

**A Correlation of**  
**Virginia Elevate Science**  
**Life ©2021**



**To the**  
**Virginia Standards of Learning**  
**for Science 2010**  
**Life Science**

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To the  
Virginia Standards of Learning for Science 2010, Life Science**

**Introduction**

The following document demonstrates how the **Virginia Elevate Science Life Science ©2021** program supports the 2010 Virginia Standards of Learning for Science. Correlation references include the Student Edition, Teacher Edition, and online Realize™ digital resources.

Savvas Learning Company is proud to introduce **Virginia Elevate Science, Life Science** – 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.

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<b>(LS.1) The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which</b>	
(LS.1.a) data are organized into tables showing repeated trials and means;	<p>This objective is met throughout <i>Virginia Elevate Science, Life</i>. For examples, please see:</p> <p><b>SE/TE:</b>  uDemonstrate Lab: Reaction Research (Design Your Investigation, #4, Data Table), 196-199  uDemonstrate Lab: Make the Right Call! (Observations), 426-429</p> <p><b>Realize™ Digital Resources:</b>  <b>Topic 3: Human Body Systems</b>  &gt;Lesson 4: Managing Materials&gt;Quest Check-In Lab: Heart Beat, Health Beat  <b>Topic 8: Natural Selection and Change Over Time</b>  &gt;Lesson 2: Natural Selection&gt;uInvestigate Lab: Variation in a Population</p>
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(LS.1.i) patterns are identified in data and are interpreted and evaluated; and	<p>This objective is met throughout <i>Virginia Elevate Science, Life</i>. For examples, please see:</p> <p><b>SE/TE:</b>  uDemonstrate Lab: Clean and Green (Analyze and Interpret Data, #2), 252-255  uDemonstrate Lab: A Bony Puzzle (Analyze and Interpret Data, #1, #2), 492-495</p> <p><b>Realize™ Digital Resources:</b>  <b>Topic 1: Living Things in the Biosphere</b>  &gt;Lesson 2: Classification Systems&gt;Quest Check-In Lab: Classifying Seeds  <b>Topic 5: Ecosystems</b>  &gt;Lesson 1: Living Things and the Environment&gt;uInvestigate Lab: Elbow Room</p>
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(LS.11.e) environmental issues.	<b>SE/TE:</b> Eutrophication, 314 Ocean Acidification, 315 Ecosystems and Human Interactions, 326-327 Reading Check: Evaluate, 327
<b>(LS.12) The student will investigate and understand that organisms reproduce and transmit genetic information to new generations.</b>	
(LS.12.a) the structure and role of DNA;	<b>SE/TE:</b> The Genetic Code, 391 DNA Replication, 392-393 Design It!, 393 Figure 4: Structure of DNA and RNA, 394 Lesson 3 Check, #1, #2, #7, 398  <b>Realize™ Digital Resources:</b> <b>Topic 7: Genes and Heredity</b> >Lesson 3: Genetic Coding and Protein Synthesis>Interactivity: The Role of DNA;>uInvestigate Lab: Modeling Protein Synthesis
(LS.12.b) the function of genes and chromosomes;	<b>SE/TE:</b> Genes and Alleles, 371 Chromosomes and Genes, 381-383 Forming Sex Cells, 385 Topic 7 SOL Review, #1, #6, 422  <b>Realize™ Digital Resources:</b> <b>Topic 7: Genes and Heredity</b> >Lesson 2: Chromosomes and Inheritance>Interactivity: Colorful Chromosomes
(LS.12.c) genotypes and phenotypes;	<b>SE/TE:</b> Genotype, 376 Reading Check: Determine Differences, 376 Lesson 1 Check, #1, #5, 377 Topic 7 SOL Review, #2, #5, 422 uDemonstrate Lab: Make the Right Call!, 426-429  <b>Realize™ Digital Resources:</b> <b>Topic 7: Genes and Heredity</b> >Lesson 1: Patterns of Inheritance>Interactivity: Pea Plant Puzzle >Lesson 4: Trait Variations>Interactivity: Track Your Traits

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(LS.12.d) characteristics that can and cannot be inherited;	<p><b>SE/TE:</b> Connect It!, 368 Using a Pedigree, 384 Model It!, 384 Lesson 2 Check, #1, #2, 388 Types of Mutations, 404-405 Lesson 4 Check, #2, 411 uDemonstrate Lab: Make the Right Call!, 426-429</p> <p><b>Realize™ Digital Resources:</b> <b>Topic 7: Genes and Heredity</b> &gt;Lesson 1: Patterns of Inheritance&gt;Inquiry Warm-Up Lab: How Tall is Tall?</p>
(LS.12.e) genetic engineering and its applications; and	<p><b>SE/TE:</b> Genetic Engineering, 414-417 Lesson 5 Check, #2, 421 Topic 7 SOL Review, #18, #19, 423 Topic 7 Evidence-Based Assessment, 424-425</p> <p><b>Realize™ Digital Resources:</b> <b>Topic 7: Genes and Heredity</b> &gt;Lesson 5: Genetic Technologies&gt;Interactivity: Solving Problems with Genetics;&gt;Enrichment: Advances in Genetics</p>
(LS.12.f) historical contributions and significance of discoveries related to genetics.	<p><b>SE/TE:</b> Mendel’s Observations, 369-370 Lesson 1 Check, #4, 377 Genetic Engineering, 414 Sequencing the Human Genome, 418 DNA Technologies, 419</p>

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<b>(LS.13) The student will investigate and understand that populations of organisms change over time.</b>	
(LS.13.a) the relationships of mutation, adaptation, natural selection, and extinction;	<p><b>SE/TE:</b> Natural Selection, 448 How Natural Selection Works, 449-451 Model It!: Natural Selection in Action, 451 Mutations, 453 Lesson 2 Check, #3, #5, 454 Extinction, 472 Lesson 4 Check, #6, 475 Topic 8 SOL Review, #10, 488</p> <p><b>Realize™ Digital Resources:</b> <b>Topic 8: Natural Selection and Change Over Time</b> &gt;Lesson 2: Natural Selection&gt;Interactivity: Mice Selection on the Prairie;&gt;Interactivity: Species Adaptation;&gt;Worksheet: Species Adaptation</p>
(LS.13.b) evidence of evolution of different species in the fossil record; and	<p><b>SE/TE:</b> Fossil Evidence of Evolution, 468-469 Comparisons of Anatomy, 470 Beginning and End of a Species, 472 Lesson 4 Check, #4, #5, 475</p> <p><b>Realize™ Digital Resources:</b> <b>Topic 8: Natural Selection and Change Over Time</b> &gt;Lesson 4: Evidence in the Fossil Record&gt;Interactivity: Along the Canyon Wall</p>
(LS.13.c) how environmental influences, as well as genetic variation, can lead to diversity of organisms.	<p><b>SE/TE:</b> Diversity of Life, 401 Environmental Factors, 406-407 Genes and Natural Selection, 452-453 Need for Mutations, 459 Lesson 3 Check, #5, 463 Topic 8 SOL Review, #10, 488</p>

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