A Correlation of

Elevate Science
Course 2, ©2019

To the

Arizona
Standards for Science (2018)

Grade 7

Pearson

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To the
Arizona Science Standards (2018), Grade 7

Introduction

This document demonstrates how ***Elevate Science ©2019*** meets the Arizona Science Standards (2018) for Grade 7. Correlation page references are to the Student and Teacher's Editions and cited at the page level.

Pearson is proud to introduce ***Elevate Science*** 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 tasks, open-ended Quests, uDemonstrate performance-based labs, 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.

Arizona Science Standards (2018) Grade 7	Elevate Science, Course 2 © 2019
Seventh Grade: Focus on Patterns; Cause and Effect; Structure and Function	
Physical Sciences: Students will explore how cause and effect take place within and between a wide variety of force and motion systems from forces on individual objects to the forces that shape our Earth.	
Physical Science Standards	
7.P2U1.1 Collect and analyze data demonstrating how electromagnetic forces can be attractive or repulsive and can vary in strength.	**SE/TE:** Magnetic Force and Energy, 465-466 Hand-On Lab: Detecting Fake Coins, 466 Magnetic Fields, 467-470 Model It! Combined Magnetic Field Lines, 469
7.P2U1.2 Develop and use a model to predict how forces act on objects at a distance.	**SE/TE:** Magnetic Force and Energy, 465-466 Interactivity: Modeling Magnetic Forces, 470 Magnetic Fields, 467-470 Hands-On Lab: Tracking Levitation, 471
7.P3U1.3 Plan and carry out an investigation that can support an evidence-based explanation of how objects on Earth are affected by gravitational force.	This standard is addressed in Elevate Science, Course 3, Topic 3, Lesson 4: Friction and Gravitational Interactions.
7.P3U1.4 Use non-algebraic mathematics and computational thinking to explain Newton's laws of motion.	This standard is addressed in Elevate Science, Course 3, Topic 3, Lesson 3: Newton's Laws of Motion.
Earth and Space Sciences: Students develop an understanding of the patterns of energy flowing along with matter cycling within and among the Earth's systems.	
Earth and Space Standards	
7.E1U1.5 Construct a model that shows the cycling of matter and flow of energy in the atmosphere, hydrosphere, and geosphere.	**SE/TE:** Conservation of Matter and Energy, 215 Water Cycle, 216-217 Hands-On Lab: Following Water, 217 Carbon and Oxygen Cycles, 218-219 Interactivity: Cycles of Matter, 219 Nitrogen Cycles, 220-221 Interactivity: Earth's Recyclables, 220 See also Elevate Science, Course 3; Topic 7; Lesson 1: Energy in Earth's Atmosphere; Lesson 2: Patterns of Circulation in the Atmosphere; and Lesson 3: Patterns of Circulation in the Ocean.

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7.E1U1.6 Construct a model to explain how the distribution of fossils and rocks, continental shapes, and seafloor structures provides evidence of the past plate motions.	This standard is addressed in Elevate Science, Course 1, Topic 8, Lesson 1: Evidence of Plate Motions.
7.E1U2.7 Analyze and interpret data to construct an explanation for how advances in technology has improved weather prediction.	This standard is addressed in Elevate Science, Course 1, Topic 6, Lesson 4: Predicting Weather Changes and Careers: Meteorologist.
Life Sciences: Students develop an understanding of the structure and function of cells.	
Life Science Standards	
7.L1U1.8 Obtain, evaluate, and communicate information to provide evidence that all living things are made of cells, cells come from existing cells, and cells are the basic structural and functional unit of all living things.	**SE/TE:** Cell Theory, 6-9 Plan It! Plastic or Wood, 9 Interactivity: Through a Microscope, 10 Interactivity: A Strange Specimen, 11
7.L1U1.9 Construct an explanation to demonstrate the relationship between major cell structures and cell functions (plant and animal).	**SE/TE:** Parts of a Cell, 15-20 Hands-On Lab: Comparing Cells, 17 Figure 2, The Control Center of the Cell, 18 Interactivity: Build a Cell, 18 Interactivity: Structure Function Junction, 19 Cells Working Together, 21-22 Figure 4, Organelles Up Close, 20 Function of the Cell Membrane, 26 Passive Transport, 26-29 Active Transport, 29 Moving Large Particles, 30
7.L1U1.10 Develop and use a model to explain how cells, tissues, and organ systems maintain life (animals).	**SE/TE:** Cells Make Up an Organism, 22 Figure 6, Levels of Organization, 22 Model It!, 77 Supporting: (Human) Levels of Organization, 74-75 Human Organ Systems, 76-79

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7.L1U1.11 Explain how organisms maintain internal stability and evaluate the effect of the external factors on organisms' internal stability.	**SE/TE:** Homeostasis, 88-90 Interactivity: Communication and Homeostasis, 89 Reading Check, 89 Reading Check, 90
7.L2U1.12 Construct an explanation for how some plant cells convert light energy into food energy.	**SE/TE:** Photosynthesis, 44-45 Interactivity: Making Food for Cells, 44 Expressing Photosynthesis, 46-47 Lesson 5 Check, 48 uEngineer It!, An Artificial Leaf, 49