: uDemonstrate Lab: Stopping on a Dime, 48-51</p> <p>Earth Systems SE/TE: uDemonstrate Lab: Modeling Sea-Floor Spreading, 146-149</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: Materials on a Slope, 48-51</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: Clean and Green, 228-231</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 2: Kinetic Energy and Potential Energy>uInvestigate Lab: Mass, Velocity, and Kinetic Energy Forces: Forces and Motion >Lesson 4: Friction and Gravitational Interactions>uInvestigate Lab: Sticky Sneakers Forces: Electricity and Magnetism >Lesson 3: Electromagnetic Force>uInvestigate Lab: Electric Current and Magnetism</p>	<p>11. develop and initiate a plan of action to complete a task or project.</p>	<p>X</p>					
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<p>Representative Citations: For related content, please see: Energy Transfer TE Only: Classroom Strategies, 40</p> <p>Forces TE Only: Professional Development, 36 Professional Development, 48</p> <p>Earth Systems TE Only: Professional Development, 26</p> <p>Changing Earth and Human Activity TE Only: Differentiated Instruction, 49</p> <p>Systems, Reproduction, and Growth SE/TE: Professional Development, 84</p> <p>Realize™ Digital Resources: Earth Systems: Minerals and Rocks in the Geosphere >Topic Close: Minerals and Rocks in the Geosphere>Quest Findings: Reflect on Science in the Movies</p>	<p>12. practice time- and project-management skills.</p>			<p>X</p>	
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<p>Representative Citations: Energy Transfer SE/TE: Quest Findings: Complete the Quest!, 83</p> <p>Forces SE/TE: Quest Findings: Complete the Quest!, 97</p> <p>Earth Systems SE/TE: Quest Findings: Complete the Quest!, 185</p> <p>Changing Earth and Human Activity SE/TE: Quest Findings: Complete the Quest!, 47</p> <p>Systems, Reproduction, and Growth SE/TE: Quest Findings: Complete the Quest!, 53</p> <p>Realize™ Digital Resources: Energy: Energy Transfer >Topic Close: Energy>Quest Findings: Reflect on Your Chain-Reaction Machine Earth Systems: Introduction to Earth's Systems >Topic Close: Introduction to Earth's Systems>Quest Findings: Reflect on Forest Fires Changing Earth and Human Activity: Human Impacts on the Environment >Topic Close: Human Impacts on the Environment>Quest Findings: Reflect on Trash Backlash</p>	<p>13. reflect upon and evaluate the results of a task or project.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer TE Only: Classroom Strategies, 40</p> <p>Forces TE Only: Professional Development, 36 Professional Development, 48</p> <p>Changing Earth and Human Activity TE Only: Differentiated Instruction, 49</p> <p>Systems, Reproduction, and Growth SE/TE: Professional Development, 84 TE Only: Teach with Visuals, 167</p> <p>Realize™ Digital Resources: Earth Systems: Minerals and Rocks in the Geosphere >Topic Close: Minerals and Rocks in the Geosphere>Quest Findings: Reflect on Science in the Movies</p>	<p>14. assume various roles and responsibilities when working independently or as a group.</p>	<p>X</p>						
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<p>Representative Citations: Energy Transfer SE/TE: Careers: Energy Engineer, 31</p> <p>TE Only: College and Career Readiness, 78</p> <p>Earth Systems TE Only: College and Career Readiness, 126</p> <p>Changing Earth and Human Activity SE/TE: Careers: Civil Engineer, 21</p> <p>Systems, Reproduction, and Growth SE/TE: Careers: Nutritionist, 147</p> <p>Realize™ Digital Resources: Forces >Lesson 3: Newton's Laws of Motion>Career Video: Mechanical Engineer Systems, Reproduction, and Growth: Human Body Systems >Lesson 2: Systems Interacting>Career Video: Illustrator Systems, Reproduction, and Growth: Reproduction and Growth >Lesson 4: Factors Influencing Growth>Career Video: Zookeeper</p>	<p>15. explore science-related careers.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer TE Only: Differentiated Instruction, 41</p> <p>Earth Systems SE/TE: My Community, 11</p> <p>Changing Earth and Human Activity TE Only: Differentiated Instruction, 12</p> <p>Systems, Reproduction, and Growth TE Only: Differentiated Instruction, 25 Differentiated Instruction, 127</p> <p>Realize™ Digital Resources: Changing Earth and Human Activity: Distribution of Natural Resources >Lesson 3: Mineral Resources>Enrichment: Minerals in the Body Changing Earth and Human Activity: Human Impacts on the Environment >Lesson 3: Impacts on Land>Quest Check-In Interactivity: Life of a Landfill >Lesson 4: Water Pollution>Interactivity: Research Water Pollution</p>	<p>16. conduct research, validate sources, and report findings in an ethical manner.</p>	<p>X</p>					
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<p>Representative Citations:</p> <p>Energy Transfer SE/TE: Topic 1 Evidence-Based Assessment, 44-46</p> <p>Forces SE/TE: uDemonstrate Lab: Planetary Detective, 98-101</p> <p>Earth Systems SE/TE: Topic 3 Evidence-Based Assessment, 144-145</p> <p>Changing Earth and Human Activity SE/TE: Topic 3 Evidence-Based Assessment, 148-149</p> <p>Systems, Reproduction, and Growth SE/TE: Topic 3 Evidence-Based Assessment, 172-173</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Topic Close: Thermal Energy>uDemonstrate Lab: Testing Thermal Conductivity Earth Systems: History of Earth >Topic Close: History of Earth>uDemonstrate Lab: Core Sampling Through Time Changing Earth and Human Activity: Earth's Surface Systems >Topic Close: Earth's Surface Systems>uDemonstrate Lab: Materials on a Slope</p>	<p>17. demonstrate mastery through multiple efforts.</p>	<p>X</p>					
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Developmentally Appropriate Instructional Resources and Strategies

