



Content Area: Science

Grade Level: 7th

Curriculum Map/Scope & Sequence (2021)

<u>Unit Name/Time Period</u>	<u>BIG Ideas/Skills</u>	<u>IL Priority Learning Standards</u>	<u>I CAN Statements</u>	<u>Assessments</u>
August September Scientific Method, Measurement & Conversion, and Sunny Days	Scientific Method, Measurement & Conversion, Sun, Water Cycle, EM Spectrum, Seasons, Food Chain, Food Web, Energy Pyramid, Moon, Tides, Photosynthesis, Classification of Living Things and Earth Cycle's	MS-ESS2 Earth's Systems MS-ESS3 Earth and Human Activity MS-ESS1 Earth's Place in the Universe MS-PS3 Energy MS-PS4 Waves	<ul style="list-style-type: none"> • I can state the problem, hypothesis, experiment, observation, and conclusions of laboratory experiments. • I can describe the scientific method and distinguish between hypotheses, theories, and laws • I can develop a model that describes the rock cycle. • I can interpret a design problem and construct a solution taking into account potential impacts on people and the environment. 	Project Quizzes
October Sunny Days Project	Sun, Water Cycle, EM Spectrum, Seasons, Food Chain, Food Web, Energy Pyramid, Moon, Tides, Photosynthesis & Classification	MS-ESS2 Earth's Systems MS-ESS3 Earth and Human Activity MS-PS3 Energy MS-PS4 Waves	<ul style="list-style-type: none"> • I can explain how resource availability can affect populations of organisms in an ecosystem • I can identify patterns of interactions between organisms in an ecosystem. • I can develop a model that describes the rock cycle. • I can interpret a design problem and construct a solution taking into account potential impacts on people and the environment. 	Quizzes Project
November	Matter, Mass, Weight, States of Matter, Periodic Table & its properties, Molecules, Compounds, Mixtures, Lewis Dot Structures, Chemical and Physical Properties	MS-PS1 Matter and Its Interactions MS-PS1-2 Analyze and interpret data on the properties of substances	<ul style="list-style-type: none"> • I can define physical science as the study matter and energy. • I can describe the components of a good controlled experiment. • I can interpret data on a scientific graph and describe data trends using proper terms (e.g. linear, nonlinear, directly proportional, and inversely proportional). • I can convert between units in the metric system 	Lectures Video Hands-on Activity Quizzes

December	Matter, Mass, Weight, States of Matter, Periodic Table & its properties, Molecules, Compounds, Mixtures, Lewis Dot Structures, Chemical and Physical Properties	MS-PS1 Matter and Its Interactions MS-PS1-2 Analyze and interpret data on the properties of substances	<ul style="list-style-type: none"> • I can define physical science as the study matter and energy. • I can describe the components of a good controlled experiment. • I can interpret data on a scientific graph and describe data trends using proper terms (e.g. linear, nonlinear, directly proportional, and inversely proportional). • I can convert between units in the metric system 	Lectures Video Hands-on Activity Quizzes Unit Test
January & February	Plant & Animal Cells, Cells Heredity, dominant and recessive genes, Protein, ATP, Punnett Squares and Adaptation	MS-LS1 From Molecules to Organisms: Structures and Processes MS-LS2 Ecosystems: Interactions, Energy, and Dynamics MS-LS3 Heredity	<ul style="list-style-type: none"> • I can explain how resource availability can affect populations of organisms in an ecosystem. • I can identify patterns of interactions between organisms in an ecosystem.. • I can describe the flow of matter and energy through the living and nonliving parts of an ecosystem. • I can describe how change to the physical and biological components of an ecosystem can affect populations. • I can identify how environmental factors may influence the growth and health of organisms. 	Lectures Video Hands-on Activity Quizzes
March	Plant & Animal Cells, Cells Heredity, dominant and recessive genes, Protein, ATP, Punnett Squares and Adaptation	MS-LS1 From Molecules to Organisms: Structures and Processes MS-LS2 Ecosystems: Interactions, Energy, and Dynamics MS-LS3 Heredity	<ul style="list-style-type: none"> • I can explain how resource availability can affect populations of organisms in an ecosystem. • I can identify patterns of interactions between organisms in an ecosystem.. • I can describe the flow of matter and energy through the living and nonliving parts of an ecosystem. • I can identify how environmental factors may influence the growth and health of organisms. 	Lectures Video Hands-on Activity Quizzes Unit Test
April	Newton 3 Laws of Motions, Load, Force, Gravity, Pressure, Blueprint of Bridge, and Design Process	MS-PS2 Motion and Stability: Forces and Interactions MS-PS3 Energy MS-ETS1 Engineering Design	<ul style="list-style-type: none"> • I can explain how air resistance and gravity affect the acceleration of falling objects. • I can state and apply Newton's Laws of Motion to real life situations. • I can describe the momentum of different objects and how it affects motion. • I can describe the forces that affect the motion of matter. • I can explain what causes friction and how it affects motion. 	Lectures Video Hands-on Activity Quizzes

May	Newton 3 Laws of Motions, Load, Force, Gravity, Pressure, Blueprint of Bridge, and Design Process	MS-PS2 Motion and Stability: Forces and Interactions MS-PS3 Energy MS-ETS1 Engineering Design	<ul style="list-style-type: none">• I can explain how air resistance and gravity affect the acceleration of falling objects.• I can state and apply Newton's Laws of Motion to real life situations.• I can describe the momentum of different objects and how it affects motion.• I can describe the forces that affect the motion of matter.• I can explain what causes friction and how it affects motion.	Lectures Video Hands-on Activity Quizzes Unit Test
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