

Correlation with National Science Standards

Use the chart below to find Science A–Z units that best support the Next Generation Science Standards* topics at grade 1 and several featured resources from those units that provide strong connections. Each Performance Expectation in the chart represents all three dimensions: Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts.



Storylines from Science A–Z present a coherent sequence of lessons that target the bundle of Performance Expectations within each topic at grade 1. They include:

- [Investigating Sound and Light](#) (Waves: Light and Sound)
- [How Plants and Animals Survive](#) (Structure, Function, and Information Processing)
- [Earth's Movements and What We See in the Sky](#) (Space Systems: Patterns and Cycles)

1. Waves: Light and Sound		
Performance Expectations	Disciplinary Core Ideas	Science A–Z Units (Featured Resources)
1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	PS4.A: Wave Properties	K–2 Energy (Unit Nonfiction Books; <i>Sound of Drums</i> FOCUS Book; <i>Tuning Forks and Sound</i> Process Activity) 3–4 Sound (Unit Nonfiction Books)
1-PS4-2. Make observations to construct an evidence-based account that objects can be seen only when illuminated.	PS4.B: Electromagnetic Radiation	K–2 Light (Unit Nonfiction Books; <i>Light from Space</i> FOCUS Book; <i>Properties of Light</i> Investigation Pack)
1-PS4-3. Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	PS4.B: Electromagnetic Radiation	K–2 Light (Unit Nonfiction Books; <i>Stained Glass</i> FOCUS Book; <i>Fun House Mirrors</i> FOCUS Book; Concept Books; <i>Shadows Change Shape</i> Quick Reads)
1-PS4-4. Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	PS4.C: Information Technologies and Instrumentation	K–2 Light (<i>Fireflies</i> FOCUS Book) 3–4 Sound (<i>String Telephones</i> Process Activity; <i>Communicating with Sound Patterns</i> Project-Based Learning Pack)

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1. Structure, Function, and Information Processing		
Performance Expectations	Disciplinary Core Ideas	Science A–Z Units (Featured Resources)
1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	LS1.A: Structure and Function	K–2 Animals (<i>Animal Protection</i> Project-Based Learning Pack; <i>Catch Dinner</i> Quick Reads; <i>Grab Food</i> Quick Reads; <i>Animals of the Air</i> FOCUS Book; <i>Animals of the Deep Ocean</i> FOCUS Book; <i>Animals of the Ice and Snow</i> FOCUS Book) K–2 Plants (Unit Nonfiction Books; <i>Insect Control</i> Debate; <i>Giant Sequoias</i> FOCUS Book)
	LS1.D: Information Processing	K–2 Senses (<i>Animals Ears</i> Quick Reads; <i>How Animals Smell</i> Quick Reads; <i>Properties of Senses</i> Investigation Pack)
1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	LS1.B: Growth and Development of Organisms	K–2 Living/Non-Living (<i>Living Things</i> Investigation Pack; <i>Babies and Parents</i> FOCUS Book; <i>Living Things Reproduce</i> Concept Book)
1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	LS3.A: Inheritance of Traits	K–2 Living/Non-Living (<i>Babies and Parents</i> FOCUS Book; <i>Fruit Seeds</i> Process Activity)
	LS3.B: Variation of Traits	K–2 Living/Non-Living (<i>Babies and Parents</i> FOCUS Book) K–2 Plants (<i>Roses</i> FOCUS Book)

1. Space Systems: Patterns and Cycles		
Performance Expectations	Disciplinary Core Ideas	Science A–Z Units (Featured Resources)
1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.	ESS1.A: The Universe and its Stars	K–2 Earth, Moon, and Sun (Unit Nonfiction Books; <i>Modeling the Earth, Moon, and Sun</i> Process Activity; <i>Using the Sun to Tell Time</i> Project-Based Learning Pack; <i>Shapes in the Night Sky</i> FOCUS Book; <i>Shadows in Space</i> FOCUS Book; <i>Days and Moon Phases</i> Interactive Science Lesson)
1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	ESS1.B: Earth and the Solar System	K–2 Weather (Unit Nonfiction Books; <i>Earth’s Seasons</i> Science Diagram) K–2 Earth, Moon, and Sun (<i>Seasons and Sunlight</i> FOCUS book)