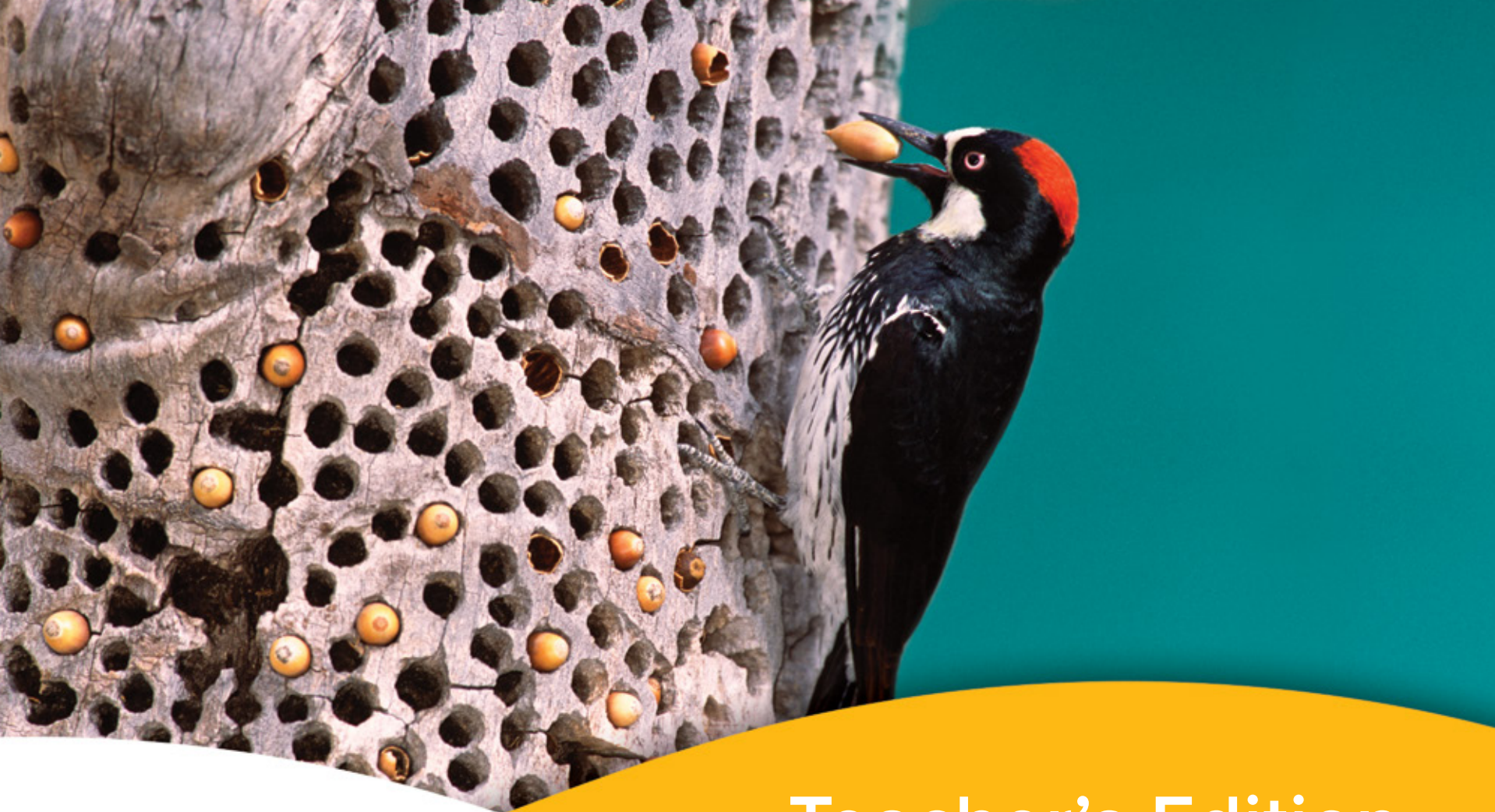




Teacher's Edition
Kindergarten • Unit 2

Inspire Science

Our Changing World

Mc
Graw
Hill
Education



Performance Expectations at a Glance

In this unit, students will discover and practice the Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts needed to perform the following Performance Expectations.

Performance Expectations	MODULE: Changes to the Environment	MODULE: Protect Earth
K-ESS2-2	●	●
K-ESS3-1		●
K-ESS3-3		●
K-2-ETS1-1		●

Correlations by Module to the NGSS

MODULE: Changes to the Environment		
K-ESS2	Earth's Systems	
 K-ESS2-2	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. <i>[Clarification Statement: Examples of plants and animals changing their environment could include a squirrel digs in the ground to hide its food and tree roots can break concrete.]</i>	<i>14–15, 16–17, 22–25, 30–31, 36–37, 44–45</i>
SEP Science and Engineering Practices		
Engaging in Argument from Evidence Engaging in argument from evidence in K–2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s). • Construct an argument with evidence to support a claim. (K-ESS2-2)		<i>14–15, 16–17, 22–25, 30–31, 36–37, 44–45</i>
DCI Disciplinary Core Ideas		
ESS2.E: Biogeology • Plants and animals can change their environment. (K-ESS2-2)		<i>12, 14–15, 16–17, 21, 22–25, 30–31, 36–37, 40–41, 42–43, 44–45, 49–50, 51</i> <i>Teacher's Edition Only: 26, 28, 29, 32, 38</i>
ESS3.C: Human Impacts on Earth Systems • Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (secondary to K-ESS2-2)		<i>36–37, 40–41, 42–43, 44–45</i>

Inquiry activities are in italics.

