Correlation of Building Blocks of Science™ 3D to the Oklahoma Academic Standards for Science 2020, Grades PK–5

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Building Blocks OF SCIENCE™ | 3D

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Building Blocks of Science™ 3D Learning Framework for the Oklahoma Academic Standards for Science 2020, Prekindergarten to Grade 5

Learning Framework for Prekindergarten

Prekindergarten	**Patterns All Around**	**Discovering Plants**	**Discovering Animals**

Learning Framework for Grades K–5

Kindergarten	**Push, Pull, Go**	**Weather and Sky**	**Living Things and Their Needs**
1st Grade	**Light and Sound Waves**	**Sky Watchers**	**Exploring Organisms**
2nd Grade	**Matter**	**Earth Materials**	**Ecosystem Diversity**
3rd Grade	**Forces and Interactions**	**Weather and Climate Patterns**	**Life in Ecosystems**
4th Grade	**Energy Works**	**Changing Earth**	**Plant and Animal Structures**
5th Grade	**Structure and Properties of Matter**	**Earth and Space Systems**	**Matter and Energy in Ecosystems**

Prekindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Science Exploration (S)		
PK.S.1	Engage in play to explore the physical and natural world.	***Patterns All Around*** • **TG:** L1 pgs. 3-6, AOS, SAS 1A, SAS 1B ***Discovering Animals*** • **TG:** L1 pgs. 1-7, AOS, FSA
PK.S.2	Make observations of the physical and natural world.	***Patterns All Around*** • **TG:** L1 pgs. 3-6, AOS, SAS 1A, SAS 1B; L2 pgs. 11-18, AOS, TS 2, SAS 2A, SAS 2B, SAS 2C; L3 pgs. 25-29, AOS, SAS 3; L4 pgs. 33-42, AOS, TS 4, SAS 4, FSA; L5 pgs. 49-57, AOS, SAS 5; L6 pgs. 61-66, AOS, SAS 6; L7 pgs. 69-76, AOS, SAS 7 • **SR:** pgs. 2-14 ***Discovering Plants*** • **TG:** L1 pgs. 1-9, AOS, SAS 1A, SAS 1B; L2 pgs. 13-20, AOS, SAS 2A, SAS 2B, SAS 2C, FSA; L3 pgs. 27-32, AOS, SAS 3; L4 pgs. 37-40, AOS, SAS 4; L5 pgs. 43-49, AOS, SAS 5A, SAS 5B; L6 pgs. 53-62, AOS, TS 6, SAS 6; L7 pgs. 75-82, AOS, SAS 7; L8 pgs. 85-90, AOS, SAS 8A, SAS 8B; L9 pgs. 95-100, AOS, SAS 9A, SAS 9B • **SR:** pgs. 2-13 ***Discovering Animals*** • **TG:** L1 pgs. 1-7, AOS, FSA; L2 pgs. 11-21, AOS, SAS 2A, SAS 2B; L3 pgs. 25-31, AOS, SAS 3A, SAS 3B, FSA; L4 pgs. 37-46, AOS, SAS 4A, SAS 4B; L5 pgs. 51-59, AOS, SAS 5; L6 pgs. 63-68, AOS, SAS 6; L7 pgs. 71-76, AOS, SAS 7 • **SR:** pgs. 2-13

Prekindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
PK.S.3	Notice and describe similarities and differences among plants, animals, and objects.	***Patterns All Around*** • **TG:** L1 pgs. 3-6, AOS, SAS 1A, SAS 1B; L2 pgs. 11-18, AOS, TS 2, SAS 2A, SAS 2B, SAS 2C; L5 pgs. 49-57, AOS, SAS 5; L6 pgs. 61-66, AOS, SAS 6; L7 pgs. 69-76, AOS, SAS 7 • **SR:** pgs. 2-14 ***Discovering Plants*** • **TG:** L1 pgs. 1-9, AOS, SAS 1A, SAS 1B; L2 pgs. 13-20, AOS, SAS 2A, SAS 2B, SAS 2C, FSA; L3 pgs. 27-32, AOS, SAS 3; L4 pgs. 37-40, AOS, SAS 4; L5 pgs. 43-49, AOS, SAS 5A, SAS 5B; L6 pgs. 53-62, AOS, TS 6, SAS 6; L7 pgs. 75-82, AOS, SAS 7; L8 pgs. 85-90, AOS, SAS 8A, SAS 8B ***Discovering Animals*** • **TG:** L1 pgs. 1-7, AOS, FSA; L2 pgs. 11-21, AOS, SAS 2A, SAS 2B; L3 pgs. 25-31, AOS, SAS 3A, SAS 3B, FSA; L4 pgs. 37-46, AOS, SAS 4A, SAS 4B; L5 pgs. 51-59, AOS, SAS 5; L6 pgs. 63-68, AOS, SAS 6; L7 pgs. 71-76, AOS, SAS 7 • **SR:** pgs. 4-11

Prekindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
PK.S.4	Share noticings and wonderings about the physical and natural world.	***Patterns All Around*** • **TG:** L1 pgs. 3-6, AOS, SAS 1A, SAS 1B; L2 pgs. 11-18, AOS, TS 2, SAS 2A, SAS 2B, SAS 2C; L3 pgs. 25-29, AOS, SAS 3; L5 pgs. 49-57, AOS, SAS 5; L6 pgs. 61-66, AOS, SAS 6; L7 pgs. 69-76, AOS, SAS 7 ***Discovering Plants*** • **TG:** L1 pgs. 1-9, AOS, SAS 1A, SAS 1B; L2 pgs. 13-20, AOS, SAS 2A, SAS 2B, SAS 2C, FSA; L3 pgs. 27-32, AOS, SAS 3; L4 pgs. 37-40, AOS, SAS 4; L5 pgs. 43-49, AOS, SAS 5A, SAS 5B; L6 pgs. 53-62, AOS, TS 6, SAS 6; L7 pgs. 75-82, AOS, SAS 7; L8 pgs. 85-90, AOS, SAS 8A, SAS 8B; L9 pgs. 95-100, AOS, SAS 9A, SAS 9B ***Discovering Animals*** • **TG:** L1 pgs. 1-7, AOS, FSA; L2 pgs. 11-21, AOS, SAS 2A, SAS 2B; L3 pgs. 25-31, AOS, SAS 3A, SAS 3B, FSA; L4 pgs. 37-46, AOS, SAS 4A, SAS 4B; L6 pgs. 63-68, AOS, SAS 6; L7 pgs. 71-76, AOS, SAS 7

Prekindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
PK.S.5	Ask questions based on curiosity about the physical and natural world.	***Patterns All Around*** • **TG:** L1 pgs. 3-6, AOS, SAS 1A, SAS 1B; L2 pgs. 11-18, AOS, TS 2, SAS 2A, SAS 2B, SAS 2C; L3 pgs. 25-29, AOS, SAS 3; L4 pgs. 33-42, AOS, TS 4, SAS 4, FSA; L5 pgs. 49-57, AOS, SAS 5; L6 pgs. 61-66, AOS, SAS 6; L7 pgs. 69-76, AOS, SAS 7 ***Discovering Plants*** • **TG:** L1 pgs. 1-9, AOS, SAS 1A, SAS 1B; L2 pgs. 13-20, AOS, SAS 2A, SAS 2B, SAS 2C, FSA; L3 pgs. 27-32, AOS, SAS 3; L4 pgs. 37-40, AOS, SAS 4; L5 pgs. 43-49, AOS, SAS 5A, SAS 5B; L6 pgs. 53-62, AOS, TS 6, SAS 6; L7 pgs. 75-82, AOS, SAS 7; L8 pgs. 85-90, AOS, SAS 8A, SAS 8B; L9 pgs. 95-100, AOS, SAS 9A, SAS 9B ***Discovering Animals*** • **TG:** L1 pgs. 1-7, AOS, FSA; L2 pgs. 11-21, AOS, SAS 2A, SAS 2B; L3 pgs. 25-31, AOS, SAS 3A, SAS 3B, FSA; L4 pgs. 37-46, AOS, SAS 4A, SAS 4B; L5 pgs. 51-59, AOS, SAS 5; L6 pgs. 63-68, AOS, SAS 6; L7 pgs. 71-76, AOS, SAS 7

Prekindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
PK.S.6	Engage in investigations based on curiosity and wondering about the physical and natural world.	***Patterns All Around*** • **TG:** L1 pgs. 3-6, AOS, SAS 1A, SAS 1B; L2 pgs. 11-18, AOS, TS 2, SAS 2A, SAS 2B, SAS 2C; L3 pgs. 25-29, AOS, SAS 3; L4 pgs. 33-42, AOS, TS 4, SAS 4, FSA; L5 pgs. 49-57, AOS, SAS 5; L6 pgs. 61-66, AOS, SAS 6; L7 pgs. 69-76, AOS, SAS 7 ***Discovering Plants*** • **TG:** L1 pgs. 1-9, AOS, SAS 1A, SAS 1B; L2 pgs. 13-20, AOS, SAS 2A, SAS 2B, SAS 2C, FSA; L3 pgs. 27-32, AOS, SAS 3; L4 pgs. 37-40, AOS, SAS 4; L5 pgs. 43-49, AOS, SAS 5A, SAS 5B; L6 pgs. 53-62, AOS, TS 6, SAS 6; L7 pgs. 75-82, AOS, SAS 7; L8 pgs. 85-90, AOS, SAS 8A, SAS 8B ***Discovering Animals*** • **TG:** L1 pgs. 1-7, AOS, FSA; L2 pgs. 11-21, AOS, SAS 2A, SAS 2B; L4 pgs. 37-46, AOS, SAS 4A, SAS 4B; L5 pgs. 51-59, AOS, SAS 5; L6 pgs. 63-68, AOS, SAS 6; L7 pgs. 71-76, AOS, SAS 7

Kindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Motion and Stability of Forces (PS2)		
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.	***Push, Pull, Go*** • **TG:** L1 pgs. 32-46, AOS, SIS 1D.1, SIS 1D.2; L2 pgs. 50-56, AOS, LA 2A, SIS 2A, THS Activity A; L3 pgs. 64-71, AOS, LA 3A, SIS 3B; L4 pgs. 76-83, AOS, LA 4A, SIS 4B, THS Activity B; L5 pgs. 90-100, SIS 5A, SIS 5D, SA • **SR:** pgs. 2-6, 8-14 • **Digital Resources**: IWB: Our Ideas About Force and Motion; IWB: What We Know About Spinning and Twirling; IWB: Our Problems and How We Fixed Them; IWB: What We Know About Force and Motion; SIM: Count, Sort, Build; SIM: Rolling Ball; SIM: Swing Set, SIM: Dominoes, SIM: Spinning; SIM: Motion Series
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 pull.	***Push, Pull, Go*** • **TG:** L5 pgs. 90-100, SIS 5A, SIS 5D, SA • **Digital Resources:** IWB: Our Ideas About Force and Motion; IWB: What We Know About Force and Motion; IWB: Our Problems and How We Fixed Them; SIM: Motion Series
Energy (PS3)		
K.PS3.1	Make observations to determine the effect of sunlight on Earth's surface.	***Weather and Sky*** • **TG**: L4 pgs. 106-115, AOS, SIS 4B, LA 4C, SIS 4C • **Digital Resources:** IWB: Temperature; SIM: Thermometer; SIM: The Sun's Warming Effect

Kindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
K.PS3.2	Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	***Weather and Sky*** • **TG**: L5 pgs. 124-133, SIS 5A, SIS 5B, SIS 5C, SA • **SR:** pg. 8 • **Digital Resources:** IWB: Our Ideas About Weather (from Lesson 1); IWB: Our Problems and How We Fixed Them; IWB: The Sun's Effects on Objects; IWB: What We Know About Weather; SIM: Shadows; SIM: The Sun's Warming Effect
From Molecules to Organisms: Structure and Function (LS1)		
K.LS1.1	Use observations to describe patterns of what plants and animals (including humans) need to survive.	***Living Things and Their Needs*** • **TG:** L1 pgs. 30-42, AOS, Plant Journal Sheet, THS, SIS 1D; L2 pgs. 50-60, AOS, Plant Journal Sheet, Plant Data Sheet, LA 2B, SIS 2B • **SR:** pgs. 2-5 • **Digital Resources:** IWB: Living vs. Nonliving; IWB: What Do All Living Things Do? IWB: What Do Plants Need to Grow Well? SIM: Factors of Plant Growth, Part 1
Earth Systems (ESS2)		
K.ESS.2.1	Use and share observations of local weather conditions to describe patterns over time.	***Weather and Sky*** • **TG:** L1 pgs. 32-43, AOS, SIS 1B, SIS 1D, THS; L2 pgs. 52-69, AOS, SIS 2A, LA 2B, SIS 2B, SIS 2C, SIS 2D, SIS 2E, TS 2A • **SR:** pgs. 2-10 • **Digital Resources:** IWB: Our Ideas About Weather; IWB: Daytime Sky; IWB: Nighttime Sky; IWB: Comparing Daytime and Nighttime Skies; IWB: How Can I Describe the Weather? IWB: Daily Weather Observations; IWB: Weekly Weather Graph; SIM: Daytime/Nighttime; SIM: Precipitation; SIM: Cloud Cover; SIM: Wind Conditions

