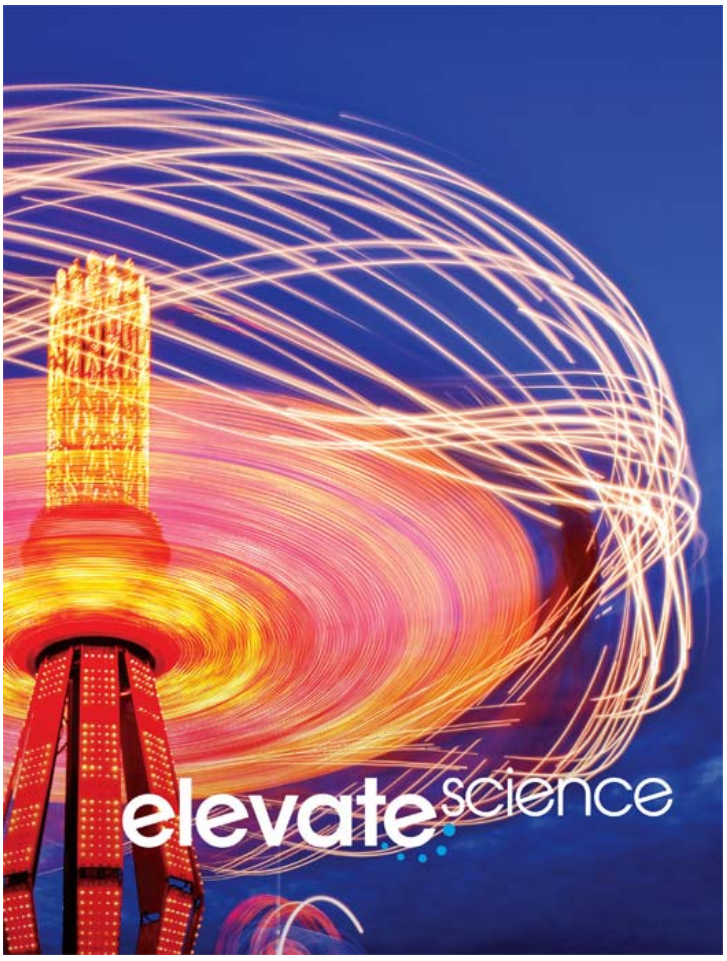
A Correlation of

Elevate Science

Grade 3, ©2019



To the

Next Generation Science Standards

DCI (Disciplinary Code Idea) Arrangement

SAVVAS

A Correlation of Elevate Science, Grade 3, ©2019
To the
Next Generation Science Standards, DCI Arrangement

Introduction

The following document demonstrates how the ***Elevate Science, ©2019*** program supports the Next Generation Science Standards, Grade 3. For each standard, correlation references are to the Student Edition and Teacher Edition where applicable.

Elevate Science is a comprehensive K-5 science program that focuses on active, student-centered learning. It builds students' critical thinking, questioning, and collaboration skills, and fuels interest in STEM and creative problem solving while supporting literacy development for elementary-age learners. Developed to support Next Generation Science Standards (NGSS), ***Elevate Science*** integrates three dimensional learning of the Scientific and Engineering Practices, Crosscutting Concepts (CCC), and Disciplinary Core Ideas (DCIs).

The ***Elevate Science*** blended print and digital curriculum engages students in phenomena-based inquiry and hands-on investigations.

- Problem–based learning Quests put students on a journey of discovery
- Engineering-focused features infuse STEM learning
- Coding and innovation engage students and build 21st century skills

The Teacher's Edition of ***Elevate Science*** helps elementary educators teach science with confidence: Scaffolding, ELD, differentiated instruction, and an instructional organization based upon the 5E learning model, (Engage, Explore, Explain, Extend/Elaborate, Evaluate), provide all the support needed for successful teaching practices. Professional development offers point-of-use support. A full-view approach to inquiry and testing provides new options for a variety of hands-on labs and assessments for three-dimensional learning.

