Mystery Science Alignment with Texas Essential Knowledge and Skills (TEKS)

Mystery Science - Texas Essential Knowledge and Skills (TEKS) Alignment
Mystery Science aligns to the streamlined 2017 Science Texas Essential Knowledge and Skills (TEKS). Each lesson (exploration & activity) is designed to take one hour per week. Mini-lessons are 5-minute videos that answer K-5 student questions and can be used as a jumping off point to engage learners for a full lesson planned by the teacher. Each TEKS statement is color-coded to indicate the following:

Identified by TEA as a Readiness Standard of the assessed curriculum
Identified by TEA as a Supporting Standard of the assessed curriculum
Not identified by TEA as part of the assessed curriculum

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Kindergarten

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Properties of Objects	*Matter & Energy*	**K.5A** Observe and record properties of objects, including bigger or smaller, heavier or lighter, shape, color, and texture.			
		K.5B Observe, record, and discuss how materials can be changed by heating or cooling.	Sunny Skies	Grade K	**Lesson 1, Read-Along:** How could you walk barefoot across hot pavement without burning your feet? **Lesson 2:** How could you warm up a frozen playground? **Lesson 3:** Why does it get cold in winter?
Energy	*Force, Motion, & Energy*	**K.6A** Use the senses to explore different forms of energy such as light, thermal, and sound.			
Position and Motion	*Force, Motion, & Energy*	**K.6B** Explore interactions between magnets and various materials.			*Addressed in Grade 3*
		K.6C Observe and describe the location of an object in relation to another such as above, below, behind, in front of, and beside.			
		K.6D Observe and describe the ways that objects can move such as in a straight line, zigzag, up and down, back and forth, round and round, and fast and slow.	Force Olympics	Grade K	**Lesson 1:** What's the biggest excavator? **Lesson 2 Read-Along:** Why do builders need so many big machines? **Lesson 3:** How can you knock down a wall made of concrete? **Lesson 4 Read-Along:** How can you knock down the most bowling pins? **Lesson 5:** How can we protect a mountain town from falling rocks? **Lesson 6 Read-Along:** How could you invent a trap?

MYSTERY science

Kindergarten, continued

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Earth Materials	*Earth and Space*	**K.7A** Observe, describe, and sort rocks by size, shape, color, and texture.	Mini-lessons		**Mini-lesson:** Why does this rock look like a sponge?
		K.7B Observe and describe physical properties of natural sources of water, including color and clarity.			
		K.7C Give examples of ways rocks, soil, and water are useful.			
Weather	*Earth and Space*	**K.8A** Observe and describe weather changes from day to day and over seasons.	Wild Weather	Grade K	**Lesson 3:** How many different kinds of weather are there?
		K.8C Observe, describe, and illustrate objects in the sky such as the clouds, Moon, and stars, including the Sun.			
Objects in the Sky	*Earth and Space*	**K.8B** Identify events that have repeated patterns, including seasons of the year and day and night.	Circle of Seasons	Grade K	**Lesson 1, Read-Along:** How do you know what to wear for the weather? **Lesson 2:** What would the weather be like on your birthday? **Lesson 3:** Why do birds lay eggs in the spring?
		K.8C Observe, describe, and illustrate objects in the sky such as the clouds, Moon, and stars, including the Sun.			*Addressed in Grade 1*

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Seasons	*Earth and Space*	**K.8A** Observe and describe weather changes from day to day and over seasons.	Circle of Seasons	Grade K	**Lesson 1, Read-Along:** How do you know what to wear for the weather? **Lesson 2:** What would the weather be like on your birthday? **Lesson 3:** Why do birds lay eggs in the spring?
		K.8B Identify events that have repeated patterns, including seasons of the year and day and night.			
Organisms and Environments	*Organisms and Environments*	**K.9A** Differentiate between living and nonliving things based upon whether they have basic needs and produce offspring.			
		K.9B Examine evidence that living organisms have basic needs such as food, water, and shelter for animals and air, water, nutrients, sunlight, and space for plants.	Plant & Animal Secrets	Grade K	**Lesson 1:** Why do woodpeckers peck wood? **Lesson 2, Read-Along:** Where do animals live? **Lesson 3:** How can you find animals in the woods? **Lesson 4, Read-Along:** How do animals make their homes in the forest? **Lesson 5:** How do plants and trees grow? **Lesson 6, Read-Along:** Why would you want an old log in your backyard?
Physical Characteristics of Organisms	*Organisms and Environments*	**K.10A** Sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape.			*Addressed in Grade 2*
		K.10B Identify basic parts of plants and animals.	Mini-lessons		**Mini-lesson:** What is the biggest apple in the world?** **Mini-lesson:** What's the biggest tree in the world?