Continued from previous page.

CCC Crosscutting Concepts	
Systems and System Models • Systems in the natural and designed world have parts that work together. (K-ESS2-2)	12, 14–15, 17, 22–25, 30–31, 36–37, 40–41, 49–50 <i>Teacher's Edition Only: 27</i>

Other Correlations	
NGSS Math Connections	
K.MD.B.3	5
ELD Connections	
PI.K.2	<i>Teacher's Edition Only: 24, 32, 43</i>
PI.K.3	<i>Teacher's Edition Only: 11</i>
PI.K.5	<i>Teacher's Edition Only: 18</i>
PI.K.6	<i>Teacher's Edition Only: 13</i>
CCSS ELA/Literacy Connections	
RI.K.1	42–43
RI.K.2	42–43
RI.K.10	28
SL.K.5	18, 21, 28, 32, 35, 48, 50
L.K.1	9, 21, 33, 35 <i>Teacher's Edition Only: 13, 28</i>
ALSO INTEGRATES:	
CCC Stability and Change	29, 40–41

Inquiry activities are in italics.

Correlations by Module to the NGSS

MODULE: Protect Earth		
K-ESS2	Earth's Systems	
 K-ESS2-2	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. <i>[Clarification Statement: Examples of plants and animals changing their environment could include a squirrel digs in the ground to hide its food and tree roots can break concrete.]</i>	60–62, 66
SEP Science and Engineering Practices		
Engaging in Argument from Evidence Engaging in argument from evidence in K–2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s). • Construct an argument with evidence to support a claim. (K-ESS2-2)		60–62, 66
DCI Disciplinary Core Ideas		
ESS2.E: Biogeology • Plants and animals can change their environment. (K-ESS2-2)		55, 66 Teacher's Edition Only: 63
ESS3.C: Human Impacts on Earth Systems • Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (secondary to K-ESS2-2)		60–62, 65, 66, 72–73, 78–79, 83–84 Teacher's Edition Only: 74, 76
CCC Crosscutting Concepts		
Systems and System Models • Systems in the natural and designed world have parts that work together. (K-ESS2-2)		60–62, 66

K-ESS3	Earth and Human Activity	
 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. <i>[Clarification Statement: Examples of relationships could include that deer eat buds and leaves, therefore, they usually live in forested areas; and grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.]</i>	Teacher's Edition Only: 63

Inquiry activities are in italics.

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SEP Science and Engineering Practices	
Developing and Using Models Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, storyboard) that represent concrete events or design solutions. • Use a model to represent relationships in the natural world. (K-ESS3-1)	Teacher's Edition Only: 63
DCI Disciplinary Core Ideas	
ESS3.A Natural Resources • Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)	60–62, 66 Teacher's Edition Only: 63
CCC Crosscutting Concepts	
Systems and System Models • Systems in the natural and designed world have parts that work together. (K-ESS3-1)	60–62, Teacher's Edition Only: 63

K-ESS3	Earth and Human Activity	
 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. <i>[Clarification Statement: Examples of human impact on the land could include cutting trees to produce paper and using resources to produce bottles. Examples of solutions could include reusing paper and recycling cans and bottles.]</i>	72–73, 77 Teacher's Edition Only: 67, 74, 76
SEP Science and Engineering Practices		
Obtaining, Evaluating, and Communicating Information • Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information. • Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas. (K-ESS3-3)		83–84
DCI Disciplinary Core Ideas		
ESS3.C: Human Impacts on Earth Systems • Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (K-ESS3-3)		60–62, 65, 66, 72–73, 78–79, 83–84 Teacher's Edition Only: 74, 76
ETS1.B: Developing Possible Solutions • Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. (secondary to K-ESS3-2)		72–73, 83–84

Inquiry activities are in italics.

Next Generation Science Standards

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CCC Crosscutting Concepts	
Cause and Effect Events have causes that generate observable patterns. (K-ESS3-3)	60–62, 78–79

K-2-ETS1	Engineering Design	
 K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	83–84
SEP Science and Engineering Practices		
Asking Questions and Defining Problems Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions. - Ask questions based on observations to find more information about the natural and/or designed world(s). (K-2-ETS1-1) - Define a simple problem that can be solved through the development of a new or improved object or tool.		83–84
DCI Disciplinary Core Ideas		
ETS1.A: Defining and Delimiting Engineering Problems - A situation that people want to change or create can be approached as a problem to be solved through engineering. (K–2-ETS1-1) - Asking questions, making observations, and gathering information are helpful in thinking about problems. (K–2-ETS1-1) - Before beginning to design a solution, it is important to clearly understand the problem. (K–2-ETS1-1)		83–84

Other Correlations	
NGSS Math Connections	
MD.B.3	73 Teacher’s Edition <i>Only</i> : 55

Inquiry activities are in italics.

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ELD Connections	
PI.K.2	Teacher's Edition <i>Only</i> : 68, 72
PI.K.3	Teacher's Edition <i>Only</i> : 61
PI.K.5	Teacher's Edition <i>Only</i> : 70
PI.K.6	Teacher's Edition <i>Only</i> : 82
CCSS ELA/Literacy Connections	
SL.K.2	65
SL.K.3	59
SL.K.5	68, 71, 82
W.K.8	79
ALSO INTEGRATES:	
Develop and Use Models	83–84 Teacher's Edition <i>Only</i> : 63
SEP Constructing Explanations and Designing Solutions	83–84
CCC Stability and Change	66

Inquiry activities are in italics.