

Grade 5 Report Card – Parent Support SCIENCE Trimester Expectations

Skills and Expectations	Standards	T1	T2	T3
<p>Scientific Inquiry:</p> <p>Understands that scientific inquiry is the process of predicting, planning, conducting, observing, describing and classifying information</p>	<p>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>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-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>	<ul style="list-style-type: none"> • Ask questions to guide investigation. • Make a prediction. • Work together in partners or groups to conduct experiment. • Record results or observations. • Answer questions by drawing conclusions based on data. 	<ul style="list-style-type: none"> • Plan an experiment (fair test) in which variables are controlled to test a hypothesis and/or identify aspects of a model that can be improved • Generate and compare multiple possible solutions to a problem 	<ul style="list-style-type: none"> • Plan and carry out an experiment (fair test) in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. • 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>Scientific Literacy:</p> <p>Demonstrates scientific literacy through listening, speaking, presenting, reading and writing about science</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-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.</p> <p>5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water.</p>	<ul style="list-style-type: none"> • Write a summary paragraph about what was learned by conducting experiment. • Present group conclusions to the class. • Summarize or reflect on extension activities with science texts or independent research. • Summarize or reflect on extension activities with science videos. 	<ul style="list-style-type: none"> • Support an argument based on research and/or experimentation that explains an outcome • Obtain and combine information about ways individual communities use science ideas 	<ul style="list-style-type: none"> • Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth. • Support an argument that plants get the materials they need for growth chiefly from air and water. • Support an argument that the gravitational force exerted by Earth on objects is directed down.

	<p>5-PS2-1 Support an argument that the gravitational force exerted by Earth on objects is directed down.</p>			
<p>Scientific Numeracy: Understands that measurement and mathematics provide useful tools for the description, analysis, and presentation of scientific data and ideas</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-ESS2-2 Describe and graph the amounts of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.</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>	<ul style="list-style-type: none"> • Represent data in graphical displays accurately. • Make observations and take measurements. 	<ul style="list-style-type: none"> • Represent data in graphical displays to reveal patterns of changes accurately. • Measure and graph quantities to provide evidence. 	<ul style="list-style-type: none"> • Make observations and measurements to identify materials based on their properties. • Use measurement and mathematics to describe, analyze and present data and ideas.
<p>Scientific Content: Demonstrates and applies understanding of core concepts</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-ETS1-3 Plan and carry out fair tests in which variables are controlled and</p>	<ul style="list-style-type: none"> • Use models to help to explain a given phenomenon 	<ul style="list-style-type: none"> • Develop models to describe a given phenomena 	<ul style="list-style-type: none"> • Plan and carry out investigations and fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

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5-PS1-1
Develop a model to describe that matter is made of particles too small to be seen.

5-PS1-4
Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

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.

5-LS2-1
Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.