

Peer to Peer Science

Estimated Time Frame for sections	Big Ideas	Essential Question	Concept (Know) Main idea	Competency (Do) objectives	Suggested Resources	Vocabulary	PA Content / Keystone Standard	Suggested Lessons & Activities
30 days	Solar system	<p>What give us the heat and light?</p> <p>What are the planets located?</p>	<p>Describe relative size, distance, or motion.</p> <p>Observe and describe the change to objects caused by heat, cold, or light.</p>	<p>Place the Sun in the center of the solar system.</p> <p>The Sun gives us heat and light.</p> <p>How big is the Sun compared to the planets?</p>	<p>Online videos</p> <p>Book Magic school bus</p>	<p>Sun</p> <p>Moon</p> <p>Mercury</p> <p>Venus</p> <p>Earth</p> <p>Mars</p> <p>Jupiter</p> <p>Saturn</p> <p>Uranus</p> <p>Neptune</p>	<p>S4.A.1.3.2</p> <p>S4.A.1.3.3</p> <p>S4.A.2.1.1</p>	<p>Created a book on the solar system.</p>
30 days	Plants / nutrition	<p>What makes a plant grow?</p> <p>Is the plant living or nonliving?</p> <p>What things do we need that are not alive that are necessary for a plant to grow?</p>	<p>Know that plants need water to survive.</p> <p>Know that plants need soil to survive.</p> <p>Explain a relationship between the living and nonliving components in a system (e.g., food web, terrarium, bicycle).</p>	<p>Water the plants.</p> <p>Transplant the plants.</p> <p>Understand that the plants need sunlight to survive.</p> <p>What does living mean?</p> <p>What are nonliving elements that a plant needs?</p>	<p>Green house videos</p>	<p>Roots</p> <p>Soil</p> <p>Water</p> <p>Leaves</p> <p>Nutrition</p> <p>Flower</p> <p>Fruit</p> <p>vegetables</p>	<p>S4.A.2.1.3</p> <p>S4.A.1.3.5</p> <p>S4.A.3.1.2</p> <p>S4.A.3.1.3</p> <p>S4.A.3.3.1</p> <p>S4.B.1.1.1</p> <p>S4.B.1.1.2</p> <p>S4.B.1.1.3</p> <p>S4.B.1.1.3</p> <p>S4.B.1.1.4</p> <p>S4.B.2.1.2</p> <p>S4.B.3.1.1</p> <p>S4.B.3.1.2</p> <p>S4.D.1.2.1</p>	<p>Plant vegetables</p> <p>Track growth of plants</p>

			<p>Categorize the parts of an ecosystem as either living or non-living and describe their roles in the system.</p> <p>Identify and describe observable patterns (e.g., growth patterns in plants, weather, water cycle).</p> <p>Describe basic needs of plants and animals (e.g., air, water, food, shelter).</p> <p>Identify the functions of plant or animal structures.</p> <p>Describe life cycles of plants and developmental</p>	<p>How do the plants grow? ie if there is a flower what comes next.</p> <p>What function do all of the parts of a plant do?</p> <p>Where do the seeds come from?</p> <p>Why are some plants leaves larger than others?</p>				
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			<p>stages of animals (vertebrates such as birds and mammals).</p> <p>Describe basic needs of plants and animals (e.g., air, water, food).</p> <p>Describe how different parts of a living thing work together to provide what the organism needs (e.g., parts of plants: roots, stems, leaves).</p> <p>Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or</p>					
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			<p>retain water).</p> <p>Distinguish between living and non-living things.</p> <p>Describe interactions between living and nonliving components (e.g. plants – water, soil, sunlight, carbon dioxide, temperature; animals – food, water, shelter, oxygen, temperature) of a local ecosystem. Identify foods from plants and animals</p>					
30 days	Bodies systems		<p>Identify life processes of living things (e.g., growth, digestion, respiration).</p> <p>Compare similar</p>	<p>Name one of the body systems.</p> <p>What does the digestive system do?</p> <p>What does the</p>	Green house videos	<p>Lungs</p> <p>Trachea</p> <p>Tongue</p> <p>Teeth</p> <p>Diaphragm</p> <p>Esophagus</p> <p>Stomach</p> <p>Small intestine</p>	<p>S4.A.1.3.5</p> <p>S4.B.1.1.1</p> <p>S4.B.1.1.2</p> <p>S4.B.1.1.3</p> <p>S4.B.1.1.4</p>	Created a life size human body with all of the system working together.

			<p>functions of external characteristics of organisms (e.g., anatomical characteristics: appendages, type of covering, body segments).</p> <p>Describe basic needs of plants and animals (e.g., air, water, food).</p> <p>Describe how different parts of a living thing work together to provide what the organism needs (e.g., parts of plants: roots, stems, leaves).</p>	<p>circulatory system do?</p> <p>What does the nervous system do?</p> <p>What does the skeletal system do?</p> <p>What does the muscular system do?</p> <p>What does the excretory system do?</p> <p>What does the lungs system do?</p>		<p>Large intestine</p> <p>Colon</p> <p>Pancreas</p> <p>Skull</p> <p>Bones</p> <p>Heart</p> <p>Artes</p> <p>Veins</p> <p>Capillaries</p> <p>Brain</p> <p>Nerves</p> <p>Spinal cord</p> <p>Kidneys</p> <p>Bladder</p> <p>Urethra</p> <p>Ureter</p>		
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