



2014 Oregon Science Standards (NGSS) Overview Correlation

Grades K-5

Three-Dimensional Learning Design Taught in 30 Minutes a Day

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	B Physical	B Life	S Earth & Space
Kindergarten	Push, Pull, Go <i>K-PS2-1; K-PS2-2</i>	Living Things and Their Needs <i>K-LS1-1; K-ESS2-2; K-ESS3-1; K-ESS3-3</i>	Weather and Sky <i>K-PS3-1; K-PS3-2; K-ESS2-1; K-ESS3-2</i>
1st Grade	Light and Sound Waves <i>1-PS4-1; 1-PS4-2; 1-PS4-3; 1-PS4-4</i>	Exploring Organisms <i>1-LS1-1; 1-LS1-2; 1-LS3-1</i>	Sky Watchers <i>1-ESS1-1; 1-ESS1-2</i>
2nd Grade	Matter <i>2-PS1-1; 2-PS1-2; 2-PS1-3; 2-PS1-4</i>	Ecosystem Diversity <i>2-LS2-1; 2-LS2-2; 2-LS4-1</i>	Earth Materials <i>2-ESS1-1; 2-ESS2-1; 2-ESS2-2; 2-ESS2-3</i>
3rd Grade	Forces and Interactions <i>3-PS2-1; 3-PS2-2; 3-PS2-3; 3-PS2-4</i>	Life in Ecosystems <i>3-LS1-1; 3-LS2-1; 3-LS3-1; 3-LS3-2; 3-LS4-1; 3-LS4-2; 3-LS4-3; 3-LS4-4</i>	Weather and Climate Patterns <i>3-ESS2-1; 3-ESS2-2; 3-ESS3-1</i>
4th Grade	Energy Works! <i>4-PS3-1; 4-PS3-2; 4-PS3-3; 4-PS3-4; 4-PS4-1; 4-PS4-3; 4-ESS3-1</i>	Plant and Animal Structures <i>4-LS1-1; 4-LS1-2; 4-PS4-2</i>	Changing Earth <i>4-ESS1-1; 4-ESS2-1; 4-ESS2-2; 4-ESS3-2</i>
5th Grade	Structure and Properties of Matter <i>5-PS1-1; 5-PS1-2; 5-PS1-3; 5-PS1-4</i>	Matter and Energy in Ecosystems <i>5-PS3-1; 5-LS1-1; 5-LS2-1; 5-ESS2-1; 5-ESS2-2; 5-ESS3-1</i>	Earth and Space Systems <i>5-PS2-1; 5-ESS1-1; 5-ESS1-2</i>
	Science	Science	Science

2014 Oregon Science Standards (NGSS*) Overview Correlation	
KINDERGARTEN	
K. Forces and Interactions: Pushes and Pulls	
Performance Expectation	Correlation to Building Blocks of Science [®]
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.	<u>Push, Pull, Go</u> TG: Lesson 1 pgs. 1–11, AOS, SAS 1A, SAS 1B, SAS 1C; Lesson 2 pgs. 17–21/AOS, SAS 2; Lesson 3 pgs. 27–32, AOS, SAS 3; Lesson 4 pgs. 35–40, AOS, SAS 4; Lesson 5 pgs. 45–53, SAS 5A, 5B SR: pgs. 2–15
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.	<u>Push, Pull, Go</u> TG: Lesson 4 pgs. 35–40, AOS, SAS 4; Lesson 5 pgs. 45–53, SAS 5A, SAS 5B SR: pgs. 4–7, 10–13, 15
K. Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment	
Performance Expectation	Correlation to Building Blocks of Science [®]
K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	<u>Living Things and Their Needs</u> TG: Lesson 1 pgs. 1–9, AOS, SAS 1A, SAS 1B; Lesson 2 pgs. 15–23, AOS, SAS 2A, SAS 2B SR: pgs. 2–10
K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	<u>Living Things and Their Needs</u> TG: Lesson 3 pgs. 29–37, AOS, SAS 3
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.	<u>Living Things and Their Needs</u> TG: Lesson 3 pgs. 29–37, AOS, SAS 3 SR: pgs. 4, 8–10
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.	<u>Living Things and Their Needs</u> TG: Lesson 4 pgs. 41–47, AOS

