

Unit/ Timeline	Common Core Standard	Topics	
Unit 1 (Unit E in book) Matter (4-5 weeks) August-September	<p>5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.</p> <p>5-PS1-2 Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.</p> <p>5-PS1-3 Make observations and measurements to identify materials based on their properties.</p> <p>5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.</p>	<p>Structure of Matter</p> <ul style="list-style-type: none"> <li>* Elements</li> <li>* Periodic Table</li> <li>* Compounds</li> </ul> <p>Characteristics of Matter</p> <ul style="list-style-type: none"> <li>* Physical Properties</li> <li>* Chemical Properties</li> <li>* Changes in matter</li> <li>* Solutions and Mixtures</li> </ul> <p>Changes of State</p> <ul style="list-style-type: none"> <li>* Three State of Matter</li> <li>* Matter changing states</li> </ul>	<p>Essential Questions</p> <p>What is matter made of?</p> <p>What are the physical properties of the state of matter?</p> <p>What are the characteristics of a mixture?</p>

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<p>Unit 2 The Life Processes (Unit A in book)</p> <p>(4-5 weeks)</p> <p>September-November</p>	<p>5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun</p> <p>5_LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water</p>	<p>Cells</p> <ul style="list-style-type: none"> <li>* Parts of a cell (Plant/ Animal)</li> <li>* Single-celled organisms</li> <li>* Cell organization</li> </ul> <p>Plant Systems</p> <ul style="list-style-type: none"> <li>* Photosynthesis</li> <li>* Movement of Materials</li> <li>* Reproduction</li> </ul> <p>Traits of Living Things</p> <ul style="list-style-type: none"> <li>* Trait inheritance</li> <li>* Traits for survival</li> </ul>	<p>Essential Questions:</p> <p>What is photosynthesis and why is it important to animals?</p> <p>What do plants need for growth and how do they move the materials?</p>

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Unit 3 Interactions Among Living Things (Unit B in book)  (4-5 weeks)  (November-December)	5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment	Ecosystems, Communities, and Biomes <ul style="list-style-type: none"> <li>* Living things form communities</li> <li>* Land biomes and climate</li> <li>* Food web</li> </ul> Life in Ecosystems <ul style="list-style-type: none"> <li>* Habitats and Niches</li> <li>* Factors Affecting Ecosystems</li> <li>* Human Activity in Ecosystems</li> </ul>	Essential Questions:  What are the roles of organisms in an ecosystem and how are they interdependent on one another?  How do a biome's environment and climates determine what organisms live there?  How do living things form communities?

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Unit 4 Earth Systems (Unit C in book)  (4-5 weeks)  (January-February)	5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact  5-ESS2-2 Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth  5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment	Earth's Changing Surface <ul style="list-style-type: none"> <li>* Features of Earth's Surface</li> <li>* Weathering</li> <li>* How Earth's Surface is Built Up</li> </ul> Earth's Structure <ul style="list-style-type: none"> <li>* Layers</li> <li>* Earthquakes/Volcanoes</li> <li>* Mountain Formation</li> </ul> Using Resources Wisely <ul style="list-style-type: none"> <li>* People Using Resources</li> <li>* Soil</li> <li>* Conserve Resources</li> </ul>	Essential Questions:  What are some ways the Earth's surface can be changed?  How does human activity affect the land and oceans on Earth?

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<p>Unit 5 Atmosphere and Solar System (Unit D in book)</p> <p>(4-5 weeks) (February- March)</p>	<p>5-ESS1-1 Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.</p> <p>5-ESS1-2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky</p>	<p>Weather and Climate</p> <ul style="list-style-type: none"> <li>* Major climate zones</li> <li>* Factors affecting Climate</li> <li>* Troposphere/gases</li> </ul> <p>Earth and Its Moon</p> <ul style="list-style-type: none"> <li>* Earth's seasons</li> <li>* Moon Phases</li> </ul> <p>Exploring Space</p> <ul style="list-style-type: none"> <li>* Planets</li> <li>* Comets/ meteors</li> <li>* Stars/ galaxies</li> </ul>	<p>Essential Questions:</p> <p>Why does the moon have phases?</p> <p>What causes Earth's seasons?</p> <p>Why does the sun, unlike other stars, appear to be bigger and brighter from Earth?</p>

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<p>Unit 6 Forms of Energy (Unit F in book)  (5-6weeks)  (March-April)</p>	<p>5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down</p>	<p>Change in Motion</p> <ul style="list-style-type: none"><li>* Force</li><li>* Gravity</li><li>* Simple Machines</li><li>* Magnetism force</li><li>* Potential Energy</li><li>* Sounds</li><li>* Properties of Light</li></ul>	<p>Essential Questions?</p> <p>What is gravity and explain how it keeps us on Earth's surface?</p> <p>How can the effects of force including magnetism, friction, and gravity be illustrated?</p> <p>Describe some forces that affect motion on Earth.</p>

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Engineering Design (3 weeks) (May)	<p>3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on material, time, and cost</p> <p>3-5-ETS1-1 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of a problem</p> <p>3-5-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>Students will be able to</p> <ul style="list-style-type: none"><li>• apply the engineering design process to a design challenge</li><li>• create a plan for project material expenses based on a budget</li><li>• set up an electric circuit using batteries, wire, and a motor</li></ul>	