For student mastery of college- and career-readiness standards, the instructional resources:

<p>Representative Citations: Energy Transfer TE Only: Differentiated Instruction, 17</p> <p>Forces TE Only: ELD Support, 83</p> <p>Earth Systems TE Only: Differentiated Instruction, 65</p> <p>Changing Earth and Human Activity TE Only: ELD Support, 137</p> <p>Systems, Reproduction, and Growth TE Only: Differentiated Instruction, 69</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 4: Friction and Gravitational Interactions>Enrichment: Gravitational Force of the Sun Earth Systems: Introduction to Earth’s Systems >Lesson 3: The Hydrosphere>Enrichment: Groundwater Systems, Reproduction, and Growth: Human Body Systems >Lesson 5: Controlling Processes>Enrichment: Polygraph Tests</p>	<p>18. include multiple research-based strategies for differentiation, intervention, and enrichment to support all learners.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: Model It!: Friction and Energy Transformation, 76</p> <p>Forces TE Only: Spark a Discussion, 36</p> <p>Earth Systems TE Only: Teach with Movement, 156</p> <p>Changing Earth and Human Activity SE/TE: Literacy Connection: Write Explanatory Texts, 7</p> <p>Systems, Reproduction, and Growth SE/TE: Literacy Connection: Write Arguments, 137</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Lesson 2: Heat Transfer>Investigate Lab: Visualizing Convection Currents Earth Systems: Minerals and Rocks in the Geosphere >Topic Close: Minerals and Rocks in the Geosphere>Quest Findings: Reflect on Science in the Movies Changing Earth and Human Activity: Earth's Surface Systems >Lesson 4: Glacial and Wave Erosion>Investigate Lab: Changing Coastlines</p>	<p>19. provide multiple opportunities for incorporating various learning modalities.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: Topic 2 Evidence-Based Assessment, 82-83</p> <p>Forces SE/TE: uDemonstrate Lab: Planetary Detective, 98-101</p> <p>Earth Systems SE/TE: Topic 4 Evidence-Based Assessment, 184-185</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: To Drill or Not to Drill, 96-99</p> <p>Systems, Reproduction, and Growth SE/TE: Topic 4 Evidence-Based Assessment, 226-227</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Lesson 3: Heat and Materials>uInvestigate Lab: Comparing How Liquids Cool Earth Systems: History of Earth >Lesson 2: Geologic Time Scale>Quest Check-In Lab: A Matter of Time Changing Earth and Human Activity: Earth's Surface Systems >Lesson 2: Erosion and Deposition>uInvestigate Lab: Small, Medium, and Large</p>	<p>20. cultivate investigative skills to lead students to form logical conclusions.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: Academic Vocabulary, 27</p> <p>Forces TE Only: Differentiated Instruction, 37</p> <p>Systems, Reproduction, and Growth TE Only: Differentiated Instruction, 129 Differentiated Instruction, 163 Focus on Mastery!, 176</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 2: Kinetic Energy and Potential Energy>Enrichment: Kinetic or Potential Energy?</p> <p>Earth Systems: Plate Tectonics >Lesson 3: Earthquakes and Tsunami Hazards>Investigate Lab: Analyze Earthquake Data to Identify Patterns</p> <p>Changing Earth and Human Activity: Earth's Surface Systems >Lesson 2: Erosion and Deposition>Investigate Lab: Small, Medium, and Large</p>	<p>21. incorporate authentic scientific vocabulary and technical terminology.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: 3, 2, 1..Liftoff!, 46-49 uDemonstrate Lab STEM: Testing Thermal Conductivity, 84-87 Appendix A: Safety Symbols, 100</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: Materials on a Slope, 48-51</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: Clean and Green, 228-231</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Lesson 1: Thermal Energy, Heat, and Temperature>uInvestigate Lab: Temperature and Thermal Energy Earth Systems: Introduction to Earth's Systems >Lesson 1: Matter and Energy in Earth's Systems>uInvestigate Lab: Where Heat Flows Systems, Reproduction, and Growth: Human Body Systems >Lesson 3: Supplying Energy>uInvestigate Lab: Measuring Calories</p>	<p>22. integrate laboratory safety practices within learning experiences.</p>	<p>X</p>					
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Life Skills					
<i>For student mastery of college- and career-readiness standards, the instructional resources will provide students with opportunities to:</i>					
<p>Representative Citations:</p> <p>Energy Transfer SE/TE: Quest Findings: Complete the Quest!, 45</p> <p>Forces SE/TE: Quest Findings: Complete the Quest!, 47</p> <p>Earth Systems SE/TE: Quest Findings: Complete the Quest!, 145</p> <p>Changing Earth and Human Activity SE/TE: Quest Findings: Complete the Quest!, 47</p> <p>Systems, Reproduction, and Growth SE/TE: Quest Findings: Complete the Quest!, 173</p> <p>Realize™ Digital Resources: Forces: Electricity and Magnetism >Lesson 4: Electric and Magnetic Interactions>Quest Check-In Lab: Electrifying Levitation Earth Systems: Minerals and Rocks in the Geosphere >Topic Close: Minerals and Rocks in the Geosphere>Quest Findings: Reflect on Science in the Movies Systems, Reproduction, and Growth: The Cell System >Topic Close: The Cell System>Quest Findings: Reflect on Your Museum Exhibits</p>	<p>23. persevere to complete a task and generate high quality work.</p>	<p>X</p>			

SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Representative Citations: Energy Transfer TE Only: Classroom Strategies, 40</p> <p>Changing Earth and Human Activity SE/TE: Case Study: Nothing Goes to Waste, 134-134 TE Only: Differentiated Instruction, 59 Differentiated Instruction, 135</p>	<p>24. be exposed to and be respectful of varying viewpoints and positions of scientific issues.</p>	<p>X</p>						
<p>Representative Citations: Forces SE/TE: Demonstrate Lab: Stopping on a Dime, 48-51</p> <p>Earth Systems SE/TE: uEngineer It!: Designing to Prevent Destruction, 131</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: Clean and Green, 228-231</p> <p>Realize™ Digital Resources: Forces: Electricity and Magnetism >Lesson 3: Electromagnetic Force>uInvestigate Lab: Electric Current and Magnetism Earth Systems: Minerals and Rocks in the Geosphere >Lesson 2: Minerals>Quest Check-In Lab: Make Your Own Stalactites and Stalagmites Systems, Reproduction, and Growth: The Cell System >Lesson 4: Cell Division>uInvestigate Lab: Modeling Mitosis</p>	<p>25. engage in hands-on activities to promote the understanding of science content.</p>	<p>X</p>						

SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Representative Citations:</p> <p>Energy Transfer SE/TE: uDemonstrate Lab STEM: Testing Thermal Conductivity, 84-87</p> <p>Forces SE/TE: uDemonstrate Lab: Planetary Detective, 98-101</p> <p>Earth Systems SE/TE: uDemonstrate Lab: The Rock Cycle in Action, 90-93</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: Materials on a Slope, 48-51</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: It's Alive!, 54-57</p> <p>Realize™ Digital Resources: Earth Systems: Introduction to Earth's Systems >Lesson 1: Matter and Energy in Earth's Systems>uInvestigate Lab: Where Heat Flows Changing Earth and Human Activity: Earth's Surface Systems >Lesson 2: Erosion and Deposition>uInvestigate Lab: Small, Medium, and Large Systems, Reproduction, and Growth: Living Things in the Biosphere >Lesson 3: Viruses, Bacteria, Protists, and Fungi>uInvestigate Lab: Life in a Drop of Pond Water</p>	<p>26. investigate the natural world and universe.</p>	<p>X</p>					
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SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Representative Citations: Energy Transfer TE Only: Classroom Strategies, 40</p> <p>Forces TE Only: Spark a Discussion, 36</p> <p>Earth Systems TE Only: Differentiated Instruction, 3</p> <p>Changing Earth and Human Activity TE Only: Spark a Discussion, 109</p> <p>Systems, Reproduction, and Growth TE Only: Differentiated Instruction, 53</p> <p>Realize™ Digital Resources: Earth Systems: Minerals and Rocks in the Geosphere >Topic Close: Minerals and Rocks in the Geosphere>Quest Findings: Reflect on Science in the Movies Earth Systems: Plate Tectonics >Topic Close: Plate Tectonics>Quest Findings: Reflect on Mount Rainier’s Safety Systems, Reproduction, and Growth: Reproduction and Growth >Topic Close: Reproduction and Growth>Quest Findings: Reflect on Your Basketball Court Plans</p>	<p>27. practice situational language (e.g., presentations, debates, speeches, collaborative discussions, social media) in real-world activities.</p>	<p>X</p>					
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SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Representative Citations: Earth Systems SE/TE: Global to Local: When the Ice Melts, 11 Case Study: The Case of the Shrinking Sea, 34-35</p> <p>Changing Earth and Human Activity SE/TE: Using Energy Resources, 64 Case Study: Phosphorus Fiasco, 82-83 Human Impacts, 88-89 Using Natural Resources, 108-109</p> <p>Realize™ Digital Resources: Changing Earth and Human Activity: Distribution of Natural Resources >Lesson 1: Nonrenewable Energy Resources> Investigate Lab: Fossil Fuels Changing Earth and Human Activity: Human Impacts on the Environment >Lesson 1: Population Growth and Resource Consumption> Investigate Lab: Doubling Time</p>	<p>28. understand the impact of global issues and events on their lives, communities, and greater society.</p>	<p>X</p>					
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SE = Student Edition; TE = Teacher Edition; Digital Resources: The symbol > indicates a click to reach each digital asset on the Realize platform.

