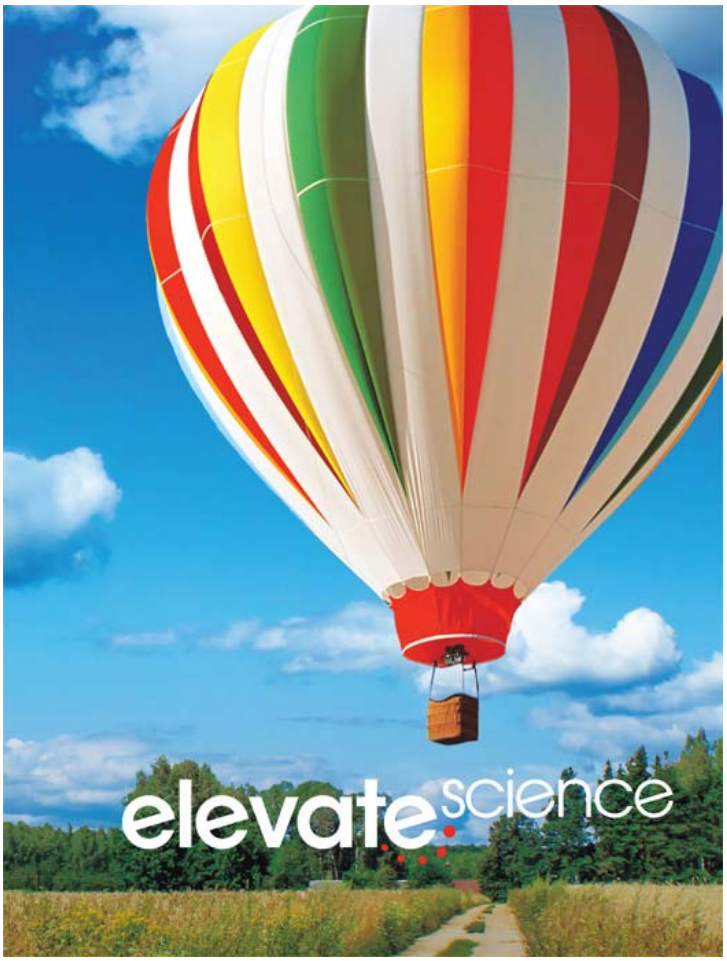
A Correlation of

Elevate Science

Grade 5, ©2019



To the

Next Generation Science Standards

DCI (Disciplinary Code Idea) Arrangement

Pearson

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Next Generation Science Standards, DCI Arrangement

Introduction

The following document demonstrates how the ***Elevate Science, ©2019*** program supports the Next Generation Science Standards, Grade 5. 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.

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Next Generation Science Standards	Elevate Science ©2019
5-PS1 Matter and Its Interactions	
Performance Expectation 5-PS1-1	
Develop a model to describe that matter is made of particles too small to be seen. **Clarification Statement** Examples of evidence supporting a model could include adding air to expand a basketball, compressing air in a syringe, dissolving sugar in water, and evaporating salt water. **Assessment Boundary** Assessment does not include the atomic-scale mechanism of evaporation and condensation or defining the unseen particles.	**SE/TE:** 17, 23, 27, 67 **TE Only:** 1d, 16a
Disciplinary Core Ideas	
PS1.A: Structure and Properties of Matter Matter of any type can be subdivided into particles that are too small to see, but even then the matter still exists and can be detected by other means. A model showing that gases are made from matter particles that are too small to see and are moving freely around in space can explain many observations, including the inflation and shape of a balloon and the effects of air on larger particles or objects.	**SE/TE:** 16–17, 20-21, 54 **TE Only:** 26a
Science and Engineering Practices	
Developing and Using Models Develop a model to describe phenomena.	**SE/TE:** 28, **TE Only:** 64a
Crosscutting Concepts	
Scale, Proportion, and Quantity Natural objects exist from the very small to the immensely large.	**SE/TE:** 18, 20–21

