



Diocese of Greensburg Curriculum Science Grade 1

Unit	Standards	Content	Skills
<p>Space Systems: Patterns and Cycles (Earth & Space)</p>	<p>NGSS: Science Performance Expectations (2013) NGSS: Grade 1</p> <hr/> <p>1.Space Systems: Patterns and Cycles Performance Expectations</p> <p>1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.</p> <p>1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.</p> <p>© Copyright 2013 Achieve, Inc. All rights reserved.</p>	<ul style="list-style-type: none"> • The sun is a star • The sun is visible during the day • Other stars are only visible during the night • The moon can be visible day and night • Sunrise and sunset appear at different locations in the sky depending on the time of day and night • The number of hours of daylight changes predictably through the seasons • There are different phases of the moon on different days of the month • The motion of the sun, moon, and Earth relates to time • Changes and patterns in the sky are caused by motions in the Earth-moon-sun system 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Define the vocabulary words in student journal using illustrations (5 words at a time) • Observe/record times of sunrise and sunset for one week • Observe/record times of daylight hours for one week • Use resources to discover different phases of the moon • Illustrate/model the phases of the moon • Formulate the effects that the Earth processes and human activities on each other
<p>Waves: Lights and Sounds (Physical Science)</p>	<p>NGSS: Science Performance Expectations (2013) NGSS: Grade 1</p> <hr/> <p>1.Waves: Light and Sound Performance Expectations</p>	<ul style="list-style-type: none"> • How vibrations produce sound • How to change the volume and pitch of sound • How sound travels from a source to a receiver • How light interacts with objects 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Explore and identify the production of sound • Produce different volumes and pitches • Model how sounds travel from source to a receiver

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	<p>1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.</p> <p>1-PS4-2. Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.</p> <p>1-PS4-3. Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.</p> <p>1-PS4-4. Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.*</p>	<ul style="list-style-type: none"> • How to direct light to different locations 	<ul style="list-style-type: none"> • Create and change the size of shadows • Plan an investigation and explain how to direct light to different locations
<p>Plants and Animals (Life Science)</p>	<p>NGSS: Science Performance Expectations (2013) NGSS: Grade 1</p> <hr/> <p>1.Structure, Function, and Information Processing Performance Expectations</p> <p>1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.*</p>	<ul style="list-style-type: none"> • Seeds and bulbs need water, nutrients, air and light to grow • New plants can grow from the stems from mature plants • Animals need water, food, air, and space with shelter to grow and survive • Animals use sensory structures to take in information about their environment to help them grow and survive • Offspring and parents share some similarities 	<p>The students will be able to:</p> <ul style="list-style-type: none"> • Plant seeds and bulbs • Observe and record germination and growth • Illustrate the life cycle of different plants • Grow new plants from stems of mature plants • Discuss needs of animals • Observe animal structures that help them to grow and survive in their environment • Read educational media on animal behavior and share information

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	<p>1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.</p> <p>1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.</p>		<ul style="list-style-type: none">• Compare and contrast animal parents and their offspring

