Science A–Z

GRADE K

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 kindergarten 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.*

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

- *Pushes and Pulls* (Forces and Interactions: Pushes and Pulls)
- *Living Things and the Places Where They Live* (Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment)
- *Sunlight and Weather* (Weather and Climate)

K. Forces and Interactions: Pushes and Pulls		
Performance Expectations	**Disciplinary Core Ideas**	**Science A–Z Units** (Featured Resources)
K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	PS2.A: Forces and Motion	**K–2 Things Move** (Unit Nonfiction Books; *Launch Weights with Rubber Bands* Process Activity; *Motion* Interactive Science Lesson) **K–2 Doing Work** (Unit Nonfiction Books; *Trucks and Diggers* FOCUS Book)
	PS2.B: Types of Interactions	**K–2 Things Move** (*People Movers* Investigation Pack; *Amusement Park Rides* Quick Reads) **K–2 Doing Work** (*Tasks and Tools* Process Activity)
	PS3.C: Relationship Between Energy and Forces	**K–2 Things Move** (Unit Nonfiction Books; *Forces That Make Things Move* Project-Based Learning Pack)
K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	PS2.A: Forces and Motion	**K–2 Things Move** (Concept Books) **K–2 Doing Work** (Unit Nonfiction Books; *Tasks and Tools* Process Activity) **K–2 Data Sheets** (*Keeping Records* Interactive Science Lesson)
	ETS1.A: Defining Engineering Problems	**K–2 Things Move** (Unit Nonfiction Books; *Forces That Make Things Move* Project-Based Learning Pack; Career Files) **K–2 Doing Work** (Unit Nonfiction Books)

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K. Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment		
Performance Expectations	**Disciplinary Core Ideas**	**Science A–Z Units** (Featured Resources)
K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	LS1.C: Organization for Matter and Energy Flow in Organisms	**K–2 Animals** (Unit Nonfiction Books; *Animals Around You* Process Activity) **K–2 Plants** (Unit Nonfiction Books; *Plants, Water, and Sunlight* Process Activity; *City Gardening* FOCUS Book)
K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	ESS2.E: Biogeology	**K–2 Animals** (*Animals in the Ground* FOCUS Book; *Animals of the Rivers* FOCUS Book) **K–2 Plants** (*Powerful Plants* FOCUS Book)
	ESS3.C: Human Impacts on Earth Systems	**K–2 Earth's Surface** (Unit Nonfiction Books; Concept Books)
K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	ESS3.A: Natural Resources	**K–2 Animals** (*What Animals Need* Investigation Pack) **K–2 Plants** (*What Plants Need* Investigation Pack; *Giant Sequoias* FOCUS Book)
K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	ESS3.C: Human Impacts on Earth Systems	**K–2 Earth's Surface** (Unit Nonfiction Books; *Drain the Swamp* Debate)
	ETSA1.B: Developing Possible Solutions	**K–2 Earth's Surface** (*Erosion Control* Process Activity; *Making Land Useful* Project-Based Learning Pack)

K. Weather and Climate		
Performance Expectations	**Disciplinary Core Ideas**	**Science A–Z Units** (Featured Resources)
K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.	ESS2.D: Weather and Climate	**K–2 Weather** (*Weather Journal* Process Activity; *Cool Clouds* FOCUS Book; *Forecasting the Weather* FOCUS Book; *Forecasting the Weather* Project-Based Learning Pack)
K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	ESS3.B: Natural Hazards	**K–2 Weather** (*Wind* Investigation Pack; *Harmful Hurricanes* FOCUS Book)
	ETS1.A: Defining and Delimiting an Engineering Problem	**K–2 Weather** (*Forecasting the Weather* Project-Based Learning Pack; *Hurricane Hunters* Video)
K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface.	PS3.B: Conservation of Energy and Energy Transfer	**K–2 Weather** (Unit Nonfiction Books; *Our Shining Star* FOCUS Book; *Weather Journal* Process Activity) **K–2 Earth, Moon, and Sun** (Unit Nonfiction Books; *Seasons and Sunlight* FOCUS Book)
K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	PS3.B: Conservation of Energy and Energy Transfer	**K–2 Weather** (*Our Shining Star* FOCUS Book)