Elevate Science 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 argument. 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, Grade 3, ©2019
To the
Next Generation Science Standards, DCI Arrangement

Table of Contents

Performance Expectation 3-PS2-1 4

Performance Expectation 3-PS2-2 6

Performance Expectation 3-PS2-3 7

Performance Expectation 3-PS2-4 8

Performance Expectation 3-LS1-1 9

Performance Expectation 3-LS2-1 10

Performance Expectation 3-LS3-1 11

Performance Expectation 3-LS3-2 12

Performance Expectation 3-LS4-1 13

Performance Expectation 3-LS4-2 14

Performance Expectation 3-LS4-3 15

Performance Expectation 3-LS4-4 16

Performance Expectation 3-ESS2-1 17

Performance Expectation 3-ESS2-2 18

Performance Expectation 3-ESS3-1 18

Performance Expectation 3–5-ETS1-1 20

Performance Expectation 3–5-ETS1-2 21

Performance Expectation 3–5-ETS1-3 22

Next Generation Science Standards	Elevate Science ©2019
3-PS2 Motion and Stability: Forces and Interactions	
Performance Expectation 3-PS2-1	
Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. **Clarification Statement** Examples could include an unbalanced force on one side of a ball can make it start moving; and, balanced forces pushing on a box from both sides will not produce any motion at all. **Assessment Boundary** Assessment is limited to one variable at a time: number, size, or direction of forces. Assessment does not include quantitative force size, only qualitative and relative. Assessment is limited to gravity being addressed as a force that pulls objects down.	**SE/TE:** 2–3, 4, 31, 35, 39, 40–41, 57, 67 **TE only:** 1d, 24a, 34a
Disciplinary Core Ideas	
PS2.A: Forces and Motion Each force acts on one particular object and has both strength and a direction. An object at rest typically has multiple forces acting on it, but they add to give zero net force on the object. Forces that do not sum to zero can cause changes in the object's speed or direction of motion.	**SE/TE:** 12, 25, 30, 38
PS2.B: Types of Interactions Objects in contact exert forces on each other.	**SE/TE:** 27 **TE only:** 6a, 24a, 34a

A Correlation of Elevate Science, Grade 3, ©2019
To the
Next Generation Science Standards, DCI Arrangement

Next Generation Science Standards	Elevate Science ©2019
Science and Engineering Practices	
Planning and Carrying Out Investigations• Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. **Scientific Investigations Use a Variety of Methods** •Science investigations use a variety of methods, tools, and techniques.	**SE/TE:** 4, 91 **TE only:** 6a, 24a, 34a, 294-295, EM12-EM13
Crosscutting Concepts	
Cause and Effect Cause and Effect relationships are routinely identified.	**TE only:** 6a, 24a, 34a

A Correlation of Elevate Science, Grade 3, ©2019
To the
Next Generation Science Standards, DCI Arrangement

Next Generation Science Standards	Elevate Science ©2019
Performance Expectation 3-PS2-2	
Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. **Clarification Statement** Examples of motion with a predictable pattern could include a child swinging in a swing, a ball rolling back and forth in a bowl, and two children on a see-saw. **Assessment Boundary** Assessment does not include technical terms such as period and frequency.	**SE/TE:** 4, 7, 17, 18, 20–21 **TE only:** 1d, 16a, 24a
Disciplinary Core Ideas	
PS2.A: Forces and Motion The patterns of an object's motion in various situations can be observed and measured; when that past motion exhibits a regular pattern, future motion can be predicted from it.	**SE/TE:** 8, 10–11, 17, 18, 20-21, 24, 25, 26, 32, 48–49 **TE only:** 16a
Science and Engineering Practices	
Planning and Carrying Out Investigations Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.	**SE/TE:** 40–41, 48–49, 91, 111, 116–117, EMS5, EMS7 **TE only:** 16a, 294-295, EM12-EM13
Science Knowledge is Based on Empirical Evidence Science findings are based on recognizing patterns.	**SE/TE:** 135
Crosscutting Concepts	
Patterns Patterns of change can be used to make predictions.	**SE/TE:** 7 **TE only:** 16a