<p>Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: Testing Thermal Conductivity, 84-87 Appendix A: Safety Symbols, 100</p> <p>Changing Earth and Human Activity SE/TE: uDemonstrate Lab: To Drill or Not to Drill, 96-99</p> <p>Systems, Reproduction, and Growth SE/TE: uDemonstrate Lab: It's Alive!, 54-57 uDemonstrate Lab STEM: Design and Build a Microscope, 106-109</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Lesson 3: Heat and Materials>uInvestigate Lab: Comparing How Liquids Cool</p> <p>Systems, Reproduction, and Growth: Living Things in the Biosphere >Lesson 1: Living Things>uInvestigate Lab: Cheek Cells</p> <p>Systems, Reproduction, and Growth: Human Body Systems >Lesson 3: Supplying Energy>uInvestigate Lab: Measuring Calories</p>	<p>29. use laboratory equipment properly.</p>	<p>X</p>					
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Assessment*The instructional resources provide:*

<p>Representative Citations: Energy Transfer SE/TE: Lesson 1 Check, 13 Topic 1 Review and Assess, 42-43 Topic 1 Evidence-Based Assessment, 44-45</p> <p>Forces SE/TE: Lesson 2 Check, 73 Topic 2 Review and Assess, 94-95</p> <p>Realize™ Digital Resources: Earth Systems: History of Earth >Lesson 1: Determining Ages of Rocks>Quiz: Determining Ages of Rocks >Lesson 2: Geologic Time Scale>Quiz: Geologic Time Scale >Topic Close: History of Earth>Test: History of Earth</p>	<p>30. ongoing diagnostic formative and summative assessments.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: uDemonstrate Lab STEM: 3, 2, 1...Liftoff!, 46-49</p> <p>Forces SE/TE: Topic 1 Evidence-Based Assessment, 46-47</p> <p>Earth Systems SE/TE: Topic 3 Review and Assess, 142-143</p> <p>Changing Earth and Human Activity SE/TE: Lesson 1 Check, 65</p> <p>Systems, Reproduction, and Growth SE/TE: Topic 4 Evidence-Based Assessment, 226-227</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 3: Newton's Laws of Motion>Quiz: Newton's Laws of Motion >Topic Close: Forces and Motion>uDemonstrate Lab: Stopping on a Dime;>Test: Forces and Motion</p>	<p>31. a variety of assessment formats, including performance tasks as well as multimedia simulations, portfolio evaluations, and data-dependent and open-ended questions.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer TE Only: Scoring Notes, 49</p> <p>Forces TE Only: Scoring Notes, 51</p> <p>Earth Systems TE Only: Scoring Notes, 149</p> <p>Changing Earth and Human Activity TE Only: Scoring Notes, 153</p> <p>Systems, Reproduction, and Growth TE Only: Scoring Notes, 231</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Topic Launch: Energy>Quest Rubric: Outrageous Energy Contraptions Forces: Electricity and Magnetism >Topic Launch: Electricity and Magnetism>Quest Rubric: Light as a Feather? Earth Systems: Plate Tectonics >Topic Launch: Plate Tectonics>Quest Rubric: To Hike or Not to Hike</p>	<p>32. rubrics wherein all learners demonstrate progress toward mastery.</p>	<p>X</p>					
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Organization, Presentation and Format

The instructional resources:

<p>Representative Citations: Energy Transfer SE/TE: Table of Contents, vi-vii Quest Kickoff: How can you build a complicated machine to do something simple?, 2-3 Quest Check-In, 13 Quest Findings: Complete the Quest!, 45 TE Only: Pacing Guide, T18</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Topic Launch: Energy>uConnect Lab: What Would Make a Card Jump? >Lesson 2: Kinetic Energy and Potential Energy>Quest Check-In Lab: Build a Chain-Reaction Machine >Lesson 4: Energy Change and Conservation>Quest Check-In Lab: Redesign and Retest a Chain-Reaction Machine</p>	<p>33. are organized in logical sequence to optimize instructional effectiveness and efficiency.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: Topic 2 Evidence-Based Assessment, 82-83</p> <p>Forces SE/TE: Extraordinary Science: Bumblebees and Electric Flowers, 65 TE Only: Professional Development, 26</p> <p>Earth Systems TE Only: Professional Development, 80</p> <p>Systems, Reproduction, and Growth SE/TE: Human Organ Systems, 118-121</p> <p>Realize™ Digital Resources: Earth Systems: Minerals and Rocks in the Geosphere >Lesson 3: Rocks>Enrichment: Geology of the Appalachians Changing Earth and Human Activity: Earth's Surface Systems >Lesson 4: Glacial and Wave Erosion>Investigate Lab: Changing Coastlines Systems, Reproduction, and Growth: The Cell System >Lesson 1: Structure and Function of Cells>Virtual Lab: Living or Not?</p>	<p>34. connect common themes across multiple science disciplines.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer SE/TE: It's All Connected: Glassblowing: Not Just a Bunch of Hot Air, 61</p> <p>Earth Systems TE Only: Professional Development, 34</p> <p>Changing Earth and Human Activity SE/TE: World Politics, 64 TE Only: Connect to the Real World: Resource Supply and Demand, 54 Professional Development, 82</p> <p>Realize™ Digital Resources: Earth Systems: Minerals and Rocks in the Geosphere >Topic Launch: Minerals and Rocks in the Geosphere>Quest Kickoff: Science in the Movies >Topic Close: Minerals and Rocks in the Geosphere>Quest Findings: Reflect on Science in the Movies Systems, Reproduction, and Growth: Human Body Systems >Topic Launch: Human Body Systems>Quest Kickoff: Peak Performance Plan</p>	<p>35. integrate cross-curricular connections.</p>	<p>X</p>					
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<p>Representative Citations: Energy Transfer TE Only: Professional Development, 46 Professional Development, 76</p> <p>Forces TE Only: Professional Development, 76 Professional Development, 88</p> <p>Earth Systems TE Only: Professional Development, 124</p> <p>Changing Earth and Human Activity TE Only: Professional Development, 8 Professional Development, 24</p> <p>Systems, Reproduction, and Growth TE Only: Professional Development, 84</p>	<p>36. provide educators necessary science content knowledge, pedagogy, and management techniques to guide learning experiences.</p>	<p>X</p>					
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SPECIFIC EVALUATION CRITERIA