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Plant Life Cycle	*Organisms and Environments*	**K.10C** Identify ways that young plants resemble the parent plant.	Plant & Animal Secrets	Grade K	**Lesson 5:** How do plants and trees grow?
		K.10D Observe changes that are part of a simple life cycle of a plant: seed, seedling, plant, flower, and fruit.			

Grade 1

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Properties of Objects	*Matter & Energy*	**1.5A** Classify objects by observable properties such as larger and smaller, heavier and lighter, shape, color, and texture.			
		1.5B Predict and identify changes in materials caused by heating and cooling.	Mini-lessons		**Mini-lesson:** Can you make lava? **Mini-lesson:** How is glass made?
		1.5C Classify objects by the materials from which they are made.			
Energy	*Force, Motion, & Energy*	**1.6A** Identify and discuss how different forms of energy such as light, thermal, and sound are important to everyday life.	Lights & Sounds	Grade 1	**Lesson 1:** How do they make silly sounds in cartoons? **Lesson 2 Read-Along:** Where do sounds come from? **Lesson 3:** What if there were no windows? **Lesson 4 Read-Along:** Can you see in the dark? **Lesson 5:** How could you send a secret message to someone far away? **Lesson 6 Read-Along:** How do boats find their way in the fog?
How Objects Move	*Force, Motion, & Energy*	**1.6B** Predict and describe how a magnet can be used to push or pull an object.			*Addressed in Grade 3*
		1.6C Demonstrate and record the ways that objects can move such as in a straight line, zig zag, up and down, back and forth, round and round, and fast and slow.			*Addressed in Kindergarten*

MYSTERY science

Grade 1, continued

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Rocks, Soil, and Water	*Earth and Space*	**1.7A** Observe, compare, describe, and sort components of soil by size, texture, and color.			
		1.7B Identify and describe a variety of natural sources of water, including streams, lakes, and oceans.	Mini-lessons		**Mini-lesson:** How deep does the ocean go? **Mini-lesson:** What's at the bottom of the ocean?
		1.7C Identify how rocks, soil, and water are used to make products.	Mini-lessons		**Mini-lesson:** Where does salt come from? **Mini-lesson:** How is glass made?
Objects in the Sky	*Earth and Space*	**1.8B** Observe and record changes in the appearance of objects in the sky such as the Moon and stars, including the Sun.	Spinning Sky	Grade 1	**Lesson 1:** Could a statue's shadow move? **Lesson 2 Read-Along:** What does your shadow do when you're not looking? **Lesson 3:** How can the Sun help you if you're lost?
		1.8C Identify characteristics of the seasons of the year and day and night.	Spinning Sky	Grade 1	**Lesson 4 Read-Along:** Why do you have to go to bed early in the summer? **Lesson 5:** Why do the stars come out at night? **Lesson 6 Read-Along:** How can stars help you if you get lost?

