

1st Grade NYSSLS/NGSS Aligned Curriculum 2019-2020

1. Waves: Light and Sound

Standard	Performance Expectations	Clarification	Disciplinary Core Idea	Mystery Science And other resources	Catholic Identity
1-PS4-1	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	Examples of vibrating materials that make sound could include tuning forks and plucking a stretched string. Examples of how sound can make matter vibrate could include holding a piece of paper near a speaker making sound and holding an object near a vibrating tuning fork.	<p>PS4.A: Wave Properties -Sound can make matter vibrate, and vibrating matter can make sound. (1-PS4-1)</p> <p>PS4.B: Electromagnetic Radiation -Objects can be seen if light is available to illuminate them or if they give off their own light. (1-PS4-2)</p> <p>-Some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam. (Boundary: The idea that light travels from place to place is developed through experiences with light sources, mirrors, and shadows, but no attempt is made to discuss the speed of light.) (1-PS4-3)</p>	<p>MS: Lights and Sounds (6-9 weeks) This unit will develop the idea that by exploring the properties of light and sound, human beings create fun and useful things.</p> <p>FOSS Grade 1 Light and Sound Module: https://www.foosweb.com/delagate/ssi-wdf-ucm-webContent?dDocName=G3837891</p> <p>Video (For Teachers only) Light Lesson: https://www.teachingchannel.org/videos/science-lesson-on-light</p>	<p>Share ideas and thoughts about God and science topics.</p> <p>Understand God created a well-ordered universe.</p> <p>Appreciate God's creation.</p> <p>Symbols of light, candles.</p>
1-PS4-2	Make observations (firsthand or from media) to construct an evidence-based account that objects can be seen only when illuminated.	Examples of observations could include those made in a completely dark room, a pinhole box, and a video of a cave explorer with a flashlight. Illumination could be from an external light source or by an object giving off its own light.	<p>PS4.C: Information Technologies</p>	<p>Musical Instruments –</p>	
1-PS4-3	Plan and conduct an investigation to determine the effect	Examples of materials could include those that are transparent (such as	<p>PS4.C: Information Technologies</p>	<p>Musical Instruments –</p>	

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	of placing objects made with different materials in the path of a beam of light.	clear plastic), translucent (such as wax paper), opaque (such as cardboard), and reflective (such as a mirror).	and Instrumentation -People also use a variety of devices to communicate (send and receive information) over long distances. (1-PS4-4)	tambourine, drum, triangle	
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.	Examples of devices could include a light source to send signals, paper cup and string “telephones,” and a pattern of drum beats.			

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1. Structure, Function, and Information Processing					
Standard	Performance Expectations	Clarification	Disciplinary Core Idea	Mystery Science and other resources	Catholic Identity
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.	Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structures by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills; and, detecting intruders by mimicking eyes and ears.	<p>LS1.A: Structure and Function All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)</p> <p>LS1.B: Growth and Development of Organisms Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. (1-LS1-2)</p> <p>LS1.D: Information Processing Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also</p>	<p>MS: Plant and Animal Superpowers (6-9 weeks) This unit will help students develop the idea that, like a superhero has special powers, every animal and plant has special parts and behaviors that help them to grow and meet their needs</p> <p>Web:</p> <p>Plant Life cycle interactive video</p> <p>How Plants Grow Interactive Game</p> <p>Structure of a Plant Interactive Diagram</p> <p>Life cycle of a plant</p>	<p>Story of Creation</p> <p>God created the plants and animals.</p> <p>God wants us to protect his creation. Earth Day.</p> <p>Appreciate God’s creation.</p> <p>Show respect for and help take care of God’s creation.</p>
1-LS1-2.	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	Examples of patterns of behaviors could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting	<p>LS1.D: Information Processing Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also</p>	<p>MS: Plant and Animal Superpowers (6-9 weeks) This unit will help students develop the idea that, like a superhero has special powers, every animal and plant has special parts and behaviors that help them to grow and meet their needs</p> <p>Web:</p> <p>Plant Life cycle interactive video</p> <p>How Plants Grow Interactive Game</p> <p>Structure of a Plant Interactive Diagram</p> <p>Life cycle of a plant</p>	<p>Story of Creation</p> <p>God created the plants and animals.</p> <p>God wants us to protect his creation. Earth Day.</p> <p>Appreciate God’s creation.</p> <p>Show respect for and help take care of God’s creation.</p>

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		the offspring).	respond to some external inputs. (1-LS1-1)	interactive diagram	
1-LS1-2	Make observations to construct an evidence-based account that some young plants and animals are similar to, but not exactly like, their parents.	Examples of patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.	<p>LS3.A: Inheritance of Traits (NYSED) Some young animals are similar to, but not exactly, like their parents. Some young plants are also similar to, but not exactly, like their parents. (1-LS3-1)</p> <p>LS3.B: Variation of Traits Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (1-LS3-1)</p>	<p>Food Chains Interactive Game</p> <p>Safari Park Adventure Game (Animal Information through the San Diego Zoo)</p>	

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1. Space Systems: Patterns and Cycles

Standard	Performance Expectations	Clarification	Disciplinary Core Idea	Mystery Science and other resources	Catholic Identity
1-ESS1-1.	Use observations of the Sun, moon, and stars to describe patterns that can be predicted.	Examples of patterns could include that the Sun and moon appear to rise along the eastern horizon, move in a predictable pathway across the sky, and set along the western horizon; and stars other than our Sun are visible at night depending on weather and other conditions such as light pollution but not visible during the day.	<p>ESS1.A: The Universe and its Stars -Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted. (1-ESS1-1)</p> <p>ESS1.B: Earth and the Solar System -Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (1-ESS1-2)</p>	<p>Spinning Sky (6-9 weeks) This unit will help students develop the idea that the Sun, Moon, and stars change position in the sky in ways that are fun to watch and predict</p> <p>ELA Module 6: https://www.engageny.org/resource/gr-ade-1-ela-domain-6-astronomy</p>	<p>God is the creator of the Heavens and Earth.</p> <p>Share ideas and thoughts about God and science topics.</p> <p>Understand God created a well-ordered universe.</p>
1-ESS1-2.	Make observations at different times of year to relate the amount of daylight to the time of year.	Emphasis is on relative comparisons of the amount of daylight in the winter to the amount in the spring or fall.			