AOS–Assessment Observation Sheet; **FSA**–Family Science Activity; **L**–Lesson; **LA**–Literacy Article; **L&S**–Literacy and Science; **SA**–Summative Assessment; **SAS**–Student Activity Sheet; **SIS**–Student Investigation Sheet; **SIM**–Simulation; **SR**–Student Reader; **TG**–Teacher's Guide; **THS**–Take-Home Science Activity; **TS**–Teacher Sheet; **IWB**–Interactive Whiteboard

Kindergarten		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
K.ESS2.2	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	***Living Things and Their Needs*** • **TG:** L3 pgs. 68-77, AOS, Plant Data Sheet, SIS 3B, LA 3B • **SR:** pgs. 6-12
Earth and Human Activity (ESS3)		
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.	***Living Things and Their Needs*** • **TG:** L3 pgs. 68-77, AOS, Plant Data Sheet, SIS 3B, LA 3B • **SR:** pgs. 6-12
K.ESS3.2	Ask questions to understand the purpose of weather forecasting to prepare for and respond to severe weather.	***Weather and Sky*** • **TG**: L3 pgs. 86-98, AOS, LA 3C, SIS 3C, THS Activity B • **SR:** pgs. 10, 15 • **Digital Resources**: IWB: Dangerous Weather, IWB: Weather Safety; SIM: Rain Conditions

1st Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Waves and Their Applications in Technologies for Information Transfer (PS4)		
1.PS4.1	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	***Light and Sound Waves*** • **TG:** L2 pgs. 48-59, AOS, SIS 2A, LA 2B, SIS 2C; L3 pgs. 72-80, AOS, SIS 3A, LA 3B; L6 pgs. 124-133, SIS 6B, SA • **SR:** pgs. 10-14 • **Digital Resources:** IWB: Vibrations of the Drum; IWB: How Do We Communicate with Sound and Light?
1.PS4.2	Make observations to construct an evidence-based account that objects can be seen only when illuminated.	***Light and Sound Waves*** • **TG:** L1 pgs. 34-45, AOS; L4 pgs. 86-94, AOS, LA 4A, SIS 4A; L6 pgs. 124-133, SIS 6B, SA • **SR:** pgs. 2-3, 10-12, 15 • **Digital Resources**: IWB: Our Ideas About Light and Sound; IWB: Our Plan to Study Vibrations; IWB: How Do We Communicate with Sound and Light? SIM: Vibrations; SIM: Illuminate Objects
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.	***Light and Sound Waves*** • **TG:** L5 pgs. 100-111, AOS, SIS 5A.1, SIS 5A.2, LA 5B, SIS 5B, THS; L6 pgs. 124-133, SIS 6B, SA • **SR:** pgs. 2-9 • **Digital Resources:** IWB: Does Light Pass Through? IWB: Reflection of Light; IWB: How Do We Communicate with Sound and Light? SIM: Translucent, Transparent, Opaque; SIM: Law of Reflection
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.	***Light and Sound Waves*** • **TG:** L6 pgs. 124-133, SIS 6B, SA • **Digital Resources:** IWB: How Do We Communicate with Sound and Light?

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1st Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
From Molecules to Organisms: Structure and Function (LS1)		
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.	***Exploring Organisms*** • **TG:** L1 pgs. 32-46, AOS, SIS 1B, SIS 1D; L2 pgs. 52-66, AOS, SIS 2A, LA 2C, SIS 2C; L5 pgs. 114-125, SIS 5A, SIS 5B, SA • **SR:** pgs. 2, 6, 11-13 • **Digital Resources:** IWB: Animal and Plant Needs; IWB: Living vs. Nonliving
1.LS1.2	Obtain information from media and/or text to determine patterns in the behavior of parents and offspring that help offspring survive.	***Exploring Organisms*** • **TG**: L3 pgs. 74-80, AOS, LA 3A, SIS 3A • **SR:** pgs. 3-5, 7 • **Digital Resources:** IWB: Ways Parents Care for Babies
Heredity: Inheritance and Variation of Traits (LS3)		
1.LS3.1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	***Exploring Organisms*** • **TG:** L4 pgs. 92-104, AOS, SIS 4A, SIS 4B, THS, LA 4C • **SR:** pgs. 8-10 • **Digital Resources:** SIM: Factors of Plant Growth, Part 1; SIM: Organism Growth

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1st Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Earth's Place in the Universe (ESS1)		
1.ESS1.1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.	***Sky Watchers*** • **TG:** L1 pgs. 32-45, AOS, SIS 1B, SIS 1C, THS; L2 pgs. 60-70, AOS, LA 2A, SIS 2B, TS 2A; L4 pgs. 100-111, AOS, LA 4A, SIS 4A, SIS 4B, TS 4A, TS 4B; L5 pgs. 124-131, SIS 5A, SA • **SR:** pgs. 2-14 • **Digital Resources:** IWB: Our Ideas About Objects in the Sky; IWB: Where Can the Sun Be Seen? IWB: Comparing Daytime and Nighttime Sky Patterns; IWB: Why We Have Day and Night; IWB: Phases of the Moon; IWB: What We Know About Objects in the Sky; SIM: Daytime/Nighttime; SIM: Shadows; SIM: Earth's Rotation; SIM: Phases of the Moon; SIM: Sun, Earth, Moon
1.ESS1.2	Make observations at different times of year to relate the amount of daylight and relative temperature to the time of year.	***Sky Watchers*** • **TG:** L3 pgs. 80-90, AOS, SIS 3A, LA 3B, SIS 3B; L5 pgs. 124-131, SIS 5A, SA • **SR:** pgs. 2-14 • **Digital Resources:** IWB: Our Ideas About Objects in the Sky; IWB: Where Can the Sun Be Seen? IWB: Comparing Daytime and Nighttime Sky Patterns; IWB: Seasons; IWB: Our Plan to Investigate Daylight Patterns; IWB: Sunrise and Sunset Data; IWB: What We Know About Objects in the Sky; SIM: Earth's Revolution
1.ESS3.1	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	***Exploring Organisms*** • **TG:** L1 Environmental Connections pg. 45; L2 Environmental Connections pg. 65; L5 Environmental Connections pg. 125