2022-2028
Group IV – Science
CCR Grade 7

Science - Grade 7

All West Virginia teachers are responsible for classroom instruction that integrates content standards, foundational skills, literacy, learning skills, computer science and technology tools. Students in grades 6 - 8 will advance through a developmentally appropriate progression of standards. The following chart represents the College- and Career-Readiness Indicators for Science that will be developed in grades 6 - 8.

College- and Career-Readiness Indicators for Science	
Grades 6 - 8	
Nature of Science	
<ul style="list-style-type: none"> Scientific knowledge is simultaneously reliable and subject to change based on empirical evidence and interpretation. Scientific knowledge is obtained through a combination of observations of the natural world and inferences based on those observations. Science is a creative human endeavor which is influenced by social and cultural biases. A primary goal of science is the formation of theories and laws. Theories are inferred explanations of some aspect of the natural world based on successfully tested information from evidence and evaluated phenomena. Laws describe relationships among what has been observed in the natural world. Scientific investigations use a variety of methods to address questions about the natural and material world. 	
Practices of Scientists and Engineers	Science Connecting Concepts
<ul style="list-style-type: none"> Asking questions and defining problems Developing and using models Planning and carrying out investigations Analyzing and interpreting data Using mathematical and computational thinking Constructing explanations and designing solutions Engaging in argument from evidence Obtaining, evaluating, and communicating information 	<ul style="list-style-type: none"> Observing patterns Investigating and explaining cause and effect Recognizing scale, proportion, and quantity Defining systems and system models Tracking energy and matter flows, into, out of, and within systems to understand system behavior Determining the relationships between structure and function Studying stability and change

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Science Literacy	Science Lab Safety
<ul style="list-style-type: none"> • Producing clear and coherent technical writing in which the development, organization and style are appropriate for the science topic • Correctly utilizing and explaining visually expressed information (e.g., flowchart, diagram, model, graph, table, or digital mapping technology) in a science narrative. • Appropriately using technical terminology or scientific concepts and processes to create visually expressed information • Reading with understanding articles about science in the popular press and engaging in social conversation about the validity of the conclusions • Identifying scientific issues underlying national and local decisions and expressing positions that are scientifically and technologically informed • Evaluating the quality and validity of scientific information on the basis of its source and the methods used to generate it 	<ul style="list-style-type: none"> • Requiring student lab safety training and demonstrating appropriate proficiency before participating in lab activities • Archiving signed student safety contracts documenting lab safety training and medical contraindications (e.g., allergies, contact lenses, medical conditions) • Wearing proper protective gear as needed (e.g., goggles, apron, and gloves) • Requiring grade appropriate lab equipment operation and safety training • Using and following SDS protocols • Storing and disposing of chemical/biological materials properly • Following ethical classroom uses of living materials/organisms • Displaying proper safety signage and laboratory rules in the classroom and lab

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The specific evaluation criteria apply to each grade level and are to be evaluated for each grade level unless otherwise specified. These criteria consist of information critical to the development of all grade levels. **In specific grade level criteria with bullet points, each of those items must be addressed.** Eighty percent of the general and eighty percent of the specific criteria must be met with I (In-depth) or A (Adequate) in order to be recommended.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
	I=In- depth	A=Adequate	M=Minimal	N=Nonexistent	I	A	M	N
In addition to alignment of West Virginia College- and Career-Readiness Standards (WVCCRS) for Science, instructional resources must also include opportunities for students to develop:								
College- and Career-Readiness Standards								
Life Science: Molecules to Organisms - Structure, Function, and Information Processing								
Systems, Reproduction, and Growth SE/TE: Characteristics of Living Things, 5-7 Microorganisms, 27 Bacteria, 30-32 Protists, 33 Fungi, 34-35 Form and Function, 39 Characteristics of Plants, 40-43 Characteristics of Animals, 44-47 Topic 1 Evidence-Based Assessment, 52-53 uDemonstrate Lab, 54-57 Cells, 63 Principles of Cell Theory, 66 Plan It!, 67	1. Conduct an investigation to provide evidence that living things are made of cells, either one cell or many different numbers and types of cells.			X				

