

Science Grade 3 Scope & Sequence

Time Frame	Unit	NGSS Standard(s)/Outcome(s)	Essential/Guiding Questions
<p>Begin in Fall Lessons 1-4</p> <p>Record Weather observation s throughout the year.</p> <p>Complete Lessons 5-9 after Spring Break.</p>	<p>Weather and Climate</p>	<p>3-ESS2-1 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</p> <p>3-ESS2-2 Obtain and combine information to describe climates in different regions of the world.</p> <p>3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard</p>	<ul style="list-style-type: none"> ● What are the attributes of weather and how can they be measured? ● How can the data collected be represented? ● How can weather data be used to predict weather patterns for a particular region? ● Why are climates different in various regions and around the world? ● What are weather-related hazards, and how can they impact an area? ● How can effective natural hazard design solutions reduce the impact of weather-related disasters?
<p>Any time following 1st unit</p>	<p>Forces and Interaction s</p>	<p>3-PS2-1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.</p> <p>3-PS2-2 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.</p> <p>3-PS2-3 Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.</p> <p>3-PS2-4 Define a simple design problem that can be solved by applying scientific ideas about magnets.</p>	<ul style="list-style-type: none"> ● How does an object stay at rest or move? ● How can the motion or direction of an object be changed? ● How are forces and motion connected? ● How do properties such as size, distance, strength, location, orientation, direct contact, and indirect contact influence motion? ● How do we use cause and effect to explain the relationship between forces and motion? ● How do we use patterns to observe, measure and predict future motion? ● How does a scientist collect data on motion?

<p>Any time following 1st unit</p>	<p>Matter and Its Interactions</p>	<p>5-PS1-3 Students will classify materials based on their properties.</p> <p>5-PS1-1 Students will develop a model to describe matter is made of particles too small to be seen.</p> <p>5-PS1-3 Students will follow the engineering design process in order to explore physical changes in matter.</p> <p>5-PS1-4 Students will conduct an investigation and present findings to explain mixtures.</p>	<ul style="list-style-type: none"> ● How do scientists and engineers work to help solve problems? ● How does knowing about the properties of matter help us determine which materials will help us solve a problem? ● How can you prove that a mixture of two or more substances can result in new substances? ● How can you prove that matter is made of particles that you cannot see?
<p>Fall 1st Unit</p>	<p>Inheritance and Variation of Traits</p>	<p>3-LS1-1 Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</p> <p>3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.</p> <p>3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.</p> <p>3-LS4-2 Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.</p>	<ul style="list-style-type: none"> ● Do organisms look the same all their lives? ● How does their appearance change over time? ● How long have various organisms been around? ● What other organisms can you suggest as examples that show changes as they grow? ● What is a life cycle? ● What is metamorphosis? ● How does the life cycle of animals compare to that of plants and insects? ● What might come during/after the adult stage of life? ● What happens when organisms reproduce? ● What kind of patterns do you see in insect, plant and animal life cycles? ● How do observations provide evidence to answer the question under investigation?

--	--	--	--