

**Science Pre K – 6  
Scope and Sequence  
2016 – 2017**

Grade	September	October	November	December	January	February	March	April	May	June
<b>PreK</b>	All About Me/Exercise	Wheels		Balls		Boxes	Shadows	Trash/Recycling	Flowers	
<b>K</b> Integrated with SS. Focus on community.	<b>Our Classroom/Our School</b> <ul style="list-style-type: none"> <li>Characteristics of communities</li> <li>Observations</li> <li>Recording data</li> <li>Change</li> </ul>	<b>Weather and Seasons in Our Community</b> <ul style="list-style-type: none"> <li>Patterns</li> <li>Changes in environment/organisms</li> <li>States of Matter: water</li> <li>Observations</li> </ul>		<b>How Do We Move Around Our Community?</b> <ul style="list-style-type: none"> <li>Transportation</li> <li>Needs of the community</li> <li>Signs and Symbols</li> <li>Push or pull</li> </ul>		<b>Needs and Want in Our Community</b> <ul style="list-style-type: none"> <li>Community helpers</li> <li>Community buildings</li> <li>Community resources</li> </ul>	<b>Living Things in our Community</b> <ul style="list-style-type: none"> <li>Parts of living things</li> <li>Senses of living things</li> <li>Nutrition</li> <li>Interactions</li> </ul>		<b>We Grow and Change in Our Community</b> <ul style="list-style-type: none"> <li>Living things adapt to their environment</li> <li>Life cycles</li> <li>Offspring / Parent characteristics</li> <li>Physical change in our community</li> </ul>	
<b>1</b>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Apple Lifecycle</li> <li>Animal survival</li> <li>Habitat</li> </ul> <b>Earth Science</b> <ul style="list-style-type: none"> <li>Patterns: Sun, Moon, Stars</li> <li>Seasons</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Pumpkin Lifecycle</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Habitat, Soil</li> </ul> <b>Earth Science</b> <ul style="list-style-type: none"> <li>Daylight Savings</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Habitat</li> </ul> <b>Earth Science</b> <ul style="list-style-type: none"> <li>Patterns: Sun, Moon, Stars</li> <li>Seasons</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Physical Science</b> <ul style="list-style-type: none"> <li>Matter</li> <li>Light, Sound, and Vocabulary</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Physical Science</b> <ul style="list-style-type: none"> <li>Light and Sound</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Habitat</li> <li>Lifecycles (Frog and Toad)</li> <li>Compare adult vs. young plants/animals</li> </ul> <b>Earth Science</b> <ul style="list-style-type: none"> <li>Patterns: Sun, Moon, Stars</li> <li>Seasons</li> <li>Daylight Savings</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Habitat</li> <li>Lifecycles (Frog and Toad)</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Habitat</li> <li>Lifecycles (Frog and Toad)</li> </ul>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> </ul> <b>Life Science</b> <ul style="list-style-type: none"> <li>Lifecycles (Frog, Toad, and Plants)</li> </ul> <b>Earth Science</b> <ul style="list-style-type: none"> <li>Patterns: Sun, Moon, Stars</li> <li>Seasons</li> <li>Soil</li> </ul>
<b>2</b>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Structure and Properties of Matter</b> <ul style="list-style-type: none"> <li>States of matter</li> <li>Properties</li> </ul>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, process</li> </ul> <b>Structure and Properties of Matter</b> <ul style="list-style-type: none"> <li>Atoms</li> <li>Molecule density</li> <li>Molecule movement</li> <li>Changing states (temp.)</li> </ul>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Structure and Properties of Matter</b> <ul style="list-style-type: none"> <li>Mixtures</li> <li>Physical/Chemical Changes</li> </ul> <b>Earth's Systems</b> <ul style="list-style-type: none"> <li>Landforms/bodies of water</li> </ul>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Earth's Systems</b> <ul style="list-style-type: none"> <li>Water on Earth</li> <li>Events that change the Earth's surface <ul style="list-style-type: none"> <li>-Rapid changes, volcano eruption, flood, tsunami etc.)</li> <li>-slow changes (glacier, river erosion, continental shift)</li> </ul> </li> </ul>		<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Earth's Systems</b> <ul style="list-style-type: none"> <li>Preventing change</li> </ul>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Interdependent Relationships in Ecosystems</b> <ul style="list-style-type: none"> <li>Plant life cycle</li> <li>Interdependent relationships (plants &amp; animals)</li> <li>Habitats</li> </ul>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Interdependent Relationships in Ecosystems</b> <ul style="list-style-type: none"> <li>Habitats satisfy needs</li> <li>Diversity of life</li> <li>Adaptation</li> <li>Habitat Change</li> </ul>	<b>Scientific Method</b> <ul style="list-style-type: none"> <li>Role of scientist</li> <li>Safety</li> <li>Tools</li> <li>Scientific method</li> </ul> <b>Interdependent Relationships in Ecosystems</b> <ul style="list-style-type: none"> <li>Habitat Change</li> </ul>	