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<p>Continued: Realize™ Digital Resources: Systems, Reproduction, and Growth: Living Things in the Biosphere >Lesson 1: Living Things>Investigate Lab: Cheek Cells >Lesson 3: Viruses, Bacteria, Protists, and Fungi>Investigate Lab: Life in a Drop of Pond Water >Lesson 4: Plants and Animals>Interactivity: Different Cells, Different Jobs;>Investigate Lab: Algae and Plants Systems, Reproduction, and Growth: The Cell System >Lesson 1: Structure and Functions of Cells>Virtual Lab: Living or Not?;>Investigate Lab: Observing Cells</p>							
<p>Systems, Reproduction, and Growth SE/TE: Quest Kickoff, 60-61 Parts of a Cell, 73-78 Students Discourse, 77 Model It!, 77 Cells Working Together, 79-80 Lesson 2 Check, #1, 81 Quest Check-In, 81 Moving Materials Into and Out of Cells, 83-88 Model It!, 89 Topic 2 Evidence-Based Assessment, 104-105</p> <p>Realize™ Digital Resources: Systems, Reproduction, and Growth: The Cell System >Topic Launch: The Cell System>Quest Kickoff: Cells on Display >Lesson 2: Cell Structures>Quest Check-In Lab: Make a Cell Model >Lesson 3: Obtaining and Removing Materials>Investigate Lab: Egg-speriment with a Cell</p>	<p>2. Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function.</p>	<p>X</p>					

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<p>Systems, Reproduction, and Growth SE/TE: Organization of the Body, 115 Reading Check, 115 Levels of Organization, 116-117 Human Organ Systems, 118-121 Lesson 1 Check, #8, 122 Systems Working Together, 125-128 Lesson 2 Check, #5, 133 The Lower Digestive System, 142-145 Reading Check, 145 The Circulatory System, 149-153 Respiratory System, 154-155 Lesson 4 Check, #3, 159 Topic 3 Evidence-Based Assessment, 172-173 uDemonstrate Lab, 174-177</p> <p>Realize™ Digital Resources: Systems, Reproduction, and Growth: Human Body Systems >Topic Launch: Human Body Systems>uConnect Lab: How Is Your Body Organized? >Lesson 4: Managing Materials>uInvestigate Lab: Body Systems Working Together</p>	<p>3. Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells with emphasis on the circulatory, excretory, digestive, respiratory, muscular, and nervous systems.</p>	<p>X</p>						
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<p>Systems, Reproduction, and Growth SE/TE: Stimulus and Response, 127 Connect It!, 160 Reflect, 161 Nervous System, 161-165 Model It!, 165 Lesson 5 Check, #3, 169 Topic 3 Review and Assess, #16, 170-171 uDemonstrate Lab, 174-177</p> <p>Realize™ Digital Resources: Systems, Reproduction, and Growth: Human Body Systems >Lesson 5: Controlling Processes>uInvestigate Lab: What Are the Parts of the Nervous System?;>Enrichment: Polygraph Tests</p>	<p>4. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.</p>	<p>X</p>						
<p>Physical Science: Energy</p>								
<p>Energy Transfer SE/TE: Kinetic Energy, 15-16 Math Toolbox, 16 Topic 1 Review and Assess, #8, #9, 42-43</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 2: Kinetic Energy and Potential Energy>Interactivity: Interpret Kinetic Energy Graphs;>uInvestigate Lab: Mass, Velocity, and Kinetic Energy</p>	<p>5. Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.</p>	<p>X</p>						

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<p>Energy Transfer SE/TE: Potential Energy, 17-19</p> <p>Forces SE/TE: Energy, Forces, and Motion, 40-41 Model It!, 41 Charges and Potential Energy, 59 Question It!, 59 Potential Energy and Static Electricity, 63 Lesson 1 Check, #3, 64 Magnets and Potential Energy, 68 Potential Energy, 69 Topic 2 Review and Assess, #5, 94-95 Topic 2 Evidence-Based Assessment, 96-97 uDemonstrate Lab, 98-101</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 2: Kinetic Energy and Potential Energy>uInvestigate Lab: Energy, Magnetism, and Electricity Forces: Electricity and Magnetism >Lesson 1: Electric Forces>Interactivity: Charged Interactions</p>	<p>6. Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.</p>	<p>X</p>					
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<p>Energy Transfer SE/TE: Quest Kickoff, 52-53 uDemonstrate Lab, 84-87</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Topic Launch: Thermal Energy>Quest Kickoff: Keep Hot Liquids Hot >Lesson 2: Heat Transfer>Interactivity: Solar Oven Design;>Worksheet: Solar Oven Design;>Quest Check-In Interactivity: Contain the Heat >Lesson 3: Heat and Materials>Quest Check-In Lab: Keep the Heat In;>Quest Check-In Lab: Keep the Cold Out</p>	<p>7. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. *</p>	<p>X</p>					
<p>Energy Transfer SE/TE: Thermal Energy and Heat, 55 Temperature and Its Measurement, 56 How Thermal Energy and Temperature Are Related, 57-59 Thermal Properties of Materials, 73-75 Math Toolbox, 74 Topic 2 Evidence-Based Assessment, 82-83 uDemonstrate Lab, 84-87</p> <p>Realize™ Digital Resources: Energy Transfer: Thermal Energy >Lesson 1: Thermal Energy, Heat, and Temperature>uInvestigate Lab: Temperature and Thermal Energy >Lesson 3: Heat and Materials>uInvestigate Lab: Comparing How Liquids Cool</p>	<p>8. Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.</p>	<p>X</p>					

