Semester 1 of 2				
Unit Number: Title Duration	Purpose	Priority Grade-Level Standards	Content Goals and Learner Outcomes	Resources and Materials
Unit 1: Sound Energy 17 days	In this module, students will conduct investigations to produce evidence that sound can make matter vibrate and that vibrating matter can make sound. Students will engage in scientific experiences to answer questions such as How is sound made? and How does sound change?	1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	Students will be able to explain • how sound can make matter vibrate and that vibrating matter can make sound • that sound can change in volume or pitch	*Inspire Science*, Module 1
Unit 2: Light Energy 27 days	In this module, students will make close observations and conduct investigations to provide evidence-based accounts that objects can be illuminated by an external source, that light passes through some objects, and that light behaves differently when objects made of different materials are placed in its path. Students will engage in scientific experiments to answer questions such as	1-PS4-2. Make observations to conduct an evidence-based account that objects can be seen only when illuminated. 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.	Students will be able to explain • what light is • how light affects shadows • how light travels through different materials • the effect of mirrors on the path of light	*Inspire Science*, Module 2

	What is light? How can light bounce off objects? How does light travel through different materials?			
Unit 3: Using Energy to Communicate 14 days	In this module, students will use tools and materials to design devices that transmit sound and light over a distance. Students will engage in scientific experiences to answer questions such as How do we use light and sound to communicate? How has communication changed over time to make people's lives easier?	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.	Students will be able to explain • how light and sound can be used to communicate over a distance • how people use a variety of devices to send and receive information • how communication has changed over time • how new communication technologies help people solve problems	*Inspire Science*, Module 3
Unit 4: Plants and Animals 31 days	In this module, students will design solutions to human problems based on mimicking the way that animals or plants use their external parts to meet their needs for growth or survival. Students will engage in scientific experiences to answer questions such as How are	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. 1-LS3-1. Make observations to construct an evidence-	Students will be able to explain • the differences between living and nonliving things • plant parts and structure • animal structure and function	*Inspire Science*, Module 4

	living and nonliving things different? How do different parts of a plant help it live? How do body parts help animals? and How can plant and animal parts help us solve human problems?	based account that young plants and animals are like, but not exactly like, their parents. 1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	• what animals need to live • how animals meet their needs • that animals and plants have parts that protect them or capture and convey information needed for growth and survival	
Semester 2 of 2				
Unit Number: Title Duration	Purpose	Priority Grade-Level Standards	Content Goals and Learner Outcomes	Resources and Materials
Unit 5: Offspring and Their Parents 43 days	In this module, students will obtain scientific information from observations, media, and texts to extend their understanding of similar traits and patterns in behavior of parents and offspring. Students will engage in scientific experiences to answer questions such as How do plants grow and change? How are plants like their parents? How are animals alike and different? How are young animals like and unlike their parents? and	1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. 1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	Students will be able to explain • how plants grow and change • how plants are like their parents • how animals are alike and different • how animal young are like and unlike their parents • patterns in behavior of parents and offspring that help the offspring survive	*Inspire Science*, Module 5

	How do animal offspring survive?			
Unit 6: Earth and Space 38 days	In this module, students will obtain scientific information from observations, media, and texts to extend their understanding of Earth and space. Students will engage in scientific experiences to answer questions such as What causes the pattern of day and night? What causes the seasons? Why does the moon seem to change? and How can you describe the sun and stars?	1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted. 1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	Students will be able to • explain what causes the pattern of day and night • observe, describe, and predict seasonal patterns of sunrise and sunset • describe patterns of the motion of the moon • use observations to describe the Sun and stars	*Inspire Science*, Module 6
End of Semester 2				