TG–Teacher’s Guide; **AOS**–Assessment Observation Sheet; **SAS**–Student Activity Sheet;
TS–Teacher Sheet; **SR**–Student Reader

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K. Weather and Climate	
Performance Expectation	Correlation to Building Blocks of Science®
K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.	<u>Weather and Sky</u> TG: Lesson 1 pgs. 1–9, AOS, SAS 1A, SAS 1B; Lesson 2 pgs. 17–29, AOS, SAS 2A, SAS 2B, SAS 2C, SAS 2D, SAS 2E SR: pg. 10
K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	<u>Weather and Sky</u> TG: Lesson 3 pgs. 45–55, AOS, SAS 3; Lesson 4 pgs. 61–68, AOS, SAS 4A, SAS 4B, SAS 4C, SAS 4D
K-PS3-1. Make observations to determine the effect of sunlight on Earth’s surface.	<u>Weather and Sky</u> TG: Lesson 4 pgs. 61–68, AOS, SAS 4A, SAS 4B, SAS 4C, SAS 4D SR: pg. 10
K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	<u>Weather and Sky</u> TG: Lesson 5 pgs. 75–81, SAS 5A, SAS 5B, SAS 5C, SAS 5D, SAS 5E, SAS 5F SR: pgs. 10, 11–14
K–2 Engineering, Technology, and Applications of Science	
Performance Expectation	Correlation to Building Blocks of Science®
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.	<u>Push, Pull, Go</u> TG: Lesson 1 pgs. 1–11; Lesson 5 pgs. 45–53 <u>Living Things and Their Needs</u> TG: Lesson 4 pgs. 41–47 <u>Weather and Sky</u> TG: Lesson 5 pgs. 75–80, SAS 5A, SAS 5B, SAS 5C, SAS 5D, SAS 5E, SAS 5F
K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<u>Push, Pull, Go</u> TG: Lesson 1 SAS 1B, SAS 1C; Lesson 4 SAS 4; Lesson 5 pgs. 45–53, SAS 5A, SAS 5B <u>Living Things and Their Needs</u> TG: Lesson 4 pgs. 41–47 SR: pgs. 5–11
K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<u>Push, Pull, Go</u> TG: Lesson 5 pgs. 45–53, SAS 5A, SAS 5B <u>Living Things and Their Needs</u> TG: Lesson 2 pgs. 15–23, SAS 2A, SAS 2B

GRADE 1	
1. Waves: Light and Sound	
Performance Expectation	Correlation to Building Blocks of Science [®]
1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	<u>Light and Sound Waves</u> TG: Lesson 4 pgs. 45–52, AOS, SAS 4; Lesson 5 pgs. 55–60, AOS, SAS 5
1-PS4-2. Make observations to construct an evidence-based account that objects can be seen only when illuminated.	<u>Light and Sound Waves</u> TG: Lesson 1 pgs. 1–5 SR: pgs. 2–3
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.	<u>Light and Sound Waves</u> TG: Lesson 2 pgs. 9–16, AOS, SAS 2A, SAS 2B; Lesson 3 pgs. 25–36, AOS, SAS 3A, SAS 3B, SAS 3C SR: pgs. 5–7
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.	<u>Light and Sound Waves</u> TG: Lesson 6 pgs. 63–68, SAS 6 SR: pg. 14
1. Structure, Function, and Information Processing	
Performance Expectation	Correlation to Building Blocks of Science [®]
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.	<u>Exploring Organisms</u> TG: Lesson 1 pgs. 1–13, AOS, SAS 1A, SAS 1B; Lesson 4 pgs. 45–58, AOS, SAS 4A, SAS 4B, SAS 4C
1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	<u>Exploring Organisms</u> TG: Lesson 2 pgs. 17–24; Lesson 4 pgs. 45–57 SR: pgs. 1–13
1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	<u>Exploring Organisms</u> TG: Lesson 3 pgs. 29–38, AOS, SAS 3A, SAS 3B

TG—Teacher’s Guide; **AOS**—Assessment Observation Sheet; **SAS**—Student Activity Sheet;
TS—Teacher Sheet; **SR**—Student Reader