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<p>Energy Transfer SE/TE: Energy Changes Form, 33-35 Energy Changes and the Law of Conservation, 36-38 Topic 1 Evidence-Based Assessment, 44-45 uDemonstrate Lab, 46-49 Temperature, Energy, and Friction, 76</p> <p>Realize™ Digital Resources: Energy Transfer: Energy >Lesson 4: Energy Change and Conservation>uInvestigate Lab: Law of Conservation of Energy;>Interactivity: Take It to the Extreme;>Quest Check-In Lab: Redesign and Retest a Chain-Reaction Machine</p>	<p>9. Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.</p>	<p>X</p>						
Forces and Interactions								
<p>Forces SE/TE: Quest Kickoff, 2-3 uEngineer It!, 33 uDemonstrate Lab, 48-51</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Topic Launch: Forces and Motion>Quest Kickoff: Build a Better Bumper Car >Lesson 1: Describing Motion and Force>Quest Check-In Interactivity: Define Criteria and Constraints >Lesson 2: Speed, Velocity, and Acceleration>Quest Check-In Lab: Mass, Speed, and Colliding Cars >Lesson 3: Newton's Laws of Motion>Quest Check-In Interactivity: Apply Newton's Laws of Motion >Lesson 4: Friction and Gravitational Interactions>Quest Check-In Lab: Bumping Cars, Bumper Solutions</p>	<p>10. Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects. *</p>	<p>X</p>						

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<p>Forces SE/TE: How Forces Affect Motion, 7-9 Math Toolbox, 10 Connect It!, 24 Newton’s First Law of Motion, 25-26 Newton’s Second Law of Motion, 27-28 uDemonstrate Lab, 48-51</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 1: Describing Force and Motion>Inquiry Warm-Up Lab: Is the Force With You? >Lesson 2: Speed, Velocity, and Acceleration>Quest Check-In Lab: Mass, Speed, and Colliding Cars >Lesson 3: Newton’s Laws of Motion>Interactivity: How Are Mass, Force, and Motion Related</p>	<p>11. Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.</p>	<p>X</p>						
<p>Forces SE/TE: The Essential Question, 53 Electric Force, Fields, and Energy, 57-59 Magnetic Fields and Current, 76-77 Solenoids and Electromagnets, 78-79 Topic 2 Evidence-Based Assessment, 96-97</p> <p>Realize™ Digital Resources: Forces: Electricity and Magnetism >Lesson 1: Electric Force>uInvestigate Lab: Detecting Charges >Lesson 4: Electric and Magnetic Interactions>Inquiry Warm-Up Lab: How Generators Work;>uInvestigate Lab: Electric Magnetic Motion</p>	<p>12. Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.</p>	<p>X</p>						

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<p>Forces SE/TE: Factors That Affect Gravity, 38-39 Literacy Connection, 39 Lesson 4 Check, #4, 42</p> <p>Realize™ Digital Resources: Forces: Forces and Motion >Lesson 4: Friction and Gravitational Interactions>Enrichment: Gravitational Force of the Sun</p>	<p>13. Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.</p>	<p>X</p>					
<p>Forces SE/TE: Quest Kickoff, 54-55 Electric Force, Fields, and Energy, 57-59 Question It!, 59 Static Electricity, 62-63 Magnetic Force and Energy, 67-68 Magnetic Fields, 69-72 Topic 2 Evidence-Based Assessment, 96-97 uDemonstrate Lab, 98-101</p> <p>Realize™ Digital Resources: Forces: Electricity and Magnetism >Topic Launch: Electricity and Magnetism>Quest Kickoff: Light as a Feather? >Lesson 1: Electric Force>Inquiry Warm-Up Lab: Uncanny Attractions >Lesson 2: Magnetic Force>Quest Check-In Lab: Tracking Levitation</p>	<p>14. Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.</p>	<p>X</p>					

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Earth and Space Sciences: Earth's Systems

Earth Systems

SE/TE:

The Earth System, 5-7
 Movement in Earth's Mantle, 56-57
 Mineral Formation, 64-66
 Model It!, 66
 Lesson 2 Check, #5, 68
 How Rocks Form, 73-76
 The Cycling of Earth's Materials, 79-82
 Model It!, 82
 Topic 2 Review and Assess, #5, 86-87
 uDemonstrate Lab, 90-93

Realize™ Digital Resources:

Earth Systems: Introduction to Earth's Systems

>Topic Launch: Introduction to Earth's Systems
 >uConnect Lab: What Interactions Occur Within the Earth System?

>Lesson 1: Matter and Energy in Earth's Systems
 >uInvestigate Lab: Where Heat Flows

Earth Systems: Minerals and Rocks in the Geosphere

>Lesson 2: Minerals
 >uInvestigate Lab: Mineral Mash-Up

>Lesson 3: Rocks
 >uInvestigate Lab: A Sequined Rock

>Lesson 4: Cycling of Rocks
 >Interactivity: Rocks on the Move

15. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.