2nd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Matter and Its Interactions (PS1)		
2.PS1.1	Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	***Matter*** • **TG:** L2 pgs. 50-67, AOS, SIS 2A, LA 2C; L3 pgs. 72-82, AOS, LA 3C, SIS 3C • **SR:** pgs. 2-6, 8-11, 13 • **Digital Resources:** IWB: Water's Three States of Matter; IWB: Describing Properties; SIM: Water Conservation; SIM: Matter Particles, SIM: Create a Mixture ***Earth Materials*** • **TG:** L2 pgs. 64-77, AOS, LA 2A, SIS 2A, SIS 2B, THS • **SR:** pgs. 6-7, 10-14 • **Digital Resources:** IWB: What We Can Observe About Rocks? IWB: What We Can Observe About Landforms; SIM: Formation of Rock Types
2.PS1.2	Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for the intended purpose.	***Matter*** • **TG:** L4 pgs. 90-100, AOS, SIS 4A, LA 4B, SIS 4B; L5 pgs. 116-130, SIS 5A, SIS 5B, SIS 5C, THS, SA • **SR:** pgs. 6, 12 • **Digital Resources:** IWB: Materials and How We Use Them; SIM: Sink or Float? SIM: Identity Change; SIM: Physical Change
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.	***Matter*** • **TG:** L1 pgs. 32-41, AOS, SIS 1A, SIS 1B • **SR:** pg. 7 • **Digital Resources:** IWB: Specifications to Build a Pyramid; SIM: Parts Make a Whole

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2nd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
2.PS1.4	Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	***Matter*** • **TG:** L2 pgs. 50-67, AOS, SIS 2A, LA 2C; L5 pgs. 116-130, SIS 5A, SIS 5B, SIS 5C, THS, SA • **SR:** pgs. 2-6, 8-12 • **Digital Resources:** IWB: Water's Three States of Matter; SIM: Water Conservation; SIM: Matter Particles; SIM: Identity Change; SIM: Physical Change
Ecosystems: Interactions, Energy and Dynamics (LS2)		
2.LS2.1	Plan and conduct an investigation to determine if plants need sunlight and water to grow.	***Ecosystem Diversity*** • **TG:** L1 pgs. 32-45, AOS, L&S 1B, SIS 1C, TS 1B • **SR:** pgs. 2-13 • **Digital Resources:** IWB: Living Things Matrix; IWB: Basic Needs of Living Things Map
2.LS2.2	Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	***Ecosystem Diversity*** • **TG:** L3 pgs. 74-82, AOS, L&S 3A, LA 3B • **Digital Resources:** SIM: Bee Pollination
Biological Unity and Diversity (LS4)		
2.LS4.1	Make observations of plants and animals to compare the diversity of life in different habitats.	***Ecosystem Diversity*** • **TG:** L1 pgs. 32-45, AOS, L&S 1B, SIS 1C, TS 1B; L2 pgs. 54-62, AOS, LA 2B, SIS 2B.1, SIS 2B.2, TS 2A; L4 pgs. 88-101, AOS, LA 4A, SIS 4A, THS; L5 pgs. 112-119, L&S 5A, SIS 5A, SA • **SR:** pgs. 2-13 • **Digital Resources:** IWB: Living Things Matrix; IWB: Basic Needs of Living Things Map; IWB: Pill Bug Preferences; SIM: Factors of Plant Growth; Part 1; SIM: Plant Life Cycle; SIM: Pollution

AOS–Assessment Observation Sheet; **FSA**–Family Science Activity; **L**–Lesson; **LA**–Literacy Article; **L&S**–Literacy and Science; **SA**–Summative Assessment; **SAS**–Student Activity Sheet; **SIS**–Student Investigation Sheet; **SIM**–Simulation; **SR**–Student Reader; **TG**–Teacher's Guide; **THS**–Take-Home Science Activity; **TS**–Teacher Sheet; **IWB**–Interactive Whiteboard

2nd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Earth's Place in the Universe (ESS1)		
2.ESS1.1	Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	***Earth Materials*** • **TG:** L2 pgs. 64-77, AOS, LA 2A, SIS 2A, SIS 2B, THS; L3 pgs. 96-112, AOS, L&S 3A, LA 3B, SIS 3C.1, SIS 3C.2; L4 pgs. 132-144, AOS, LA 4A, SIS 4B, L&S 4C, TS 4A; L5 pgs. 158-175, AOS, SIS 5A, LA 5B, SIS 5B; L6 pgs. 192-201, SIS 6A, SIS 6B, SA • **SR:** pgs. 2-15 • **Digital Resources:** IWB: What We Can Observe About Rocks? IWB: What We Can Observe About Landforms; IWB: Our Ideas About Sand; IWB: Properties of Dry and Wet Sand; IWB: Our Ideas About Soil; IWB: Comparing Sand and Soil; IWB: Changes to the Land; IWB: Landforms and Bodies of Water; IWB: Our Ideas About Earth Materials; IWB: What We Know About Earth's Materials; SIM: Formation of Rock Types; SIM: Erosion; SIM: Weathering; SIM: Soil Erosion; SIM: Canyon Formation; SIM: Glacier Formation
Earth's Systems (ESS2)		
2.ESS2.1	Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.	***Earth Materials*** • **TG:** L3 pgs. 96-112, AOS, L&S 3A, LA 3B, SIS 3C.1, SIS 3C.2; L4 pgs. 132-144, AOS, LA 4A, SIS 4B, L&S 4C, TS 4A; L5 pgs. 158-175, AOS, SIS 5A, LA 5B, SIS 5B; L6 pgs. 192-201, SIS 6A, SIS 6B, SA • **SR:** pgs. 2-5, 7-15 • **Digital Resources:** IWB: Our Ideas About Sand; IWB: Properties of Dry and Wet Sand; IWB: Our Ideas About Soil; IWB: Comparing Sand and Soil; IWB: Changes to the Land; IWB: Landforms and Bodies of Water; IWB: Our Ideas About Earth's Materials; IWB: What We Know About Earth's Materials; SIM: Erosion; SIM: Weathering; SIM: Soil Erosion; SIM: Canyon Formation; SIM: Glacier Formation

