

NGSS Grade Standards Conceptual Flow Map

*conceptual flow map is a working draft and subject to revisions throughout the year

Unit/Estimated Dates	Phenomena/ Topic	Standards
<p>Unit 1</p> <p>August - October</p>	<p>How can we use the properties of matter to clean up water after a natural disaster?</p>	<p>5-PS1-1 Develop a model to describe that matter is made of particles too small to be seen.</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>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>Unit 2</p> <p>October - January</p>	<p>How can you develop a system to help grow and sustain plant and human life on a foreign planet?</p>	<p>5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.</p> <p>5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</p> <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 materials,</p>

		<p>time, or cost.</p> <p>3-5-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>5-PS3-1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and used to maintain body warmth) was once energy from the sun.</p> <p>5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</p>
<p style="text-align: center;">Unit 3</p> <p style="text-align: center;">February - March</p>	<p>How are Earth's systems affected by humans?</p>	<p>5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.</p> <p>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.</p> <p>5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.</p> <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 materials, time, or cost.</p> <p>3-5-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 style="text-align: center;">Unit 4</p>	<p>Can we use patterns on Earth to help us solve problems?</p>	<p>5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down.</p>

<p>April - June</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>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>
----------------------------	--	--