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Next Generation Science Standards	Elevate Science ©2019
Performance Expectation 5-PS1-2	
Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved. **Clarification Statement** Examples of reactions or changes could include phase changes, dissolving, and mixing that form new substances. **Assessment Boundary** Assessment does not include distinguishing mass and weight.	**SE/TE:** 46, 49, 57, 65 **TE Only:** 42d, 48a, 56a, 64a, 78a
Disciplinary Core Ideas	
PS1.A: Structure and Properties of Matter The amount (weight) of matter is conserved when it changes form, even in transitions in which it seems to vanish.	**SE/TE:** 65, **TE Only:** 48a, 56a, 64a, 78a
PS1.B: Chemical Reactions No matter what reaction or change in properties occurs, the total weight of the substances does not change.	**TE Only:** 48a, 56a, 64a, 78a
Science and Engineering Practices	
Using Mathematical and Computational Thinking Measure and graph quantities such as weight to address scientific and engineering questions and problems.	**SE/TE:** 46, 57, 65, 74–75, 86–87, EM5 **TE Only:** 48a, 56a, 64a
Crosscutting Concepts	
Scale, Proportion, and Quantity Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.	**SE/TE:** 6, **TE Only:** 16a, 26a, 56a, 64a
Connecting to Nature of Science: Scientific Knowledge Assumes an Order and Consistency in Natural Systems Science assumes consistent patterns in natural systems.	**SE/TE:** 60, 72

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Next Generation Science Standards	Elevate Science ©2019
Performance Expectation 5-PS1-3	
Make observations and measurements to identify materials based on their properties. **Clarification Statement** Examples of materials to be identified could include baking soda and other powders, metals, minerals, and liquids. Examples of properties could include color, hardness, reflectivity, electrical conductivity, thermal conductivity, response to magnetic forces, and solubility; density is not intended as an identifiable property. **Assessment Boundary** Assessment does not include density or distinguishing mass and weight.	**SE/TE:** 4, 7, 8, 9, 10–11, 14, 17, 23, 27, 34, 40–41 **TE Only:** 1d, 6a, 26a
Disciplinary Core Ideas	
PS1.A: Structure and Properties of Matter Measurements of a variety of properties can be used to identify materials. (Boundary: At this grade level, mass and weight are not distinguished, and no attempt is made to define the unseen particles or explain the atomic-scale mechanism of evaporation and condensation.)	**SE/TE:** 2–3, 4, 7, 8, 10-11, 14, 27, 32–33, 34, 38–39, 40–41, 63 **TE Only:** 6a, 16a
Science and Engineering Practices	
Planning and Carrying Out Investigations Make observations and measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon.	**SE/TE:** 4, 14, 17, 23, 46, 49, 57, 65, 74–75, 79, 86–87, 94–95 **TE Only:** 6a, 246a, 254a
Crosscutting Concepts	
Scale, Proportion, and Quantity Standard units are used to measure and describe physical quantities such as weight, time, temperature, and volume.	**SE/TE:** 6TE, 7, 9, 11, 29, 37 **TE Only:** 6a, 16a, 26a, 48a, 78a

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Performance Expectation 5-PS1-4	
Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	**SE/TE:** 79, 94–95 **TE Only:** 42d, 64a, 78a
Disciplinary Core Ideas	
PS1.B: Chemical Reactions When two or more different substances are mixed, a new substance with different properties may be formed.	**SE/TE:** 68–69 **TE Only:** 26a
Science and Engineering Practices	
Planning and Carrying Out Investigations 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.	**SE/TE:** 65 **TE Only:** 64a, 78a
Crosscutting Concepts	
Cause and Effect Cause and effect relationships are routinely identified and used to explain change.	**SE/TE:** 53, 59, 92–93, 123 **TE Only:** 56a, 78a

Next Generation Science Standards	Elevate Science ©2019
5-PS2 Motion and Stability: Forces and Interactions	
Performance Expectation 5-PS2-1	
Support an argument that the gravitational force exerted by Earth on an object is directed down. **Clarification Statement** "Down" is a local description of the direction that points toward the center of the spherical Earth. **Assessment Boundary** Assessment does not include mathematical representation of gravitational force.	**SE/TE:** 279, 280, 281, 283 **TE Only:** 272d, 278a
Disciplinary Core Ideas	
PS2.B: Types of Interactions The gravitational force of Earth acting on an object near Earth's surface pulls that object toward the planet's center.	**SE/TE:** 279, 280, 281, 282, 283, 308–309 **TE Only:** 278a
Science and Engineering Practices	
Engage in Argument from Evidence Support an argument with evidence, data, or a model.	**SE/TE:** 279, 282 **TE Only:** 278a
Crosscutting Concepts	
Cause and Effect Cause and effect relationships are routinely identified and used to explain change.	**SE/TE:** 355, 372, 379, 392 **TE Only:** 278a