AOS–Assessment Observation Sheet; **FSA**–Family Science Activity; **L**–Lesson; **LA**–Literacy Article; **L&S**–Literacy and Science; **SA**–Summative Assessment; **SAS**–Student Activity Sheet; **SIS**–Student Investigation Sheet; **SIM**–Simulation; **SR**–Student Reader; **TG**–Teacher's Guide; **THS**–Take-Home Science Activity; **TS**–Teacher Sheet; **IWB**–Interactive Whiteboard

2nd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
2.ESS2.2	Develop a model to represent the shapes and kind of land and bodies of water in an area.	***Earth Materials*** • **TG:** L1 pgs. 34-50, AOS, SIS 1B, SIS 1C.1, SIS 1C.2, SIS 1D.2; L6 pgs. 192-201, SIS 6A, SIS 6B, SA • **SR:** pgs. 2-5, 8-9, 13, 15 • **Digital Resources:** IWB: Our Ideas About Earth's Materials; IWB: What We Know About Water; IWB: What We Know About Earth's Materials; SIM: Water Cycle
2.ESS2.3	Obtain information to identify where water is found on Earth and that it can be solid or liquid.	***Earth Materials*** • **TG:** L1 pgs. 34-50, AOS, SIS 1B, SIS 1C.1, SIS 1C.2, SIS 1D.1, SIS 1D.2; L5 pgs. 158-175, AOS, SIS 5A, LA 5B, SIS 5B; L6 pgs. 192-201, SIS 6A, SIS 6B, SA • **SR:** pgs. 2-5, 8-13, 15 • **Digital Resources:** IWB: Our Ideas About Earth's Materials; IWB: What We Know About Water; IWB: Changes to the Land; IWB: Landforms and Bodies of Water; IWB: What We Know About Earth's Materials; SIM: Water Cycle; SIM: Canyon Formation; SIM: Glacier Formation

3rd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Motion and Stability: Forces and Interactions (PS2)		
3.PS2.1	Plan and conduct investigations on the effects of balanced and unbalanced forces on the motion of an object.	***Forces and Interactions*** • **TG**: L1 pgs. 32-48, SIS 1A, SIS 1C; L2 pgs. 54-70, SIS 2A, SIS 2B, LA 2C, SIS 2C • **SR**: pgs. 4-5, 7-8 • **Digital Resources:** SIM: Balance; SIM: Balance an Unknown; SIM: Tug-of-War; SIM: Friction; SIM: Rolling Car; SIM: Spring Scale
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.	***Forces and Interactions*** • **TG:** L2 pgs. 54-70, SIS 2A, SIS 2B, LA 2C, SIS 2C; L3 pgs. 86-98, SIS 3A, LA 3B, SIS 3B, SIS 3C • **SR:** pgs. 2-3, 5-7, 10-11 • **Digital Resources:** SIM: Friction; SIM: Rolling Car; SIM: Spring Scale; SIM: Force, Motion, Speed
3.PS2.3	Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.	***Forces and Interactions*** • **TG:** L4 pgs. 112-129, SIS 4B, LA 4C, SIS 4C.1, SIS 4C.2, SIS 4D.1, SIS 4D.2, THS • **SR:** pg. 9 • **Digital Resources:** SIM: Magnetic Attraction and Repulsion; SIM: Iron Fillings; IWB: Which Objects Are Magnetic?
3.PS2.4	Define a simple design problem that can be solved by applying scientific ideas about magnets.	***Forces and Interactions*** • **TG:** L5 pgs. 152-159, SIS 5B, SA • **Digital Resources:** SIM: Newton's First Law; SIM: Newton's Third Law

3rd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
From Molecules to Organisms: Structure and Function (LS1)		
3.LS1.1	Develop and use models to describe that organisms have unique and diverse life cycles but all have a common pattern of birth, growth, reproduction, and death.	***Life in Ecosystems*** • **TG:** L1 pgs. 32-51, SIS 1A, SIS 1B.1, SIS 1B.2, SIS 1B.3, SIS 1C • **SR:** pgs. 2-3, 15 • **Digital Resources**: IWB: Our School As a Model of an Ecosystem; IWB: Predictions About Our Plants and Butterflies; IWB: Life Cycles of Plant and Butterfly; IWB: How Do We Categorize an Ecosystem?
Heredity: Inheritance and Variation of Traits (LS2)		
3.LS2.1	Construct an argument that some animals form groups that help members survive.	***Life in Ecosystems*** • **TG:** L1 pgs. 32-51, SIS 1A, SIS 1B.1, SIS 1B.2, SIS 1B.3, SIS 1C • **SR:** pgs. 2-3, 15 • **Digital Resources:** IWB: Our School As a Model of an Ecosystem; IWB: Predictions About Our Plants and Butterflies; IWB: Life Cycles of Plant and Butterfly; IWB: How Do We Categorize an Ecosystem?
Heredity: Inheritance and Variation of Traits (LS3)		
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.	***Life in Ecosystems*** • **TG:** L2 pgs. 68-80, LA 2A, SIS 2A, SIS 2B • **SR:** pgs. 10-11 • **Digital Resources:** IWB: Class Inherited Traits; SIM: Trait Variation
3.LS3.2	Use evidence to support the explanation that traits can be influenced by the environment.	***Life in Ecosystems*** • **TG:** L4 pgs. 130-145, LA 4A, SIS 4A, SIS 4B.1, SIS 4B.2, SIS 4B.3 • **SR:** pgs. 12-13, 15 • **Digital Resources:** IWB: Environmental Factors and Plant Growth (from Lesson 3); IWB: Organisms' Needs; SIM: Phototropism; SIM: Fossil Formation