1. Space Systems: Patterns and Cycles	
Performance Expectation	Correlation to Building Blocks of Science®
1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.	<u>Sky Watchers</u> TG: Lesson 1 pgs. 1–12, AOS, SAS 1A, SAS 1B; Lesson 2 pgs. 17–25, AOS, SAS 2; Lesson 3 pgs. 29–40, AOS, SAS 3A, SAS 3B, SAS 3C; Lesson 5 pgs. 61–78, AOS, TS 5A, TS 5B, SAS 5A, SAS 5B, SAS 5C; Lesson 6 pgs. 89–94, AOS, SAS 6 SR: pgs. 4–5, 10–11
1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	<u>Sky Watchers</u> TG: Lesson 3 pgs. 29–40, AOS, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 47–55, AOS, SAS 4A, SAS 4B SR: pgs. 2–13
K-2 Engineering, Technology, and Applications of Science	
Performance Expectation	Correlation to Building Blocks of Science®
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.	<u>Light and Sound Waves</u> TG: Lesson 6 pgs. 63–68, SAS 6 <u>Exploring Organisms</u> TG: Lesson 4 pgs. 45–57 <u>Sky Watchers</u> TG: Lesson 4 pgs. 47–54, SAS 4A, SAS 4B
K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<u>Light and Sound Waves</u> TG: Lesson 3 SAS 3A; Lesson 4 SAS 4; Lesson 6 pg. 63–68, SAS 6 <u>Exploring Organisms</u> TG: Lesson 3 SAS 3B; Lesson 4 SAS 4C <u>Sky Watchers</u> TG: Lesson 6 pgs. 89–93, SAS 6
K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<u>Light and Sound Waves</u> TG: Lesson 2 pgs. 9–16, Lesson 3 pgs. 25–35, Lesson 6 pgs. 63–68 <u>Exploring Organisms</u> TG: Lesson 4 pgs. 45–57, SAS 4A, SAS 4B, SAS 4C <u>Sky Watchers</u> TG: Lesson 4 pgs. 47–55, SAS 4A

GRADE 2	
2. Structure and Properties of Matter	
Performance Expectation	Correlation to Building Blocks of Science [®]
2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	<u>Matter</u> TG: Lesson 3 pgs. 33–40, AOS, SAS 3
2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.	<u>Matter</u> TG: Lesson 4 pgs. 45–51, AOS, SAS 4A, SAS 4B
2-PS1-3. Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.	<u>Matter</u> TG: Lesson 1 pgs. 1– 8, AOS, SAS 1A, SAS 1B; Lesson 2 pgs. 17–29, AOS, SAS 2
2-PS1-4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	<u>Matter</u> TG: Lesson 5 pgs. 61–67, AOS, SAS 5A, SAS 5B
2. Interdependent Relationships in Ecosystems	
Performance Expectation	Correlation to Building Blocks of Science [®]
2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.	<u>Ecosystem Diversity</u> TG: Lesson 2 pgs. 15–21, AOS, SAS 2A, SAS 2B, SAS 2C
2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	<u>Ecosystem Diversity</u> TG: Lesson 3 pgs. 35–40, AOS, Literacy and Science 3, TS 3; Lesson 5 pgs. 59–63, AOS, Literacy and Science 5, SAS 5
2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.	<u>Ecosystem Diversity</u> TG: Lesson 1 pgs. 1–10, AOS, TS 1, Literacy and Science 1; Lesson 4 pgs. 45–52, AOS, SAS 1A; Lesson 5 pgs. 59–63, AOS, Literacy and Science 5, SAS 5 SR: pgs. 2–13

TG–Teacher’s Guide; **AOS**–Assessment Observation Sheet; **SAS**–Student Activity Sheet;
TS–Teacher Sheet; **SR**–Student Reader