<b>3</b>	<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Creating/Evaluating scientific solutions</li> </ul> <b>Earth Science</b> <ul style="list-style-type: none"> <li>Layers</li> <li>Rocks and minerals</li> <li>Fossils (what is a fossil?)</li> <li>Rock/Fossil formation</li> <li>Classifying specimens</li> </ul>		<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Creating/Evaluating scientific solutions</li> </ul> <b>Weather</b> <ul style="list-style-type: none"> <li>Weather/Climate</li> <li>Weather Instruments</li> <li>Data Collection</li> <li>Water Cycle</li> <li>Human Impacts</li> </ul>		<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Creating/Evaluating scientific solutions</li> </ul> <b>Motion and Stability</b> <ul style="list-style-type: none"> <li>Force/Motion</li> <li>Gravity</li> <li>Magnetism</li> <li>Work</li> <li>Simple Machines</li> </ul>		<b>Scientific Process</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Creating/Evaluating scientific solutions</li> </ul> <b>Vertebrates and Change over Time</b> <ul style="list-style-type: none"> <li>Classification of Organisms</li> <li>Ecosystems</li> <li>Change over time</li> <li>Adaptations</li> </ul>			
<b>4</b>	<b>Scientific Method and Design</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Scientific Method</li> <li>Labs/Investigations</li> <li>Design Loop Process</li> </ul>	<b>Molecules to Organisms</b> <ul style="list-style-type: none"> <li>Cells</li> <li>Classification</li> <li>Plants and animals grow and change</li> <li>Structures supporting survival of organisms</li> <li>Energy in ecosystems</li> <li>Abiotic and biotic interactions in ecosystems</li> </ul>		<b>Body Systems</b> <ul style="list-style-type: none"> <li>Respiratory</li> <li>Skeletal</li> <li>Muscular</li> <li>Digestive</li> <li>Circulatory</li> <li>Obtaining and processing information</li> </ul>		<b>Forces, Energy, Waves</b> <ul style="list-style-type: none"> <li>Gravity</li> <li>Motion</li> <li>Light and Heat</li> <li>Forms of energy</li> <li>Energy conversion</li> <li>Wave behavior</li> </ul>		<b>Weather and Erosion</b> <ul style="list-style-type: none"> <li>Weathering</li> <li>Erosion</li> <li>Impact on Earth's features</li> <li>Natural resource fuels</li> <li>Environmental effects</li> <li>Human Impacts</li> </ul>		
<b>5</b>	<b>Scientific Method/Engineering Design</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Scientific Method</li> <li>Investigations/Labs</li> <li>Design Loop Process</li> </ul>	<b>Structure and Properties of Matter</b> <ul style="list-style-type: none"> <li>States</li> <li>Physical/chemical changes</li> <li>Measurement</li> <li>Energy changes</li> <li>Structure of substances</li> </ul>		<b>Earth's Systems</b> <ul style="list-style-type: none"> <li>Plate tectonics</li> <li>Geological succession</li> <li>Adaptation</li> <li>Geological time scale</li> <li>Technology</li> <li>Human Impact</li> </ul>		<b>Space and Space Technology</b> <ul style="list-style-type: none"> <li>Universe</li> <li>Solar System</li> <li>Forces that govern universe</li> <li>Space technology</li> </ul>		<b>Ecosystems: Interactions, Energy, and Dynamics</b> <ul style="list-style-type: none"> <li>Energy flow in a community</li> <li>Biological communities</li> <li>Interactions/relationships</li> <li>Natural and human-made changes</li> <li>Lake Health</li> <li>Human Impacts</li> </ul>		
<b>6</b>	<b>Scientific Practices</b> <ul style="list-style-type: none"> <li>Tools, vocabulary, data collection</li> <li>Scientific Method</li> <li>Process Skills</li> <li>Experimental Design</li> <li>Design Loop Process</li> </ul>	<b>Geoscience</b> <ul style="list-style-type: none"> <li>Geological succession</li> <li>Time scales</li> <li>Rock cycle</li> <li>Rock composition</li> <li>Layers of the earth</li> <li>Convection Currents</li> <li>Sea floor spreading</li> <li>Features/Geophysics</li> </ul>		<b>Weather and Climate Systems</b> <ul style="list-style-type: none"> <li>Wind currents</li> <li>Ocean currents</li> <li>Global climate system</li> <li>Water cycle</li> <li>Geospheres and interactions</li> <li>Human Impact</li> </ul>		<b>Space Systems</b> <ul style="list-style-type: none"> <li>Structure of the Universe</li> <li>Apparent motion of sun</li> <li>Revolution/rotation</li> <li>Patterns</li> <li>Gravity</li> <li>Moon phases</li> <li>Seasons</li> </ul>		<b>Interacting Earth Systems/Human Impact</b> <ul style="list-style-type: none"> <li>Earth's spheres</li> <li>Interactions of spheres</li> <li>Human Impact</li> <li>Global environmental issues</li> </ul>		