

# NGSS Matrix Organized by Topics

		Life Science	Earth & Space Science	Physical Science	Engineering
Elementary School	K	K.Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment	K.Weather and Climate	K.Forces and Interactions: Pushes and Pulls	K-2.Engineering Design
	1	1.Structure and Function	1.Space Systems: Patterns and Cycles	1.Waves: Light and Sound	
	2	2.Interdependent Relationships in Ecosystems	2.Earth’s Systems: Processes that Shape the Earth	2.Structure and Properties of Matter	
	3	3.Interdependent Relationships in Ecosystems 3.Inheritance and Variation of Traits: Life Cycles and Traits	3.Weather and Climate	3.Forces and Interactions	3-5.Engineering Design
	4	4.Structure and Function	4.Earth’s Systems: Processes that Shape the Earth	4.Energy 4.Waves: Waves and Information	
	5	5.Matter and Energy in Organisms and Ecosystems	5.Earth’s Systems 5.Space Systems: Stars and the Solar System	5.Structure and Properties of Matter	
Middle School		MS.Structure and Function MS.Matter and Energy in Organisms and Ecosystems MS.Interdependent Relationships in Ecosystems MS.Natural Selection and Adaptations MS.Growth, Development, and Reproduction of Organisms	MS.Space Systems MS.History of Earth MS.Earth’s Systems MS.Weather and Climate MS.Human Impacts	MS.Structure and Properties of Matter MS.Chemical Reactions MS.Forces and Interactions MS.Energy MS.Waves and Electromagnetic Radiation	MS.Engineering Design
High School		HS.Structure and Function HS.Inheritance and Variation of Traits HS.Matter and Energy in Organisms and Ecosystems HS.Interdependent Relationships in Ecosystems HS.Natural Selection and Evolution	HS.Space Systems HS.History of Earth HS.Earth’s Systems HS.Weather and Climate HS.Human Sustainability	HS.Structure and Properties of Matter HS.Chemical Reactions HS.Forces and Interactions HS.Energy HS.Waves and Electromagnetic Radiation	HS.Engineering Design

# NGSS Matrix Organized by Disciplinary Core Ideas

		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
	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	
	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	
	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
	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	
	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	
Middle School		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 MS-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