

## SCIENCE YEAR AT A GLANCE - 1st Grade

Unit 1: Introduction to Science Estimated Time To Complete: 2 to 3 Sessions Estimated Window: Dates Aug. 24 <sup>th</sup> - Sept. 18 <sup>th</sup>	Unit 2: Light and Sound Estimated Time To Complete: 16 Sessions Estimated Window: Dates Sept. 18 <sup>th</sup> - Nov. 20 <sup>th</sup>	Unit 3: Patterns and Cycles on Earth Estimated Time To Complete: 12 Sessions Estimated Window: Dates Nov. 30 <sup>th</sup> -Jan. 22 <sup>th</sup>	Unit 4: Patterns and Cycles of Sun, Moon, and Stars Estimated Time To Complete: 12 Sessions Estimated Window: Dates Jan. 25 <sup>st</sup> - March 4 <sup>th</sup>
<p><b>Essential Standard(s):</b>  <b>1_SC_1</b> Students will understand and use scientific and engineering practices to conduct investigations and solve problems.</p> <p><b>Learning Targets:</b></p> <ul style="list-style-type: none"> <li>· <b>1_SC_1_A</b> Ask questions on observations to find more information about the natural and/or designed world (R,S)</li> <li>· <b>1_SC_1_B</b> Analyze data from tests of an object or tool to determine if it works as intended (R)</li> <li>· <b>1_SC_1_C</b> Conduct an investigation in collaboration with peers using the scientific method (R,S)</li> <li>· <b>1_SC_1_D</b> Obtain information using grade appropriate texts, informational text features, and other media that will be useful in answering scientific question (K, R)</li> <li>· <b>1_SC_1_E</b> Develop a simple model based on evidence to represent a proposed object or tool (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) (P, S)</li> <li>· <b>1_SC_1_F</b> Define a simple problem that can be solved through the development of a new or improved object or tool (K,P)</li> </ul>	<p><b>Essential Standard(s):</b>  <b>1_SC_2</b> Students will demonstrate an understanding of light and sound including their significance to communication.</p> <p><b>Learning Targets:</b></p> <ul style="list-style-type: none"> <li>· <b>1_SC_2_A</b> Investigate and describe how vibrating matter creates sound and that sound can cause matter to vibrate (K)</li> <li>· <b>1_SC_2_B</b> Explore how objects in darkness are only illuminated when light is available (S)</li> <li>· <b>1_SC_2_C</b> Investigate the effects of placing objects with different characteristics in the path of a beam of light (R)</li> <li>· <b>1_SC_2_D</b> Use tools and materials to design and build a device that uses light or sound to send a signal over a distance (P)</li> <li>· <b>1_SC_2_E</b> Conduct an investigation in collaboration with peers using the scientific method (S,R)</li> <li>· <b>1_SC_2_F</b> Define a simple problem that can be solved through the development of a new or improved object or tool (K, P)</li> <li>· <b>1_SC_2_G</b> Obtain information using grade appropriate tests, informational text features, and other media that will be useful in answering a scientific question (K,R)</li> </ul>	<p><b>Essential Standard(s):</b>  <b>1_SC_3</b> Students will observe and understand patterns and cycles to Earth.</p> <p><b>Learning Targets:</b></p> <ul style="list-style-type: none"> <li>· <b>1_SC_3_A</b> Make and share observations about local, natural events that have cycles and those that have a clear beginning and end</li> <li>· <b>1_SC_3_B</b> Make observations throughout the year to relate the amount of daylight to the time of year</li> <li>· <b>1_SC_3_C</b> Ask questions based on observation to find more information about the natural and/or designed world</li> <li>· <b>1_SC_3_D</b> Analyze data from tests of an object or tool to determine if it works as intended.</li> <li>· <b>1_SC_3_E</b> Obtain information using grade appropriate tests, informational text features, and other media that will be useful in answering a scientific question (K,R)</li> <li>· <b>1_SC_3_F</b> Conduct an investigation in collaboration with peers using the scientific method (S,R)</li> </ul>	<p><b>Essential Standard(s):</b>  <b>1_SC_4</b> Students will demonstrate an understanding of patterns and cycles of the Sun, Moon, and stars.</p> <p><b>Learning Targets:</b></p> <ul style="list-style-type: none"> <li>· <b>1_SC_4_A</b> Observe, describe, and predict the motion of the Sun, Moon, and Stars (K)</li> <li>· <b>1_SC_4_B</b> Make observation throughout the year to relate the amount of daylight to the time of year (R)</li> <li>· <b>1_SC_4_C</b> Analyze data from tests of an object or tool to determine if it works as intended (R)</li> <li>· <b>1_SC_4_D</b> Conduct an investigation in collaboration with peers using the scientific method (K, R)</li> <li>· <b>1_SC_4_E</b> Obtain information using grade appropriate tests, informational text features, and other media that will be useful in answering a scientific question (K,R)</li> </ul>

<p style="text-align: center;">Unit 5: Animals and Plants            Estimated Time To Complete: 18 Sessions            Estimated Window: Dates March 7th-May 20th</p>			
<p><b>Essential Standard(s):</b>  <b>1_SC_5</b> Students will observe and understand the function of external structure of animals and plants in their life cycle including inheritance and variation of traits.</p> <p><b>Learning Targets:</b></p> <ul style="list-style-type: none"> <li>• <b>1_SC_5_A</b> Explain how the external parts of animals and plants help them survive and grow (K)</li> <li>• <b>1_SC_5_B</b> Compare how animals use body parts to meet their needs to how humans problems solve similar situations (R)</li> <li>• <b>1_SC_5_C</b> Record observations and communicate the ways young plants and animals change as they grow (K)</li> <li>• <b>1_SC_5_D</b> Gather information and explain how parents and offspring interact to survive (K)</li> <li>• <b>1_SC_5_E</b> Observe and explain how individual plants and animals of the same type have similarities and differences (R)</li> <li>• <b>1_SC_5_F</b> Ask questions based on observation to find more information about the natural and/or designed world (R,S)</li> <li>• <b>1_SC_5_G</b> Obtain information using grade appropriate tests, informational text features, and other media that will be useful in answering a scientific question (K,R)</li> <li>• <b>1_SC_5_H</b> Define a simple problem that can be solved through the development of a new or improved object or tool (K,P)</li> </ul>			