2. Earth's Systems: Processes that Shape the Earth	
Performance Expectation	Correlation to Building Blocks of Science®
2-ESS1-1. Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	<p><u>Earth Materials</u></p> <p>TG: Lesson 1 pgs. 1–16, AOS, SAS 1A, SAS 1B, SAS 1C, SAS 1D; Lesson 2 pgs. 25–37, AOS; Lesson 3 pg. 43–57, AOS, Literacy and Science 3, SAS 3A, SAS 3B; Lesson 4 pg. 73–87, AOS, Literacy and Science 4, SAS 4A, SAS 4B; Lesson 5 pgs. 99–111, AOS, SAS 5A, SAS 5B, Lesson 6 pgs. 123–131, AOS, TS 6, SAS 6</p> <p>SR: pgs. 10–13</p>
2-ESS2-1. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.	<p><u>Earth Materials</u></p> <p>TG: Lesson 3 pgs. 43–57, AOS, Literacy and Science 3, SAS 3A, 3B; Lesson 4 pgs. 73–87, AOS, Literacy and Science 4, SAS 4A, 4B, Lesson 5 pgs. 99–111, AOS, SAS 5A, SAS 5B; Lesson 6 pgs. 123–131, AOS, TS 6, SAS 6</p>
2-ESS2-2. Develop a model to represent the shapes and kinds of land and bodies of water in an area.	<p><u>Earth Materials</u></p> <p>TG: Lesson 1 pgs. 1–16, AOS, SAS 1A, SAS 1B, SAS 1C, SAS 1D; Lesson 6 pgs. 123–131, AOS, TS 6, SAS 6</p> <p>SR: pgs. 2–3</p>
2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.	<p><u>Earth Materials</u></p> <p>TG: Lesson 1 pgs. 1–13, AOS, SAS 1A, SAS 1B, SAS 1C, SAS 1D; Lesson 5 pgs. 99–111, AOS, SAS 5A, SAS 5B; Lesson 6 pgs. 123–131, AOS, TS 6, SAS 6</p> <p>SR: pgs. 2–3</p>

K-2 Engineering, Technology, and Applications of Science	
Performance Expectation	Correlation to Building Blocks of Science [®]
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.	<p><u>Matter</u> TG: Lesson 5 pgs. 61–66, SAS 5A, SAS 5B</p> <p><u>Ecosystem Diversity</u> TG: Lesson 4 pgs. 45–52, SAS 4A</p> <p><u>Earth Materials</u> TG: Lesson 6 pgs. 123–131, SAS 6</p>
K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<p><u>Matter</u> TG: Lesson 4 pgs. 45–50, SAS 4A</p> <p><u>Ecosystem Diversity</u> TG: Lesson 2 SAS 2A, SAS 2C; Lesson 4 SAS 4A</p> <p><u>Earth Materials</u> TG: Lesson 6 pgs. 123–131, SAS 6</p>
K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<p><u>Matter</u> TG: Lesson 4 pgs. 45–50, SAS 4A</p> <p><u>Ecosystem Diversity</u> TG: Lesson 5 pgs. 59–63, SAS 5</p> <p><u>Earth Materials</u> TG: Lesson 3 pgs. 43–57, SAS 3</p>

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TS–Teacher Sheet; **SR**–Student Reader

GRADE 3	
3. Forces and Interactions	
Performance Expectation	Correlation to Building Blocks of Science®
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.	<u>Forces and Interactions</u> TG: Lesson 1 pgs. 1–11, SAS 1A, SAS 1B; Lesson 2 pgs. 19–33, SAS 2A, SAS 2B, Literacy and Science 2; Lesson 5 pgs. 89–95, SAS 5B SR: pgs. 2–7
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.	<u>Forces and Interactions</u> TG: Lesson 2 pgs. 19–33, SAS 2A, 2B, Literacy and Science 2, SAS 2B; Lesson 3 pgs. 41–50, SAS 3A, SAS 3B, SAS 3C; Lesson 5 pgs. 89–95, SAS 5A, SAS 5B SR: pgs. 3–7
3-PS2-3. Ask questions to determine cause and effect relationships of electronic or magnetic interactions between two objects not in contact with each other.	<u>Forces and Interactions</u> TG: Lesson 3 pgs. 41–50, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 61–71, SAS 4A, SAS 4B, SAS 4C, SAS 4D, SAS 4E SR: pgs. 9, 10–11
3-PS2-4. Define a simple design problem that can be solved by applying scientific ideas and magnets.	<u>Forces and Interactions</u> TG: Lesson 5 pgs. 89–95, SAS 5B SR: pgs. 14–15
3. Interdependent Relationships in Ecosystems	
Performance Expectation	Correlation to Building Blocks of Science®
3-LS2-1. Construct an argument that some animals form groups that help members survive.	<u>Life in Ecosystems</u> TG: Lesson 1 pgs. 1–12, SAS 1A, SAS 1B, SAS 1C SR: pgs. 2–5
3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.	<u>Life in Ecosystems</u> TG: Lesson 5 pgs. 71–78, SAS 5A, SAS 5B, SAS 5C, SAS 5D SR: pgs. 12–13
3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	<u>Life in Ecosystems</u> TG: Lesson 3 pgs. 37–49, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 59–65, SAS 4A, SAS 4B SR: pgs. 4–13, 15
3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	<u>Life in Ecosystems</u> TG: Lesson 4 pgs. 59–65, SAS 4A, SAS 4B; Lesson 5 pgs. 71–78, SAS 5C, Literacy and Science 5