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Weather and Seasons	*Earth and Space*	**1.8A** Record weather information, including relative temperature such as hot or cold, clear or cloudy, calm or windy, and rainy or icy.			*Addressed in Kindergarten.*
		1.8C Identify characteristics of the seasons of the year and day and night.	Spinning Sky	Grade 1	**Lesson 4 Read-Along:** Why do you have to go to bed early in the summer? **Lesson 5:** Why do the stars come out at night? **Lesson 6 Read-Along:** How can stars help you if you get lost?
		1.8D Demonstrate that air is all around us and observe that wind is moving air.	Wild Weather Plant & Animal Superpowers	Grade K Grade 1	**Lesson 1, Read-Along:** How can you get ready for a big storm? **Lesson 2:** Have you ever watched a storm? **Lesson 5:** Why don't trees blow down in the wind?
Organisms and Environments	*Organisms and Environments*	**1.9A** Sort and classify living and nonliving things based upon whether they have basic needs and produce offspring.			
		1.9B Analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver.			
		1.9C Gather evidence of interdependence among living organisms such as energy transfer through food chains or animals using plants for shelter.	Mini-lessons		**Mini-lesson:** Why are flamingos pink?** **Mini-lesson:** Why are butterflies so colorful?** **Mini-lesson:** Do bats really drink blood?

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Physical Characteristics of Organisms	*Organisms and Environments*	**1.10A** Investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats.	Plant & Animal Superpowers Mini-lessons	Grade 1	**Lesson 1:** Why do birds have beaks? **Lesson 3:** Why are polar bears white? **Mini-lesson:** What is the biggest spider in the world?** **Mini-lesson:** Why do penguins have wings if they don't fly?
		1.10B Identify and compare the parts of plants.	Plant & Animal Superpowers	Grade 1	**Lesson 5:** Why don't trees blow down in the wind? **Lesson 6, Read-along:** What do sunflowers do when you're not looking?
Life Cycles	*Organisms and Environments*	**1.10C** Compare ways that young animals resemble their parents.	Plant & Animal Superpowers	Grade 1	**Lesson 2, Read-Along:** Why do baby ducks follow their mother? **Lesson 4, Read-Along:** Why do family members look alike?
		1.10D Observe and record life cycles of animals such as a chicken, frog, or fish.			

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Grade 2

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Matter	*Matter & Energy*	**2.5A** Classify matter by physical properties, including relative temperature, texture, flexibility, and whether material is a solid or liquid.	Material Magic	Grade 2	**Lesson 1:** Why do we wear clothes?
		2.5B Compare changes in materials caused by heating and cooling.	Material Magic	Grade 2	**Lesson 2:** Can you really fry an egg on a hot sidewalk? **Lesson 3:** Why are so many toys made out of plastic?
		2.5C Demonstrate that things can be done to materials such as cutting, folding, sanding, and melting to change their physical properties.	Material Magic	Grade 2	**Lesson 3:** Why are so many toys made out of plastic? **Lesson 5:** Could you build a house out of paper?
		2.5D Combine materials that when put together can do things that they cannot do by themselves such as building a tower or a bridge and justify the selection of those materials based on their physical properties.	Material Magic	Grade 2	**Lesson 4:** What materials might be invented in the future? **Lesson 5:** Could you build a house out of paper?
Energy	*Force, Motion, & Energy*	**2.6A** Investigate the effects on objects by increasing or decreasing amounts of light, heat, and sound energy such as how the color of an object appears different in dimmer light or how heat melts butter.	Material Magic	Grade 2	**Lesson 2:** Can you really fry an egg on a hot sidewalk? **Lesson 3:** Why are so many toys made out of plastic?
Force and Motion	*Force, Motion, & Energy*	**2.6B** Observe and identify how magnets are used in everyday life.	Mini-lessons		**Mini-lesson:** How are magnets made?
		2.6C Trace and compare patterns of movement of objects such as sliding, rolling, and spinning over time.			*Addressed in Grade 3*