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3rd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Biological Unity and Diversity (LS4)		
3.LS4.1	Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.	***Life in Ecosystems*** • **TG:** L4 pgs. 130-145, LA 4A, SIS 4A, SIS 4B.1, SIS 4B.2, SIS 4B.3 • **SR:** pgs. 12-13, 15 • **Digital Resources:** IWB: Environmental Factors and Plant Growth (from Lesson 3); IWB: Organisms' Needs; SIM: Phototropism; SIM: Fossil Formation
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 and reproducing.	***Life in Ecosystems*** • **TG:** L3 pgs. 90-108, SIS 3A, SIS 3B, SIS 3C, THS, LA 3C, TS 3B.1, TS 3B.2; L5 pgs. 168-178, SIS 5B, TS 5B.1, TS 5B.2, SA • **SR:** pgs. 2-15 • **Digital Resources:** IWB: Adaptations; IWB: Environmental Factors and Plant • Growth; IWB: Predator-Prey; IWB: Ecosystem Chart (from Lesson 1); IWB: Ecosystem Interactions; SIM: Beak Simulation; SIM: Coral Reef
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.	***Life in Ecosystems*** • **TG:** L4 pgs. 130-145, LA 4A, SIS 4A, SIS 4B.1, SIS 4B.2, SIS 4B.3; L5 pgs. 168-178, SIS 5B, TS 5B.1, TS 5B.2, SA • **SR:** pgs. 2-5, 12-13, 15 • **Digital Resources:** IWB: Environmental Factors and Plant Growth (from Lesson 3); IWB: Organisms' Needs; IWB: Ecosystem Chart (from Lesson 1); IWB: Ecosystem Interactions; SIM: Phototropism; SIM: Fossil Formation; SIM: Coral Reef
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.	***Life in Ecosystems*** • **TG:** L5 pgs. 168-178, SIS 5B, TS 5B.1, TS 5B.2, SA • **SR:** pgs. 2-5, 15 • **Digital Resources:** IWB: Ecosystem Chart (from Lesson 1); IWB: Ecosystem Interactions; SIM: Coral Reef

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3rd Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Earth's Systems (ESS2)		
3.ESS2.1	Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	***Weather and Climate Patterns*** • **TG:** L1 pgs. 32-46, SIS 1A, SIS 1B, SIS 1C, THS; L2 pgs. 66-76, L&S 2A, SIS 2A, LA 2B, SIS 2B • **SR:** pgs. 2-9, 14-15 • **Digital Resources:** IWB: Our Ideas About Weather; IWB: Seasons; SIM: Air Pressure; SIM: Earth's Revolution; SIM: Earth's Rotation; SIM: Rain Gauge; SIM: Precipitation; SIM: Water Vapor
3.ESS2.2	Obtain and combine information to describe climates in different regions of the world.	***Weather and Climate Patterns*** • **TG:** L3 pgs. 102-116, LA 3A, SIS 3A, SIS 3B, SIS 3C; L4 pgs. 144-154, LA 4A, SIS 4A, SIS 4B.1, SIS 4B.2, TS 4A • **SR:** pgs. 10-13 • **Digital Resources:** IWB: Our Ideas About Climate; IWB: Weather Hazards; SIM: Earth's Rotation; SIM: Earth's Revolution; SIM: Land Breezes and Sea Breezes; SIM: Air Circulation; SIM: Air Pressure; SIM: Coriolis Effect
Earth and Human Activity (ESS3)		
3.ESS3.1	Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.	***Weather and Climate Patterns*** • **TG:** L5 pgs. 172-183, SIS 5A, SIS 5B.1, SIS 5B.2, TS 5A, TS 5B.1, TS 5B.2, SA • **Digital Resources:** IWB: Impacts of Weather Hazards, IWB: Our Ideas About Weather (from Lesson 1), IWB: Our Ideas About Climate (from Lesson 3), IWB: What We Know About Weather and Climate

4th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Energy (PS3)		
4.PS3.1	Use evidence to construct an explanation relating the speed of an object to the energy of that object.	***Energy Works*** • **TG:** L2 pgs. 48-63, LA 2A, SIS 2A, SIS 2B, SIS 2C • **SR:** pgs. 6-9 • **Digital Resources:** IWB: Exploring Stored and Motion Energy; SIM: Stored and Motion Energy; SIM: Energy in a Table Tennis Ball; SIM: Energy Transfer
4.PS3.2	Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.	***Energy Works*** • **TG:** L1 pgs. 34-44, SIS 1B; L3 pgs. 88-102, LA 3A, SIS 3A, SIS 3C.1, SIS 3C.2, SIS 3C.3; L5 pgs. 168-182, LA 5A, SIS 5B, SIS 5C, THS; L6 pgs. 208-216, SIS 6A, SA • **SR:** pgs. 2-5, 8-14 • **Digital Resources:** IWB: Where Do You Get Your Energy? IWB: Energy Transfers and Transformations; IWB: Bulbs and Batteries, Mystery Box, and Solar Cells; IWB: Alternative Energy; IWB: My Energy Experiment; SIM: Building a Circuit; SIM: Solar Cells; SIM: Wind Turbine; SIM: Waterwheel
4.PS3.3	Ask questions and predict outcomes about the changes in energy that occur when objects collide.	***Energy Works*** • **TG:** L2 pgs. 48-63, LA 2A, SIS 2A, SIS 2B, SIS 2C; L4 pgs. 128-142, SIS 4A, SIS 4B.1, SIS 4B.2, SIS 4C, SIS 4D, LA 4C • **SR**: pgs. 6-9 • **Digital Resources:** IWB: Exploring Stored and Motion Energy; IWB: Let's Find Out About Water Waves; SIM: Stored and Motion Energy; SIM: Energy in a Table Tennis Ball; SIM: Energy Transfer; SIM: Wind Waves; SIM: Marble Waves; SIM: Morse Code Demo
4.PS3.4	Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.	***Energy Works*** • **TG:** L6 pgs. 208-216, SIS 6A, SA • **Digital Resources:** IWB: My Energy Experiment

