Semester 1 of 2				
Unit Number: Title Duration	Purpose	Priority Grade-Level Standards	Content Goals and Learner Outcomes	Resources and Materials
Unit 1: Structure and Properties of Matter 26 days	In this module, students will develop a model and carry out investigations using computational thinking to explore states of matter and identify properties of matter Students will engage in scientific experiences to answer questions such as: What are the structures of matter? What is matter made of? What are some properties of metals and nonmetals?	5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen. 5-PS1-3 Make observations and measurements to identify materials based on their properties.	Students will be able to • design a model to show their understanding of the structure of the three states of matter. • carry out investigations and make predictions to identify matter. • develop a model solution to a problem involving metals.	*Inspire Science*, Module 1
Unit 2: Physical and Chemical Changes 27 days	In this module, students will carry out an investigation and use mathematics and computational thinking to answer questions about physical and chemical changes in matter and the conservation of matter. Students will engage in scientific experiences to	5-PSI -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. 5-PSI-4 Conduct an investigation to determine	Students will be able to • show conservation of matter during a change in state. • show that mass is conserved when different substances are mixed together. • determine if mixing certain substances	*Inspire Science*, Module 2

	answer questions such as: What happens to the amount of matter when it changes state? What happens when different types of matter are mixed?	whether the mixing of two or more substances results in new substances.	results in a chemical reaction.	
Unit 3: Plant and Animal Needs 28 days	In this module, students will use models and make arguments from evidence to answer questions about photosynthesis and cellular respiration. Students will engage in scientific experiences to answer question such as: What do plants need to survive? How do animals get energy from food? How do plants use cellular respiration to carry out life processes?	5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water. 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.	Students will be able to • argue from evidence to show what plants need to survive. • make models to compare the structures of a plant cell and an animal cell. • support the idea that plants perform photosynthesis and cellular respiration and need both to survive.	*Inspire Science*, Module 3
Semester 2 of 2				
Unit Number: Title Duration	Purpose	Priority Grade-Level Standards	Content Goals and Learner Outcomes	Resources and Materials
Unit 4: Matter in Ecosystems 29 days	In this module, students will develop and use models and communicate about cycles and relationships within ecosystems. Students will be involved in making	5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Students will be able to • model how energy moves within a food chain and food web. • explain how the different roles of organisms affect the	*Inspire Science*, Module 4

	observations and will engage in scientific experiences to help them answer questions such as: How does matter flow in an ecosystem? What is the relationship between living and nonliving things in an ecosystem? and How is matter cycled through ecosystems?		stability of an ecosystem. • make models of cycles in ecosystems and explain how the cycles affect the ecosystem.	
Unit 5: Interactions of Earth's Major Systems 45 days	In this module, students will develop and use models to understand the interactions of Earth's major systems. Students will be involved in making observations and will engage in scientific experiences to help them to answer questions such as: How do scientists define Earth's systems? How does the geosphere affect other systems? How does the hydrosphere	5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. 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. 5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	Students will be able to • give examples of all four of the Earth's systems and how they interact. • develop a model to show how the geosphere affects weather. • obtain and evaluate information about Earth's water to communicate why desalination is so important. • explain how the water cycle and the atmosphere affects Earth's systems. • evaluate the ways that humans positively and	*Inspire Science*, Module 5

			negatively affect Earth's major systems.	
Unit 6: The Solar System and Beyond 34 days	In this module, students will analyze and interpret data and engage in argument from evidence to explain locations, interactions, and characteristics of objects in space. Students will engage in scientific experiences to answer questions such as: How do the Sun, Earth, and Moon interact? What causes the repeating patterns of the Moon's shape? What other objects can be found in space? What are stars and why are some brighter than others?	5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down. 5-ESS1-1 Support an argument that the apparent brightness of the sun and stars is due to their relative distances from the Earth. 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.	Students will be able to • show how changes in Earth's position affect conditions at different locations on its surface. • explain the repeating patterns of the appearance of the Moon by analyzing its movements. • support an argument to explain how the force of gravity affects the location of objects in space.	*Inspire Science*, Module 6
End of Semester 2				