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Earth Materials and Natural Resources	*Earth and Space*	**2.7A** Observe, describe, and compare rocks by size, texture, and color.	Work of Water Mini-lessons	Grade 2	**Lesson 2:** Why is there sand at the beach? **Mini-lesson:** Where does metal come from? **Mini-lesson:** How are diamonds made?
		2.7B Identify and compare the properties of natural sources of freshwater and saltwater.	Work of Water Mini-lessons	Grade 2	**Lesson 1:** If you floated down a river, where would you end up? **Mini-lesson:** Why is the ocean salty?
		2.7C Distinguish between natural and manmade resources.	Mini-lessons		**Mini-lesson:** Where does metal come from? **Mini-lesson:** How are diamonds made? **Mini-lesson:** How is plastic made? **Mini-lesson:** How is gold made?
Patterns in Weather and the Appearance of the Moon	*Earth and Space*	**2.8A** Measure, record, and graph weather information, including temperature, wind conditions, precipitation, and cloud coverage, in order to identify patterns in the data			
		2.8B Identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation	Material Magic	Grade 2	**Lesson 1:** Why do we wear clothes? **focus on clothing choices*
		2.8C Observe, describe, and record patterns of objects in the sky, including the appearance of the Moon.			*Addressed in Grade 1*

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Organisms and Environments	*Organisms & Environments*	**2.9A** Identify the basic needs of plants and animals.	Plant Adventures	Grade 2	**Lesson 1:** How did a tree travel halfway around the world? **Lesson 2:** Could a plant survive without light?
		2.9B Identify factors in the environment, including temperature and precipitation, that affect growth and behavior such as migration, hibernation, and dormancy of living things.	Mini-lessons		**Mini-lesson:** Why do bears hibernate?** **Mini-lesson:** Why do animals come back after going to warm places in the winter? **Mini-lesson:** Where do bugs go in winter?
		2.9C Compare the ways living organisms depend on each other and on their environments such as through food chains	Animal Adventures	Grade 2	**Lesson 1:** How many different kinds of animals are there? **Lesson 2:** Why do frogs say “ribbit”? **Lesson 3:** How could you get more birds to visit a feeder?
Physical Characteristics & Behaviors of Organisms	*Organisms & Environments*	**2.10A** Observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs.	Animal Adventures Mini-lessons	Grade 2	**Lesson 2:** Why do frogs say “ribbit”? **Lesson 3:** How could you get more birds to visit a feeder? **Mini-lesson:** Why do owls say ‘hoo’?** **Mini-lesson:** Why can’t fish breathe on land? **Mini-lesson:** Can animals get a sunburn?
		2.10B Observe, record, and compare how the physical characteristics of plants help them meet their basic needs such as stems carry water throughout the plant.	Plant Adventures Mini-lessons	Grade 2	**Lesson 1:** How did a tree travel halfway around the world? **Lesson 2:** Could a plant survive without light? **Mini-lesson:** Why do leaves change color in the fall?** **Mini-lesson:** How do flowers bloom in the spring?**
Insect Life Cycles	*Organisms & Environments*	**2.10C** Investigate and record some of the unique stages that insects such as grasshoppers and butterflies undergo during their life cycle.	Mini-lessons		**Mini-lesson:** Are butterflies the only animals that start out as caterpillars?**

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Properties of Matter	*Matter & Energy*	**3.5A** Measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float	Invisible Forces	Grade 3	**Lesson 4:** What can magnets do? **physical property of magnetism is addressed*
		3.5B Describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container			
		3.5C Predict, observe, and record changes in the state of matter caused by heating or cooling such as ice becoming liquid water, condensation forming on the outside of a glass of ice water, or liquid water being heated to the point of becoming water vapor	Stormy Skies Mini-lessons	Grade 3	**Lesson 1:** Where do clouds come from? **Mini-lesson:** How is syrup made?
		3.5D Explore and recognize that a mixture is created when two materials are combined such as gravel and sand or metal and plastic paper clips			
Energy	*Force, Motion, & Energy*	**3.6A** Explore different forms of energy, including mechanical, light, sound, and thermal in everyday life	Waves of Sound	Grade 4	**Lesson 1:** How far can a whisper travel? **Lesson 2:** What would happen if you screamed in outer space? **Lesson 3:** Why are some sounds high and some sounds low?
Force and Motion	*Force, Motion, & Energy*	**3.6B** Demonstrate and observe how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons.	Invisible Forces	Grade 3	**Lesson 1:** How could you win a tug-of-war against a bunch of adults? **Lesson 2:** What makes bridges so strong? **Lesson 3**: How can you go faster down a slide?
		3.6C Observe forces such as magnetism and gravity acting on objects.	Invisible Forces	Grade 3	**Lesson 4:** What can magnets do? **Lesson 5:** How could you unlock a door using a magnet?