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4th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Waves and Their Applications in Technologies for Information Transfer (PS4)		
4.PS4.1	Develop and use a model of waves to describe patterns in terms of amplitude and wavelength, and to show that waves can cause objects to move.	***Energy Works*** • **TG:** L4 pgs. 128-142, SIS 4A, SIS 4B.1, SIS 4B.2, SIS 4C, SIS 4D, LA 4C • **Digital Resources:** IWB: Let's Find Out About Water Waves; SIM: Wind Waves; SIM: Marble Waves; SIM: Morse Code Demo
4.PS4.2	Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen.	***Plant and Animal Structures*** • **TG:** L6 pgs. 176-182, SIS 6A.1, SIS 6A.2, SA
4.PS4.3	Generate and compare multiple solutions that use patterns to transfer information.	***Energy Works*** • **TG:** L4 pgs. 128-142, SIS 4A, SIS 4B.1, SIS 4B.2, SIS 4C, SIS 4D, LA 4C • **Digital Resources:** IWB: Let's Find Out About Water Waves; SIM: Wind Waves; SIM: Marble Waves; SIM: Morse Code Demo
From Molecules to Organisms: Structure and Processes (LS1)		
4.LS.1.1	Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	***Plant and Animal Structures*** • **TG:** L1 pgs. 34-43, SIS 1A, SIS 1B; L2 pgs. 48-64, L&S 2A, LA 2B, SIS 2A, SIS 2B.1, SIS 2B.2, TS 2A; L3 pgs. 84-100, SIS 3A, SIS 3C, SIS 3D, LA 3B, THS; L4 pgs. 118-131, SIS 4A.1, SIS 4A.2, SIS 4B, SIS 4C, LA 4B; L5 pgs. 152-168, LA 5A, SIS 5A, TS 5C; L6 pgs. 176-182, SIS 6A.1, SIS 6A.2, SA • **SR:** 2-13 • **Digital Resources:** IWB: Plant and Animal Structures; IWB: Thinking About Internal Animal Structures; IWB: Vertebrates and Invertebrates; IWB: Information Processing; IWB: What Eye Know; SIM: Factors of Plant Growth, Part 2; SIM: Plant Life Cycle; SIM: Bee Pollination; SIM: Information Processing; SIM: Reaction Time Test; SIM: Pupil Size

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4th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
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.	***Plant and Animal Structures*** • **TG:** L4 pgs. 118-131, SIS 4A.1, SIS 4A.2, LA 4B, SIS 4B, SIS 4C; L5 pgs. 152-168, LA 5A, SIS 5A, TS 5C; L6 pgs. 176-182, SIS 6A.1, SIS 6A.2, SA • **SR:** 6-7 • **Digital Resources:** IWB: Information Processing; IWB: What Eye Know; SIM: Information Processing; SIM: Reaction Time Test; SIM: Pupil Size
Earth's Place in the Universe (ESS1)		
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.	***Changing Earth*** • **TG:** L2 pgs. 48-59, LA 2A, SIS 2A, SIS 2B, SIS 2C; L5 pgs. 98-108, LA 5A • **SR:** pgs. 16-21 • **Digital Resources**: IWB: Fossils and Their Formation; SIM: Formation of Rock Types; SIM: Rock Cycle; SIM: Rock Strata; SIM: Fossil Formation
Earth's Systems (ESS2)		
4.ESS2.1	Plan and conduct investigations on the effects of water, ice, wind, and vegetation on the relative rate of weathering and erosion.	***Changing Earth*** • **TG:** L3 pgs. 66-75, LA 3A, SIS 3A, THS; L6 pgs. 112-121, SIS 6A, SIS 6B, TS 6C, SA • **SR:** pgs. 12-15 • **Digital Resources:** IWB: Weathering and Erosion; IWB: Our Earth; SIM: Canyon Formation; SIM: Soil Erosion
4.ESS2.2	Analyze and interpret data from maps to describe patterns of Earth's features.	***Changing Earth*** • **TG:** L1 pgs. 34-44, SIS 1B, TS 1C; L2 pgs. 48-59, LA 2A, SIS 2A, SIS 2B, SIS 2C; L3 pgs. 66-75, LA 3A, SIS 3A, THS; L4 pgs. 86-93, LA 4A, SIS 4A, SIS 4B • **SR:** pgs. 2-21 • **Digital Resources:** IWB: Our Earth; IWB: Weathering and Erosion; SIM: Earth's Layers; SIM: Magma Convection; SIM: Formation of Rock Types; SIM: Rock Cycle; SIM: Canyon Formation

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4th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Earth and Human Activity (ESS3)		
4.ESS3.1	Obtain and combine information to describe that energy and fuels are derived from renewable and non-renewable resources and how their uses affect the environment.	***Energy Works*** • **TG:** L5 pgs. 168-182, LA 5A, SIS 5B, SIS 5C, THS • **SR:** pgs. 10-14 • **Digital Resources:** IWB: Alternative Energy; SIM: Wind Turbine; SIM: Waterwheel
4.ESS3.2	Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	***Changing Earth*** • **TG:** L6 pgs. 112-121, SIS 6A, SIS 6B, TS 6C, SA • **Digital Resources:** IWB: Our Earth; SIM: Soil Erosion

5th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Matter and Its Interactions (PS1)		
5.PS1.1	Develop a model to describe that matter is made of particles too small to be seen.	***Structure and Properties of Matter*** • **TG:** L2 pgs. 62-76, LA 2B, SIS 2A, SIS 2B, SIS 2C; L6 pgs. 170-179, SIS 6A, SA • **SR:** pgs. 6-7, 21 • **Digital Resources:** SIM: Particle Attraction; SIM: States of Water
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.	***Structure and Properties of Matter*** • **TG:** L2 pgs. 62-76, LA 2B, SIS 2A, SIS 2B, SIS 2C; L6 pgs. 170-179, SIS 6A, SA • **SR:** pgs. 6-7, 21 • **Digital Resources:** SIM: Particle Attraction; SIM: States of Water
5.PS1.3	Make observations and measurements to identify materials based on their properties.	***Structure and Properties of Matter*** • **TG:** L1 pgs. 34-48, SIS 1B, SIS 1C, THS; L2 pgs. 62-76, SIS 2A, LA 2B, SIS 2B, SIS 2C; L3 pgs. 92-101, LA 3A, SIS 3A, SIS 3B.1, SIS 3B.2; L6 pgs. 170-179, SIS 6A, SA • **SR:** pgs. 2-13, 21 • **Digital Resources:** IWB: Our Ideas and Questions About Matter; SIM: Balloon Properties; SIM: Displacement; SIM: Volume and Mass; SIM: Particle Attraction; SIM: States of Water; SIM: Hardness, Buoyancy, Magnetism; SIM: Layering by Density; SIM: Viscosity Racetrack
5.PS1.4	Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	***Structure and Properties of Matter*** • **TG:** L4 pgs. 116-128, SIS 4A, LA 4B, SIS 4B, SIS 4C; L5 pgs. 148-159, SIS 5A, LA 5B, SIS 5B; L6 pgs. 170-179, SIS 6A, SA • **SR:** pgs. 14-21 • **Digital Resources:** IWB: Physical and Chemical Changes; SIM: Create a Mixture; SIM: Chemical Reactions

