

Science Curriculum Map

Fifth Grade

Trimester One Aug-Oct. Strategies/Skills covered	Key Standards	Assessments	Suggested Materials
<p>Unit 1: Engineering and Technology Engineering Design</p> <ul style="list-style-type: none"> Defining a problem Developing possible solutions Improving designs 	<p>ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time or cost</p> <p>ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem</p>	<p>Worksheets Lab Reports Lesson quizzes Simulations Projects</p>	<p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL Google Expeditions- VR</p>
<p>Unit 2: Matter Structure and Properties of Matter</p> <ul style="list-style-type: none"> Discover the different states of 	<p>PS1-1 Develop a model to describe that matter is made of particles too small to be seen</p> <p>PS1-2 Measure and graph quantities to provide evidence the regardless of the type of</p>	<p>Worksheets Lab Reports Lesson quizzes Simulations Projects</p>	<p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL</p>

<p>matter and how to measure matter</p> <ul style="list-style-type: none"> • Explore the different properties of matter along with dissolving rates of certain matter • Compare and contrast physical and chemical changes of matter <p>Unit 3: Energy and Matter in Organisms</p> <ul style="list-style-type: none"> • Investigate how living organisms get energy • Explore how living organisms use energy and how they interact in their environment 	<p>change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved</p> <p>PS1-3 Made observations and measurements to identify materials based on their properties</p> <p>LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water</p> <p>PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, and motion and to maintain body warmth) was once energy from the sun</p>	<p>Worksheets Lab Reports Lesson quizzes Simulations Projects Unit test</p>	<p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL</p>
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Trimester Two Oct.-Feb. Strategies/Skills covered	Key Standards	Assessments	Suggested Materials
<p>Unit 4: Energy and Matter in Ecosystems</p> <ul style="list-style-type: none"> Explore phenomena of predator-prey population interactions and native and invasive species interactions Use models to develop explanations of the energy inputs and energy and matter flows within ecosystems 	<p>LS2-1 Develop a model to describe movement of matter among plants, animals, decomposers, and the environment</p> <p>LS4-4 Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change</p>	<p>Worksheets Lab Reports Lesson quizzes Simulations Projects Unit test</p>	<p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL Scienceflix Trueflix Google Expeditions-VR ScienceSpin</p>
<p>Unit 5: Systems in Space Stars and the Solar System</p> <ul style="list-style-type: none"> Use evidence to explain that Earth's orbit, the moon's orbit and Earth's 	<p>PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down</p> <p>ESS1-1 Support an argument that the differences in the apparent brightness of the sun compared to other stars is due</p>	<p>Worksheets Lab Reports Lesson quizzes Simulations Projects Unit test</p>	<p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL ScienceFlix</p>

<p>rotation cause predictable patterns</p> <ul style="list-style-type: none"> • Explain why the sun appears so large and bright from Earth • Explain that Earth is a sphere and that gravity pulls objects toward Earth's center 	<p>to their relative distances from Earth</p> <p>ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in the length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky</p>		<p>Trueflix ScienceSpin</p>
<p>Unit 6: Earth's Systems</p> <ul style="list-style-type: none"> • Explore the hydrosphere, geosphere, biosphere, and atmosphere • Learn how Earth's systems interact 	<p>ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact</p> <p>ESS2-2 Describe and graph the amounts and percentages of water and freshwater in various reservoirs to provide evidence about the distribution of water on Earth</p> <p>ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment</p>	<p>Worksheets Lab Reports Lesson quizzes Simulations Projects Unit test</p>	<p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL Scienceflix Trueflix ScienceSpin</p>

Trimester Three Mar-Jun Strategies/Skills covered	Key Standards	Assessments	Suggested Materials
<p>Review Science concepts</p> <ul style="list-style-type: none"> • forces and motion • Energy transfer • Electricity and Magnetism <p>Unit 7: Earth and Human Activities</p> <ul style="list-style-type: none"> • Explore how human activity affects the Earth and its systems • Learn about ways to keep Earth and its systems healthy 	<p>PS3-1 Use evidence to construct an explanation relating the speed of an object to the energy of that object</p> <p>PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat and electrical currents</p> <p>ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment</p>	<p>ISA State assessment Nature of science inquiry Worksheets</p> <p>Worksheets Lab Reports Lesson quizzes Simulations Projects Unit test</p>	<p>ISBE Website ISA Website DC sample questions IXL Other resources as available</p> <p>HMH Science Dimensions Leveled Readers Mystery Science Science kit bins IXL Scienceflix Trueflix ScienceSpin</p>

<p>Unit 1: Engineering and Technology</p> <ul style="list-style-type: none"> • Discover how science and math are used in engineering • Investigate a design process • Explore how technology decisions affect society 	<p>ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment</p> <p>ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved</p>	<p>Project-design prototype Forensic Science mysteries</p>	<p>Other Resources as available</p>
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