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The Natural World	*Earth and Space*	**3.7A** Explore and record how soils are formed by weathering of rock and the decomposition of plant and animal remains			
		3.7B Investigate rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides.	The Birth of Rocks Mini-lessons	Grade 4	**Lesson 1:** Could a volcano pop up where you live? **Lesson 2:** Why do some volcanoes explode? **Lesson 4:** How could you survive a landslide? **Mini-lesson:** How do earthquakes happen?
		3.7C Explore the characteristics of natural resources that make them useful in products and materials such as clothing and furniture and how resources may be conserved	Mini-lessons		**Mini-lesson:** How do they turn wood into paper? **Mini-lesson:** Where does chocolate come from? **Mini-lesson:** How are pencils made?
The Solar System	*Earth and Space*	**3.8B** Describe and illustrate the Sun as a star composed of gases that provides light and thermal energy	Spaceship Earth*	Grade 5	**Lesson 8:** Could there be life on other planets?
		3.8C Construct models that demonstrate the relationship of the Sun, Earth, and Moon, including orbits and positions	Spaceship Earth*	Grade 5	**Lesson 5:** Why does the Moon change shape?
		3.8D Identify the planets in Earth's solar system and their position in relation to the Sun.	Spaceship Earth* Mini-lessons	Grade 5	**Lesson 6:** What are the wandering stars? **Mini-lesson:** Why is Mars red?
Weather	*Earth and Space*	**3.8A** Observe, measure, record, and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction, and precipitation.			

*Spaceship Earth was initially developed for Grade 5. Expect aspects of these lessons to be a challenge.

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Ecosystems	*Organisms and Environments*	**3.9A** Observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.			
		3.9B Identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field	Web of Life*	Grade 5	**Lesson 1:** Why would a hawk move to New York City?*
		3.9C Describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations.			
Structures and Functions of Organisms	*Organisms and Environments*	**3.10A** Explore how structures and functions of plants and animals allow them to survive in a particular environment.	Plant Adventures Mini-lessons	Grade 2	**Lesson 3:** Why do trees grow so tall? **Lesson 4:** Should you water a cactus? **Lesson 5:** Where do plants grow best? **Mini-lesson:** How do polar animals survive the cold?**
Life Cycles	*Organisms and Environments*	**3.10B** Investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles.	Animals Through Time	Grade 3	**Lesson 7:** What's the best way to get rid of mosquitoes?

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Grade 4

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Physical Properties of Matter	*Matter & Energy*	**4.5A** Measure, compare, and contrast physical properties of matter, including mass, volume, states (solid, liquid, gas), temperature, magnetism, and the ability to sink or float.			
Mixtures	*Matter & Energy*	**4.5B** Compare and contrast a variety of mixtures, including solutions			
Energy	*Force, Motion, & Energy*	**4.6A** Differentiate among forms of energy, including mechanical, sound, electrical, light, and thermal.	Energizing Everything	Grade 4	**Lesson 1:** How is your body similar to a car? **Lesson 2:** What makes roller coasters go so fast? **Lesson 3:** Why is the first hill of a roller coaster always the highest?
		4.6B Differentiate between conductors and insulators of thermal and electrical energy.			
		4.6C Demonstrate that electricity travels in a closed path, creating an electrical circuit.			*Addressed in Grade 5*
Force and Motion	*Force, Motion, & Energy*	**4.6D** Design a descriptive investigation to explore the effect of force on an object such as a push or a pull, gravity, friction, or magnetism.	Spaceship Earth	Grade 5	**Lesson 7:** Why is gravity different on other planets?
Natural Resources	*Earth and Space*	**4.7A** Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants			
		4.7C Identify and classify Earth's renewable resources, including air, plants, water, and animals, and nonrenewable resources, including coal, oil, and natural gas, and the importance of conservation.	Watery Planet Energizing Everything	Grade 5 Grade 4	**Lesson 1:** How much water is in the world? **Lesson 2:** When you turn on the faucet, where does the water come from? **Lesson 8:** Where does energy come from?

