

		Year at a Glance 2019-2020				Creation Date: May 3, 2019	
		7 <sup>th</sup> Grade Science				Revision Date: August 5, 2019	
Unit Name	7-1 Cells 8/21-9/27 27 Days		7-2 Genetics 9/30-10/11 10 Days		7-3 Adaptations and Natural Selection 10/15-10/31 12 Days		7-4 Body Systems 11/01-12/20 31 Days
TEKS	<b>New:</b> 12F, 12C, 12E, 12D		<b>Spiraled:</b> 12D <b>New:</b> 14A, 14B, 14C		<b>Spiraled:</b> 14C <b>New:</b> 11B, 11C, 12A		<b>Spiraled</b> 12C <b>New</b> 12B
Big Ideas	<ol style="list-style-type: none"> <li>Organisms are composed of cells that carry out the basic functions of life.</li> <li>Eukaryotic cells have specialized structures called organelles that perform basic life functions.</li> <li>In addition to the organelles also found in animal cells, plant cells contain chloroplasts for photosynthesis, a large central vacuole (chemical storage) and a cell wall (protection and structure).</li> </ol>		<ol style="list-style-type: none"> <li>Our inherited traits are governed by DNA, an organic molecule.</li> <li>Heredity is the passing on of characteristics from one generation to the next.</li> <li>Sexual reproduction results in diverse offspring and asexual reproduction results in uniform offspring.</li> </ol>		<ol style="list-style-type: none"> <li>There is variation among populations and species, including external and internal adaptations.</li> <li>Adaptations occur over generations of a species.</li> </ol>		<ol style="list-style-type: none"> <li>Human body systems perform specific functions to maintain life.</li> </ol>
Unit Name	7-5 Stimulus & Response 1/07-1/22 11 Days	7-6 Energy 1/23-2/05 10 Days	7-7 Biomes and Ecosystems 2/06-3/02 17 Days	7-8 Changes to Earth's Surface 3/03-3/31 15 Days	7-9 Earth & the Solar System 4/01-4/16 10 Days	7-10 Physical Science 4/17-5/06 14 Days	7-11 Wellness & Sexual Health 5/07-5/28 13 Days
TEKS	<b>Spiraled</b> 12B <b>New</b> 13A, 13B	<b>New</b> 5A, 5B, 7A	<b>Spiraled</b> 11B <b>New</b> 10A, 10B, 10C, 11A	<b>New</b> 8A, 8B, 8C	<b>New</b> 9A, 9B	<b>New</b> 6A, 7B	<b>Spiraled</b> 7B, 12C, 12D, 12E, 12F, 13B
Big Ideas	<ol style="list-style-type: none"> <li>Organisms respond to external stimulus to survive in their environment.</li> <li>Organisms respond to internal stimulus maintain homeostasis.</li> </ol>	<ol style="list-style-type: none"> <li>Radiant energy from the sun is transformed into chemical energy through the process of photosynthesis.</li> <li>Energy is transformed within organisms.</li> <li>Energy flows through ecosystems from producers to consumers and decomposers and can be represented in food chains, food webs, and energy pyramids.</li> </ol>	<ol style="list-style-type: none"> <li>Different environments support different organisms.</li> <li>The dichotomous key allows us to compare and contrast groups of similar organisms.</li> <li>Biodiversity contributes to the sustainability of an ecosystem.</li> <li>The purpose of ecological succession is for an ecosystem to reach a state of balance after it has been formed or disturbed.</li> </ol>	<ol style="list-style-type: none"> <li>Weathering, erosion, and deposition change the topography of a region.</li> <li>Human activities can impact ground and surface water in the watershed.</li> </ol>	<ol style="list-style-type: none"> <li>Earth is a special planet within our solar system in that it has the right conditions for life to exist.</li> <li>Differences in pressure, temperature, atmosphere, and gravity must be accounted for in order for manned space travel to occur.</li> </ol>	<ol style="list-style-type: none"> <li>Matter can undergo a variety of changes- either physical or chemical.</li> <li>Forces affect motion</li> </ol> <p><i>8<sup>th</sup> Foundational Skills:</i></p> <ol style="list-style-type: none"> <li>An atom is the smallest particle of any element that still retains the characteristics of that element.</li> <li>Atoms consist of protons, neutrons and electrons.</li> <li>Unbalanced forces accelerate objects.</li> <li>Newton's Laws can help predict the motion of objects.</li> <li>Topographic maps provide 2-D information land and erosional features.</li> </ol>	<ol style="list-style-type: none"> <li>Healthy habits and relationships promote avoidance of health risk behaviors.</li> </ol>

