

CARLISLE AREA SCHOOL DISTRICT
Carlisle, PA 17013

ELEMENTARY SCIENCE

GRADE 3

Date of Board Approval: May 21, 2009
Revised Date: January 19, 2012

**CARLISLE AREA SCHOOL DISTRICT
PLANNED INSTRUCTION COVER PAGE**

Title of Course: Science Subject Area: Science Grade Level: Third

Course Length: (Semester/Year): Year Duration: _____ Frequency: _____

Prerequisites: Not Applicable Credit: Not Applicable Level: Not Applicable

Course Description/Objectives: The district shall provide for attainment of the academic standards per Chapter 4, Section 4.12. Each student shall demonstrate proficiency in the following areas: unifying themes; inquiry and design; biological sciences; physical science, chemistry and physics; earth sciences; technology education; science, technology and human endeavors; watersheds and wetlands, renewable and non-renewable resources; environmental health; agriculture and society; integrated pest management; ecosystems and their interactions; threatened, endangered and extinct species; humans and the environment; and, environmental always and regulations.

Major Text(s)/Resources:

Curriculum Writing Committee: Cindy Birdwell Bonnie Mehls Deb Them Traci Brunner
Michelle Nye Heather Luckenbaugh Yvette Reidy Megan Baitzel Allison Shughart
D. Bailor Karen Lyter Rachel Placek Sherry Mann Kim Walters

Unit: Simple Machines	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
3.2A. Identify and use the nature of scientific and technological knowledge.	<ul style="list-style-type: none"> • Predict, collect and observe information in an experiment. 	
3.2C. Recognize and use the elements of scientific inquiry to solve problems.	<ul style="list-style-type: none"> • Make a hypothesis by creating questions before conducting experiments. • Identify and recognize what certain inquiry tools are used for. 	
3.2C. Recognize and use the elements of scientific inquiry to solve problems.	<ul style="list-style-type: none"> • Apply the scientific method. • Understand that science is raising questions and seeking answers by careful observation and investigation. 	
3.1E. Recognize change in natural and physical systems.	<ul style="list-style-type: none"> • Discuss changes that occur from observations when conducting experiments. 	

Unit: Simple Machines	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
3.1B. Know models as useful simplifications of objects or processes.	<ul style="list-style-type: none"> • Give examples of simple machines in everyday life. • Know that simple machines make work easier. 	
3.1B. Know models as useful simplifications of objects or processes.	<ul style="list-style-type: none"> • Explain and construct four major groups of simple machines. 	
3.1E Recognize change in natural and physical systems.	<ul style="list-style-type: none"> • Name and demonstrate push, pull, and lift as types of motion (movement). 	
3.2A Identify and use the nature of scientific and technological knowledge.	<ul style="list-style-type: none"> • Predict the movement of objects as direction, shape, or speed change. • Predict, collect and observe information about how to increase or decrease friction. 	
3.2A Identify and use the nature of scientific and technological knowledge.	<ul style="list-style-type: none"> • Discuss changes that occur from observations when conducting experiments. 	

Unit: Simple Machines	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
3.2B Describe objects in the world using the five senses.	<ul style="list-style-type: none"> Describe changes in movement and parts using all five senses. 	
3.2C Recognize and use the elements of scientific inquiry to solve problems.	<ul style="list-style-type: none"> Make hypothesis by creating questions before conducting experiments. 	
3.2C Recognize and use the elements of scientific inquiry to solve problems.	<ul style="list-style-type: none"> Apply the scientific method to areas within simple machines. 	
3.4B Know basic energy types, sources and conversions.	<ul style="list-style-type: none"> Identify and give examples of motion. 	
3.4C Observe and describe different types of force and motion.	<ul style="list-style-type: none"> Compare push, pull, and lift. Compare and contrast different types of motion (e.g., bouncing ball, moving in a straight line, back and forth, merry-go-round). 	

Unit: Simple Machines	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
3.4C Observe and describe different types of force and motion.	<ul style="list-style-type: none"> • Identify and give examples of force. • Describe the location of parts in the three classes of levers. 	
3.6C Know physical technologies of structural design, analysis and engineering, finance, production, marketing, research and design.	<ul style="list-style-type: none"> • Construct a simple machine. • Explain how simple machines are used in transportation systems. 	
3.8A Know that people select, create and use science and technology and that they are limited by social and physical restraints.	<ul style="list-style-type: none"> • Explain how simple machines make work easier. 	