3. Inheritance and Variation of Traits: Life Cycles and Traits	
Performance Expectation	Correlation to Building Blocks of Science[®]
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.	<u>Life in Ecosystems</u> TG: Lesson 1 pgs. 1–12, SAS 1A, SAS 1B, SAS 1C
3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.	<u>Life in Ecosystems</u> TG: Lesson 2 pgs. 23–30, SAS 2A, 2B; Lesson 3 pgs. 37–49, SAS 3A, SAS 3B, SAS 3C
3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.	<u>Life in Ecosystems</u> TG: Lesson 4 pgs. 59–65, SAS 4A, SAS 4B SR: pgs. 4–15
3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.	<u>Life in Ecosystems</u> TG: Lesson 3 pgs. 37–49, SAS 3A, SAS 3B, SAS 3C SR: pgs. 4–15
3. Weather and Climate	
Performance Expectation	Correlation to Building Blocks of Science[®]
3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	<u>Weather and Climate Patterns</u> TG: Lesson 1 pgs. 1–8, SAS 1A, SAS 1B, SAS 1C; Lesson 2 pgs. 17–23, SAS 2A, SAS 2B, SAS 2C, SAS 2D; Lesson 3 pgs. 31–38, SAS 3A, 3B SR: pgs. 2–3; 6–9
3-ESS2-2. Obtain and combine information to describe climates in different regions of the world.	<u>Weather and Climate Patterns</u> TG: Lesson 4 pgs. 45–53, SAS 4A, SAS 4B, SAS 4C, SAS 4D, SAS 4E, SAS 4F SR: pgs. 10–14
3-ESS3-1. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.	<u>Weather and Climate Patterns</u> TG: Lesson 5 pgs. 63–68, SAS 5A, SAS 5B; Lesson 6 pgs. 75–80, SAS 6A, SAS 6B SR: pg. 14

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TS–Teacher Sheet; **SR**–Student Reader

3–5 Engineering, Technology, and Applications of Science	
Performance Expectation	Correlation to Building Blocks of Science®
3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	<p><u>Forces and Interactions</u> TG: Lesson 5 pgs. 89–95, SAS 5B SR: pgs. 14–15</p> <p><u>Weather and Climate Patterns</u> TG: Lesson 5 pgs. 63–68, SAS 5A, SAS 5B; Lesson 6 pgs. 75–80, SAS 6A, SAS 6B</p>
3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	<p><u>Forces and Interactions</u> TG: Lesson 5 pgs. 89–95, SAS 5B SR: pgs. 14–15</p> <p><u>Weather and Climate Patterns</u> TG: Lesson 5 pgs. 63–67, SAS 5A, SAS 5B; Lesson 6 pgs. 75–79, SAS 6A; SAS 6B</p>
3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	<p><u>Forces and Interactions</u> TG: Lesson 5 pgs. 89–95, SAS 5B SR: pgs. 14–15</p> <p><u>Weather and Climate Patterns</u> TG: Lesson 5 pgs. 63–68, SAS 5A, SAS 5B; Lesson 6 pgs. 75–80, SAS 6A, SAS 6B</p>

