



Grade 4 Science Year At-A-Glance

Theme: Our Place in the Solar System

Students will examine how life is supported from the solar system to planet Earth, to the state of Virginia, and their specific ecosystems.

<u>Quarter 1</u>	Unit 1: Solar System (about 20 days)	Unit 2: “Earth-Moon-Sun” Relationships (about 25 days)	Begin Unit 3: Weather (about 4 days)	
<u>Quarter 2</u>	Complete Unit 3: Weather (about 20 days)		Begin Unit 4: Living Systems and Processes (about 22 days)	
<u>Quarter 3</u>	Complete Unit 4: Living Systems and Processes (about 7 days)	Unit 5: Ecosystems (about 20 days)	Begin Unit 6: Ocean Environment (about 15 days)	
<u>Quarter 4</u>	Complete Unit 6: Ocean Environment (about 9 days)	Unit 7: Virginia's Natural Resources (about 18 days)	Cumulative Review and Reteaching (about 15 days)	Family Life Education (about 5 days)

Unit guides will be released prior to the start of each quarter.

 **Note:** Science and Engineering Practices (SEPs), SOL 4.1a-f, should be embedded throughout the year rather than taught in isolation.

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 1	<u>Unit 1: Solar System</u>	about 20 days Assessment Window Week of 09/15/25	<p>4.5 The student will investigate and understand that the planets have characteristics and a specific place in the solar system. Key ideas include</p> <ul style="list-style-type: none"> a) planets rotate on their axis and revolve around the sun; b) planets have characteristics and a specific order in the solar system; and c) the size of the sun and planets can be compared to one another.
	<u>Unit 2: “Earth-Moon-Sun” Relationships</u>	about 25 days Assessment Window Week of 10/27/25	<p>4.6 The student will investigate and understand that there are relationships among Earth, the moon, and the sun. Key relationships include</p> <ul style="list-style-type: none"> a) the motions of Earth, the moon, and the sun; b) the causes for Earth’s seasons; c) the causes for the four major phases of the moon and the relationship to the tide cycles; and d) the relative size, position, age and makeup of Earth, the moon, and the sun.
	Begin <u>Unit 3: Weather</u>	about 4 days	<p>4.4 The student will investigate and understand that weather conditions and phenomena affect ecosystems and can be predicted. Key ideas include</p> <ul style="list-style-type: none"> a) weather measurements create a record that can be used to make weather predictions; b) common and extreme weather events affect ecosystems; and c) long-term seasonal weather trends determine the climate of a region.

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 2	Complete <u>Unit 3: Weather</u>	about 20 days Assessment Window Week of 12/08/25	<p>4.4 The student will investigate and understand that weather conditions and phenomena affect ecosystems and can be predicted. Key ideas include</p> <ul style="list-style-type: none"> a) weather measurements create a record that can be used to make weather predictions; b) common and extreme weather events affect ecosystems; and c) long-term seasonal weather trends determine the climate of a region.
	Begin <u>Unit 4: Living Systems and Processes</u>	about 22 days	<p>4.2 The student will investigate and understand that plants and animals have structures that distinguish them from one another and play vital roles in their ability to survive. Key ideas include</p> <ul style="list-style-type: none"> a) the survival of plants and animals depends on photosynthesis; b) plants and animals have different structures and processes for obtaining energy; and c) plants and animals have different structures and processes for creating offspring.

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 3	Complete <u>Unit 4: Living Systems and Processes</u>	about 7 days Assessment Window Week of 02/02/26	<p>4.2 The student will investigate and understand that plants and animals have structures that distinguish them from one another and play vital roles in their ability to survive. Key ideas include</p> <ul style="list-style-type: none"> a) the survival of plants and animals depends on photosynthesis; b) plants and animals have different structures and processes for obtaining energy; and c) plants and animals have different structures and processes for creating offspring.
	<u>Unit 5: Ecosystems</u>	about 20 days Assessment Window Week of 03/02/26	<p>4.3 The student will investigate and understand that organisms, including humans, interact with one another and with the nonliving components in the ecosystem. Key ideas include</p> <ul style="list-style-type: none"> a) interrelationships exist in populations, communities, and ecosystems; b) food webs show the flow of energy within an ecosystem; c) changes in an organism's niche and habitat may occur at various stages in its life cycle; and d) classification can be used to identify organisms.
	Begin <u>Unit 6: Ocean Environment</u>	about 15 days	<p>4.7 The student will investigate and understand that the ocean environment has characteristics. Key characteristics include</p> <ul style="list-style-type: none"> a) geology of the ocean floor; b) physical properties and movement of ocean water; and c) interaction of organisms in the ocean.

Quarter	Unit	Suggested Time	Standards of Learning
Quarter 4	<u>Complete Unit 6: Ocean Environment</u>	about 9 days Assessment Window Week of 04/13/26	4.7 The student will investigate and understand that the ocean environment has characteristics. Key characteristics include a) geology of the ocean floor; b) physical properties and movement of ocean water; and c) interaction of organisms in the ocean.
	<u>Unit 7: Virginia's Natural Resources</u>	about 18 days Assessment Window Week of 05/11/26	4.8 The student will investigate and understand that Virginia has important natural resources. Key resources include a) watersheds and water; b) plants and animals; c) minerals, rocks, and ores; and d) forests, soil, and land.
	<u>Cumulative Review and Reteaching</u>	about 15 days	
	<u>Family Life Education</u>	about 5 days	