Grade 4, continued

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Changing Earth	*Earth and Space*	**4.7B** Observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice.	The Birth of Rocks Mini-lessons	Grade 4	**Lesson 3:** Will a mountain last forever? **Mini-lesson:** How old is the Earth?
Weather and the Water Cycle	*Earth and Space*	**4.8A** Measure, record, and predict changes in weather	Stormy Skies Mini-lessons	Grade 3	**Lesson 2:** How can we predict when it's going to storm? **Lesson 4:** How can you keep a house from blowing away in a windstorm? **Mini-lesson:** Why are tornadoes so hard to predict?
		4.8B Describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process			*Addressed in Grade 5*
Patterns of the Sun, Moon, and Earth Systems	*Earth and Space*	**4.8C** Collect and analyze data to identify sequences and predict patterns of change in shadows, seasons, and the observable appearance of the Moon over time	Spaceship Earth	Grade 5	**Lesson 2:** Who set the first clock? **Lesson 3:** How can the Sun tell you the season? **Lesson 4:** Why do the stars change with the seasons?

MYSTERY science

Grade 4, continued

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit		Mystery Science Lessons
Energy Flow in Living Systems	*Organisms and Environments*	**4.9A** Investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food	Web of Life	Grade 5	**Lesson 2:** What do plants eat?
		4.9B Describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web			*Addressed in Grade 5*
Structure and Behaviors of Organisms	*Organisms and Environments*	**4.10A** Explore how structures and functions enable organisms to survive in their environment.	Power of Flowers Human Machine Mini-lessons	Grade 3 Grade 4	**Lesson 1:** Why do plants grow flowers? **Lesson 2:** Why do plants give us fruit? **Lesson 1:** Why do biceps bulge? **Lesson 4:** How does your brain control your body? **Mini-lesson:** Why do our skeletons have so many bones?** **Mini-lesson:** What would happen if you didn't have a skull?** **Mini-lesson:** How does the heart pump blood?** **Mini-lesson:** Why do we sweat when we play sports?
		4.10B Explore and describe examples of traits that are inherited from parents to offspring such as eye color and shapes of leaves and behaviors that are learned such as reading a book and a wolf pack teaching their pups to hunt effectively	Power of Flowers	Grade 3	**Lesson 3:** Why are some apples red and some green? **Lesson 4:** How could you make the biggest fruit in the world?
Life Cycles	*Organisms and Environments*	**4.10C** Explore, illustrate, and compare life cycles in living organisms such as beetles, crickets, radishes, or lima beans			

**Indicates a mini-lesson that includes a hands-on STEAM activity from Mystery Science

Grade 5

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Physical Properties of Matter	*Matter & Energy*	**5.5A** Classify matter based on measurable, testable, and observable physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating using water as a reference point), solubility in water, and the ability to conduct or insulate thermal energy or electric energy.	Chemical Magic	Grade 5	**Lesson 3:** What would happen if you drank a glass of acid? **Lesson 4:** What do fireworks, rubber, and silly putty have in common? **Lesson 5:** Why do some things explode?
		5.5B Demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand and sand and water.			
		5.5C Identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water.	Chemical Magic	Grade 5	**Lesson 1:** Are magic potions real? **Lesson 2:** Could you transform something worthless into gold?
Forms of Energy	*Force, Motion, & Energy*	**5.6A** explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy.	Energizing Everything	Grade 4	**Lesson 4:** Could you knock down a building using only dominoes? **Lesson 5:** Can you build a chain reaction machine? **Lesson 7:** How long did it take to travel across the country before cars and planes?
		5.6B demonstrate that the flow of electricity in closed circuits can produce light, heat, or sound.	Energizing Everything	Grade 4	**Lesson 6:** What if there were no electricity?
		5.6C Demonstrate that light travels in a straight line until it strikes an object and is reflected or travels through one medium to another and is refracted.	Human Machine Mini-lessons	Grade 4	**Lesson 2:** What do people who are blind see? **Lesson 3:** How can some animals see in the dark? **Mini-lesson:** How are rainbows made?** **Mini-lesson:** Why is snow white?**