GRADE 4	
4. Energy	
Performance Expectation	Correlation to Building Blocks of Science®
4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.	<u>Energy Works!</u> TG: Lesson 2 pgs. 11–18, SAS 2A, SAS 2B SR: pgs. 6–7
4-PS3-2. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.	<u>Energy Works!</u> TG: Lesson 1 pgs. 1–6, SAS 1; Lesson 3 pgs. 33–41, SAS 3A, SAS 3B, SAS 3C, SAS 3D; Lesson 5 pgs. 91–99, SAS 5A, SAS 5B; Lesson 6 pgs. 117–122, SAS 6 SR: pgs. 2–13
4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide.	<u>Energy Works!</u> TG: Lesson 2 pgs. 11–18, SAS 2B
4-PS3-4. Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.	<u>Energy Works!</u> TG: Lesson 3 pgs. 33–41, SAS 3A, SAS 3B, SAS 3C, SAS 3D; Lesson 5 pgs. 91–99, SAS 5A, SAS 5B; Lesson 6 pgs. 117–122, SAS 6 SR: pgs. 8–9
4. Waves: Waves and Information Transfer	
Performance Expectation	Correlation to Building Blocks of Science®
4-PS4-1. Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.	<u>Energy Works!</u> TG: Lesson 4 pgs. 59–70, SAS 4A, SAS 4B, SAS 4C SR: pg. 4
4-PS4-3. Generate and compare multiple solutions that use patterns to transfer information.	<u>Energy Works!</u> TG: Lesson 4 pg. 59–70, SAS 4D

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TS–Teacher Sheet; **SR**–Student Reader

4. Structure, Function, and Information Processing	
Performance Expectation	Correlation to Building Blocks of Science®
4-PS4-2. Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.	<u>Plant and Animal Structures</u> TG: Lesson 5 pgs. 93–101, SAS 5A, SAS 5B; Lesson 6 pgs. 113–115, SAS 6 SR: pg. 14
4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	<u>Plant and Animal Structures</u> TG: Lesson 1 pgs. 1–7, SAS 1A, SAS 1B, SAS 1C; Lesson 2 pgs. 13–24, Literacy and Science 2, SAS 2A, SAS 2B, SAS 2C; Lesson 3 pgs. 41–54, SAS 3A, SAS 3B, SAS 3C, SAS 3D; Lesson 6 pgs. 111–115, SAS 6 SR: pgs. 2–5, 8–14
4-LS1-2. Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.	<u>Plant and Animal Structures</u> TG: Lesson 4 pgs. 65–75, SAS 4A, SAS 4B, SAS 4C; Lesson 6 pgs. 111–115, SAS 6 SR: pgs. 6–7, 14
4. Earth's Systems: Processes That Shape the Earth	
Performance Expectation	Correlation to Building Blocks of Science®
4-ESS1-1. Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.	<u>Changing Earth</u> TG: Lesson 2 pgs. 11–18, SAS 2A; Lesson 5 pgs. 45–51 SR: 2–9; 16–21
4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.	<u>Changing Earth</u> TG: Lesson 3 pgs. 25–29, SAS 3A SR: pgs. 10–15
4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features.	<u>Changing Earth</u> TG: Lesson 1 pgs. 1–7, SAS 1; Lesson 4 pgs. 37–41, SAS 4A, SAS 4B SR: pgs. 10–15
4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.	<u>Energy Works!</u> TG: Lesson 5 pgs. 91–99, SAS 5A, SAS 5B SR: pgs. 10–14
4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	<u>Changing Earth</u> TG: Lesson 6 pgs. 53–59, SAS 6A, SAS 6B SR: pgs. 6–9

3–5 Engineering, Technology, and Applications of Science	
Performance Expectation	Correlation to Building Blocks of Science [®]
3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	<p><u>Energy Works!</u> TG: Lesson 5 pgs. 91–99, SAS 5A, SAS 5B</p> <p><u>Plant and Animal Structures</u> TG: Lesson 6 pgs. 111–115, SAS 6</p> <p><u>Changing Earth</u> TG: Lesson 6 pgs. 53–59, SAS 6A</p>
3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	<p><u>Energy Works!</u> TG: Lesson 4 pgs. 59–68, SAS 4A, SAS 4B, SAS 4C</p> <p><u>Plant and Animal Structures</u> TG: Lesson 6 pgs. 111–115, SAS 6</p> <p><u>Changing Earth</u> TG: Lesson 6 pgs. 53–59, SAS 6A, SAS 6B</p>

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TS–Teacher Sheet; **SR**–Student Reader

