

Middle School Scope and Sequence
Grades 6 – 8

Purple – Unifying Themes

Red – Inquiry and Design

Blue – Physical Science

Green – Life Science

Orange – Earth and Space Science

Physical Science	Life Science	Earth and Space Science
Cause and Effect Energy and Matter Patterns Scale, proportion, and quantity Stability and change Structure and function Systems and system models	Cause and Effect Energy and Matter Patterns Scale, proportion, and quantity Stability and change Structure and function Systems and system models	Cause and effect Energy and matter Patterns Scale, proportion, and quantity Stability and Change Systems and system models
Analyze and interpret data Ask questions and define problems Construct explanations and design solutions Develop and use models Engage in argument from evidence Obtain, evaluate, and communicate information Plan and carry out investigations Use mathematics and computational thinking	Analyze and interpret data Ask questions and define problems Construct explanations and design solutions Develop and use models Engage in Argument from evidence Obtain, evaluate, and communicate information Plan and carry out investigations Use mathematics and computational thinking	Analyze and interpret data Ask questions and define problems Construct explanations and design solutions Develop and use models Engage in argument from evidence Obtain, evaluate, and communicate information Plan and carry out investigations Use mathematics and computational thinking
Structure and properties of matter Chemical reactions Definitions of energy Force and motion Types of interactions Definitions of energy Conservation of energy and energy transfer Relationship between energy and forces Wave properties Electromagnetic radiation Information technologies and instrumentation	Structure and function Growth and development of organisms Organization for matter and energy flow in organisms Information processing Interdependent relationships in ecosystems Cycle of matter and energy transfer in ecosystems Ecosystem dynamics, functioning, and resilience Biodiversity and humans Growth and development of organisms Inheritance of traits Variation of traits Evidence of common ancestry and diversity Natural selection Adaptation	The universe and its stars Earth and the solar system History of planet Earth Earth's materials and systems Plate tectonics and large-scale system interactions Roles of water in Earth's surface processes Weather and climate Natural resources Natural hazards Human impacts on earth systems