Next Generation Science Standards	Elevate Science ©2019
Performance Expectation 3-PS2-3	
Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. **Clarification Statement** Examples of an electric force could include the force on hair from an electrically charged balloon and the electrical forces between a charged rod and pieces of paper; examples of a magnetic force could include the force between two permanent magnets, the force between an electromagnet and steel paperclips, and the force exerted by one magnet versus the force exerted by two magnets. Examples of cause and effect relationships could include how the distance between objects affects strength of the force and how the orientation of magnets affects the direction of the magnetic force.] **Assessment Boundary** Assessment is limited to forces produced by objects that can be manipulated by students, and electrical interactions are limited to static electricity.	**SE/TE:** 54, 72–73, 74–75, 82–83 **TE only:** 50d, 56a, 66a, 74-75
Disciplinary Core Ideas	
PS2.B: Types of Interactions Electric, and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other.	**SE/TE:** 6, 28–29, 54, 57, 59, 62, 64, 70, 82–83 **TE only:** 24a, 34a, 56a
Science and Engineering Practices	
Asking Questions and Defining Problems Ask questions that can be investigated based on patterns such as cause and effect relationships.	**TE only:** 56a, 66a, 294-295, EM10-EM11

Next Generation Science Standards	Elevate Science ©2019
Crosscutting Concepts	
Cause and Effect Cause and effect relationships are routinely identified, tested, and used to explain change.	**SE/TE:** 70, 235 **TE only:** 56a, 66a
Performance Expectation 3-PS2-4	
Define a simple design problem that can be solved by applying scientific ideas about magnets. **Clarification Statement** Examples of problems could include constructing a latch to keep a door shut and creating a device to keep two moving objects from touching each other.	**SE/TE:** 72–73, 74–75, 82–83 **TE only:** 50d, 66a, 74-75
Disciplinary Core Ideas	
PS2.B: Types of Interactions Electric, and magnetic forces between a pair of objects do not require that the objects be in contact. The sizes of the forces in each situation depend on the properties of the objects and their distances apart and, for forces between two magnets, on their orientation relative to each other.	**TE only:** 66a
Science and Engineering Practices	
Asking Questions and Defining Problems Define a simple problem that can be solved through the development of a new or improved object or tool.	**SE/TE:** 57, 67, 72–73, 276–277 **TE only:** 66a, EM10-EM11
Crosscutting Concepts	
Interdependence of Science, Engineering, and Technology Scientific discoveries about the natural world can often lead to new and improved technologies, which are developed through the engineering design process.	**SE/TE:** 116–117

A Correlation of Elevate Science, Grade 3, ©2019
To the
Next Generation Science Standards, DCI Arrangement

Next Generation Science Standards	Elevate Science ©2019
3-LS1 From Molecules to Organisms: Structure and Processes	
Performance Expectation 3-LS1-1	
Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. **Clarification Statement** Changes organisms go through during their life form a pattern. **Assessment Boundary** Assessment of plant life cycles is limited to those of flowering plants. Assessment does not include details of human reproduction	**SE/TE:** 175, 180–181, 182 **TE only:** 168d, 174a
Disciplinary Core Ideas	
LS1.B: Growth and Development of Organisms Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.	**TE only:** 174a
Science and Engineering Practices	
Developing and Using Models Develop models to describe phenomena.	**SE/TE:** 250–251, 259 **TE only:** 174a, EM6-EM7, EM12-EM13
Scientific Knowledge is Based on Empirical Evidence Science findings are based on recognizing patterns.	**SE/TE:** 135
Crosscutting Concepts	
Patterns Patterns of change can be used to make predictions.	**SE/TE:** 7, 17, 21 **TE only:** 174a