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5th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Motion and Stability: Forces and Interactions (PS2)		
5.PS2.1	Support an argument, with evidence, that Earth's gravitational force pulls objects downward toward the center of the earth.	***Earth and Space Systems*** • **TG:** L1 pgs. 32-45, SIS 1B.1, SIS 1B.2, SIS 1C, TS 1B, TS 1C • **SR:** pgs. 2-3, 8-9 • **Digital Resources:** IWB: Knowledge and Questions About Earth and Space Systems; SIM: Sun, Earth, Moon
Energy (PS3)		
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.	***Matter and Energy in Ecosystems*** • **TG:** L2 pgs. 58-69, SIS 2A, LA 2B, SIS 2B; L3 pgs. 78-88, SIS 3A, LA 3B, SIS 3B, THS, TS 3A • **SR:** pgs. 12-17 • **Digital Resources:** IWB: Food Chain; SIM: Competition; SIM: Energy Cycles
From Molecules to Organisms: Structure and Processes (LS1)		
5.LS1.1	Support an argument that plants get the materials they need for growth chiefly from air and water.	***Matter and Energy in Ecosystems*** • **TG:** L1 pgs. 34-46, SIS 1B, SIS 1C • **SR:** pgs. 6-9 • **Digital Resources:** IWB: Biotic and Abiotic Factors; SIM: Photosynthesis; SIM: Factors of Plant Growth, Part 2

5th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Ecosystems: Interactions, Energy, and Dynamics (LS2)		
5.LS2.1	Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	***Matter and Energy in Ecosystems*** • **TG:** L1 pgs. 34-46, SIS 1B, SIS 1C; L2 pgs. 58-69, SIS 2A, LA 2B, SIS 2B; L3 pgs. 78-88, SIS 3A, LA 3B, SIS 3B, THS, TS 3A; L4 pgs. 104-117, LA 4A, SIS 4A,SIS 4C, TS 4B; L5 pgs. 132-145, L&S 5A, LA 5A, SIS 5A, SIS 5B, SIS 5C, TS 5B; L6 pgs. 168-175, SIS 6A, SA • **SR:** pgs. 2-9, 12-21 • **Digital Resources:** IWB: Biotic and Abiotic Factors; IWB: Food Chain; IWB: The Four Spheres of Earth; IWB: Pollution; SIM: Photosynthesis; SIM: Factors of Plant Growth, Part 2; SIM: Competition; SIM: Energy Cycles; SIM: Water Cycle
5.LS2.2	Use models to explain factors that upset the stability to local ecosystems.	***Matter and Energy in Ecosystems*** • **TG:** L5 pgs. 132-145, L&S 5A, LA 5A, SIS 5A, SIS 5B, SIS 5C, TS 5B; L6 pgs. 168-175, SIS 6A, SA • **SR:** pgs. 18-21 • **Digital Resources:** IWB: Pollution
Earth's Place in the Universe (ESS1)		
5.ESS1.1	Support an argument with evidence that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.	***Earth and Space Systems*** • **TG:** L2 pgs. 58-70, LA 2A, SIS 2A, SIS 2B, SIS 2C • **SR:** pgs. 4-5 • **Digital Resources:** SIM: Earth's Rotation; SIM: Shadows

5th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
5.ESS1.2	Represent data in graphical displays to reveal patterns of daily changes in the length and direction of shadows, in addition to different positions of the sun, moon, and stars at different times of the day, month, and year.	***Earth and Space Systems*** • **TG:** L2 pgs. 58-70, LA 2A, SIS 2A, SIS 2B, SIS 2C; L3 pgs. 90-104, LA 3A, SIS 3A.1, SIS 3A.2, SIS 3B, THS, TS 3A, TS 3C • **SR:** pgs. 4-9 • **Digital Resources:** SIM: Earth's Rotation; SIM: Shadows; SIM: Earth's Revolution; SIM: Earth and Moon; SIM: Phases of the Moon
Earth's Systems (ESS2)		
5.ESS2.1	Develop a model to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.	***Matter and Energy in Ecosystems*** • **TG:** L4 pgs. 104-117, LA 4A, SIS 4A, SIS 4C, TS 4B; L5 pgs. 132-145, L&S 5A, LA 5A, SIS 5A, SIS 5B, SIS 5C, TS 5B; L6 pgs. 168-175, SIS 6A, SA • **SR:** pgs. 2-5, 18-21 • **Digital Resources:** IWB: The Four Spheres of Earth; IWB: Pollution; SIM: Water Cycle ***Earth and Space Systems*** • **TG:** L4 pgs. 140-151, SIS 4A, LA 4B, SIS 4B, TS 4A, TS 4B • **SR:** pgs. 10-21, 23 • **Digital Resources:** IWB: Water Cycle; SIM: Water Cycle
5.ESS2.2	Describe and graph amounts of saltwater and freshwater in various reservoirs to provide evidence about the distribution of water on Earth.	***Earth and Space Systems*** • **TG:** L4 pgs. 140-151, SIS 4A, LA 4B, SIS 4B, TS 4A, TS 4B • **SR:** pgs. 10-21, 23 • **Digital Resources:** IWB: Water Cycle; SIM: Water Cycle

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5th Grade		
Oklahoma Academic Standards for Science		**Building Blocks of Science™ 3D**
Earth and Human Activity (ESS3)		
5.ESS3.1	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environments.	***Earth and Space Systems*** • **TG:** L5 pgs. 176-186, SIS 5A, SA, TS 5A, TS 5B • **Digital Resources:** IWB: Human Impacts on Earth's Systems; IWB: Knowledge and Questions About Earth and Space Systems (from Lesson 1); IWB: What We Learned About Earth and Space Systems **Matter and Energy in Ecosystems** • **TG:** L5 pgs. 132-145, L&S 5A, LA 5A, SIS 5A, SIS 5B, SIS 5C, TS 5B; L6 pgs. 168-175, SIS 6A, SA • **SR:** pgs. 18-21 • **Digital Resources:** IWB: Pollution