X

<p>Earth Systems SE/TE: The Water Cycle, 25-26 Topic 1 Review and Assess, #17, 36-37</p> <p>Realize™ Digital Resources: Cycles Influencing Weather and Climate: Earth Systems: Introduction to Earth's Systems >Lesson 3: The Hydrosphere>Interactivity: The Water Cycle</p>	<p>16. Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.</p>	<p>X</p>						
<p>Changing Earth and Human Activity SE/TE: The Essential Question, 53 Fossil Fuels, 58-62 Nuclear Energy, 63 Lesson 1 Check, #5, 65 Minerals and Ores, 75-79 Lesson 3 Check, #3, 81 Water on Earth, 85-87 Lesson 4 Check, #2, 90 Topic 2 Review and Assess, #13, 92-93 Topic 2 Evidence-Based Assessment, 94-95 uDemonstrate Lab, 96-99</p> <p>Realize™ Digital Resources: Changing Earth and Human Activity: Distribution of Natural Resources >Lesson 1: Nonrenewable Energy Resources>Interactivity: Distribution of Fossil Fuels >Lesson 3: Mineral Resources>Interactivity: Distribution of Minerals</p>	<p>17. Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.</p>	<p>X</p>						

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History of Earth						
<p>Earth Systems SE/TE: Connect It!, 164 The Geologic Time Scale, 165-167 Dividing Geologic Time, 168-169 Lesson 2 Check, #5, 170 Major Events in the Paleozoic Era, 173-175 Major Events in the Mesozoic Era, 176-177 Major Events in the Cenozoic Era, 178 How Scientists Organize Earth’s History, 179 Topic 4 Evidence-Based Assessment, 184-185 uDemonstrate Lab, 186-189</p> <p>Realize™ Digital Resources: Earth Systems: History of Earth >Lesson 2: Geologic Time Scale>Interactivity: A Very Grand Canyon</p>	<p>18. Construct a scientific explanation based on evidence from rock strata for how the geologic timescale is used to organize Earth’s 4.6-billion-year-old history.</p>	<p>X</p>				

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<p>Earth Systems SE/TE: The Essential Question, 95 The Theory of Plate Tectonics, 109-112 Plate Boundaries, 113-116 Case Study: Australia on the Move, 118-119 Stress and Earth's Crust, 121-122 New Landforms From Plate Movement, 123-124 Volcanoes and Plate Boundaries, 134-135 Volcano Landforms, 136 uDemonstrate Lab, 146-149</p> <p>Changing Earth and Human Activity SE/TE: Connect It!, 4 Breaking Down Earth's Surface, 5 Weathering Earth's Surface, 6-8 Lesson 1 Check, #2, 12 Changing Earth's Surface, 15 Mass Movement, 16 Lesson 2 Check, #2, 20 Connect It!, 22 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 Lesson 4 Check, #2, 43 Topic 1 Evidence-Based Assessment, 46-47 uDemonstrate Lab, 48-51</p>	<p>19. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.</p>	<p>X</p>					
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<p>Earth Systems SE/TE: Hypothesis of Continental Drift, 99-101 Mid-Ocean Ridges, 102 Sea-Floor Spreading, 103 Ocean Trenches, 104-105 Lesson 1 Check, #2, #3, 106</p> <p>Realize™ Digital Resources: Earth Systems: Plate Tectonics >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</p>	<p>20. Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.</p>	<p>X</p>							
<p>Human Impacts</p>									
<p>Changing Earth and Human Activity SE/TE: uEngineer It!, 73 Quest Kickoff, 102-103</p> <p>Realize™ Digital Resources: Changing Earth and Human Activity: Human Impacts on the Environment >Topic Launch: Human Impacts on the Environment>uConnect Lab: Finding a Solution for Your Pollution;>Quest Kickoff: Trash Backlash >Lesson 4: Water Pollution>Quest Check-In Lab: Reducing Waste</p>	<p>21. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. *</p>	<p>X</p>							

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Engineering, Technology, and Applications of Science: Engineering Design

This standard is addressed by labs and activities throughout *Elevate Science 6-8 Modules*. For examples, please see:

Earth Systems

SE/TE:

uEngineer It!, 59

Realize™ Digital Resources:

Forces: Forces and Motion

>Lesson 1: Describing Motion and Force>Quest
Check-In Interactivity: Define Criteria and Constraints

Changing Earth and Human Activity: Earth's Surface Systems

>Lesson 2: Erosion and Deposition>Quest
Check-In Lab: Ingenious Island Part I

Systems, Reproduction, and Growth: Reproduction and Growth

>Lesson 4: Factors Influencing Growth>Quest
Check-In Interactivity: Make Your Construction Case

22. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, considering limitations to solutions including scientific principles and potential relevant possible impacts on people and the environment.

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<p>This standard is addressed by labs and activities throughout <i>Elevate Science 6-8 Modules</i>. For examples, please see:</p> <p>Energy Transfer SE/TE: Quest Kickoff: How can you build a complicated machine to do something simple?, 2-3</p> <p>Forces SE/TE: uEngineer It!, 33</p> <p>Changing Earth and Human Activity SE/TE: Quest Kickoff: How can you help your school reduce its impact on Earth's systems?, 102-103</p> <p>Systems, Reproduction, and Growth SE/TE: Quest Kickoff: How do your body systems interact when you train for your favorite sport?, 112-113</p> <p>Realize™ Digital Resources: Changing Earth and Human Activity: Earth's Surface Systems >Lesson 3: Water Erosion>Quest Check-In Lab: Ingenious Island Part II</p>	<p>23. Analyze data from tests to determine which characteristics of design can be combined into a new solution to better meet the criteria for success.</p>	<p>X</p>						
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