



**SPRING GROVE AREA SCHOOL DISTRICT**



**PLANNED COURSE OVERVIEW**

<b>Course Title:</b> Science <b>Grade Level(s):</b> 5 <b>Units of Credit:</b> NA <b>Classification:</b> Required	<b>Length of Course:</b> Full Year <b>Periods Per Cycle:</b> 6 <b>Length of Period:</b> 30 minutes <b>Total Instructional Time:</b> 90 Hours
---	---

***Course Description***

This course provides students with a foundation of skills in Life, Earth, Physical Science, Environmental Literacy and Sustainability, and Engineering and Technology.

***Instructional Strategies, Learning Practices, Activities, and Experiences***

Anchor Charts Anticipatory Sets Bell Ringers Class Discussions Closure Critical Thinking Graphic Organizers Guided Reading Higher Level Questioning Homework	Interaction Sequence Internet Research Journals Paper and Pencil Activities Posted Objectives Practice Exercises Presentations PSSA Released Materials Question-Answer Relationships Quizzes	Reports and Speeches Research Small Group Interventions Teacher Demonstrations Teacher Made Tests Technology Integration Videos / DVDs Wait Time Wait Time Extended
---	---	---

***Assessments***

Homework Oral Projects Presentations	Projects Reports Teacher Observations	Teacher Made Tests and Quizzes PSSA Practice Materials PSSA Item Samplers
--	---	---

***Materials/Resources***

Core Knowledge Science Guest Speakers Internet	Leveled Readers Resource Books SAS (Standards Aligned System)	Supplemental Readings Videos / DVDs
--	---	--

**Adopted:** 1/27/88

**Revised:** 9/3/91, 12/8/97, 11/15/01, 5/19/14, 5/22/23

<b>3.1 Life Science</b>	
<b>CONTENT/KEY CONCEPTS</b>	<b>OBJECTIVES/STANDARDS</b>
Organization for Matter and Energy Flow in Organisms Interdependent Relationships in Ecosystems Energy in Chemical Processes and Everyday Life  Taught Using Core Knowledge Unit Energy and Matter in Ecosystems Lessons 1-9 and 12-13	3.1.5.A - Support an argument that plants get the materials they need for growth chiefly from air and water.  3.1.5.B - Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.  3.2.5.G - Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

<b>3.2 Physical Science</b>	
<b>CONTENT/KEY CONCEPTS</b>	<b>OBJECTIVES/STANDARDS</b>
<p>Structure and Properties of Matter</p> <p>Chemical Reactions</p> <p>Taught Using Core Knowledge Unit Investigating Matter Lessons 1-10</p>	<p>3.2.5.A - Develop a model to describe that matter is made of particles too small to be seen.</p> <p>3.2.5.B - Make and communicate observations and measurements to identify materials based on their properties.</p> <p>3.2.5.C - Interpret and analyze data to make decisions about how to utilize materials based on their properties.</p> <p>3.2.5.D - Measure and graph quantities to provide evidence that regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.</p> <p>3.2.5.E - Conduct an investigation to determine whether the mixing of two or more substances results in new substances.</p>

3.3 Earth and Space Sciences	
CONTENT/KEY CONCEPTS	OBJECTIVES/STANDARDS
<p>The Universe and its Stars</p> <p>The Earth and the Solar System</p> <p>Types of Interactions</p> <p>Taught Using Core Knowledge Unit Astronomy Space Systems Lessons 4-14</p>	<p>3.3.5.A - Support an argument that differences in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth.</p> <p>3.3.5.B - Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.</p> <p>3.2.5.F - Support an argument that the gravitational force exerted by Earth on objects is directed down.</p>

3.3 Earth and Space Systems Cont'd	
CONTENT/KEY CONCEPTS	OBJECTIVES/STANDARDS
<p>Earth Materials and Systems</p> <p>The Roles of Water in Earth's Surface Processes</p> <p>Human Impact on Earth Systems</p> <p>Taught Using Core Knowledge Unit – Protecting Earth's Resources Lessons 1-15</p>	<p>3.3.5.C – Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere and/or atmosphere interact.</p> <p>3.3.5.D – Describe and graph the amounts of salt water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.</p> <p>3.3.5.E - Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.</p> <p>3.3.5.F - Generate and design possible solutions to a current environmental issue, threat, or concern.</p>