Science Cohort Curriculum

Vision

Our vision for students is a K-8 science experience that builds and deepens each year, developing a strong foundation and excitement in science and engineering. Through the exploration of scientific phenomena, students' interactions will be student centered, hands-on/minds-on, and inquiry based while actively engaging in science. By marrying scientific practices, crosscutting concepts, and disciplinary core ideas within the science curriculum, we will ensure that students develop critical thinking and problem solving skills, while generating interest in understanding the world around them. Ultimately, our vision for students is a three dimensional learning experience that will prepare them with the skills and knowledge needed for a future job market that will later exist for them.

Scope and Sequence - Grade 2

Unit	Instructional Days	Timeframe
Unit 1: **Relationships in Habitats** **2-LS4-1** **2-LS2-1** **2-LS2-2** **K-2-ETS1-1**	**15**	**September/October**
Unit 2: Properties of Matter **2-PS1-1** **2-PS1-2** **K-2-ETS1-3**	**20**	**November/December**
Unit 3: Changes to Matter **2-PS1-3** **2-PS1-4**	**15**	**January/February**
Unit 4: The Earth's Land **and Water** **2-ESS2-3** **2-ESS2-2**	**20**	**March/April**
Unit 5: Changes to **Earth's Land** **2-ESS1-1** **2-ESS2-1**	**20**	**May/ June**

Avon ~ Bradley Beach ~ Brielle ~ Farmingdale ~ Sea Girt ~ Spring Lake Heights

K-2-ETS1-1		
K-2-ETS1-2		

NGSS Learning Progressions Matrix

		Life Science	Earth & Space Science	Physical Science	Engineering
Elementary School	K	K-LS1 From Molecules to Organisms: Structures and Processes	K-ESS2 Earth's Systems K-ESS3 Earth and Human Activity	K-PS2 Motion and Stability: Forces and Interactions K-PS3 Energy	K-2-ETS1 Engineering Design
Elementary School	1	1-LS1 From Molecules to Organisms: Structures and Processes 1-LS3 Heredity: Inheritance and Variation of Traits	1-ESS1 Earth's Place in the Universe	1-PS4 Waves and Their Applications in Technologies for Information Transfer	K-2-ETS1 Engineering Design
Elementary School	2	2-LS2 Ecosystems: Interactions, Energy, and Dynamics 2-LS4 Biological Evolution: Unity and Diversity	2-ESS1 Earth's Place in the Universe 2-ESS2 Earth's Systems	2-PS1 Matter and Its Interactions	K-2-ETS1 Engineering Design
Elementary School	3	3-LS1 From Molecules to Organisms: Structures and Processes 3-LS2 Ecosystems: Interactions, Energy, and Dynamics 3-LS3 Heredity: Inheritance and Variation of Traits 3-LS4 Biological Evolution: Unity and Diversity	3-ESS2 Earth's Systems 3-ESS3 Earth and Human Activity	3-PS2 Motion and Stability: Forces and Interactions	3-5-ETS1 Engineering Design
Elementary School	4	4-LS1 From Molecules to Organisms: Structures and Processes	4-ESS1 Earth's Place in the Universe 4-ESS2 Earth's Systems 4-ESS3 Earth and Human Activity	4-PS3 Energy 4-PS4 Waves and Their Applications in Technologies for Information Transfer	3-5-ETS1 Engineering Design
Elementary School	5	5-LS1 From Molecules to Organisms: Structures and Processes 5-LS2 Ecosystems: Interactions, Energy, and Dynamics	5-ESS1 Earth's Place in the Universe 5-ESS2 Earth's Systems 5-ESS3 Earth and Human Activity	5-PS1 Matter and Its Interactions 5-PS2 Motion and Stability: Forces and Interactions 5-PS3 Energy	3-5-ETS1 Engineering Design
Middle		MS-LS1 From Molecules to Organisms: Structures and Processes MS-LS2 Ecosystems: Interactions, Energy, and Dynamics MS-LS3 Heredity: Inheritance and Variation of Traits MS-LS4 Biological Evolution: Unity and Diversity	MS-ESS1 Earth's Place in the Universe MS-ESS2 Earth's Systems MS-ESS3 Earth and Human Activity	MS-PS1 Matter and Its Interactions MS-PS2 Motion and Stability: Forces and Interactions MS-PS3 Energy HS-PS4 Waves and Their Applications in Technologies for Information Transfer	MS-ETS1 Engineering Design
High School		HS-LS1 From Molecules to Organisms: Structures and Processes HS-LS2 Ecosystems: Interactions, Energy, and Dynamics HS-LS3 Heredity: Inheritance and Variation of Traits HS-LS4 Biological Evolution: Unity and Diversity	HS-ESS1 Earth's Place in the Universe HS-ESS2 Earth's Systems HS-ESS3 Earth and Human Activity	HS-PS1 Matter and Its Interactions HS-PS2 Motion and Stability: Forces and Interactions HS-PS3 Energy HS-PS4 Waves and Their Applications in Technologies for Information Transfer	HS-ETS1 Engineering Design