https://mysteryscience.com/docs/texas

**Indicates a mini-lesson that includes a hands-on STEAM activity from Mystery Science

MYSTERY science

Grade 5, continued

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit		Mystery Science Lessons
Forces	*Force, Motion, & Energy*	**5.6D** Design a simple experimental investigation that tests the effect of force on an object.	Energizing Everything	Grade 4	**Lesson 4:** Could you knock down a building using only dominoes? **Lesson 5:** Can you build a chain reaction machine? **Lesson 7:** How long did it take to travel across the country before cars and planes?
Earth's Changes	*Earth and Space*	**5.7A** Explore the processes that led to the formation of sedimentary rocks and fossil fuels			
		5.7B Recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth's surface by wind, water, or ice.	Work of Water*	Grade 2	**Lesson 3:** What's strong enough to make a canyon? **Lesson 4:** How can you stop a landslide?
Water and Weather Patterns	*Earth and Space*	**5.8A** Differentiate between weather and climate.	Stormy Skies Mini-lessons	Grade 3	**Lesson 3:** Why are some places always hot? **Mini-lesson:** What is the coldest place on Earth?
		5.8B Explain how the Sun and the ocean interact in the water cycle.	Watery Planet	Grade 5	**Lesson 3:** Can we make it rain? **Lesson 4:** How can you save a town from a hurricane?

*Work of Water was initially developed for Grade 2, but can be adapted for Grade 5.

MYSTERY science

Grade 5, continued

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Sun, Earth, and Moon Systems	*Earth and Space*	**5.8C** Demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky.	Spaceship Earth Mini-lessons	Grade 5	**Lesson 1:** How fast does the Earth spin? **Mini-lesson:** Why do places have different times?
		5.8D Identify and compare the physical characteristics of the Sun, Earth, and Moon.	Mini-lessons		**Mini-lesson:** What is the Moon made of? **Mini-lesson:** How close could an astronaut get to the Sun? **Mini-lesson:** Is Earth the only planet with life?
Ecosystem Interactions	*Organisms and Environments*	**5.9A** Observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.	Web of Life	Grade 5	**Lesson 3:** Where do fallen leaves go? **Lesson 4:** Do worms really eat dirt? **Lesson 5:** Why do you have to clean a fish tank but not a pond?
		5.9B Describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers.	Web of Life	Grade 5	**Lesson 6:** Why did the dinosaurs go extinct?
		5.9C Predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways	Web of Life	Grade 5	**Lesson 5:** Why do you have to clean a fish tank but not a pond?

MYSTERY science

Grade 5, continued

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TEKS Unit	TEKS Strand	TEKS Statement	Mystery Science Unit	Mystery Science Grade	Mystery Science Lessons
Structures and Behaviors of Organisms	*Organisms and Environments*	**5.10A** compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals	Animals Through Time	Grade 3	**Lesson 1:** Where can you find whales in a desert? **Lesson 8:** How long can people (and animals) survive in outer space?
		5.10B Differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle	Animals Through Time	Grade 3	**Lesson 4:** What kinds of animals might there be in the future? **Lesson 5:** Can selection happen without people? **Lesson 6:** Why do dogs wag their tails?
Fossils and Environments	*Organisms and Environments*	**5.9D** Identify fossils as evidence of past living organisms and the nature of the environments at the time using models	Animals Through Time Mini-lessons	Grade 3	**Lesson 1:** Where can you find whales in a desert? **Lesson 2:** How do we know what dinosaurs looked like? **Lesson 3:** Can you outrun a dinosaur? **Mini-lesson:** Were dragons ever real? **Mini-lesson:** Are unicorns real?