GRADE 5	
5. Structure and Properties of Matter	
Performance Expectation	Correlation to Building Blocks of Science®
5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen.	<u>Structure and Properties of Matter</u> TG: Lesson 1 pgs. 1–11, SAS 1 A, SAS 1B; Lesson 2 pgs. 27–34, SAS 2A, SAS 2B; Lesson 4 pgs. 61–69, SAS 4A, SAS 4B, SAS 4C; Lesson 6 pgs. 101–106, SAS 6 SR: pgs. 2–7, 22
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.	<u>Structure and Properties of Matter</u> TG: Lesson 2 pgs. 27–33, SAS 2A, SAS 2B; Lesson 4 pgs. 61–69, SAS 4A, SAS 4B, SAS 4C; Lesson 5 pgs. 85–92, SAS 5A, SAS 5B; Lesson 6 pgs. 101–105, SAS 6 SR: 2–3, 17–21, 22
5-PS1-3. Make observations and measurements to identify materials based on their properties.	<u>Structure and Properties of Matter</u> TG: Lesson 3 pgs. 43–50, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 61–69, SAS 4A, SAS 4B, SAS 4C; Lesson 6 pgs. 101–106, SAS 6 SR: 2–13, 22
5-PS1-4. Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	<u>Structure and Properties of Matter</u> TG: Lesson 4 pgs. 61–69, SAS 4A, SAS 4B, SAS 4C; Lesson 5 pgs. 85–92, SAS 5A, 5B; Lesson 6 pgs. 101–106, SAS 6 SR: 14–17, 22
5. Matter and Energy in Organisms and Ecosystems	
Performance Expectation	Correlation to Building Blocks of Science®
5-PS3-1. Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.	<u>Matter and Energy in Ecosystems</u> TG: Lesson 1 pgs. 1–11, SAS 1A, 1B; Lesson 2 pgs. 33–44, SAS 2; Lesson 3 pgs. 51–59, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 69–77; Lesson 5 pgs. 81–90, SAS 5A, SAS 5B SR: pgs. 2–5, 11–17, 23
5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water.	<u>Matter and Energy in Ecosystems</u> TG: Lesson 2 pgs. 33–44, SAS 2 SR: pgs. 6–11
5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	<u>Matter and Energy in Ecosystems</u> TG: Lesson 1 pgs. 1–11, SAS 1A, 1B; Lesson 2 pgs. 33–44, SAS 2; Lesson 3 pgs. 51–59, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 69–77; Lesson 5 pgs. 81–90, SAS 5A, SAS 5B SR: pgs. 12–17, 22

5. Earth's Systems	
Performance Expectation	Correlation to Building Blocks of Science [®]
5-ESS2-1. Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.	<p><u>Matter and Energy in Ecosystems</u> TG: Lesson 1 pgs. 1–11, SAS 1A, SAS 1B; Lesson 5 pgs. 81–90, SAS 5A, SAS 5B SR: pgs. 3–6, 10–18</p> <p><u>Earth and Space Systems</u> TG: Lesson 4 pgs. 65–70, SAS 4A, SAS 4B SR: pgs. 10–15</p>
5-ESS2-2. Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.	<p><u>Earth and Space Systems</u> TG: Lesson 5 pgs. 81–88, SAS 5A, SAS 5B SR: pgs. 12, 16–17, 23</p>
5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	<p><u>Matter and Energy in Ecosystems</u> TG: Lesson 6 pgs. 105–111, SAS 6A, SAS 6B, SAS 6C, SAS 6D SR: pgs. 18–21, 23</p> <p><u>Earth and Space Systems</u> TG: Lesson 6 pgs. 103–110, SAS 6A, SAS 6B; Lesson 7 pgs. 123–128, SAS 7 SR: pgs. 10–15</p>
5. Space Systems: Stars and the Solar System	
Performance Expectation	Correlation to Building Blocks of Science [®]
5-PS2-1. Support an argument that the gravitational force exerted by Earth on objects is directed down.	<p><u>Earth and Space Systems</u> TG: Lesson 7 pgs. 123–128, SAS 7 SR: pgs. 2–3</p>
5-ESS1-1. Support an argument that the apparent brightness of the sun and stars is due to their relative distances from Earth.	<p><u>Earth and Space Systems</u> TG: Lesson 1 pgs. 1–7, SAS 1A, SAS 1B; Lesson 7 pgs. 123–128, SAS 7 SR: pgs. 2–3</p>
5-ESS1-2. Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.	<p><u>Earth and Space Systems</u> TG: Lesson 3 pgs. 39–45, SAS 3A, SAS 3B, SAS 3C; Lesson 4 pgs. 65–70, SAS 4A, SAS 4B; Lesson 7 pgs. 123–128, SAS 7 SR: pgs. 4–9</p>