Unit: Plants	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
3.1A Know that natural and human-made objects are made up of parts.	<ul style="list-style-type: none"> • Identify and describe the jobs of different plant parts. 	
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Identify plants and animals with their habitat and food sources. 	
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Identify environmental variables that affect plant growth. • Classify plants as invasive or non-invasive 	
4.6B Understand the concept of cycles.	<ul style="list-style-type: none"> • Explain the process of photosynthesis. • Explain the life cycle of a seed producing plant. 	
4.7A Identify differences in living things.	<ul style="list-style-type: none"> • Identify local plants or animals and describe their habitat. 	

Unit: Ecosystems and their Interactions	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
3.2B Describe objects in the world using the five senses.	<ul style="list-style-type: none"> • Describe what a local ecosystem is made up of using senses. 	
4.3C Understand that the elements of natural systems are interdependent.	<ul style="list-style-type: none"> • Identify some of the organisms that live together in an ecosystem. • Understand that the components of a system all play a part in a healthy natural system. 	
4.3C Understand that the elements of natural systems are interdependent.	<ul style="list-style-type: none"> • Identify the effects of a healthy environment on the ecosystem. 	
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Know that all living interact with their ecosystems. 	
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Describe how animals interact with plants to meet their needs for shelter. • Identify a local ecosystem and its living and nonliving components. 	

Unit: Ecosystems and their Interactions	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Identify and give examples of consumers, decomposers, and producers as components of food chains and food webs. • Define a food chain. 	
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Define a food web. • Describe how change in population affects a food web. • Illustrate a food chain and food web. 	
4.7A Identify differences in living things.	<ul style="list-style-type: none"> • Identify local plants or animals and describe their habitat. 	
4.4C Know that food and fiber originate from plants and animals.	<ul style="list-style-type: none"> • Describe how plants meet their basic needs. 	
4.6A Understand that living things are dependent on nonliving things in the environment for survival.	<ul style="list-style-type: none"> • Describe how plants meet their basic needs. 	

Unit: Ecosystems and their Interactions	Subject Area: Science	Grade: 3
PA Academic Standards	Performance Indicators	Assessments
4.1A Identify various types of water environments.	<ul style="list-style-type: none"> • Compare and contrast the system (e.g., creeks, rivers, streams) and describe the lentic system (e.g., ponds, lakes, swamps) (PSSA). 	
4.1A Identify various types of water environments.	<ul style="list-style-type: none"> • Define watershed. • Explain how a stream functions in a watershed. 	
4.1B Explain the differences between moving and still water.	<ul style="list-style-type: none"> • Describe the difference between lentic and lotic. 	
4.1E Recognize the impact of watershed and wetlands on animals.	<ul style="list-style-type: none"> • Identify plants and animals supported by a wetland (PSSA). 	

Adaptations/Modifications for Students with I.E.P.s

Adaptations or modifications to this planned course will allow exceptional students to earn credits toward graduation or develop skills necessary to make a transition from the school environment to community life and employment. The I.E.P. team has determined that modifications to this planned course will meet the student's I.E.P. needs.

Adaptations/Modifications may include but are not limited to:

INSTRUCTION CONTENT

- Modification of instructional content and/or instructional approaches
- Modification or deletion of some of the essential elements

SETTING

- Preferential seating

METHODS

- Additional clarification of content
- Occasional need for one to one instruction
- Minor adjustments or pacing according to the student's rate of mastery
- Written work is difficult, use verbal/oral approaches
- Modifications of assignments/testing
- Reasonable extensions of time for task/project completion
- Assignment sheet/notebook
- Modified/adjusted mastery rates
- Modified/adjusted grading criteria
- Retesting opportunities

MATERIALS

- Supplemental texts and materials
- Large print materials for visually impaired students
- Outlines and/or study sheets
- Carbonless notebook paper
- Manipulative learning materials
- Alternatives to writing (tape recorder/calculator)