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3–5 Engineering, Technology, and Applications of Science	
Performance Expectation	Correlation to Building Blocks of Science®
3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	<u>Structure and Properties of Matter</u> TG: Lesson 6 pgs. 101–106, SAS 6
3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	<u>Structure and Properties of Matter</u> TG: Lesson 3 pgs. 43–50, SAS 3A, SAS 3B, SAS 3C; Lesson 6 pgs. 101–105, SAS 6 <u>Matter and Energy in Ecosystems</u> TG: Lesson 6 pgs. 105–111, SAS 6A, SAS 6B, SAS 6C, SAS 6D <u>Earth and Space Systems</u> TG: Lesson 7 pgs. 123–128, SAS 7 SR: pgs. 18–21, 23
3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	<u>Structure and Properties of Matter</u> TG: Lesson 6 pgs. 101–106, SAS 6

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The image is a full-page background featuring a faded, artistic rendering of a deep canyon with a winding river at the bottom. The canyon walls are layered and textured, suggesting geological formations. The entire image is overlaid with a series of thin, horizontal, light-colored lines, giving it a notebook-like or lined paper appearance. The colors are muted, with earthy tones of brown, tan, and blue.

	B Physical	B Life	S Earth & Space
Kindergarten	Push, Pull, Go <i>K-PS2-1; K-PS2-2</i>	Living Things and Their Needs <i>K-LS1-1; K-ESS2-2; K-ESS3-1; K-ESS3-3</i>	Weather and Sky <i>K-PS3-1; K-PS3-2; K-ESS2-1; K-ESS3-2</i>
1st Grade	Light and Sound Waves <i>1-PS4-1; 1-PS4-2; 1-PS4-3; 1-PS4-4</i>	Exploring Organisms <i>1-LS1-1; 1-LS1-2; 1-LS3-1</i>	Sky Watchers <i>1-ESS1-1; 1-ESS1-2</i>
2nd Grade	Matter <i>2-PS1-1; 2-PS1-2; 2-PS1-3; 2-PS1-4</i>	Ecosystem Diversity <i>2-LS2-1; 2-LS2-2; 2-LS4-1</i>	Earth Materials <i>2-ESS1-1; 2-ESS2-1; 2-ESS2-2; 2-ESS2-3</i>
3rd Grade	Forces and Interactions <i>3-PS2-1; 3-PS2-2; 3-PS2-3; 3-PS2-4</i>	Life in Ecosystems <i>3-LS1-1; 3-LS2-1; 3-LS3-1; 3-LS3-2; 3-LS4-1; 3-LS4-2; 3-LS4-3; 3-LS4-4</i>	Weather and Climate Patterns <i>3-ESS2-1; 3-ESS2-2; 3-ESS3-1</i>
4th Grade	Energy Works! <i>4-PS3-1; 4-PS3-2; 4-PS3-3; 4-PS3-4; 4-PS4-1; 4-PS4-3; 4-ESS3-1</i>	Plant and Animal Structures <i>4-LS1-1; 4-LS1-2; 4-PS4-2</i>	Changing Earth <i>4-ESS1-1; 4-ESS2-1; 4-ESS2-2; 4-ESS3-2</i>
5th Grade	Structure and Properties of Matter <i>5-PS1-1; 5-PS1-2; 5-PS1-3; 5-PS1-4</i>	Matter and Energy in Ecosystems <i>5-PS3-1; 5-LS1-1; 5-LS2-1; 5-ESS2-1; 5-ESS2-2; 5-ESS3-1</i>	Earth and Space Systems <i>5-PS2-1; 5-ESS1-1; 5-ESS1-2</i>
	Science	Science	Science